NEW ORLEANS

MEDICAL AND SURGICAL

JOURNAL.

INDEX TO VOLUME XIX.

[NEW SERIES.]

JULY, 1891,

TO

JUNE, 1892.

NEW ORLEANS:
L. GRAHAM & SON, PRINTERS, 44 & 46 BARONNE STREET.
1892.

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J. P. Davidson M. D.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XIX. JULY, 1891. No. 1.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the first day of the month preceding that in which they are expected to appear. A complimentary edition of twenty-five reprints of his article will be furnished each contributor should he so desire. Any number of reprints may be had at reasonable rates if a *written* order for the same accompany the paper.]

A CLINICAL REPORT ON INTRAVENOUS SALINE INFUSION IN THE WARDS OF THE NEW ORLEANS CHARITY HOSPITAL FROM JUNE, 1888, TO JUNE, 1891.*

BY RUDOLPH MATAS, M. D., Visiting Surgeon, etc.

While the records of the Charity Hospital point to the fact that intravenous saline infusion was practised during the earlier and devastating cholera epidemic that prevailed in this city, and a dim indication is also met here and there of the direct and indirect transfusion of blood in the surgical practice of this institution (though I have no official information or record to that effect), it is, I believe, historically correct to state that no attempt prior to July, 1888, had been made to infuse intravenously a saline solution for the relief of acute anæmia.

I have undertaken, therefore, as a matter of domestic history as well as of general medical interest to present the records of all the cases that have been subjected to this procedure since that time, in this institution, and to draw from them such conclusions as the nature of the cases and the results warranted. In so doing I have gathered nineteen observations of a purely surgical character, which represent all the instances in which, after diligent inquiry, I have been able to ascertain that this method of treatment had been practised. I have, furthermore,

*Read before the Louisiana State Medical Society, May, 1891.

included one medical case occurring in my own practice, which I have added to sum up the total of my personal experience with the method which is represented by five cases, all of which are embodied in this report. The other remaining cases occurred in the services of other members of the staff to whose courtesy I am indebted for the reports, especially as they are almost all unpublished histories from the ward books.

In several cases the conditions which gave rise to the indication for saline infusion were rare and of unusual interest, and outside of their therapeutic aspect are worthy of record, and for this reason I regret that in some instances I was not able to obtain more full and detailed information.

After the presentation of the clinical observations I shall avail myself of the text furnished by them to direct your attention to the indications, the advantages and life saving properties of saline infusion, believing that after the recital of several of these critical experiences you will concur with me in the belief that it is impossible to overestimate the great value of this mode of therapeutic relief in all cases in which its exhibition is appropriately called for.

I.

OBSERVATION I.—SERVICE OF DR. R. MATAS (WARD 8).

Mixed Cavernous Sarcoma of Thigh, Simulating Aneurism of the Femoral—Amputation at Upper Third—Profound Shock—Saline Infusion Twice Repeated—Death.

R. C., æt. 26, admitted July 12, 1888; Louisianian; farmer; temperate; no hereditary history; no syphilis. History: about fifteen years ago patient fell from a pine tree and drove a sharp stump about four inches deep into the flesh of the inner side of thigh. Three years ago noticed a small tumor at a spot corresponding to the apex of Scarpa's triangle. It was seen by Dr. F. (a practitioner in his native place who first examined him and who is here now and confirms the statement), who noticed a pulsation and believes he also heard a murmur. The doctor was so thoroughly convinced that the tumor was an aneurism that in sending him to the hospital later he advised the patient to carry with him a strong elastic

bandage, with the instruction to constrict the limb above the tumor in case it should burst before reaching surgical assistance.

Status Præsens: The patient is thin, apparently poorly nourished and careworn from anxiety, but not noticeably cachectic. He is a man of moderate height, about 5 feet 6 inches, and shows traces of a past robust and vigorous physique. On examination of right thigh, a large tumor at once attracts attention, lying with its longitudinal axis parallel to the long axis of the thigh and right over the course of the femoral.

The tumor is ovoidal in shape, projects considerably above the thigh; the skin over the tumor is tense, adherent, and over the center presents a livid color. The tumor measures in length over 9 inches, beginning at a point 3½ inches from Poupart's ligament, and reaches a point 4 inches above the internal condyle. The transverse diameter is over 9 inches. The tumor did not appear to spring from the bone, though it originated deeply in the thigh and, though very well outined in the soft parts, was not distinctly encapsulated, but blended gradually with them at the periphery; in the most prominent portion of the tumor a slight bloody ooze was noticeable, owing to a fissure in the tense and livid skin. The tumor, though quite firm throughout, had, in some parts, a semi-solid feel just like a sac filled with clot. No pulsation was visible, or recognizable by palpation; no thrill; no murmur. Firm pressure over the femoral at groin causes very little difference in size of tumor, but the application of the elastic bandage reduces it considerably, fully 3½ inches, by measuring the circumference of the limb.

Puncture with an exploring needle draws a syringeful of pure blood.

This last result of the examination causes considerable hesitation in the diagnosis. The traumatic history, the statements of the first medical attendants and above all the reductibility of the growth by elastic compression all seem to point to aneurism; still the size of the tumor, the absence of all pulsation, thrill, murmur and above all the slight effect of the compression of the femoral above the tumor and absence of varicose veins tend to discredit the diagnosis of aneurism and rather favor that of malignant disease.

With considerable doubt in my mind as to which was the real condition, I decided to give the patients the benefit of an operation that would first clear the diagnosis, and second permit of an attempt to remove radically either an aneurism or malignant tumor.

The apparent break in the most prominent part of the tumor and its bloody discharge indicated the necessity for prompt action. Therefore, on July 14, 1888, the patient was taken to the amphitheater, where, with the aid of Dr. Laplace and other members of the staff, the patient was anæsthetized (chloroform followed by ether) and an Esmarch bandage applied from the foot to the groin, where it was secured just below the groin. An exploratory incision was now made, following the long axis of the tumor, which at once penetrated to the center of the growth and revealed its true neoplastic character. The appearance of the section, however, was rather novel. As the knife entered the tumor a considerable amount of dark venous blood spurted out in a surprising manner.

Sponges were instantly applied, and as they were cautiously removed it was seen that the hemorrhage had stopped, and that large cavities existed in the tumor, which had evidently contained the blood that had given rise to the alarming hemorrhage.

It was evidently a cavernous growth, the large spaces being occupied by a serous, in some by a colloidal, and in most by a venous fluid. The caverns were hollowed in a stroma consisting of mixed osseous, chondroid and soft sarcomatous tissue.

In attempting to dissect the integument from the surface of the tumor it was found that the two were thoroughly adherent throughout the convex surface of the growth, and that a very large loss of skin would have to be incurred, even if the tumor allowed of enucleation in its deeper surfaces. On further exploration it became evident that the whole femoral sheath was involved and imbedded in the neoplastic mass. The tumor, however, appeared to be independent of the femur. In the presence of the complications, it was plain that conservatism was out of the question, and I decided to amputate

the thigh at its extreme upper third. Fearing that any slip in a constrictor at the thigh would prove fatal to the already exhausted subject, the ligature of the common femoral at the level of Poupart's ligament was undertaken and quickly accomplished. The elastic constrictor was now removed and the thigh amputated by a short anterior and long posterior mixed flap amputation (Lister's).

The hemorrhage was comparatively slight (not over three ounces) the vessels in the posterior flap being readily controlled with the able assistance of Dr. Laplace. The patient was kept under the influence of the anæsthetic (chloroform followed by ether) over one hour and fifteen minutes.

Notwithstanding the really small loss of blood (excepting that first loss when the loculi of the tumor were first opened) the patient was in a condition of profound shock when he was placed in bed; the pulse being then very small, shallow and rapid. Brandy and ammonium carbonate were administered and heat applied to the body and extremities. The patient recovered consciousness in the course of an hour and spoke intelligently; he vomited, or rather strained, with nausea considerably.

Six hours after the operation I visited the patient and found him perfectly rational and talkative, though profoundly prostrated, the pulse being intermittent and exceedingly shallow and rapid. Notwithstanding the persistent application of heat the patient was growing colder, and a clammy sweat bathed the surface. I now decided to try the effects of an intravenous saline injection.

Two pints of a common salt solution, made by boiling one drachm of common salt in a pint of distilled water, were slowly injected into the right median basilic. The fluid was infused warm (about 100° F.) A few seconds after the injection had commenced the patient gave utterance to expressions of increasing comfort and grateful well being. He had complained of a "fire" or "heat" which was consuming his vitals, "and a great, burning thirst." Now, as the water flowed into the vein, he felt as if a delightful cool wave was gently spreading over his body, and was giving him new strength and life and wonderfully appeasing his thirst. The

pulse in the meantime improved immensely; it became fuller, more resistant to the finger, then slower, and finally quite strong and regular, the pulsation having been reduced from 150 to 100, and less when the injection was stopped.

Next day, July 15, the patient had been very cheerful and expressed himself as having passed a comfortable night, but toward morning the prostration had reasserted itself and he had slept but little; he was not as thirsty as yesterday, but the extremities were cold and his pulse was evidently undergoing a change for the worse. It was again shallow, compressible and rapid, about 128-130, and showed a tendency to rapid deterioration. Nourishment— beef tea, brandy, milk, and digitalis, had been regularly given during the night and had been kept up since.

Evening.—The patient is evidently relapsing into the same condition as before saline injection, the beneficial effects of which are now no more perceptible; the pulse is practically imperceptible at the wrist and a cold, clammy sweat bathes the surface; he is manifestly sinking. I again inject nearly two pints of the same saline solution into the left median basilic. This time the pulse responds more slowly to the influence of the injection and it requires more fluid than the first time to fill it up. After the second pint the pulse, however, rallies and becomes hard and the patient revives.

The beneficial effects of this injection are more transitory than the first. The newly improved pulse is maintained only a quarter of an hour, the pulse becoming rapidly faster and weaker so that in the course of three or four hours it becomes imperceptible, consciousness lost and the patient expires in the morning of the 16th. The wound at no time after the operation gave reason for anxiety. After death the stump was found in excellent condition.

Remarks: In this case we must note (1) that the cause of the prostration was mainly shock and not hemorrhage, the latter being insufficient alone to account for death.

(2) That the man had been for a long time prior to the operation in a state of great nervous tension and worry, and that this added to the legitimate shock of the prolonged operation and were the true factors that led to the fatal result.

(3) The relief afforded by the saline infusion was prompt and decided, and without the two injections it is certain that life would have ended at least 36 hours before the time that it did take place.

(4) That not only was life prolonged, but great comfort given the patient by the saline infusions.

(5) That no attempt was made to regulate the quantity of liquid by a predetermined dosage, but that quantity injected was regulated by the visible or perceptible effect on the general condition and particularly by the pulse.

OBSERVATION 2.—SERVICE OF DR. A. B. MILES, HOUSE SURGEON.

Stab Wound of the Right Axillary Artery—Axillary Abscess—Profuse and Repeated Hemorrhage after Opening Abscess—Syncope—Intravenous Infusion of Saline Solution—Recovery.

"H. M., æt. 26 years, bricklayer, white, came to the hospital November 28, 1888, with large pectoral abscess and partial paralysis of left arm. Patient gave a history of having been stabbed two weeks previously; knife entering about one inch from insertion of great pectoral muscle. Abscess was opened and found to contain a large quantity of pus and blood clots. About two hours after opening of abscess patient had a hemorrhage from this wound. Compress applied and patient put to bed. Several hours later a second hemorrhage occurred, and like the first appeared to be venous in character. Compress was reapplied more firmly, and hemorrhage temporarily checked. Patient complained of intense thirst and was given to drink warm milk and tea. Three hours later a third hemorrhage occurred, much more profuse than either of the others, and unmistakably arterial. Patient was almost in a state of collapse.

"Dr. Miles was summoned and decided to ligate bleeding vessels immediately, as compresses would not check the hemorrhage. On opening the axilla the knife was found to have divided the median nerve and cut half through the axillary artery, which was gaping wide and bleeding profusely. Hemorrhage was controlled by pressure upon the subclavian and a ligature put around each end of the wounded vessel.

* * * * * * Patient's pulse was now 170 per minute and scarely perceptible at wrist. At the suggestion of Mr. Borde, R. S., one pint of saline fluid (ʒi to pint of warm water) was injected through the median basilic vein. This had an immediate and beneficial effect; pulse became full, more regular and less frequent.

"Patient was taken back to the ward. No further hemorrhage occurred. Wound had almost healed and he will soon be restored to his normal state of health.

"There is no doubt that the injection had much to do with saving the patient's life. The hemorrhage had been profuse, and there was scarcely blood enough in his body to stimulate the heart to proper action. * * * In this case, as soon as the fluid was injected a marked change was perceptible."

[Extract from hospital report by Dr. E. D. Martin, then Ambulance Surgeon, Charity Hospital, in New Orleans Medical and Surgical Journal, February, 1889.]

OBSERVATION 3.—AMBULANCE CASE, ATTENDED BY DR. A. B. MILES.

Idiopathic Epistaxis.—Simply a note in the preceding report by Dr. Martin to the effect that infusion had been practised in the case of a little girl, aet. 12, who had lost so much blood from nasal hemorrhage, that no pulse could be detected at the wrist. Half a pint of saline fluid was injected and almost immediately the pulse was restored, the patient recovering permanently.

OBSERVATION 4.—SERVICE OF DR. R. MATAS (WARD 2).

Syme's Amputation for Tubercular Arthrites of Ankle and Tarsus—Secondary Hemorrhage—Syncope—Intravenous Injection of 12 oz. of Saline Solution—Recovery.

J. C., negro, male, æt. 42. Admitted in ward 2, July 5, 1889. Ankle and foot very much swollen; pus in the ankle, one or two sinuses leading to tarsal bones. Shortly after admission Syme's amputation was performed. The cavity of the stump is stuffed with iodoform gauze, the operation having been performed with careful antiseptic and aseptic precautions.

There were few spouting vessels after the removal of the Esmarch, but more than the usual general ooze. Hot water sponging appears to control this. The day after the operation the dressings are removed because of much soaking with blood. On removal of gauze considerable hemorrhage in region of posterior tibial which seemed to be of a venous character. The interne of the service packs the wound carefully with iodoform gauze and apparently the hemorrhage is arrested.

The dressing is removed two days after and is still found considerably soaked with blood. In removing the dressing serious hemorrhage again takes place, which still presents the same dark color; packing again resorted to and with apparent success. Owing to continued oozing Dr. M. removes the dressings and makes a careful search for a bleeding vessel, but the attempts made to control the points of greatest oozing with catch forceps fail, and owing to excessive pain complained of by the patient the attempt is abandoned and a firm tamponnade and dressing to the stump is applied, while preparations are made to administer an anæsthetic and permanently arrest the hemorrhage by ligating the bleeding points. Before the anæsthetic is administered the patient sinks in syncope, with a faint, collapsed, irregular pulse, the body being bathed in a profuse cold and clammy sweat. Stimulants, ether, auto-transfusion by bandaging the extremities, digitalis and brandy, hypodermatically, are resorted to promptly, but the patient gives no sign of rallying, and death appears imminent from collapse. Infusion is now appealed to; the left median basilic is exposed and twelve ounces of the saline solution (warmed) same as used in Case 1 are injected. The effect is magical; the pulse improves, *pari passu* with the flow of the solution in the vein, and the patient awakens rapidly, expressing himself as infinitely improved. The pulse having been brought from 150-160 to 90.

The stump was not touched; no further search made for bleeding points, as no further tendency to hemorrhage was manifested by stump from that day.

This patient finally left the hospital completely restored to health and walking on a very firm and excellent stump.—[From notes furnished by Dr. Saizan, R. S., then interne of service.]

OBSERVATION 5.—SERVICE OF DR. A. B. MILES.

Gunshot Wound of Arm and Head—Meningitic Symptoms—Profuse Epistaxis—Saline Infusion—Transitory Benefit—Death.

J. B., male, æt. 32, admitted April 15, 1889. The wound in the arm was of little consequence. The wound of the head very serious, the ball penetrating below right orbit, and ranging upward and inward, passing deeply to base of skull, probably penetrating through the basilar process of occiput. Some pieces of bone were removed through wound in face; the eye did not appear to be injured, yet the patient had been blind since the injury; he could not even see a candle held before him. There had been some epistaxis on admission. Temperature for a week following admission oscillated between 102 deg. and 104 deg. F., but was declining, when a tremendous epistaxis occurred. The posterior nares were plugged and the hemorrhage finally stopped. The next day it commenced again in spite of plugging, and as he was sinking from vascular depletion, Dr. Bloom, assistant house surgeon, infused over three pints of an extemporized saline solution into the arm. While the injection was flowing the patient appeared to rally, but Dr. Bloom discontinued the injection when he saw almost the pure and colorless salt water coming through the nose. The vascular depletion appears to have been extraordinarily complete, and it is almost incomprehensible how the patient survived long enough even to receive the intravenous injection. Notwithstanding this profound oligohæmia it is remarkable that the temporary plethora produced by the infusion kept the patient alive for several hours after the operation.

It is much to be regretted that no autopsy could be obtained in this case, and that the true cause of the tremendous and fatal epistaxis could not be positively ascertained; still the venous character of the blood and the course of the ball lead the attendants to suspect the hemorrhage to come from one of the sinuses at the cranial base.

Strange to state, the amaurosis which had existed on admission disappeared some time before death, as the patient

could see plainly before the epistaxis took place, just as the fever began to decline. No autopsy was granted in this case. —[From notes kindly furnished by Dr. Cocram, then interne, and Dr. Bloom.]

OBSERVATION 6.

Avulsion of Right Arm by a Propeller After Falling from a Skiff into the River.

[Ambulance case attended by DR. BLOOM, Assistant House Surgeon.]

A white man, aged about 50 years, was upset while in a skiff in the Mississippi river and was caught by the rapidly rotating propeller of a steamer. The right arm was completely torn away in a perfectly circular manner about the middle third of the arm. The patient had lost a very large quantity of blood and was nearly drowned when rescued. When brought to the hospital he was practically pulseless from the profound shock, anæmia and asphyxia. Dr. Bloom availed himself of one of the large gaping veins in the stump, and, after securing the main arteries, injected about 20 ounces of extemporized saline solution. The pulse was temporarily restored, and while the vascular distention lasted the patient appeared to rally and improve. The tonic action of the injection was not sustained, however, as the patient again sank and died several hours after the infusion. In this case shock appeared to be the prominent factor in determining the *exitus letalis*. The temporary and decided benefit of the infusion in this case was very marked, as the patient was practically dead when brought to the hospital.

[This case is reported from a verbal communication of Dr. Bloom].

OBSERVATION 7.—SERVICE OF DR. E. LAPLACE.

Overlapping Fracture of the Femur—Refracture with Chisel through External Incision—Profuse Venous Hemorrhage—Grave Syncopal Symptoms—Saline Infusion—Recovery.

This case is reported in detail by Dr. E. Laplace, visiting surgeon, who performed the operation, in the *Medical News* for November 2, 1889. In this case the hemorrhage appeared to come directly from the chiseled bone, and the beneficial effect of the injection was truly remarkable. Sixteen ounces of the saline solution were injected.

OBSERVATION 8.—SERVICE OF PROF. E. S. LEWIS, M. D.

Ovarian Fibro-cystoma—Ovariotomy—Hemorrhage and Shock during Operation—Threatened Collapse in Spite of Energetic Stimulation—Saline Infusion—Recovery.

L. F., white, age 43, admitted in hospital Oct. 29, 1889. Abdominal tumor of three years' duration. The tumor had attained enormous proportions, interfering with respiration, digestion and defecation. Patient exceedingly weak, emaciated, with a very poor, small, pulse at time of operation. Operation performed about ten days after admission by Prof. Lewis. The cyst was multilocular and contained over (?) gallons. It was universally adherent. In consequence of these adhesions much unavoidable hemorrhage occurred and operation prolonged.

At the conclusion of operation, the pulse could not be felt at the wrist; the arteries of the neck appeared to be carrying hardly any blood. Stimulation with hypodermatic injections of ether, brandy and ammon. carb. and digitalis did some good while operation was in progress, but at its conclusion failed totally to revive the patient. Saline infusion was practised by Dr. Miles, and nearly two pints of an extemporized salt solution were injected into the median cephalic. The effect was magical; in five minutes her pulse could be felt at wrist, and in ten minutes could be counted very easily and beating about 86-90 per minute. The patient left the hospital December 15, 1889, perfectly restored to health.—[Notes kindly furnished by Dr. Wm. Armstrong, then interne.]

OBSERVATION 9.—SERVICE OF DR. MATAS (WARD 2).

Multiple Radiating and Comminuted Fracture of Cranium from Blow in Right Temporal Region—Laceration of Main Trunk of Right Arteria Meningea Media—Coma with Diffuse Cortical Symptoms—Trephining and Removal of Large Fragments of Vault—Threatened Collapse during Operation—Saline Infusion—Temporary Improvement—Death.

B. C., negro, adult, aged 29 (about); was struck in dispute with a heavy club on right side of head. The man was struck senseless by the blow and brought in an unconscious

state to the hospital, where he was seen several hours after admission by Dr. Matas.

The patient lay motionless in apparent sleep; no stertor; could not be roused by questioning or pinching him; could swallow a little water when placed in his mouth with a spoon. By pricking skin of feet or legs reflex movements were elicited, which after deeper and more vigorous stimulation with the pin gradually extended to upper extremities. These reflex movements appeared to be particularly active in the right half of the body, corresponding to injury; the left side did not respond as actively as right when thus stimulated. There appeared to be a slight paresis of the two extremities; the pupil on the same side appeared to be a little more dilated, though both were widely dilated and responded indifferently to lights; the pulse was slightly irregular, but pretty full; no spontaneous evacuation of fæces or urine had taken place since admission.

On examination of the head it was noticed that the right eye and lids were slightly ecchymotic and puffy; the right temple also fuller than the left. No external visible wound could be detected, but on percussion a decided "crack-pot" sound was elicited over the right temporal and parietal regions. No distinct depression could be felt, nothing certainly pointed to the enormous fracturation subsequently detected. After consultation with Dr. Bloom and with his assistance I proceeded to perform an exploratory operation. After due antiseptic preparation of the field of operation a curvilinear incision was made in temporal region over the line of the superior temporal ridge, extending from the external process of the frontal to a point about half an inch above the base of the mastoid. A perpendicular incision carried down vertically to the zygoma bisected the original curved line. By these incisions the temporal aponeurosis was detached almost completely above and bisected at its most resistant portion; the temporalis was also divided to the bone and readily peeled away from the temporal fossa. As soon as this was done the extensive character of the injury was immediately recognized. The squamous plate had been completely fractured, and was the starting point of several long fissures which radiated toward the vertex—one to bregma, another toward parietal foramen, extending across

the sagittal line, and another shorter, backward in the direction of the lambda. A number of large fragments, which were readily detached, represented the squamous portion of the temporal; some of these fragments were much depressed and imbricated. All the fragments were liberated; trephining had to be resorted to in two places to facilitate the elevation of a larger piece, after the removal of all the broken fragments.

A large space, representing the squamous area of the temporal, existed in the lateral region of skull and exposed a considerable mass of clot and the underlying dura mater; this was washed out and gently sponged, and it was seen that the dura was not resistant and flabby. An incision was made through it, which allowed a little sero-sanguinolent fluid to escape and revealed the temporo-sphenoidal lobe almost in a state of pulpification. The finger could be readily pushed into the brain substance almost to the lateral ventricles. The brain substance had almost a mushy consistence. After this revelation I hastened to wash gently with warm, boiled water, replace some of the fragments and sew the wound. As the man had shown a disposition to restlessness during the operation some chloroform was given to quiet him. It was not necessary to administer much. The hemorrhage was readily controlled, as the vessels were divided by the pressure of assistant's finger and by artery forceps; the hemorrhage was certainly moderate considering the excessive vascularity of this region. Still while the sutures were being introduced the assistants in charge of the pulse remarked that the pulse was becoming very irregular, more shallow and almost imperceptible.

The patient was very cold and clammy and appeared to be in collapse, and it was plain that he was about to die on the table. Heat, stimulants and digitalis were applied hypodermatically, but without any effect. Infusion was then resorted to and I injected over 20 ounces of extemporized saline solution into the median basilic vein. The result on the pulse was extraordinary; it was reduced to its normal beat and strength, and though the patient was unconscious he ceased to present his former collapsed and moribund appearance. The dressing was finished leisurely and the patient returned to his ward.

He survived till the next day, over 18 hours after the exploratory operation.

OBSERVATION 10.—MEDICAL CASE, ATTENDED BY DR. MATAS.

Acute Dysentery in an Aged Male Subject—Profound Exhaustion—Apparent Death—Saline Infusion—Restoration to Consciousness—Life Prolonged Five Hours.

Dr. S., male, white, about 60 years; much exhausted by mental worry and physical work. Came to the city for treatment, suffering with a most violent and fœtid dysentery of over one week's duration. When seen by writer, patient was pinched, shriveled and cadaverous in appearance; had small, strained, mucous actions of a most offensive character and dark color every fifteen or twenty minutes. Patient had attempted to treat himself, but very ineffectually, with enemas of morphia solution and no internal treatment. Pulse exceedingly small and rapid, over 130 per minute. Placed at once on stimulants, ether and digitalis, with small doses of saline and morphia. Enemata of Labarraque's solution and suppositories of opium, belladonna and iodoform. Temporary relief. Seen with Dr. Castellanos in consultation later, next day, and strychnia added to treatment. The evacuations appear to be improved considerably, but the pulse is growing weaker in spite of the most systematic stimulation. The mind becomes perceptibly affected; some delirium with lucid intervals. The dysentery becoming apparently better, almost all therapeutic efforts are directed toward restoring the cardiac strength. At night, find patient in stupor, cold and clammy, pulse imperceptible at wrist, evidently moribund.

In response to the distressing appeals of family to try something, the writer practises saline injection, assisted by Mr. Parker, R. S. A very large quantity of saline solution is injected while the patient is absolutely pulseless in the extremities and the respiration is barely perceptible; the patient being totally unconscious. Over two pints were injected before a decided impression could be noticed in the patient, but after this the pulse came back rapidly, filling up and becoming tense and regular as the third pint was being emptied. The pulse now

beat about ninety times per minute; the respiration was about twenty-five, and the patient revived sufficiently to ask "What is the matter?" and to survey his surroundings. Nearly three pints had been injected when this occurred and the canula was withdrawn from the median basilic vein. As was feared, the beneficial effect of the injection was only temporary. In half an hour the pulse became more rapid, the lethargic stupor began to reassert itself, and the moribund state returned. Life was prolonged, however, until 2 A. M., when death took place, five hours after the infusion had been practised.

OBSERVATION II.

Wound of the Internal Mammary Artery Complicated with Penetration into the Pleura and Pericardium with enormous Hæmo-thorax—Syncopal Symptoms Preceded by Great Dyspnœa—Saline Infusion—Temporary Benefit—Death.

A. B., male, negro, æt. 25,was brought in the ambulance. suffering with a stab wound of the chest, implicating some large vessel. Much external hemorrhage had taken place at the time the stab had been inflicted. When brought to hospital patient very pale and evidently in profound shock; breathing short, rapid; pulse intermittent, very rapid and almost imperceptible. Consciousness retained. Complains of a feeling of great oppression in chest. Messrs Armstrong and Martin, Ambulance Surgeons, immediately injected an extemporized salt solution into the median cephalic. The pulse improved as fast as the fluid flowed in veins, and almost the normal rhythm and number of beats had been reached when the injection was stopped. About two pints were injected. Though the pulse was very notably improved the respiration still remained quite rapid and short. The general effect on the patient was most remarkable, he appeared greatly relieved of his previous distress and he expressed himself as being very much better. The effects of the injection were only temporary, however; the patient succumbed about four and a half hours after.

The post mortem examination revealed an enormous hæmothroax, caused by a completely divided left internal-mammary artery. The pericardium had also been perforated,but the

heart was intact. In this case vascular depletion, anæmia and apnœa from the complete disability (from compression) of the left lung were the causes of death. Still, in spite of these eminently lethal conditions, it can not be doubted that life was prolonged at least three or four hours.—[From notes furnished by Dr. Armstrong, R. S.]

OBSERVATION 12.—SERVICE OF PROF. E. S. LEWIS, M. D.

Supra Vaginal Hysterectomy for Enormous Uterine Myoma of Nine Years' Duration—Profuse Hemorrhage from General Adhesions—Profound Shock—Collapse—Saline Infusion—Marked Temporary Improvement—Survival of Three Days After Operation.—Death from Exhaustion.

(Clinical History by Dr. Saizan, R. S., then Interne of Service.)

Mr. B., aet. 46; married; Ipara. Noticed small swelling in hypogastrium nine years before admission into hospital. Admitted February 5, 1890. Tumor grew slowly the first five years, but in the last two it enlarged in a very rapid manner. The abdomen is enormously distended, and there is great interference with the respiratory functions. On February 11, 1890, laparotomy was performed under ether. Incision extended from above umbilicus to pubis; universal adhesion with abdominal walls and viscera. Much hemorrhage and time required to separate the mass from its connections. The uterus amputated on level with *cervix;* this portion being attached as pedicle to the abdominal wound. Operation lasted one and one-half hours. During the latter part of operation, and after the tumor had been removed, the patient became pulseless at wrist, pulsations barely perceptible at carotids, and could hardly be counted, and estimated at about 160 or 170. liq. ammon. carb., brandy, digitalis, etc., were injected hypodermatically, but with little benefit. The breathing was very shallow at this time, and the heart failing most rapidly.

Saline infusion was immediately practised by Dr. Bloom, who assisted Dr. Lewis. The solution was extemporized (℥i—Oj). After the introduction of a small quantity of solution there was a marked improvement in the patient's general condition, the pulse commencing to show the beneficial effect first. When six ounces had been injected, the beats came

down to 104 per minute; and after eight more ounces had been infused, the pulse beat at the rate of 84 per minute, the respirations 23.

The pulse continued good for two or three hours after operation, though it again showed an ugly tendency to rise six hours after, when it rose to 130 per minute; the temperature 99 1-2° F.

On the third day, at 2 P. M., she expired apparently from exhaustion.

OBSERVATION 13.—SERVICE OF DR. MATAS—(WARD 2).

Laparotomy for Perforating Gunshot Injury of Abdomen—Perforation of Liver, Stomach, Duodenum and Pancreas, the Bullet Lying in the Retroperitoneal Connective Tissue over the Left Crus of Diaphragm—Secondary Shock—Infusion of Saline Solution—Death—Autopsy.

A. B., negro, male, æt. 36 or 38, brought to the hospital in the Charity wagon, Tuesday, September 23, 1890, at 10:30 A. M. The patient, a strong, healthy, muscular laborer. He stated that on the night preceding admission he had eaten a hearty supper at 7 P. M. At 11 P. M. (three hours after) he became involved in a difficulty and was shot in the abdomen, at a very short distance, with a revolver carrying a 32-caliber bullet. Shortly after the shooting he repeatedly vomited large quantities of a black coffee-ground stuff mixed with some ingesta. The vomiting was repeated often during the night and continued the next morning when admitted to the ward.

Shortly after admission he was carefully examined by the writer together with Drs. Parham, Michinard and Bloom, with the following result:

A bullet wound was found in the upper epigastrium situated at a point midway between the xyphoid cartilage and the tip of the left tenth rib. This was the only visible wound in the body. On percussion and palpation the whole epigastrium was found full, tympanitic and tender, especially in the vicinity of the wound.

The remainder of the abdominal surface appeared to be normal. The pulse was full and regular, beating at the rate of 98 to 100 per minute. Temp. 100° F. The urine clear.

Mind fully conscious and intelligent. The general condition in every way favorable.

In view of the evidence of perforation and signs of beginning peritonitis we decided that there should be no delay in opening the abdomen. The dangers of his condition were fully explained to the patient and with his consent he was anæsthetized (chloroform) and placed on the operating table.

After a thorough preliminary antiseptic preparation of the abdominal surface, a slightly curvilinear incision, four inches in length, was made, starting from a point slightly below the xyphoid cartilage, extending downward in a direction parallel with the costal arch. This immediately exposed the lower margin of the left lobe of the liver, and at once exposed a perforation situated about three-quarters of an inch from the margin and one inch to the left of the median line. The anterior surface of the stomach then rolled into view immediately, presenting a perforation about the center of the body of the organ, which allowed a probe to pass into it. The stomach was moderately distended with gas. Some blood was found diffused in the peritoneum, but no perceptible ingesta. The wounded surface having been gently drawn over, the wounded area was isolated by large abdominal sponges and the wound readily closed with a few Lembert stitches. After closing this wound it became necessary to examine the posterior surface, and for this purpose the great omentum was torn through posteriorly, with the result of exposing a bullet wound which perforated the posterior wall of the stomach, which, being larger and more irregular than the first, allowed gases and ingesta to escape freely into the lesser cavity of the peritoneum.

Further examination of the lesser cavity revealed that some extravasation of blood and ingesta had taken place, though not in large quantity. It was furthermore discovered that the bullet had again perforated the ascending layer of the transverse meso-colon and had found its way into the retro-peritoneal space at a point immediately over the abdominal aorta, which had, however, miraculously escaped injury. A ragged and ugly wound was also seen to involve the very terminus of the duodenum and the pancreas close to the superior

mesenteric artery, and allowing the escape of chymous matter into the peritoneal and retro-peritoneal tissues.

Further examination through an enlarged incision (two inches more) revealed considerable accumulation of blood in the infra-colic and left lumbar region. A careful search was made for a bleeding vessel, but as none was found and there being no evidence of active hemorrhage it was deemed advisable to close the duodenal wound. This was done with some difficulty owing to the great depth of the wounded parts, but was finally accomplished. The abdominal peritoneal toilette was then attended to with scrupulous attention, the whole cavity being repeatedly flushed with hot sterilized water. About one hour was consumed in this work and the patient's condition grew unfavorable. The pulse was tolerable, but meteorism of the stomach and intestines was developing visibly and causing considerable respiratory disturbance and annoying tension in the wounded area.

After carefully drying the abdomen, a glass drainage tube was inserted at the lower angle and the wound sutured. After the dressings had been completed the patient, who had been on the operating table over two hours, was bathed in a profuse sweat, the pulse over 120 and small.

The patient was now put to bed and warmed with artificial heat and hypodermatic injections of brandy. Seven hours after, the pulse was 98, very regular, strong and fine, and the temperature 100 F.

The patient was quite conscious but restless, and was very thirsty. Every half hour the abdominal glass drain is tested with a glass syringe, and any excess of fluid in the tube is drained away, and in this manner a considerable quantity (about 4 to 6 ounces) of bloody serum is removed from the cavity; the bloody serum also flows freely from the drain into the dressings, showing its efficiency.

September 24 (second day), at 6 A. M., Mr. Fortier, interne of the service, noticed that the pulse was becoming more rapid and compressible, and patient more restless. A teaspoonful of hot water is given every hour and a hypodermic of 10 minims of tincture of digitalis. Temperature, subnormal.

At 11 A. M. Patient is evidently moribund; stuporous state; pulse could be counted at wrist, and skin covered with a profuse sweat. I decided to infuse salt solution. With the able assistance of Dr. Bloom and other members of the house staff, over 50 ounces (about 3 pints 3 ounces) of warm salt solution (1 teaspoonful to a pint) are injected into the right basilic vein.

The immediate effect of the infusion in this case was not as favorable as anticipated. The patient was roused from the stupor into which he had fallen, but constantly complained of *thirst* and a great heat all over his body, which appeared to increase rather than diminish with the steady flow of the infused fluid. The pulse became slower but could not be reduced lower than 120 in spite of the large quantity of fluid that had been poured into the vascular system; finally the agitation and sensation of general heat increasing to even alarming extent the further injection of fluid was stopped. About ten minims each of the tr. digitalis and aromatic spirits of ammonia were injected thirty minutes before and thirty minutes after the saline infusion.

The immediate effect of the saline infusion was decidedly puzzling in this case, specially the remarkable sensation of "burning heat" complained of by the patient, and the increasing restlessness. The behavior of this patient was indeed a striking contrast to patient No. 1, who appeared to be delighted with the cool and soothing stream that diffused itself all over his body, and so kindly quenched his burning thirst.

In this case I was certainly surprised at the results, and expected that the patient would die one or two hours after the injection.

Sept. 25. Third day after operation. Much to my surprise I learned that the patient was still alive, though he had been very delirious during the night. In fact, late at night he eluded the vigilance of the night nurse and jumped out of bed, saying that he was all right and only wanted to eat and drink. He had been forced back to bed with difficulty and had been strapped down to keep him there. Of course he was now much more exhausted. The pulse is 140 and shallow, yet

the general condition of the patient, especially the mind, is apparently much better than it was yesterday either before or after the infusion of the salt water. The temperature since the operation has never risen above 100 deg. F. There has been no vomiting and no tympanites or abdominal tenderness.

In spite of all the great excitement there was no unfavorable change in this respect. The dressings were changed, but the drain allowed to remain, though partially plugged with a Miculicz's iodoform gauze drain. The condition of the wound appeared to be satisfactory.

Black coffee and Ducro's Elixir were given with tr. digitalis by enema every three hours. Notwithstanding this and other efforts at stimulation, the man succumbed at 6 P. M., about fifty-four hours after the laparotomy and about thirty hours after the infusion of saline solution.

A careful autopsy held by Dr. P. E. Archinard, deputy coroner, confirmed the condition of affairs reached at the time of the operation. The bullet was found lying loosely in the retroperitoneal connective tissue behind the transverse duodenum to the left of the vertebral column. There were evidences of slight peritonitis limited to the lower cavity and no hemorrhage.

In this case the direct cause of death was not peritonitis, not hemorraage, but circulatory failure, which came on, not as shock comes, immediately after the operation, but fully four hours after complete and satisfactory post-operative reaction had taken place.

Furthermore, this circulatory failure appears to have been benefited by saline infusion sufficiently to prolong life at least twenty-four hours, though the immediate effects of the infusions were far from comprehensible in that light.

OBSERVATION 14.—SERVICE OF DR. F. W. PARHAM.

Fracture of Olecranon—Phlegmonous Erysipelas—Disarticulation at Shoulder—Shock—Exhaustion—Saline Infusion—Death.

(Clinical History by Mr. E. D. Fenner, R. S., Interne of Service.)

I. C. S., male, æt. 24. Patient fell and fractured the olecranon of right arm, on November 6, 1890. Arm was put upon a slightly flexed anterior tin gutter splint, which had to

be reapplied on third day on account of pain and swelling with great ecchymosis. On sixth day he returned, very pale and weak, with marked fever which was found to be due to erysipelas of the broken arm and the whole right side of the trunk. He was transferred to erysipelas ward, where he remained till November 26, when he was sent down to ward 9.

At this time his condition was pitiful. He was emaciated and very weak, with a distressing cough which brought up extremely offensive sputum. Long incision in the arm gave exit to quantities of dirty, creamy pus. The elbow joint was opened and the brachial artery exposed and its outer coat sloughing for several inches. Suspension and the bi-chloride drip was tried for two days, when it became apparent that amputation at the shoulder was his last chance. Ether was given, preceded by atropine, grain $\frac{1}{80}$ and brandy ʒss, subcutaneously. The parts were then quickly cleansed and digital pressure made upon axillary vessels. A vertical incision was made down the outer side of shoulder, and from this an ellipitical cut was carried around the arm just below the joint, but not severing the axillary vessels. The bone was now rapidly disarticulated, the vessels grasped in the flap, the circular incision completed and the vessels seized with forceps.

Meanwhile the patient had become very weak. Respirations were very feeble and shallow; pulse very weak and 200 to the minute. Large injections did not improve his condition, and saline infusion was done, the stump being stuffed with gauze and covered with hot towels. After a pint of fluid had been introduced, pulse became much stronger and a great deal slower and the operation was completed, the stump being packed with gauze and a few retentive sutures put in. Patient was put to bed, and surrounded by hot cans. He died, however, in a few hours.

OBSERVATION 15.—SERVICE OF DR. SAMUEL LOGAN.

Compound Comminuted Fracture of Femur—Amputation—Shock—Hemorrhage—Prophylactic Saline Infusion—Recovery.

[Clinical report by Dr. H. J. Scherck, chief of clinic.]

John McC., æt. 31 years, white, was conveyed to the Charity

Hospital by the ambulance, on January 6, 1891, suffering from compound comminuted fracture of thigh, having been run over by wheels of baggage car. Before the arrival of the ambulance he had lost a very large amount of blood, so much indeed that upon examination in the amphitheatre he was nearly pulseless and unconscious; there was also an element of shock in his case, but the extreme condition was without doubt due to the hemorrhage that had taken place; his pulse could barely be felt, but it was about 190 per minute.

The assistant house surgeon considered that the operation of amputation, under the existing circumstances, would be useless, so it was determined to give him the benefit of intravenons injection of saline solution to see if his condition could be benefited sufficiently to operate. Between three and four pints were thrown into the circulation through the median basilic vein; the effect was immediately perceptible, indicated by his pulse, which soon fell to 90 per minute. It was then that amputation was performed, at the upper third of the thigh; he regained consciousness before the beginning of the operation and chloroform was administered. His general condition for several days afterward was only fair, occasionally unconscious, but after the fourth or fifth day he gained strength and his condition improved steadily. His temperature at the time of operation was $99\frac{2}{5}$, which reached $103\frac{2}{5}$ on the night of the same day, but this steadily came down to normal on the fifth day.

The stump did fairly well, a small portion of the under flap sloughing; other than this there was no particular trouble with it.

This case furnishes another link in the chain of good results following the intravenous injection of saline solution. This patient would, beyond a shadow of a doubt, have died from exhaustion from hemorrhage had it not been for the injection. Again, the great and prompt effect of this agent as a reactive agent or stimulant is beyond question; further than this it is without danger and should be employed in like cases.

OBSERVATION 16.—SERVICE OF DR. F. W. PARHAM.

Compound Fracture of Leg Communicating With Ankle Joint—Fracture of Ribs and Destruction of Right Eye—Secondary Hemorrhage from Seat of Fracture—Amputation of Leg—Prophylactic Injection of Saline Infusion—Death.

(Clinical history by Mr. E. D. Fenner, Interne of Service.)

Thos. Byrnes, male, 42 years, white. Patient suffered a badly comminuted compound fracture of leg, communicating with ankle joint. Several of his ribs were broken, and his right eye so badly injured as to require enucleation. Suppuration occurred, and on January 6, under chloroform, the openings were enlarged and numerous fragments of bone removed. Amputation was advised and was now urged, but was stoutly refused. On the 12th the man was told that his leg must come off or he would lose his life. He then consented to have it done next day.

During the night, secondary hemorrhage took place, and nearly drained the circulation before it was discovered, at about 7 o'clock in the morning. The man was then unconcious and almost pulseless. Digitalis was given beneath the skin, and hot bottles put around him; at 9 o'clock his pulse was somewhat better, but he was still unconscious. He was now taken to the amphitheatre and the limb was amputated just below the tibial tubercle. Prior to the operation infusion of saline solution was commenced, and continued during the operation; after about a pint had been injected in the right median basilic, the vein became occluded with a clot. The canula was removed and inserted in the other arm, into which nearly as much more fluid was allowed to flow. Digitalis and whiskey were injected, too, and under the influence of these stimulants the man regained consciousness for a while. He was taken back to the ward with a forlorn hope for life, but died in about an hour.

OBSERVATION 17.—SERVICE OF DR. E. S. LEWIS—PYOSALPINX

Laparotomy—Hemorrhage—Shock—Exhaustion—Saline Infusion—Death.

(Clinical history by Mr. A. G. Bloch, R. S., Interne of Service.)

L. S., a frail, delicate woman æt. 23 years, entered the

gynæcological ward of the Charity Hospital, February 11, 1891, complaining of severe pelvic pains. Upon examination a large fluctuating tumor was found in the left side, apparently attached to the uterus; on the right was another but freely movable. The diagnosis being unquestionable, Dr. L. suggested the removal of the diseased organs as the only means of cure. Having received the consent of the patient, on February 16 she was anæsthetized and her abdomen opened. A large pus tube was found on the left side, bound securely to the pelvic floor by strong, adhesive bands. The intestines were also bound to it by similar bands, making its removal exceedingly difficult. During the process of enucleation the tube burst, and, though every precaution had been taken, a small quantity of pus escaped into the abdominal cavity. The abdominal cavity was thoroughly irrigated, the corresponding ovary and tube were also removed for disease though not near as extensive.

The pelvic and abdominal cavities were closed, a glass drainage tube left in situ, and an antiseptic dressing placed over the wound. Patient experienced no shock from the operation; she was free from pain, though no anodyne had been given. Three hours after the operation my attention was called to the patient by the nurse, who stated that blood was running through the dressing. Upon removing same I found there was a constant flow of blood through the tube; I removed this with a syringe, cleansed the cavity with hot water, and gave ergot and digitalis hypodermically.

This I found of no benefit. Every two hours two to three drachms of blood were drawn; the patient was becoming very weak and exsanguinated. Having exhausted all means of controlling this hemorrhage except re-opening the abdomen, on February 19, with the permission of the house surgeon, I proceeded to infuse salt solution intravenously, patient's pulse being 178 and her temperature 96½. I injected 1½ pints of a salt solution into the cephalic vein; the heart immediately improved to the increased pressure, the pulse falling in fifteen minutes to 140, and changing from a thready, almost imperceptible pulse to a full, though a still compressible one. The following day patient, while being momentarily unattended, arose from her bed and ran across the

ward. Being so weak, she fell; she was put immediately to bed, but her fall was irremediable. She was badly shocked; in the fall she must have struck the drainage tube; her pulse almost disappeared, and there was a decided hemorrhage again from the wound. From that time patient grew steadily worse and died on the night of February 21. The *post mortem* showed a cavity full of pus. There was a large blood clot around the left pedicle, the intestines were infected—in fact, patient died of both hemorrhage and suppurative peritonitis.

OBSERVATION 18.—AMBULANCE CASE ATTENDED BY DR. J. D. BLOOM.

Stab Wound of Arm at Bifurcation of Brachial, Severing Vessels and Median Nerve—Profuse Hemorrhage—Saline Infusion—Recovery.

(Clinical history by Mr. J. J. Ayo, R. S., Interne of Service.)

Governor Jackson, colored, born in Catahoula parish, æt. 18, and for the last three months a student at the Leland University, New Orleans, was brought to hospital by ambulance, Tuesday, April 8, 1891, at about 3 o'clock in the evening. The following history was obtained: While engaged in a fight with one of his schoolmates, patient was stabbed just below the bend of the elbow. When ambulance arrived patient was bleeding profusely, and was very much exhausted, and pulseless at the wrist. A tourniquet was applied and brandy and digitalis were administered hypodermatically.

When patient arrived at hospital, Dr. Bloom's assistance was immediately called for. Dr. B. immediately resorted to saline infusion. The patient's pulse at the temporal was 130 to the minute. About thirty ounces of a solution of common table salt and water were infused. Each time that six ounces were transfused a remarkable difference was noticed in the pulse, it having fallen respectively from 130 to 114, 108, 100, 90, 84. The wound having been thoroughly examined, it was ascertained that all the important veins had been severed; also, that the radial and ulnar arteries had been cut at their origin;

the median nerve aud pronator radii teres being likewise divided. All the vessels injured were ligated, the muscle and median nerve sutured, while the wound was closed and dressed antiseptically.

Patient was sent to ward, put to bed, and his arm was surrounded by cans filled with hot water. Shortly he regained his strength, his pulse never rising above 120 to the minute. Three or four days after accident, patient had fever ranging between 101 deg. and 102 deg.; this led us to suppose that pus had accumulated in the wound, and the dressings were removed. None of the sutures had united, and considerable pus escaped. Patient was afterward dressed daily, and when he was discharged the wound was nearly completely healed up, but there was slight impairment of motion in the thumb, index and middle fingers.

OBSERVATION 19.—SERVICE OF DR. MATAS (WARD 2).

Gunshot Wound of Thigh, with Comminuted and Radiating Fracture of Femur—Dissecting Purulent Infiltration—Fourneaux Jordan's Disarticulation at Hip—Shock—Saline Infusion During Operation—Death from Shock Two Hours After Operation.

(From notes furnished by Mr. J. J. Ayo, Interne of Service.)

Albert C., male, æt. 36, colored, laborer; native of Indiana; strong and vigorous. While on his way to New Orleans he was shot with a pistol bearing a 38-calibre ball. The ball penetrated the middle of the thigh in antero-posterior direction, shattering the middle third of the femur. When patient was admitted in the hospital, May 11, 1891, the day following the accident, the patient was immediately attended by Dr. Bloom, assisted by members of the ambulance corps. A small opening of entrance was discovered from which considerable venous blood oozed; there was no aperture of exit, the ball being evidently imbedded in the thigh. A marked semi-solid swelling of the thigh had taken place and there was considerable lividity of the limb, indicating that considerable

concealed hemorrhage had taken place. The circulation of the foot and leg was well maintained, however, and as the pulsation of the dorsalis pedis could be faintly felt it was decided that only venous hemorrhage had taken place and that the main vessels had not been directly injured. After carefully applying an occlusive iodoform-bichloride dressing to the wound, a padded Liston's splint, permitting of extension by weights and adjusted with a liquid glass dressing, was applied by Dr. Bloom, assistant house surgeon.

The next day the swelling of the thigh increased and the oozing of the blood through the opening continued, indicating that hemorrhage had continued. The liquid glass bandage which covered the thigh became intolerably tight and had to be divided to give comfort to patient and avoid risk of strangulation. The antiseptic dressing over wound was also soaked with blood and had to be removed. A flat bag of shot being placed directly over the dressing was, by its weight, able to control excess of ooze.

The general condition of the patient was comparatively fair considering the gravity of the injury, the pulse and temperature simply indicating a subdued condition of irritability, which was remarkably disproportioned to the great devastations that were subsequently revealed.

On the 20th the wound had not healed, and for the first time discharged a purulent ooze that called for immediate action.

The patient was anæsthetized (chloroform followed by ether) and a free exploratory incision carried to the seat of fracture was made by Dr. Matas. About one quart of grumous, bloody pus at once escaped through the incision, several fragments of bone were disengaged and removed by the exploring finger, which at once discovered that the pus had burrowed upward toward the adductor region and backward to the interspace between the hamstrings. It was further discovered that the femur had sustained a longitudinal fracture which split it almost in two halves and extended in a direction upwards toward the great trochanter. In the presence of these revelations, the parts were packed with antiseptic dressings and the anæsthesia stopped.

The exploratory operation had been conducted in the ward and it was now decided to take the patient to the amphitheatre where the disarticulation of the femur at the hip could be more advantageously performed. Here the patient was stimulated with whiskey and the anæsthesia renewed. The Esmarch was applied, and aided by Wyeth's needles hemostasis secured to groin. Fourneaux Jourdan's incision was adopted, the circular division of the thigh being effected a short distance above the the seat of fracture. The vessels were secured without any loss of blood and the bone enucleated from the soft parts without difficulty. The disarticulation was very difficult, however, even after a complete separation of all the external ligamentous attachments. After the disarticulation the patient gave evidences of profound shock verging on complete collapse. About one and a half quart of saline solution was now infused by Dr. Bloom into the left median basilic vein. In the meantime, ether, ammonia, digitalis and brandy were exhibited liberally both *per os* and hypodermically. The patient's pulse improved very markedly as the saline fluid was injected and fell from 160 to 110 per minute.

When the pulse reached this point an attempt was made to introduce a few deep silver sutures in order to hold together the lips of the huge wound left by the disarticulation, but the patient commenced to scream with pain and had to be given a few inhalations of chloroform-ether. The effect of the anæsthetic on the pulse was immediate and most depressing, a few inhalations raised it to 140, and of course they had to be discontinued.

The wound was therefore packed with iodoform and sublimate gauze and the stump covered with the usual dressings.

The patient was quickly brought to bed and efforts made to restore him with dry heat and stimulants.

He became conscious shortly after returning to bed and pulse appeared to improve markedly. About half hour after the operation it beat at about 120 per minute and he gave encouraging evidence of positive improvement. Two hours afterward, however, he suddenly collapsed and died.

No.	Immediate indication.	Sex.	Age.	Race.	Immediate effect.	Final result.	Quantity of fluid.	Operators.	Nature of injury or operation.	Date.	Remarks.
1	Shock—hemorrhage.	M.	26	W.	Very good.	Death.....	Oj; Oij	Matas.....	Sarcoma of thigh. Amp. upper third.	July 12, 1888.	Injected twice at different sittings.
2	Hemorrhage.	M.	26	W.	Very good.	Recovery	Oj.....	Miles.....	Wound of axillary art. Secondary hemorrhage.	Nov. 28, 1888.	
3	Hemorrhage.	F.	12	W.	Very good.	Recovery	8 ozs.....	Miles	Idiopathic epistaxis.	——, 1888.	
4	Hemorrhage.	M.	42	C.	Very good.	Recovery	12 ozs...	Matas	Syme's amp. Secondary hemorrhage.	July 5, 1889.	
5	Exhaustion—hemorrhage.	M.	32	W.	Good ..	Death	48 ozs...	Bloom.....	Gunshot wound of head; wound of cerebral sinus.	April 15, 1889	Hemorrhage uncontrollable. Effect of infusion very temporary.
6	Shock—hemorrhage.	M.	50	W.	Good ...	Death	20 ozs...	Bloom.....	Avulsion of arm.....	——, 1889.	Shock the dominating element of danger.
7	Hemorrhage.	M.	40	W.	Very good.	Recovery	16 ozs...	Laplace.....	Overlapping fracture of femur; osteotomy.	——, 1889.	
8	Hemorrhage.—shock.	F.	43	W.	Very good.	Recovery	43 ozs...	Lewis.....	Ovariotomy — for fibro cystoma.	Oct. 29, 1889.	
9	Shock.....	M.	29	C.	Very good.	Death	32 ozs...	Matas	Multiple fracture of skull with laceration; of arteria meningea media.	June, 1890.	Infusion practically resurrected this patient and prolonged life 24 hours.
10	Exhaustion (acute).	M.	60	W.	Very good.	Death	50 ozs...	Matas	Acute dysentery.....	July, 1890.	Life prolonged over 5 hours by infusion.
11	Hemorrhage.	M.	25	C.	Good ...	Death	32 ozs...	Armstrong-Martin ..	Stab of int. mammary artery.	1890 (?)	Lesion only discovered *post mortem*.
12	Shock—hemorrhage.	F.	46	W.	Very good.	Death	16 ozs...	Lewis	Supra-vaginal hysterectomy for myoma.	Feb. 5, 1890.	Survived 3 days after infusion.
13	Shock	M.	36	C.	Unsatisfactory.	Death	56 ozs...	Matas	Laparotomy for gunshot of abdomen.	Sept. 23, 1890.	While the pulse appeared to be favorably impressed toward the end of infusion, the patient appeared disagreeably affected.
14	Exhaustion—shock.	M.	24	W.	Good ...	Death	(?)	Parham	Fracture of olecranon; erysipelas, suppuration. Disarticulation of shoulder.	Nov. 28, 1890.	
15	Hemorrhage—shock.	M.	31	W.	Very good.	Recovery	O 3-4 ...	Logan.....	Amputation upper third of thigh.	Jan. 6, 1891.	The amputation was performed in this case *after infusion*.
16	Exhaustion—hemorrhage.	M.	42	W.	Good ...	Death.....	Oij	Parham	Comp. fracture of leg; secondary hemorrhage. Amputation.	Jan. 12, 1891.	*Prophylactic* infusion; 1 pint in each arm.
17	Exhaustion—hemorrhage.	F.	23	W.	Good ...	Death.....	Oiss	Lewis.....	Pyosalpinx; laparotomy.	Feb. 16, 1891.	Infusion practiced by Mr. Bloch, Feb. 19, for hemorrhage and exhaustion.
18	Hemorrhage.	M.	18	C.	Very good.	Recovery	30 ozs...	Bloom.....	Stab of brachial at elbow.	April 7, 1891.	
19	Shock	M.	30	C.	Good ...	Death	Oiij.....	Matas	Disarticulation of hip for multiple, comminuted gunshot fracture of femur.	May, 1891.	Infusion allowed patient to be removed alive from operating table.

SUMMARY OF THE CLINICAL REPORT.

1. Total number of cases, 19.
2. Most urgent indication.*

Hemorrhage	6
Hemorrhage-shock	2
Shock-hemorrhage	3
Shock	3
Exhaustion, acute	1
Exhaustion—hemorrhage	3
Exhaustion—shock	1
Total	19

(6) Hemorrhage: 5 recoveries; 1 death (uncontrollable hemorrhage)	= 6
(2) Hemorrhage-shock: 2 recoveries	= 2
(3) Shock-hemorrhage: 3 deaths	= 3
(3) Shock: 3 deaths	= 3
(1) Exhaustion: 1 death	= 1
(3) Exhaustion-hemorrhage: 3 deaths	= 3
(1) Exhaustion-shock: 1 death	= 1
Total	19

Recoveries, 7; deaths, 12. Percentage recoveries, $36\frac{16}{19}$; percentage deaths, $63\frac{3}{19}$. Sex, males, 15; females, 4. Age, from 12 to 60 years; average, 33.+ years. Race, 13 white, 6 colored. Quantity of fluid injected from 8 to 50 ounces. Immediate effects, always good, with one solitary exception, in which, while the objective result was good, the subjective sensations were not satisfactory.

[TO BE CONTINUED IN THE NEXT ISSUE.]

REFLEX EPILEPTIFORM CONVULSIONS OF GENITAL ORIGIN AMENABLE TO SURGICAL TREATMENT.

By DR. R. H. DAY, of Baton Rouge, La.

For the last eight or ten years many cases have fallen under my observation of infants and children afflicted with epileptiform spasms, nervous jactitations and neurotic explosions; and failing to find any systemic conditions, functional or organic, to account satisfactorily for these nervous seizures, I was led to turn my attention to the sexual organs by the following incident: I was called in the country, five or six miles from Baton Rouge, to see a white male child, 6 or 7 years of age, who was subject to frequent spells of alarming nervous agitation. On the present occasion they were so severe in

* In specifying the immediate indications that led to the saline infusions, the writer has adopted the method of classifying the dominant indication in mixed or complicated cases, by prefixing the most obvious cause of depression in a complicated condition.

character that his parents became alarmed and sent for me. The child was calmer when I arrived. He seemed to be well nourished and appeared otherwise well. I exposed his abdomen, and in manipulating it to discover if the viscera and organs were at fault, my hand happened to touch his penis, which immediately became erect and intensely hard. His face flushed, his eyes became lustrous and he exhibited great cerebral excitement.

I took the penis between my fingers to examine more closely. I found the preface contracted so tightly as to conceal the meatus, and no efforts could retract it over the glans. A probe passed into the opening of the preface disclosed that the preface was adherent to the glans. I at once slit open the preface back to the corona, separated the adherent surfaces, with the result that the child was permanently cured of his neurotic troubles.

From this on, in all cases of neuroses occurring in infants and children, I have never failed to examine the genitals, and have frequently been rewarded by discovering the seat and cause of the troubles, and by operative measures at once to give permanent relief.

On February 6, 1891, I had a very interesting case brought to my office from an adjoining parish, that of a male white child eight months old. I found the prepuce firmly and extensively adherent, and learned that the infant since early in last January had been subject to severe spasms, and growing more frequent and distressing.

I separated these adhesions, dilated the prepuce and pushed it back over the corona. The retained smegma had become chalky and granulated with these hardened granules imbedded in the mucous coat both of the glans and prepuce, so that in removing them blood oozed from their sites. I carefully instructed the parents to keep the surfaces well cleansed, the prepuce well contracted, and vaseline freely applied to prevent re-adhesion.

On March 7, the child was brought to me again, having had a return of his spasms five days previously.

Upon examination I discovered that the parents had failed

to carry out my instructions efficiently, with the result that the prepuce was again contracted and adherent as at first.

I determined to make a thorough operation, being satisfied that the genital abnormality was the real cause of the child's spasms. I accordingly chloroformed him, slit the prepuce far back, detached the adhesions, divided the frenum, cut off the angles of the prepuce and then with a continuous fine suture brought the divided surfaces together, and gave suitable instructions as to after-dressings, etc.

As the parents of the child are quite intelligent, I addressed them a series of questions to get a clear history of the case and the relation it might bear to heredity.

The folllowing facts were elicited: No other member of the family had had convulsions, hysteria, spells of depression or melancholy. The first convulsions, or nervous explosions occurred on January 9, 1891, and lasted thirty or forty minutes, leaving the child in a very weak state and sleepless. The child slept well after the first operation, which was performed on February 6, 1891. The nervous spells returned on March 2, 1891, three weeks after the first opertion. The last operation was performed on March 7, 1891, since which time (up to April 1, 1891), the child has had no convulsions.

On May 8 the father further informs me: "When I wrote you on April 11, the baby had a severe cold, which caused him to cough a great deal; he was very irritated at times. An hour after I mailed my letter to you he had one of those convulsions. It did not last as long as the ones he had previous to that. He has had no more convulsions since, which was April 11, 1891. He is well and hearty now, and very fat. My wife in the near future will go to Baton Rouge, and she will bring the baby for you to see it.

I might here properly close this paper, but perhaps it is my duty to remark that these peculiar forms of reflex neuroses are not limited to male infants and children, but afflict also female children, the cause generally consisting in a strictured clitoris. I have seen a few cases where I was well convinced that such was the case. It has only been during the last year that my attention has been drawn to nervous troubles in female infants from genital irritation, and future research and clinical

observation must confirm or disprove the correctness of my deductions.

While discussing this obscure, but growing and important class of diseases, I can not refrain from relating my experience in connection with a case in an adult married male, the father of several children, who, from his position in society and connections, made his case one of peculiar interest to me. For several years his health seemed to be declining, poor and capricious appetite, with symptoms of dyspepsia, anomalous, nervous agitations, dizziness of the head and tremors. I tried to analyze his symptoms and trace out their cause. I could find no organic or functional disease of any of the viscera, and came to the conclusion that his increasing troubles grew out of his sedentary life, intense application to business and perhaps, at times, to improper feeding. In despite of all my efforts and the faithful observance on his part of my directions, there was no improvement, but on the contrary, a periodical aggravation of his neurotic troubles. I advised him to visit New Orleans and consult the leading physicians of that city.

He did so, and consulted several, among them Prof. John B. Elliott, M. D., who, after a thorough physical examination with negative results, lifted his shirt and discovered a contracted prepuce, tightly binding the glans penis. To Dr. Elliott's mind the mystery was solved. He said to the young man: "Get up, put on your clothes and go home, and be circumcised, and my word for it you will be cured." The young man was astonished, and expressed his non-belief in the views of Dr. Elliott. But the doctor emphasized his opinions and said "he was so confident of their correctness that he would stake his medical reputation upon the result."

The young man returned home. I verified the condition of the penis as stated by Dr. Elliott, performed the operation, and to-day the patient is well, and as closely attentive to his business as he ever was.

I had not suspected any genital trouble possible in a married man capable of fructifying the ova of the female, and hence did not investigate the condition of the penile organ to find the seat and source of the trouble, and I respectfully and

thankfully submit that Dr. Elliott has done me a great favor, and the medical profession of the State as well.

The fact that these anomalous and obscure neurotic diseases are amenable to surgical treatment, while being greatly on the increase in this and other countries makes them of peculiar interest to the medical profession, and should induce our best physicians everywhere to make them the subjects of close clinical and scientific study, and it is for this purpose that I have contributed this short paper.

Proceedings of Societies.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.

APRIL MEETING.

The president, Dr. Henry Wilson, in the chair.

Dr. Wm. P. Chunn related a case of ascites, which he treated by tapping and permanent drainage with apparently good results.

Dr. B. B. Browne operated more than a year ago upon a woman with ascites, who also had an abdominal tumor, which proved to be papillamatous.

There has been no return of either the dropsy or the papillomatous growth. He referred to the many cases of laparotomy and washing out the abdominal cavity.

Dr. Geo. W. Miltenberger could not see why any malignant tumor should not be able, by irritation of the serous membrane, to cause ascites. We often see ascites without any definable cause, and when a growth did exist it seemed a very good reason for the presence of the fluid. He referred to the case of a colored woman operated upon by Dr. Neale.

Dr. L. E. Neale said that in the case of the colored woman referred to there was no assignable cause for the ascites except the presence of a sub-serous uterine fibro-myoma; at the operation he removed the uterine appendages. The growth remained but there was no return of the ascites. There was also a complete procidentia, but after the operation he was enabled to keep the uterus in place with a soft rubber ring.

The tumor gradually diminished and ultimately disappeared.

Is the exposure and irritation of the serous membrane during the operation a sufficient explanation of such an alteration in its function when the apparent cause of the ascites remains?

He thought the question eminently important and practical in its bearings and that it required further elucidation.

Dr. Wilmer Brinton remarked that in a case of corrhosis of the liver, in a male patient, tapping for the ascites had been followed by a permanent opening which persisted until the patient's death one month afterward.

Dr. J. Whitridge Williams, in referring to Dr. Maseby's remarks, said that the ascites accompanying papillomatous growths was considered to be due, in great part, to direct exudation from the vessels of the growth. He also referred to tubercular peritonitis.

Dr. B. B. Browne exhibited a small tumor about the size of a large hickory nut, and apparently a fibroid, which he had removed from a point a little to one side of the median line and between the clitoris and urethra. It pressed on the urethra, interfering with micturition. The growth was easily shelled out and the patient did perfectly well. It was the first growth of the sort he had seen in that locality.

Dr. Neale related a case of imperforate rectum in a white male child, naturally born at full term of healthy parents. The child was puny, weighing only 5¾ pounds at birth, and 1 inch within the anus; the rectum was imperforate. Dr. T. Harney operated upon the child when it was 2½ days old, very feeble and partly cyanosed. No anæsthetic was used; anus was cut through, the perineal structures laid open, the coccyx removed, the rectum opened through its posterior wall just above the imperforate part and its mucous membrane stitched to the skin just behind the original aperture. The stitches sloughed out and the large wound healed slowly by granulation. A copious discharge of flatus and meconium occurred during the operation and the tympanitic distension disappeared.

Profound shock and collapse followed the operation, the child lying motionless, the feet and lower limbs cyanosed, the face and head less so; jaw dropped, mouth opened, eyes closed, lids blue, surface temperature but little if at all lowered. No cry. The features were frequently pinched or wrinkled from pain, bec oming more or less blue at irregular intervals.

In this condition the child would make no effort at suction, but would swallow two teaspoonfuls at a time of milk and brandy when poured into its mouth, rarely refusing to swallow, and never vomiting the food and stimulants which were given freely and frequently.

For nearly two days and a half did it remain in this state,

partially rousing during the administration of food or other disturbance, and again sleeping. Even after this period, when the first decided improvement occurred, the child would frequently relapse and remain in this condition for hours at a time. The first two weeks of its life was passed in this manner. The digestive and urinary apparatus functioned nominally.

From the tenth to the fourteenth day these attacks gradually diminished and ultimately disappeared.

The child is now nearly two months old but very feeble, and weighs only five and one-quarter pounds. It has been reared chiefly on condensed milk. The dense cicatrix just about the seat of the old imperforation has to be dilated daily with the finger; another operation will be necessary. No diagnosis of abnormality in vascular system could be made.

Dr. Brinton mentioned a case of a child which lived nine or ten days with an open ductus arteriosus.

He thought that no cardiac trouble could account for the symptoms in the case. The cyonasis would not clear up entirely and then recur. He did not consider the condition one of collapse. There was no feebleness of pulse or coldness of surface. The child would lie in an appareutly comatose condition with no evidence of sensation, and then recover. The first attack followed immediately after the operation and evidently from shock; but after two or three days it could not be attributed to this cause. There was no chill or febrile condition.

After the child had commenced taking food he used quinine by injection and also small doses of dyalized iron and as he believes with benefit from the latter.

He was inclined to account for the condition in this way: A very feeble child had food forced upon it for eight or ten hours and when it had taken in all it could it apparently fell into a condition similar to that of some animals, and when the supply of food was exhausted it would recover and take more nourishment. This condition entirely disappeared after the first two weeks. W. S. GARDNER, M. D., *Secretary.*

THE AMERICAN SOCIETY OF MICROSCOPISTS.

This association, now in the thirteenth year of its existence, will hold its fourteenth annual meeting in Washington, D. C., August 10, and continue in session five days. Its roll of active members contains about three hundred and fifty names, embracing very nearly every person in the United States who is at all prominent as a microscopist. Its membership consists of two distinct classes, viz: professional men

and students of the natural sciences, who use the microscope in their daily avocations as an instrument of research, diagnosis, or precision; and amateurs, or those who find pleasure and profit in the revelations of the instrument. Many of the latter class, from having early chosen special lines of study and investigation, have acquired high reputations in their respective departments of microscopical research. In its earlier years this class predominated in the membership of the society, but at present the professional element is largely in excess.

The qualifications for membership are very simple. The applicant must be a respectable person socially, and interested in the use of the microscope.

The advantages of membership are dual in their nature, *i. e.*, general and social, or those which accrue to the individual from associations with others engaged or interested in the same pursuits in any and all walks of life; and special, in that the meetings of the society are to a certain extent educational in their nature. In the "Working Sessions" experts in every department of microscopical technology are engaged in giving manual demonstrations of the details of their lines of work; in the informal evening "conversaziones" the room of every worker who has anything special to exhibit or demonstrate, is open for the reception of all those who wish to witness the demonstration: finally the soirée affords an opportunity of displaying, for the benefit of the members, as well as the public generally, all that is most beautiful, interesting and instructive in the cabinets of laboratories of the exhibitors. Of late years the soirées have been attended by many thousands of visitors in every city in which the society has met, and have been regarded as distinguished socials as well as scientific events.

The dues are trifling, only $2 per annum, and in return the member gets a volume of the Annual Proceedings, which costs very nearly this amount. These proceedings are elegantly and profusely illustrated with photo-engravings, autotypes, chromoliths and wood engravings, done in the highest style of art. There is scarcely a subject in the whole range of microscopical work, upon which information may not be found by reference to the indexes of these volumes, and collectively they form a library of microscopy full of invaluable matter to the student and worker.

The railroads have of late years extended excursion or convention rates to and from the places of meeting, and, although no arrangements have as yet been definitely made, we can assure our readers that the Washington meeting will be no exception to the rule. Indeed, it is probable, from the

fact of the meeting of the American Association for the Advancement of Science inWashington, only three days after our adjournment, that a more than usually advantageous arrangement may be obtained.

The museums and libraries, as well as the many other objects of interest of the National Capital and its surroundings, will be open to the visits of the members, and special facilities for seeing them will be accorded.

Special hotel rates will also be secured. An announcement of the railway fares, hotel rates, etc., will be made hereafter.

In view of the facts related and from assurances that we have already received we are justified in saying that three will be present the largest number of old members of the society ever in attendance at an annual meeting.

We invite and urge upon all persons, professional or amateur, interested in microscopy and not already on the rolls, to send in their applications for membership to the Secretary, Dr. W. H. Seaman, No. 1427 Eleventh Street, Washington, D. C. The application should be accompanied by $3,00 which is the initiation fee, and one year's dues. As it is more than probable that the initiation fee will be increased in the near future, it will be to the advantage of all who contemplate membership to send in their applications before the next meeting.

Any further information concerning the society or the approaching meeting may be obtained on addressing any of the undersigned. Frank L. James, President, Box 568, St. Louis. W. H. Seaman, Secretary, No. 1424 Eleventh St., Washington, D. C C. C. Mellor, Treasurer, No. 77 Fifth Ave., Pittsburg, Pa.—*St. Louis Medical and Surgical Journal.*

Correspondence.

STATE BOARD OF HEALTH OF KENTUCKY.
EXECUTIVE OFFICE,
BOWLING, KY., June 19, 1891.

To the Editor: I am instructed by this Board to transmit to you for publication the following self-explanatory resolution which was adopted at its recent meeting held in Louisville:

Resolved, That the secretary be instructed to place upon the list of medical colleges whose diplomas are to be certified and endorsed for registration under the laws of this state, only such colleges as shall, after the session of 1891-92, exact of matriculates and graduates a minimum of requirements not less than those required by the American Medical College Association. Very respectfully, J. N. M. GUNACK, *Secretary.*

BIOGRAPHICAL SKETCH OF DR. J. P. DAVIDSON.

[We are indebted to Dr. Davidson's daughter, Mrs. R. L. Robertson, for the following notes. We append also the report of the Committee on Necrology of the State Medical Society.—*Editor.*]

Dr. John Pintard Davidson was born in Pinckneyville, Miss., December 8, 1812. He was the son of Dr. Richard Davidson, of Virginia, a surgeon in the United States army, who came to New Orleans in 1804 and attained eminence as a practising physician. His mother was Eliza Noël Pintard, daughter of John Pintard, a Huguenot, prominent in the early history of the city of New York. Dr. Davidson received his degree of M. D. at the University of Pennsylvania in 1832. He returned immediately to New Orleans and entered the Charity Hospital. He commenced life by opening a drug store at the corner of Carondelet and Delord streets, in the two-story brick house which still stands there and which has been occupied as a drug store ever since. He subsequently removed to Rapides parish, at the solicitation of some of the planters of that parish and the town of Alexandria, where he soon built up a lucrative practice and endeared himself to the entire community, white and black. He was the typical physician, friend and counselor, frequently performing the duties of nurse and physician, comforter and pastor—even baptizing infants and burying the dead.

At the outbreak of hostilities between the North and South, Dr. Davidson went out as captain of the Alexandria Rifles, Crescent Regiment, commanded by Col. Marshall J. Smith. The greatest excitement and feeling were displayed at his departure. Special services were held at the churches and mass was said at the Roman Catholic church once a month for him during his absence. Although a Protestant, he was broad and liberal and respectful to all creeds. After the battle of Shiloh, Gen. Bragg tried to prevail upon him to return home and try to mend his own health which had become impaired at Corinth. This he refused to do; but finally Gen. Leonidas Polk, his warm personal friend, learning of his illness wrote to him advising him to return home where he was so valuable. He resumed his practice in New Orleans immediately after the war.

During the epidemic of yellow fever in 1875, at Shreveport, he was one of the experts selected with Drs. Bruns and Choppin to be sent to that place. He was also sent to Brunswick, Ga., as an expert on fever and also sent to the plantations below New Orleans, when the National Board of Health pronounced the fever prevailing to be yellow fever. Dr.

Davidson declared the fever at both places to be "rice fever," a fever peculiar to those living on and cultivating rice plantations. This difference of opinion produced considerable feeling on the part of the National Board of Health. Dr. Davidson was also Hon. Past Medical Examiner of Chalmette Council No. 801, American Legion of Honor. He also occupied the following positions:

President of Orleans Parish Medical Society; President of State Board of Health in 1880 (resigned before the close of the year); Chairman of Board of Medical Experts on Yellow Fever; a member of the Red Cross Society of Louisiana.

He was a man of large-hearted charity, and gave much of his time and service to the cause of humanity. He was for many years the visiting physician of the Jackson Street Orphan's Home, and also for the Trinity Benevolent Association—all gratuitous. He was a man who cared not for fame; he was not an egotist. He was loved and esteemed by all. To those whom he attended professionally he was more than a curer of pains and ills. He was cheerful, genial, always inspiring hope for the best, and in trouble gave sympathy and consolation from the depths of his generous heart. It was his lively christian charity and goodness of heart that drew and bound him to his people, and his influence was felt wherever he went.

One remarkable trait was his forgetfulness of himself when the lives of others were concerned. For instance, about the year 1848 or 1849, Asiatic cholera broke out on the plantation of Mr. Calhoun, some miles above Alexandria, on Red river. Two of the physicians in attendance had died of the disease, and everyone was panic stricken. He was called in, and in opposition to all his family could say took up his abode there, and upon investigation, found that the large number of slaves on the plantation were being fed on rotten meal; he at once separated the well from the sick, and moved all to the pine woods and changed their food and water, after which he lost not a single case, but came near losing his own life. He was stricken with the disease, and in trying to reach the house of a friend was found on the road-side by a faithful servant. He was refused shelter in the house near which he was found, but was given the use of a skiff. This faithful servant then took him to Dr. L. Lucketts, an old and loved friend, where he was for several days at death's door. Then, during the epidemic of yellow fever in 1853, he sent all his children out of town and filled his house with sick, and was, during the greater part of the time, the only physician up; and the only sleep he got was in his buggy as he was driven from door to door.

His success here in this city during the epidemics of 1867 and 1878, the books of the Board of Health will show, and a search through the records of Trinity parish and the Howard Association will give some idea of the amount of charity practice he did here.

REPORT OF COMMITTEE ON NECROLOGY—LOUISIANA STATE MEDICAL SOCIETY.

Dr. John Pintard Davidson, of New Orleans, was born on December 8, 1812, at Pinckneyville, Wilkinson county, Miss., and died March 20, 1890, in his seventy-eighth year. He was the oldest practitioner in New Orleans. He loved the companionship of much younger men and shared in their ardor and enthusiasm, and yet his life was tempered with that conservatism which is acquired only by age and thoughtful observation. He stood between us of this day and the men of the remote past, many of whose names will ever be memorable in the medical archives of Louisiana. His reminiscences of those men and this time he often told, in his own happy, knowing way, to the delight of those who knew him in his social life.

Dr. Davidson inherited the traditions of medicine. His father, a physician, was a surgeon in the United States army and came to New Orleans in 1804.

The subject of this sketch was educated in the east and graduated in medicine at the University of Pennsylvania. Returning to New Orleans in 1832, the year in which the present Charity Hospital buildings were erected, he at once entered the medical service of this institution. He subsequently settled in Rapides parish, and there lived and practiced extensively until the outbreak of the civil war. He then went to the front as captain of the Alexandria Rifles, and having served in the campaigns of Corinth and Shiloh, he was obliged to return to his home, being broken in health and fortune.

Since 1855 Dr. Davidson lived and practised medicine in New Orleans. No medical man of his day was more endeared to the profession and the people of this city.

He was prominent in all the medical societies of this city, having served as president of the New Orleans Medical and Surgical Association, and at the time of his death occupying the presidency of the Orleans Parish Medical Society. He was among the first members of our State society, and honored among its presidents.

He rendered distinguished service in connection with the State Board of Health, by appointment of Governor Wiltz in

1878. He served under commission from the Howard Association in the epidemic of yellow fever at Shreveport, and for many years, up to the time of his death, he was a member of the Commission of Experts appointed by the State Board of Health. He was among the foremost in our ranks, and none were more beloved and respected.

In his death we mourn the loss of a member whose face was always familiar at the meetings of the society, whose earnest, honest ways always carried conviction with them, and whose examples as a man, as a physician, also as a benefactor, actuated by feelings of broadest charity and good will toward men, deserves our emulation at all times.

N. O. Medical and Surgical Journal,

ESTABLISHED IN 1844.

PUBLISHED MONTHLY, $2.00 A YEAR.

Articles from physicians are respectfully solicited. All articles, news and exchanges, and books for review, should be sent to the EDITOR, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL. Business communications should be addressed to the BUSINESS MANAGER, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

EDITED AND PUBLISHED BY

AUGUSTUS McSHANE, M. D.

COLLABORATORS:

F. W. PARHAM. DR. H. W. BLANC. DR. A. W. De ROALDES.

DR. R. MATAS. DR. JOHN DELL'ORTO.

Editorial Articles.

ANNOUNCEMENT.

The NEW ORLEANS PUBLISHING COMPANY has transferred the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL to DR. AUGUSTUS MCSHANE, who assumes full charge of the Editorial Department.

The present number is the first under the new arrangement.

Many illustrious names have become identified with the JOURNAL. Since its foundation in 1844, the editorial department has, at various times, been controlled by men who will always live in the annals of American medicine. Those who can not boast a world-wide fame, can, in an humble way, make themselves serviceable to the world in general, and the medical world in particular. There is always room in this work-a-day world for such as are willing to contribute their mite to the general mass of toil, and on this basis the editor hopes to claim a right to exist.

* * *

Every journal should have a reason to exist; it should have some definite, tangible object to fulfil. The tasks to which the JOURNAL shall address itself shall be to spread

general medical intelligence among its readers and, chiefly, to cultivate closer relations among the members of the profession in Louisiana. It hopes that it will thus aid in building up a strong, compact State medical organization that will embrace all of the intelligent and progressive medical men of Louisiana.

For the purpose of carrying out this idea of consolidating the profession of the State, the JOURNAL will publish each month, under the head of "State News," such items as may be of personal or general interest to Louisiana physicians. We hope to publish regularly proceedings of the local societies of the State, and to give abstracts of the official proceedings of our State medical institutions, a list of which is given in the present number of the JOURNAL. The vast amount of clinical material contained in these institutions does not find representation in current medical literature commensurate with its importance. The JOURNAL will strive to be the mouthpiece of physicians of Louisiana, and to place before the medical world the labors and achievements of our medical men.

* * *

The present number begins a new volume. It opens with the report of nineteen cases of infusion of salt-solution, which would have been allowed to pass into oblivion had it not been for our indefatigable co-laborer. Much material is thus allowed to pass unnoticed simply for lack of a recorder. This is not as it should be. It deprives the individual operators of their due meed of fame and causes the profession as a whole to remain in the background. The JOURNAL stands ready to do its full share in the work of giving Louisiana physicians proper representation. But it can not do everything; it must have the coöperation of the profession.

The world moves, and the JOURNAL proposes to move with it. The time has come when it is deemed advisable to reduce the price of the JOURNAL. The price has accordingly been reduced from $3 to $2 per annum.

MRS. RICHARDSON'S GIFT TO THE MEDICAL DEPARTMENT OF THE UNIVERSITY.

It is with great pleasure that we chronicle the donation of $100,000 by Mrs. Dr. T. G. Richardson to the medical department of the Tulane University of Louisiana.

Events of that character are, unfortunately, too rare in our community. Since Mr. Paul Tulane gave the princely sum of $1,250,000 to the University of Louisiana, no considerable donations have been made, save those of Mrs. Richardson and Mrs. Newcombe.

The motives actuating the generous donatrix in selecting the medical department for the bestowal of her gift are not difficult to find. For thirty-seven years her eminent husband was connected with the medical department. He was professor of anatomy from 1852 to 1872; Professor of Surgery from 1872 to 1879; and Dean of the Faculty from 1865 to 1885. Ill health compelled him, in 1889, to sever official connection with the medical department; but the cessation of official relations did not put an end to the lively interest which he always had for the college. Sharing in this warm feeling, Mrs. Richardson freely gave of her store in order to advance the interests of the school with which her husband's name has become inseparably connected.

The donation will be devoted exclusively to the erection of new college buildings.

The Educational Board of Tulane University has purchased, for $35,000, three-quarters of the square of ground bounded by Canal, Robertson, Customhouse and Villere streets. With ample space and funds, we confidently look forward to a building that will be an ornament to New Orleans.

The important work of drawing a suitable plan for a medical college has been intrusted to Dr. Edmond Souchon, the present Professor of Anatomy. The doctor is already acquainted with the construction of the prominent medical colleges of this country, and that of Paris, where he spent several years in study. In order, however, thoroughly to familiarize himself with all of the commendable features in the construction of a good medical college, Dr. Souchon will visit the large cities of the Union, and examine carefully the details of the

model colleges. In his trip he will visit Baltimore, New York, Philadelphia, Boston and other large cities. He will be accompanied by an architect, who will carry out and execute the ideas of Dr. Souchon. This "voyage of exploration" will consume a good deal of time, but it is expected that work will begin on the new building by December 1, 1891, and will be ready to receive students by October 1, 1892.

* * *

We can not repress a few reflections suggested by the site selected. In the large cotton yard, where the new buildings will be erected, there was a broad shed, surmounted by a belfry, which was dismantled some years ago. For a number of years, in recent times, that deep-toned bell rung out the fire alarms, and during the late "unpleasantness" between the North and South, it peeled forth a warning whenever a Yankee gunboat was descried coming up the river. That function ceased in April, 1863, when General B. F. Butler paid a visit to New Orleans preceded by Admiral Porter. The numerous visitors that General Butler brought with him were quartered in various parts of the city, and one of the places selected was Wood's Cotton Yard. The writer was wearing the garments of infancy when Butler first enjoyed the hospitality of New Orleans; the General was warmly received, but many people thought he stayed too long. At the close of the war, the writer had not grown much older, but he was old enough to remember the Federal soldiers taking their supper on the broad, neutral ground on Claiborne street and in Wood's Cotton Yard.

* * *

Tempora Mutantur. On the ground where the rattle of invaders' bayonets was heard nearly thirty years ago, will soon be heard the eloquent voices of teachers instructing ardent youths how to save human life and not destroy it. In olden times the prophet urged the warriors to turn their swords into ploughshares, and their spears into pruning-hooks. Now, the fancy lightly turns to swords made into amputating knives, and muskets into bistouries; and where once the chilling clink of bayonets was heard, nothing more discordant than the cutting of the dissecting knife shall disturb the timid ear.

HOSPITAL FOR WOMEN AND CHILDREN.

It gives us great pleasure to note the now assured success of the hospital for women and children, which is advertised in the JOURNAL. It was formally opened to the public last January. We are glad to say it is everything it is claimed to be. It is spoken of most favorably by all who have in any way been connected with it, especially by those physicians who have had occasion to send patients to this institution.

All are loud in their praise of the nursing, which is most thorough.

Every care and attention is given the patients. It is strictly private, and only women and children are admitted. The hospital is well equipped and little remains to be done to put the institution on a footing with others of its kind in the south. It is certainly a great boon to physicians and patients. The former can feel assured that their interest will be looked to in every particular, and patients can feel that they will be as private and as comfortable as in their own house, with a *trained nurse* to care for them.

THE INTERNATIONAL AMERICAN MEDICAL CONGRESS.

For many years efforts have been made to bring about closer relations with the countries to the south of us. It is gratifying to note that the medical profession is doing its share toward cementing the friendship among the American republics. A long step in advance has been made, as will be seen from the annexed circular from the Secretary of the American Medical Association. We are glad that the initiation has been taken by North American physicians, and congratulate the Committee and Louisiana upon the selection made to represent our State upon the Committee on Permanent Organization.

THE INTER-CONTINENTAL AMERICAN MEDICAL CONGRESS.

OFFICE OF THE PERMANENT SECRETARY
OF THE AMERICAN MEDICAL ASSOCIATION,
PHILADELPHIA, June 4, 1891.

To the Medical Profession of the Western Hemisphere: At the meeting of the American Medical Association, held at

Washington, May 5, 1891, Dr. Charles A. L. Reed, of Cincinnati, introduced the following:

Resolved, That the American Medical Association hereby extends a cordial invitation to the medical profession of the Western Hemisphere, to assemble in the United States in an Inter-Continental American Medical Congress.

Resolved, That the Committee on Nominations be and is hereby instructed to nominate one member for each State and Territory, and one each from the army, navy and Marine Hospital service, who shall constitute a committee, which is hereby instructed to effect a permanent organization of the proposed Inter-Continental American Medical Congress, and to determine the time and place at which the same shall be held.

The resolutions were seconded by Dr. Wm. H. Pancoast and others, and unanimously adopted.

Pursuant to the foregoing the following committee was nominated and elected:

Ala., W. H. Sanders, M. D.; Ariz., Henry A. Hughes, M. D.; Ark., Ed. Bentley, M. D.; Cal., W. R. Cluness, M. D.; Colo.; Wm. A. Campbell, M. D.; Conn., C. A. Lindsey, M. D.; Del., C. H. Richards, M. D.; D. C., D. W. Prentiss, M. D.; Fla., C. R. Oglesby, M. D.; Ga., J. McFadden Gasten, M. D.; Idaho, Geo. P. Haley, M. D.; Ill., N. S. Davis, M. D.; Ind., A. M. Owen, M. D ; Iowa, B. H. Crilley, M. D.; Kan., J. E. Minney, M. D ; Ky., J. N. McCormack, M. D.; La., Stanford E. Chaille, M. D.; Maine, Hampton E. Hill, M. D.; Md., Geo. H. Kohe, M. D.; Mass., Augustus P. Clarke, M. D.; Mich., C. Henri Leonard, M. D.; Minn., P. H. Millard, M. D.; Miss., W. T. Kendall, M. D.; Mo., I. N. Love, M. D.; Mont., Thos. J. Murray, M. D.; Neb., R. C. Moore, M. D.; Nev., P. J. Aitken, M. D.; N. H., Irving A. Watson, M. D.; N. J., E. J. Marsh, M. D.; New Mex., C. E. Winslow, M. D.; N. Y., John Cronyn, M. D.; N. C., H. Longstreet Taylor, M. D.; N. D., E. M. Barrow, M. D.; Ohio, Charles A. L. Reed, M. D.; Oregon, Wm. Boys, M. D.; Pa., Wm. Pepper, M. D.; R. I , Geo. L. Collins, M. D.; S. C., R. A. Kinloch, M. D.; S. D., J. W. Freeman, M. D.; Tenn., J. R. Buist, M. D.; Tex., J. W. Carhart, M. D.; Utah, F. S. Bascom, M. D.; Vt., H. H. Holton, M. D.; Va., J. S. Wellford, M. D.; Wash., J. H. Morgan, M. D.; W. Va.; I. H. Brownfield, M. D.; Wis., J. T. Reeve, M. D.; Wyo., J. H. Finfrock, M. D.; U. S. A., ——; U. S. N., A. L. Gihon, M. D.; U. S. M. H. S., J. B. Hamilton, M. D.,

WM. T. BRIGGS, *President.*

WILLIAM B. ATKINSON, *Permanent Secretary.*

THE INTER-CONTINENTAL AMERICAN MEDICAL CONGRESS,
OFFICE CHAIRMAN OF COM. ON PERMANENT ORGANIZATION,
CINCINNATI, June 6, 1891.

The committee appointed by the American Medical Association to effect a permanent organization of the Inter-Continental Medical Congress, met at "The Arlington," Washington, May 7, 1891. The following officers were elected: Charles A. L. Reed, M. D., Cincinnati, O., chairman; J. W. Carhart, M. D., Lampasas, Tex., secretary. I. N. Love, M. D., St. Louis, Mo., treasurer.

On motion, the officers were appointed a special committee to draft a constitution, and report the same at an adjourned meeting of the general committee, to be held at St. Louis, Mo., Wednesday, October 14, 1891, when the time and place of meeting of the Congress will be decided, and permanent officers be elected.

CHARLES A. L. REED, M. D., *Chairman.*
J. W. CARHART, M. D., *Secretary.*

State News.

[Communications from Physicians of Louisiana are solicited for this Department. News of personal interest is especially desired.]

The following lists comprise the largest and most prominent medical institutions of the State:

Alexandria Charity Hospital, Alexandria, La.; capacity, 40.

Charity Hospital, New Orleans; capacity, 700. Dr. A. B. Miles, house surgeon.

Eye, Ear, Nose and Throat Hospital, New Orleans; Outcylinic. Drs. A. W. de Roaldes and S. D. Kennedy.

Hotel Dieu, New Orleans; capacity, 150. Dr. David Jamison, physician in charge.

Louisiana Retreat for the Insane, New Orleans. Dr. E. T. Shepard, physician. In charge of the Sisters of Charity.

State Lunatic Asylum, Jackson, La. Dr. L. G. Perkins, physician in charge.

Shreveport Charity Hospital; capacity, 60.

Small Pox Infirmary, New Orleans; capacity, 250. Dr. Geo. Huhner, physician in charge.

Touro Infirmary, New Orleans; capacity, 150. Dr. F. Loeber, physician in charge.

U. S. Gulf Quarantine Station, Chandeleur Islands; capacity, 164. Dr. Hy. R. Carter, physician in charge.

U. S. Marine Hospital, New Orleans; capacity, 60. Dr. J. B. Gassoway, surgeon in charge.

Dr. A. W. de Roaldes, of New Orleans, left for Europe on the 20th ult. On his way he will visit Detroit, Mich., to examine Drs. Shurley and Gibbes' method of treating con-

sumption. He will also visit all the prominent ear and throat clinics of Europe, and will return about October 1, 1891. The doctor will send the JOURNAL some correspondence, giving his impressions of the famous clinics. The JOURNAL wishes the doctor a safe and pleasant trip.

Dr. H. W. Blanc, of New Orleans, has decided to leave the city of his birth to settle in Sewanee, Tenn. The doctor, will, however, continue to favor the JOURNAL with valuable contributions on dermatology and hygiene, and will give reviews of pediatric notes. While the JOURNAL congratulates Sewanee on its accession, it can not help deploring the loss suffered by New Orleans.

Abstracts, Extracts and Annotations.

SURGERY.

VENTRAL HERNIA—RUPTURE OF COVERINGS—ESCAPE OF INTESTINES AND THEIR EXPOSURE FOR EIGHTEEN HOURS—RECOVERY.

By JAMES J. McKONE, M. D., Surgeon to St. Joseph's Hospital, Tacoma, Washington.

Mrs. J., aged 49 years, mother of one child 16 years of age, was twelve years ago treated for what her physician called an abscess of the abdominal wall. She was confined to bed for ten months. When she got around again she, for the first time, noticed a hernia. With the exception of weakness from this she suffered no more until the current year, when she noticed the skin over the "tumor" becoming black; she consulted a physician, who told her it was gangrene of the skin, and who applied treatment.

February 10th, about a month later, she fell from a stoop, and the gangrenous tissue gave way for an extent of four and one-half inches, from just below the umbilicus in a direction downward and outward toward the centre of Poupart's ligament on the right side. Through this wound thirty-four inches of the small intestines escaped. The patient walked into the house without assistance and went to bed. Her husband covered the gut with a towel and sent for Dr. Norgren, a Norwegian physician. The latter not being at home, and the husband being unable to speak a word of English, he waited

for Dr. Norgren till the following morning, the intestines meanwhile lying on the abdomen covered by the towel.

I was called to the case by Dr. Norgren at 3 P. M. The accident had happened at 9 P. M. of the previous evening, making the time during which the intestines had been exposed eighteen hours. The towel was found adherent to the intestines; after it was carefully removed by irrigation with hot bichloride solution, the exposed coils of intestines were found matted together by recent adhesions, which were easily broken.

The patient's temperature was good; the pulse 90 and full; the temperature 100 deg. Ether was now administered, and examination showed that the abdomen was traversed by thick bands of adhesions, most of which ran between the two widely separated portions of the abdominal fascia. These bands were tied and separated, the abdominal cavity thoroughly irrigated with hot water and the intestines returned. On account of the large amount of gas it was necessary to puncture the gut with a small trocar before reduction could be accomplished. The cavity of the abdomen was again thoroughly irrigated, and the wound closed by a continuous silk suture; after cutting away the gangrenous tissue, which consisted of a strip one inch wide in the whole length of the wound, a glass drainage-tube was inserted in Douglas' pouch and brought out at the lower angle of the wound.

It was impossible to perform an operation for the radical cure of the hernia, as the intestines above and to the right side of the rent were firmly adherent to the inner surface of the integument by adhesions which conld not be separated, this integument constituting the sole covering of the intestines, the peristaltic action of which was distinctly visible through the thin tissue. The dressing consisted of bichloride gauze, covered by absorbent cotton soaked in glycerine, the whole being retained by a wide binder.

The patient recovered quickly from the anæsthetic, which was administered by Dr. A. E. Burns, of Brooklyn, and had an almost uninterrupted recovery. The temperature rose to 103 degrees on the fifth day, but promptly subsided after free purgation with sulphate of magnesium. The glass tube, which had discharged quite freely, was removed on the third day, when a rubber one was substituted. After the first day there was scarcely any pain; the patient's appetite returned immediately; she was fed on raw eggs and milk for ten days, when an ordinary diet was allowed. The dressing was removed on the eighth day, and primary union found to have taken place, except in the track of the drainage-tube, in

which granulation subsequently took place. The patient is now up and around, and able to attend to her household duties.

This is a most remarkable case. Here is a woman, with most unhygenic surroundings—the shanty in which she lived consisting of one room, which served as bedroom, kitchen and cellar—lying for eighteen hours with thirty-four inches of her intestines outside the abdomen, and peritonitis well advanced, subjected to the additional shock of an anæsthetic and manipulation, who goes on to recovery with scarcely a bad symptom. That she did not have a fatal traumatic peritonitis is probably due to the fact that continued irritation of the peritoneum for years had made it tolerant of abuse. This may also account for the absence of shock. As to sepis, I have nothing to say.—*Med. News.*

PUNCTURED FRACTURE OF THE SKULL IN WHICH THE SUPERIOR LONGITUDINAL SINUS WAS WOUNDED.

By WILLIAM J. TAYLOR, Surgeon to St. Agnes Hospital.

For the history of this case I am indebted to Dr. John B. Maloney, resident physician.

W. R. J., aged 35 years, was admitted to the surgical wards of St. Agnes Hospital, about midnight of June 25, 1890, suffering from a punctured fracture of the vertex of the skull. He was brought to the hospital in a patrol wagon, but walked into the wards. Except for a little anxiety and a disposition to quarrel on not being immediately shown to bed, it could not have been known that anything was wrong.

The man could give no account of the injury, but the police officer stated that he had been struck on the head by a pick at 1 o'clock in the morning, just half an hour before he was seen by me. He became delirious, spoke of his friends, and did not recognize those about him. At half-past 1 o'clock he was placed under the influence of ether and the wound examined.

Two inches from the glabella, and about one-half inch to the right of the median line, was a small wound of the scalp, having an appearance as though made by a pick or other pointed instrument. The skull beneath was punctured, and the bone broken into small fragments, which were driven down into the brain-substance. The opening was just large enough to permit the insertion of the finger. The wound was enlarged with a knife, and the scalp turned back. The edges of the skull were cut away by

a rongeur forceps, and the depressed pieces of bone removed. It was then seen that the wall of the superior longitudinal sinus had been wounded by a fragment of bone. The hemorrhage was profuse. Pressure with forceps controlled the bleeding, until a larger opening, two and a quarter inches long by two inches wide, and extending one-half inch to the left of the median line, was made in the bone, thoroughly exposing the sinus, and including the whole area of fracture. The dura was torn and the brain itself lacerated. Blood flowed freely from the small tear in the wall of the sinus, which was about one-quarter of an inch long. Packing would not control the hemorrhage. The patient having already lost a large quantity of blood, and as the imperfect light made it difficult to see, the opening in the sinus was included in the grasp of a pair of hæmostatic forceps, and the hemorrhage completely controlled; the forceps were allowed to remain. The dura was freely opened, and the brain examined with the finger. The wound was then carefully disinfected; so much of the wound in the dura as was possible was brought together with catgut sutures, and the whole was packed with iodoform gauze.

The patient reacted nicely from the operation. At the end of seventy-two hours the hæmostatic forceps were removed from the wound in the sinus; there was no hemorrhage that was not easily controlled by a packing of iodoform gauze gently applied. On the third day there were symptoms of intense cerebral irritation, with delirium and restlessness, so that it became necessary to strap the man in bed and give morphine and bromides. For some days he passed both urine and fæces in bed, and was extremely weak. He gradually regained strength, and his mind became clear again. The wound healed by granulation. The patient was discharged from the hospital on August 29 entirely well, and returned to his work.—*Medical News.*

MEDICINE.

ETIOLOGY OF BRIGHT'S DISEASE.

J. Mannaberg (*Zeuschrift f. klin. Medicin*, 1890) does not regard the commonly accepted causes of Bright's disease as entirely satisfactory or complete. He accepts the mechanical theory of catching cold as the cause of the malady; the blood being driven to the internal organs causing hyperemia in

the vessels of the kidneys, the first step to the development of nephritis. Lassar observed that on plunging well-heated rabbits into ice water he could produce interstitial inflammation in the kidneys, although this same process was noticed in the heart, liver and lungs. Dyscrasia, superalbuminosis and subalbuminosis of the blood, and vaso-motor disturbances are also considered in their etiological aspect. Among other theories are those founded upon the observations which appear to show the infectious character of many cases of acute Bright's disease.

Studying first the nephritis occurring as a complication in other diseases, Mannaberg finds, in a large number of cases, sufficient data to lead him to suspect the bacterial origin of the renal trouble. He believes that chronic diseases, such as tuberculosis, chronic suppurative processes, syphilitic ulcers, etc., can produce nephritis by the passage of their bacteria through the kidneys. He finds, however, that acute diseases are more active in producing infectious nephritis. The observations on this subject are not fully established as yet. This is the extent of our present data. The nephritis occurring in scarlet fever is due possibly to a toxine; in diphtheria to a ferment produced by the diphtheritic bacillus; in erysipelas to the streptococci Fehleisen; in pneumonia to the diplococci; in typhoid fever to the typhoid bacillus; in recurrent fever to the spirillum or its toxine. The bacteria of measles, rheumatism, typhus fever, yellow fever, etc., have not been traced in regard to their action on the kidneys. Taking up the subject of acute primary bacteritic Bright's disease, Bamberger's observations, made thirty years ago, were the first to call attention to the possibility of the cause; and his observations, though faulty and obscure, have been confirmed and completed by recent observers.

Mannaberg obtained from the urine of eleven patients streptococci of characteristic appearance and growth which, on cultivation and inoculation in healthy animals, immediately set up acute nephritis. Precautions were taken, of course, to exclude the presence of bacteria due to other causes. The *post mortem* examination of animals so treated to show the presence of any of these bacteria in the kidneys, hence the author believes that the simple elimination of morbid germs is sufficient to alter renal epithelium and produce albuminuria, at least in animals.

In the résumé of the subject he presents the following conclusions: (1) In eleven cases of acute Bright's disease numerous streptococci were found in the urine; they disappeared from it at the end of the disease. (2) This streptococci has

never been seen in the urine of patients suffering from other diseases, or in healthy people. (3) This streptococci can be cultivated; in this point it differs from the streptococcus previously known. (4) Injection of this streptococcus in dogs and rabbits produces intense nephritis; in rabbits it also produces endecarditis. (5) The cocci are not increased in the kidney; they influence the kidney in their passing. (6) These streptococci produce Bright's disease in the cases observed. (7) These cases of Bright's disease in which streptococci are found have a rapid and favorable course.—*University Medical Magazine.*

RULES FOR THE MANAGEMENT OF INFANTS DURING THE HOT SEASON.*

By WILLIAM GOODELL, M. D., of Philadelphia.

Rule 1.—Bathe the child once a day in tepid water. If it is feeble, sponge it all over twice a day with tepid water, or with tepid water and vinegar. The health of a child depends much upon its cleanliness.

Rule 2.—Avoid all tight bandaging. Make the clothing light and cool, and so loose that the child may have free play for its limbs. At night undress it, sponge it and put on a slip. In the morning remove the slip and dress the child in clean clothes. If this can not be afforded, thoroughly air the day-clothing by hanging it up during the night. Use clean diapers, and change them often. Never dry a soiled one in the nursery or in the sitting-room and never use one for a second time without first washing it.

Rule 3.—The child should sl ep by itself in a cot or cradle. It should be put to bed at regular hours, and be early taught to go to sleep without being nursed in the arms. Without the advice of a physician, never give it any *spirits, cordials, carminatives, soothing syrups or sleeping drops. Thousands of children die every year from the use of these poisons.* If the child frets and does not sleep, it is either hungry or ill. If ill, it needs a physician. Never quiet it by candy or cake; they are the common causes of diarrhœa and of other troubles.

Rule 4.—Give the child plenty of fresh air. In the cool of the morning and evening, send it out to the shady sides of broad streets, to the public squares or to the park. Make frequent excursions on the rivers. Whenever it seems to suffer

*At a meeting of the Obstetrical Society of Philadelphia, held April 3, 1873, the undersigned committee was appointed "To consider the Causes and the Prevention of Infant Mortality during the Summer Months." The following rules, drawn up by this committee, were revised and adopted by the society at a meeting held May 1, 1873, and ordered to be published. —Dr. William Goodell, chairman; Dr. J. Forsyth Meigs, Dr. John L. Ludlow, Dr. Albert H. Smith, Dr. John S. Parry, Dr. William F. Jenks.

from the heat, let it drink freely of ice water. Keep it out of the room in which washing or cooking is going on. It is excessive heat that destroys the lives of young infants.

Rule 5.—Keep your house sweet and clean, cool and well aired. In very hot weather let the windows be open day and night. Do your cooking in the yard, in a shed, in the garret, or in an upper room. Whitewash the walls every spring, and see that the cellar is clear of all rubbish. Let no slop collect to poison the air. Correct all foul smells by pouring carbolic acid or quick-lime into the sinks and privies. The former article can be got from the nearest druggist, who will give the needful directions for its use. Make every effort yourself, and urge your neighbors to keep the gutters of your street or court clean.

Rule 6.—Breast-milk is the only proper food for infants. If the supply is ample and the child thrives on it, no other kind of food should be given—while the hot weather lasts. If the mother has not enough, she must not wean the child, but give it, besides the breast, goat's or cow's milk, as prepared under Rule 8. Nurse the child once in two or three hours during the day, and as seldom as possible during the night. Always remove the child from the breast as soon as it has fallen asleep. Avoid giving the breast when you are overfatigued or overheated.

Rule 7.—If, unfortunately, the child must be brought up by hand, it should be fed on a milk diet alone, and that warm milk out of a nursing bottle, as directed under Rule 8. Goat's milk is the best, and next to it, cow's milk. If the child thrives on this diet, *no other kind of food whatever should be given while the hot weather lasts.* At all seasons of the year, but especially in summer, there is no safe substitute for milk to an infant that has not cut its front teeth. *Sago, arrow-root, potatoes, corn-flour, crackers, bread, every patented food, and every article of diet containing starch, can not and must not be depended on as food for very young infants.* Creeping or walking children must not be allowed to pick up unwholesome food.

Rule 8.—Each bottleful of milk should be sweetened by a small lump of loaf-sugar, or by half a teaspoonful of crushed sugar. If the milk is known to be pure, it may have one-fourth part of hot water added to it; but if it is not known to be pure, no water need be added. When the heat of the weather is great, the milk may be given quite cold. Be sure that the milk is unskimmed; have it as fresh as possible, and brought very early in the morning. Before using the pans into which it is to be poured, always scald them with boiling suds. In

very hot weather, boil the milk as soon as it comes, and at once put away the vessels holding it in the coolest place in the house—upon ice if it can be afforded, or down a well. Milk carelessly allowed to stand in a warm room soon spoils and becomes unfit for food.

Rule 9.—If the milk should disagree, a tablespoonful of lime-water may be added to each bottleful. Whenever pure milk cannot be got, try the condensed milk, which often answers admirably. It is sold by all the leading druggists and grocers, and may be prepared by adding, without sugar, one teaspoonful or more, according to the age of the child, to six teaspoonfuls of boiling water. Should this disagree, a teaspoonful of arrow-root, of sago, or of corn-starch to the pint of milk may be cautiously tried. If milk in any shape can not be digested, try for a few days, pure cream diluted with three-fourths or four-fifths of water, returning to the milk as soon as possible.

Rule 10.—The nursing-bottle must be kept perfectly clean; otherwise the milk will turn sour, and the child will be made ill. After each meal, it should be emptied, rinsed out, taken apart, and the tube, cork, nipple and bottle be placed in clean water, or in water to which a little soda has been added. It is a good plan to have two nurning-bottles, and to use them by turns.

Rule 11.—Do not wean a child just before or during the hot weather; nor, as a rule, until after its second summer. If suckling disagrees with the mother, she must not wean the child, but feed it in part, out of nursing-bottle, on such food as has been directed. However small the supply of breast-milk, provided that it agrees with the child, the mother should carefully keep it up against sickness; it alone will often save the life of a child when everything else fails. When the child is over six months' old, the mother may save her strength by giving it one or two meals a day of stale bread and milk, which should be pressed through a sieve and put into a nursing-bottle. When from eight months to a year old, it may have also one meal a day of the yolk of a fresh and rare-boiled egg, or one of beef or mutton broth into which stale bread has been crumbed. When older than this, it can have a little meat finely minced; but even then milk should be its principal food, and not such food as grown-up people eat.

BRIEF RULES FOR CASES OF EMERGENCY.

Rule 1.—If the child is suddenly attacked with vomiting, purging and prostration, send for a doctor at once. In the meantime, put the child for a few minutes in a hot bath, carefully wipe it dry with a warm towel, and wrap it in warm

blankets. If its hands and feet are cold, bottles filled with hot water and wrapped in flannel should be laid against them.

Rule 2.—A mush poultice, or one made of flaxseed meal, to which one-quarter part of mustard flour has been added, or flannels wrung out of hot vinegar and water, should be placed over the belly.

Rule 3.—Five drops of brandy in a teaspoonful of water may be given every ten or fifteen minutes; but if the vomiting persists, give the brandy in equal parts of milk and lime-water.

Rule 4.—If the diarrhœa has just begun, or if it is caused by improper food, a teaspoonful of castor oil or of the spiced syrup of rhubarb should be given.

Rule 5.—If the child has been fed partly on the breast and partly on other food, the mother's milk alone must now be used. If the child has been weaned, then it should have pure milk with lime-water, or weak beef-tea, or chicken-water.

Rule 6.—The child should be allowed to drink cold water freely.

Rule 7.—The soiled diapers or the discharges should be at once removed from the room, but saved for the physician to examine at his visit.

FOR THE CONVENIENCE OF MOTHERS THE FOLLOWING RECIPES FOR SPECIAL FORMS OF DIET ARE GIVEN.

Boiled Flour or Flour Ball.—Take one quart of good flour; tie it up in a putting-bag so tightly as to get a firm, solid mass; put it into a pot of boiling water early in the morning, and let it boil until bedtime. Then take it out and let it dry. In the morning, peel off from the surface and throw away the thin rind of dough, and with a nutmeg-grater grate down the hard, dry mass into a powder. Of this from one to three teaspoonfuls may be used, by first rubbing it into a paste with a little milk, then adding to it about a pint of milk, and, finally, by bringing the whole to just the boiling-point. It must be given through a nursing-bottle.

An excellent food for children who are costive in their bowels may be made by using bran-meal or unbolted flour instead of the white flour, preparing it as above directed.

Rice Water.—Wash four tablespoonfuls of rice; put it into two quarts of water, which boil down to one quart, and then add sugar and a little nutmeg. This makes a pleasant drink.

A half pint or a pint of milk added to this, just before

taking it from the fire, and allowed to come to a boil, gives a nourishing food suitable for cases of diarrhœa.

Sago, tapioca, barley and cracked corn can be prepared in the same manner.

Beef Tea.—Take one pound of juicy, lean beef—say a piece off the shoulder or the round—and mince it up with a sharp knife on a board or a mincing-block. Then put it with its juice into an *earthen* vessel containing a pint of tepid water, and let it stand for two hours. Strain off the liquid through a clean cloth, squeezing well the meat, and add a little salt. Place the whole of the juice thus obtained over the fire, but remove it as soon as it has become browned. Never let it boil; otherwise most of the nutritious matter of the beef will be thrown down as a sediment. Prepared in this way the whole nourishment of the beef is retained in the tea, making a pleasant and palatable food. A little pepper or allspice may be added if preferred.

Mutton Tea—May be prepared in the same way. It makes an agreeable change when the patient has become tired of beef tea.

Raw Beef for Children.—Take half a pound of juicy beef, free from any fat; mince it up very finely; then rub it up into a smooth pulp either in a mortar or with an ordinary potato masher. Spread a little out upon a plate and sprinkle over it some salt, or some sugar if the child prefers it. Give it with a teaspoon or upon a buttered slice of stale bread. It makes an excellent food for children with dysentery.—*Annals of Hygiene.*

ABORTING PNEUMONIA.

By OLIVER J. ROSKOTEN, M. D., Peoria, Ill.

In view of the dreadful mortality from pneumonia at the present time, any suggestion bearing on treatment must be of interest to the medical practitioner. Limited though my experience be, I give it for the benefit of others in the hope that a trial by unbiased men may confirm the observations which I have made in a few cases.

In company with others I find that in acute lobar pneumonia (to which variety alone I now refer), after exudation and consolidation have taken place, I am nearly, if not quite, powerless to modify the course of the disease under any treatment now in vogue. This deplorable fact was very forcibly impressed on me some time ago by the loss from heart failure of several patients in quick succession. After prolonged consideration I concluded that the period most promising of suc-

cess in medication must be that preceding the exudation, *i. e.*, the stage of engorgement, that in which, beyond excessive vascularity and perhaps some moderate effusion, no great anatomical change has yet disturbed the recuperative powers of the lung threatened.

Can pneumonia be diagnosticated thus early?

I find that with reasonable certainty it can, at least if a severe chill and other symptoms to be named are accepted as sufficient. The chill comes on suddenly in a person previously of good health, is rapidly succeeded by stitch pains in the side (or at some one of the less frequent points, *e. g.*, the lateral part of the epigastic region), by short, suppressed, locally painful, dry cough, somewhat accelerated, superficial respiration, elevated temperature and pulse rate, with just noticeable dullness on percussion, respiratory murmur only tinged, as it were, with a tubular element, and a larger or smaller number of the ominous fine, crackling, crepitant râles audible on deep inspiration over the affected, but as yet limited, area at the base. The respiratory murmur here has lost its soft rustling character; is probably weakened by instinctive favoring of the opposite sound side, and there is exaggerated.

No one can deny the close relationship between the skin and the respiratory organs. Sudden suppression of cutaneous exhalation ordinarily is quickly followed by a catarrhal state of some portion of the air passages, but the noxious influence developed through disturbance of the function of the skin may skip the less important and generally less resisting mucous membranes, and precipitate an inflammation in the deeper parts. Why this should occur we can only surmise. I take it as probable that the respiratory centre does not alone regulate the proper working of the main respiratory mechanism, but that of the subsidiary organs, especially the skin, as well. Its connections with the vaso-motor centres and nerves must hence be very complex, and one can understand how it must be exposed to the frequent disturbances, I may say strains, on its integrity by abnormal influences reaching it from all the organs over which it presides.

I, therefore, regard acute nasal, laryngeal, bronchial catarrhs, and even acute croupous pneumonia, as so many manifestations of disturbed equilibrium between the respiratory and the vaso-motor centres, the localization of the affection depending on the intensity and other characters of the primary irritation, as well as upon the condition of the centre itself.

I determined to make some impression on this centre, be it good or bad, in the next case of pneumonia which should chance to fall into my hands, intending thus to gain an experi-

ence which would guide me to a rational therapeusis in other cases. I decided upon jaborandi, and soon had an opportunity to test it.

A fairly strong cattle feeder in one of our distilleries suffered a prolonged wetting of the feet at his occupation, and was well soaked in a rain storm on his way home. He was that evening seized with a violent chill and all the symptoms enumerated above. A few hours later I made the diagnosis of acute lobar pneumonia, located at the right base. I placed him on the following inelegant mixture:

℞. Extr. fl. jaborandi ..... ℥ iij.
Liq. ammon. acet ..... ℥ j.
Tinct. aromat ..... ℥ ij.
Syrupi aromat ..... ℥ j.
Aquæ dest ..... q. s. ut ft. ℥ iv.
M. Sig.: Tablespoonful every hour until thorough effect, then half doses every two hours.

I also ordered a hot pediluvium, and some mild counter-irritant. After two doses a most profuse diaphoresis ensued, which was prolonged by lessened doses of the medicine until I saw him next morning. The temperature, previously 103 deg. Fahr., was now found to be 98 deg. Fahr.; pulse, 80; some stitch pains left, but general condition vastly improved. The local signs had not progressed. Little or no salivation. As there was no occasion for any change in medicine, the patient was directed to continue the remedy at longer intervals. My astonishment can be imagined when at the third visit, next day, I found the bird flown, himself and family to this day doubting my diagnostic acumen!

I have practised this method in four cases since then, with three signal successes, while the fourth, a failure, was probably an instance of mistaken diagnosis; anyway, pleurisy was recognized a few days later, though pneumonia may have existed and been aborted.

I have confined this treatment to the earliest stage of the variety known as acute lobar pneumonia, and can not speak of experience in any other, but during last year's run of la grippe I have freely used the remedy, with the result that I have not met with a single instance of pneumonia in the course of the epidemic, although the number of cases treated was quite large.

The theoretical objection to jaborandi or pilocarpine, on the ground of its being a depressant to the heart, I have met, by the addition of aromatic stimulants, and in one or two cases, of digitalis. I aimed to have each dose absorbed in a little less than one hour, delaying absorption (if the stomach was empty) by having it diluted with a small quantity of hot water or tea, in order to avoid a too suddenly violent effect and attendant

dangers; and for this reason also I have preferred the extract to the active principle. In very weak persons, and in those afflicted with fatty or valvular disease of the heart, the remedy in efficient doses is undoubtedly dangerous.

I have ventured to bring the remedy to the notice of the readers of the *Medical Record* with some diffidence, as the number of cases on which the report rests is too small to convince even myself, but there is enough encouragement in the results observed to warrant a trial on a larger scale by those who enjoy more extended opportunities.—*N. Y. Med. Record.*

A STUDY OF ERGOT.

In the Johns Hopkins Laboratory Dr. John C. Hemmeter, of Baltimore, Md., made an elaborate series of experiments, the object of which were:

1. To determine whether the contractions of the uterus by ergot are of centric or peripheral origin.

2. Whether the peristalsis of the intestines is increased or diminished by ergot. If increased, whether this be due to a centric or peripheral action of ergot.

3. Whether the cause of the contraction of the blood vessels in the omentum is central or peripheral.

4. Whether ergot produces a rise or a fall of blood pressure. Whatever change occurs, is it due to an action on the heart and arteries or on the spinal cord.

5. The action of ergot on temperature.

Dr. Hemmeter says: "In no department of experimental therapeutics do we meet with such manifold and contradictory results, or with more widely digressing theories than those concerning the action of ergot. This is especially true in the investigations that have hitherto been made relating to the nature and cause of the contraction of the pregnant and non-pregnant uterus, which is produced by this drug. Up to the present time it has not been established whether the action of ergot in this case is a peripheral or central one: that is, whether ergot acts by innervating the uterus through the spinal cord, or directly on the muscular fibre of the organ.

H. C. Wood admits the uncertainty, but thinks that the drift of present evidence is toward peripheral action.

T. Lauder Brunton intimates that ergot possibly acts like ammonia, producing contraction of the uterus after all nervous connections have been divided, but gives no experimental evidence for deciding the point.

Rosenbach is inclined to accept a direct and local action

of ergot upon the muscular tissue of the uterus, indirectly causing contraction by bringing on acute anæmia of the organ.

These contradictory statements may be partly explained by the fact that the uteri of different animals vary greatly with regard to their irritability, and to the manner in which they respond to stimulations by general contractions. A part of the discrepancies in the opinion of the investigators mentioned might be explained by the fact that the quality and efficacy of ergot and of its preparations obtainable in pharmacies vary greatly.

As the watery infusion of fresh ergot (this having been used by former investigators) was found to undergo changes very rapidly, I concluded to resort to the fluid extract of ergot, but found this, as obtained from various sources, very variable, both in physical properties and therapeutic efficacy, some of the specimens having a very offensive odor. In two German preparations of ergotin, and one liquid ergotin prepared in Basle, Switzerland, and specially recommended by the manufacturer for hypodermic use, a very unpleasant fœtid odor, reminding of decomposed organic matter, was noticeable, and the last named used hypodermically proved very irritating, causing an abscess in a patient suffering from goiter.

Some of the secondary results in the experiments upon animals were caused by the impurities of the ergot used.

My attention was at last called to a form of liquid ergotin made in Baltimore by Sharp & Dohme, which gave evidences of being a standard preparation, both in clinical and experimental application. I have had some of this ergot in my possession for nearly ten months (since February 3, 1890). It has deposited no sediment, has a fresh, pure odor and is very effective. This ergotin solution, which is probably the most concentrated liquid preparation of ergot that can be obtained, has since become known under the name ot ergotole, to distinguish it from the numerous and widely-differing preparations sold under the name of ergotin. In my experiments this form of ergot was used, together with two forms of fluid extract of ergot, the officinal containing hydrochloric acid, the other no acid, which, however, were more bulky.

After the injection of 1 c. c. of fluid extract of ergot (about sixteen minims), the capillaries and arterioles in the omentum of a large rabbit could be seen to contract within from five to eight minutes, and the uterus showed peristaltic contractions. On the other hand, 0.25 c. c. (four minims) of the liquid ergot just described produced the same effect on the arterioles in from two to three minutes (rarely five minutes), and the contractions of the uterus were more active and fol-

lowed each other with greater rapidity. The ergot in both cases was diluted with the same quantity of distilled water, and injected into the jugular vein in preference to the hypodermic method, as the absorption of solutions of ergot from beneath the skin in animals is very slow.

I began my experiments by first curarizing the animal (rabbit), and then isolated the uterus from all nervous connections by destroying the spinal cord from the tenth dorsal vertebra to the cauda equina by running a white hot copper wire down the vertebral canal. Experiments on animals thus prepared led to the following conclusions:

Ergot, in producing contractions of the uterus acts primarily and essentially upon the lumbar cord, *i. e.*, its action in causing peristalisis of the uterus is centric, not peripheral.

Ergot, in producing intestinal peristalsis, acts directly on the cord and only reflexly upon the intestines, its action in this case, too, being centric, not peripheral.

Ergot produces constriction of the arterioles and capillaries in the omentum and ear of rabbits and in the frog's web as long as the cord and the vagi are intact. These being destroyed constriction is no longer produced by the drug; its action in this case is centric, not peripheral.

Ergot reduces the number of pulse-beats per minute.

In the isolated frog's heart it reduces the force of the contractions.

It exerts a local poisonous influence on the heart of the batrachian as well as on that of the mammal when injected into the jugular vein.

Its main action, however, is exercised through the influence of the central nervous system.

It raises arterial pressure when injected into the jugular vein of mammals. The rise is preceded by a primary depression due to the local action on the heart.

It is impossible at present to decide whether this local action is due to an influence on the heart muscle or on the cardiac ganglia.

It lowers temperature by reducing the number, force, and tonicity of the cardiac contractions, consequent upon which is loss of tone in the general circulation with its attendant reduction of oxidation processes.

The therapeutic effects of few drugs correspond so closely with their physiological action as do those of ergot.

The theory of its action is based upon the artificial anæmia which it induces in the arterial vessels, so that the histological process of inflammation is impeded.

The power of ergot to reduce temperature, the number

of pulse-beats, the number of respirations, and at the same time maintain increased arterial pressure, makes it a most important agent in the management of the first stage of pneumonia and bronchitis.

We believe that ergot exercises a very decided effect upon the pulmonary vessels.

Transudation has been proved by a very large number of observers, to depend mainly upon the permeability and elastic distensibility of the blood vessels.

If transudation is associated with increased heart's action, we know that ergot reduces the number of heart beats.

If the beginning of pneumonic exudation is associated with hurried breathing, we know that ergot reduces the number of respirations per minute.

If transudation is connected with fever, we know that ergot reduces temperature.

If the fever in inflammatory exudations lowers blood pressure, we know that ergot raises it.

All of these phosiological effects directly counteract the main features of the pathological process, and check further transudation, while the lymphatics carry away the exudation that has already occurred.

Upon the power of ergot to constrict the arterioles and to cause arterial and capillary anæmia depends its application in a large number of diseased conditions. It has been successfully used in hæmotypsis, hæmatemesis, epistaxis, hemorrhage from the gums; renal, hemorrhoidal, and vesical hemorrhage; in the bleeding caused by carcinoma, dysentery, mitral regurgitation, aortic insufficiency, dilatation of the heart, goitre, meningitis, epilepsy, locomotor ataxia, hemicrania, and diabetes mellitus.

WHAT IS THE BEST NUTRITIVE ENEMA?

Nutritive enemata, though often indicated in cases of œsophageal or gastric disease, are comparatively rarely used, because of the general skepticism as to their utility. Either they are of but little nutritive value, as in the case of bouillon, or they are difficult of absorption by the rectum, as in the case of milk. Leube suggested, in 1872, the use of pancreatized beef-pulp, and afterward Ewald proposed the peptones of meat and of cheese as offering suitable material for rectal feeding. There is no doubt that the substances recommended by these writers are, in part at least, absorbed by the rectum. Nevertheless, their use has never become general, because of the difficulty of their preparation. Ewald, as a result of further

experiments, found that eggs, even though not peptonized, were to a considerable extent absorbed by the rectal mucous membrane. According to the *Mercredi médical* for April 1st, Huber, of Zurich, has recently repeated Ewald's experiments in Professor Eichhorst's clinic, and announces that the absorption of the raw eggs is greatly aided by the addition of common salt. The salt is well borne, and causes, as a rule, no irritation of the bowel. He considers that eggs beaten up with salt, in the proportion of fifteen grains to each egg, are the best form of nutritive enema. His method of procedure is as follows: Two or three eggs are taken and thirty to forty-five grains of salt are added to them. They are slowly injected by means of a soft rubber tube carried as high up into the bowels as possible. Three such enemata are given daily. An hour before each enema the rectum is cleared out by means of a large injection of warm water.—*N. Y. Medical Journal.*

COCAINE INCOMPATIBLES.

Cocaine is used in manifold mixtures, and often brought in contact with substances with which it is entirely incompatible. A. Bruner states that it is frequently prescribed with silver nitrate in ointments, when, as is probably not known to the prescriber, decomposition of the hydrochloride ensues with formation of insoluble chloride of silver, and a corresponding change in the cocaine. E. Schell, in the *Els.-Loth. Journ. d. Pharm.*, reports that if calomel and cocaine hydrochlorate are rubbed together chemical reaction sets in. Mercuric oxide, too, if dispensed in form of ointment containing cocaine hydrochlorate changes, so that the ointment, instead of producing an anæsthetic effect upon the eyes, produces an exceedingly irritating one. This is due to the formation of oxy-chloride of mercury, the quantity of which depends on the amount of cocaine used, the intimacy of its mixture with the oxide, and the age of the ointment.—*Apoth. Ztg.*—*Journal American Medical Association.*

SIMPLE TREATMENT FOR CHOLERA.

Dr. Harkin has proved the following method by actual experience: Blistering, collodion or any epispastre, is applied behind each ear and along the course of the pneumogastric nerve as far as the angle of the lower jaw. The object is to cause inhibition of the sympathetic in the abdomen by stimulating the vagus. The result is at once apparent; the purging

and other characteristic symptoms cease, and the patients fall asleep long before vesication takes place, and awake cured, or at least tidied over the dangerous period. Counter-irritation with mustard or spice leaves might be useful in a similar way in the treatment of cholera infantum.—*India Med. Gaz. Jour. Amer. Med. Assn.*

WHAT SHALL BE DONE FOR A COLD IN THE HEAD.

It may not be always possible to break up a cold. Sometimes during the congestive stage, anything which will allay irritation will suffice. The person who feels a cold coming on should instantly betake himself to bed, drink a cup of hot ginger tea, and make use of a snuff like that which was proposed several years ago by Dr. Ferrier:

℞. Morph. sulph ..... gr. j.
Bismuth subnit ..... ʒ iij.
Pulv. acaciæ ..... ʒ j. M.

The insufflation of a little morphine at the commencement of a cold in the head is sometimes attended with very happy results. Quinine as an abortant in commencing cold is much in use; the dose should be somewhat large; Dr. T. J. Maclagan says ten grains. Its efficiency is, however, rather problematical. Doubtless, menthol is one of the best local applications in the early stages of coryza. It may be used in the form of an ointment (menthol one part, vaseline thirty parts), or as a spray with liquid albolene. A formula which may do good service is the following: Menthol, one part; liquid albolene, thirty parts. A special spray atomizer, such as sold by all the instrument makers, is needed for the effective use of this combination. Menthol seems to limit conjestion to the mucous membrane; it is often followed by a profuse flow of nasal mucous with little sneezing. Breathing through the nose and mouth the steam of hot camphor water, and the internal use of carbonate of ammonia are also recommended, and there is often utility in the production of active diaphoresis. Many, of late years, have claimed decided benefit from full doses of antipyrin, acetanilid, phenacetin, in the onset of cold; and, doubtless, these new remedies are more and more taking the place of the depressant diaphoretics.—*Boston Medical and Surgical Journal.—Jour. Amer. Med. Association.*

PHILIP (R. W.) "ON THE TREATMENT OF PULMONARY TUBERCULOSIS."

Edinburgh Medical Journal, March, 1891.

Dr. Philip first touches upon catarrh of the respiratory passages in its relation to phthisis. When the ultimate vesicles are involved in this catarrh, the more or less stagnant mucopurulent secretion forms a good cultivation medium for the tubercle bacillus—hence an explanation of Niemeyer's doctrine on neglected catarrh.

Dr. Philip then divides phthisis from the point of view of treatment into three stages:

(1) *Catarrhal Stage Proper.*—Previous to the inoculation with the tubercle bacillus the treatment should be mainly prophylactic. "Colds" should be treated with attention and energy. Climatic treatment and well regulated gymnastic exercise should be made use of. Impure air, especially if it contain dust, will induce and prolong catarrhal state. It is in this stage that a knowledge of the life history of the organism is likely to bear the greatest fruit. Dr. Philip recommends the free use of arsenic in anæmia so often present at this period.

(2) *Stage of Invasion.*—Here the physical signs may be slight. The temperature is variable. Tubercle bacillus is found in the sputum. Here, besides tonic treatment, the question arises whether the cultivation medium can be made less suitable to the growth of the bacillus. The basis of the antiseptic treatment lies in this. Eucalyptus oil may be given with this object—ten to thirty minims three or four times daily. Dr. Philip says he has used the intra-tracheal injection frequently during the past three years, and that he finds it easy, safe and efficacious. Iodine, iodoform and salicylates are used with the same object. Sulphuretted hydrogen, administered by the rectum, also belongs to this same class of remedies. Bacterio-therapy is based on the antagonism of some micro organisms to others. It was first suggested by Cantani, but as yet the results are doubtful.

(3) *Stage of Absorption, or Phthisis Proper.*—The therapeutic indications cover much the same lines as in stage 2. The question of the possibility of surgical interference is touched upon. Dr. Philip recommends the use of belladonna in large doses in this stage.—*E. F. Trevelyan, in the Manchester Medical Chronicle.*

THE TREATMENT OF DIPHTHERIA.

VERNON JONES, M. B.

I should like to put on record a method which I have found exceedingly useful in the treatment of diphtheria; it

consists in the hourly spraying of the fauces and naso-pharynx with a saturated solution of biborate and bicarbonate of soda (about forty grains of each to the ounce of water). The *ationale* of the thing is, I believe, that the bicarbonate of soda tends to loosen and liquefy the tenacious mucus which is always present in these cases, and thus allows the borax to exert its action as an antiseptic; it is, of course, a weak antiseptic, but it has the advantage of being compatible with the bicarbonate, which I believe plays an important part as I have said above.

I have not the smallest doubt, in my own mind, that it tends to shorten the course of the disease; in fact, in one case the recovery was so rapid that I should have doubted my diagnosis if it had not been that a sister of the patient, who was living in the same house, had just died of the disease in St. George's Hospital.

In severe cases it is well to spray up the nostril to prevent the membrane spreading upwards, but for this the solution should be diluted, for if it is saturated with alkali it causes hyperæmia and soreness of the mucus membrane.

I must say, in justness to Dr. Soltau Fenwick, that in all my cases I have given iron, though only in one according to the prescription which he gives in the *British Medical Journal* for February 14.

It is now nearly two years since Dr. R. H. Coall mentioned the line of treatment to me; he tells me that he had used it for several years previously—in fact, it is to him that the credit is altogether due if the method should prove useful after a more extended trial.

OBSTETRICS.

PARTURITION IN A PRIMIPARA WITHOUT THE KNOWLEDGE OF THE PARTURIENT.

Brunon (*Jour. de Méd.*, April, 19, 1891) reports a case which is important from a medico-legal point of view. It concerned a primipara, twenty-two years of age, who at termination of pregnancy was seized with quite severe lumbar pains one evening at nine o'clock, though the pains were not so severe that she or any one in her household thought of summoning a physician. At eleven o'clock she had a desire for an evacuation of the bowels, which kept her sitting in the water-closet for about an hour. After that time the lumbar pains diminished. At half past one the lumbar pains reappeared

with tncreased severity, with a feeling of heaviness in the ischiadic region, and a renewal of the desire to defecate. At this moment the patient endeavored to bring her thighs together, but was prevented by an obstruction which, upon examination, was found to be the head of her infant protruding from the vulva. At no time had the question of parturition occurred to her, and her first intimation as to what was going on was when she touched and saw the child's head between her thighs. The patient was a woman of calm temperament and good health and belonging to the cultivated class. There was nothing in her antecedents that would have any bearing upon this nearly painless labor. There was no abdominal colic at any time, there were no terminal expulsive pains, which are usually so severe; in fact, the only evidence of the process of parturition were the lumbar pains, the feeling of weight in the rectum, and the illusory desire to defecate. She stated that she might have given birth to her child in the water-closet had her friends not summoned her out after she had been in there some time. As to the medico-legal bearing of such cases, an inexperienced woman who did not realize what was going on might mistake the pains accompanying the dilatation of the uterus for a desire to evacuate the bowels and under these circumstances a child might be born and fall into a privy without the least intention of infanticide on the parf of the mother. —*N. Y. Medical Journal.*

REPORT OF A CASE IN WHICH THE CHILD'S ARM BECAME ENGAGED IN THE FENESTRUM OF THE OBSTETRIC FORCEPS.

By DAN MILLIKIN, M. D., of Hamilton, O.

Nearly a year ago I attended a woman who had borne four dead children after severe and complicated labors, each time under the care of a different physician. She had also borne one living child, which owed its existence to the fact that it was very small, and probably was prematurely born. This woman, half through her sixth pregnancy, came to me, and consented to the induction of premature labor. Thereupon she passed from my notice, changed her plans upon ill-advice, and summoned me when labor at term had progressed for two or three hours.

When the cervical tissues were in proper condition, a careful examination of the case was made under an anæsthetic. Finding a head of moderate size above the brim of the pelvis in left occipito-anterior position, I was sure that I could deliver it with forceps in spite of a slight asymmetry, and a shortened

antero-posterior diameter of the pelvis. In this opinion I was all amiss, for it was afterward demonstrated that the child could not be delivered in that position, and it also appeared that it could be delivered easily feet foremost. But this error of judgment is somewhat apart from my present business.

Four fingers were passed, and the forceps were carefully guided to the sides of the child's head. They were easily locked and manifested no disposition to slip during the attempted extraction of the child. It may also be remarked that they were my pet instruments, with broad blades and strong curves, cephalic and pelvic.

No effort was made to induce pains by traction. The pains were very vigorous but separated by unusually long intervals. For this reason, and because the woman's general condition was excellent, the effort to deliver by forceps was much prolonged.

When, finally, it was determined to essay delivery by podalic version, a state of affairs was presented which, so far as I can learn, was unique in obstetric practice. The upper blade of the forceps—that one which passed to the right side of the woman's pelvis—would not come out! The lower blade was withdrawn first, and without difficulty, but still the other would not come away. Then my hands, passed into the uterus, revealed the fact that the child's right hand had passed through the fenestrum of the blade and that, in fact, the blade hung on the bend of the elbow, as a basket hangs on one's arm. The blade could not have been withdrawn without internal manipulation.

Presently, when the child had been delivered by the feet, it was seen that violence had been done to the forearm alone, and that the injury was near the elbow. No bones were broken, but the soft parts were terribly crunched. Undoubtedly, if the instrument had been long and stiff, and if it had appeared proper to compress the head very severely, the arm would have been completely chewed off.

Endeavering to draw some warning from such a sorry job, we may note, in the first place that the accident could only occur when a suprapelvic application of the forceps is made. To attain the odd position in which I found it, the arm must have lain for a moment with its palmar surface on the convex surface of the forceps blade as it was about to be applied to the head; then the hands must have dropped into the fenestrum, and finally, the forearm must have been flexed upon the arm by the final thrust of the blade home to its position. All of these evolutions require room, and could only occur above the brim.

In the second place, I would remark that the accident can not possibly be diagnosed unless the head and arm are above the ordinary size. In my case the forceps were easily introduced and locked with the greatest ease; the handles were approximated as much as in the average case; there was no disposition to slip, neither when the forceps were in my hands nor in the hands of my skilled associate, Dr. Geo. C. Skinner; the child's head and the points of the forceps were repeatedly and carefully palpated through the thin abdominal and uterine tissues, and no suspicion of this unique complication arose in our minds. I can not believe that the most expert and experienced obstetrician could have detected the presence of the arm in the fenestrum until he attempted the withdrawal of the instruments.

For this reason I am in the humor to inquire whether the fenestrum has any reason to exist. What is it good for, anyway? It has been said in most of the systemic treatises that the fenestrum gives lightness to the forceps, but this proposition, which is at first glance very plausible, admits of question. Give to me a solid blade that is admittedly too heavy, and I can lighten it either by cutting out a fenestrum or by grinding it thinner. If I cut out the fenestrum I weaken the blade, past question, and may need to thicken the remaining metal to restore the lost strength. Any instrument shop will furnish samples of forceps which have passed through this line of development; that is to say, they are light blades with generous fenestra and metal altogether too thick. And after all, what signifies weight in obstesric forceps? Ordinary forceps, fenestrated or non-fenestrated, need not weigh more than a pound, and it is easy to make a long pair of crushing instruments with a pound and a half of steel. Surely the brother who can not carry a pair or two of this weight is not stout enough to be out at night, much less to use forceps.

On behalf of the fenestra it has been said, further, that they permit prominent parts of the head to engage in them—the parietal eminences, for example—in such a manner that the forceps occupy no available room, take a much better hold upon the head, and obviate the tendency to slip. To this it may be responded in the way of argument, that it is a remarkable streak of luck, and nothing but luck, when the prominences on a child's head project into the fenestra. It may be said, further, that forceps rightly chosen and rightly used for the case in hand do not occupy any available room nor, when in use, increase the diameter of the child's head, measured between the blades. Fenestrated or non-fenestrated, they *make* room, moulding the head by compressing it to such

a degree that were they of double thickness they would find room. And, finally, as to the slipping of the forceps, it may be said that when they show an inveterate tendency to slip, either the forceps or the operator should be changed; there is something amiss in the fit, the application or the manipulation. Fenestra will not prevent slipping when the forceps have not been placed upon the child's head, nor when they are used merely as tractors.

And it may be urged further, that when we cut fenestra in our forceps we increase the total amount of edge surface. This is a positive disadvantage which should be atoned for by some very great advantage. Examining the head of a child which has been the subject of a severe forceps extraction, one will find that the narrow rim of metal about the fenestrum has shown a tendency to actually cut into the tissues of the scalp. Not only the outer, convex, marginal edges make their mark, but also in lesser degree, the inner, concave edges which bound the fenestrum. Looking at such a specimen one would incline to the opinion that the fenestrum is an evil.

But waiving the question as to whether the fenestrum has any reason to exist, I think that my mishap in the case cited gives us reason to cease operating above the brim with forceps having wide fenestra.—*Journal Amer. Medical Association.*

SUBCUTANEOUS INJECTIONS OF CAFFEINE IN THE TREATMENT OF PUERPERAL HEMORRHAGE.

Misrachi (*Jour. de Med.*, March 8, 1891,) recommends this method of using caffeine for cases of post-partum hemorrhage in which a rapid effect is required. It is of special advantage to the country practitioner, who may at the time be attending cases of infectious disease, and whose hands may not be sufficiently disinfected to justify a digital examination of the genital organs of the parturient patient. The author states that caffeine will act more rapidly than ergot and more efficiently than ether, though the latter is more rapid in its action as a stimulant. The caffeine should be administered in a solution containing a grain and a quarter of the substance, and this may be repeated if necessary until five grains have been used. A better solution may be obtained by dissolving the caffeine in warm water with benzoate of sodium. It is recommended that packages containing both thsee materials form a portion of the contents of the obstetrician's bag.—*N. Y. Medical Journal.*

Book Reviews and Notices.

Principles of Surgery. By N. Senn, M. D., Ph. D., Milwaukee, Wis., Professor Principles of Surgery in Rush Medical College, etc. Illustrated with 109 wood engravings. Philadelphia and London: F. A. Davis. 1890.

Without exaggeration, Senn's book may be said to be the most notable contribution to surgical literature that has appeared since antisepsis revolutionized the science and art of surgery. It is the only work of the kind in the English language; and, on account of the broadness of the principles laid down and the originality of the author, it may come to mark an epoch in modern surgery.

Many great minds have shed light on various questions connected with the surgeon's art. Each one has added something to the great mass of material which makes up modern surgery; but it was left for Senn to digest the vast literature that had accumulated, and combine apparently disconnected fragments into a harmonious whole. Senn did not introduce antiseptic surgery, neither did he establish bacteriology; but he has carefully considered all the valuable material that other investigators have amassed, and from this he has elaborated a work that will always stand as a clear and vigorous exposition of the broad fundamental principles upon which a rational system of surgical procedure may confidently be built. Senn's work gives the essence of advanced modern surgical doctrine on all points except tumors, which the author reserves for a subsequent work.

In the opening chapter of his book on *Regeneration*, Senn boldly distinguishes between repair and inflammation. Inflammation, according to Senn, is always caused by the presence of one or more kinds of pathogenic bacteria; no bacteria, no inflammation. "As compared with true inflammation it has been customary for quite a number of years to speak of regeneration as a plastic or regenerative inflammatory process; but the term *inflammation* in the future should be limited to the series of histological changes, which ensue in the living body from the presence and action of specific microorganisms, while the word *regeneration* should be used to designate the histological changes which take place in tissues which are primarily in aseptic condition, or have been rendered so after the inflammation has subsided." Bacteriology here offers the greatest assistance to surgery. The part played by bacteria in the causation of disease is clearly set forth by

Senn, the material for this portion of the work being drawn from his "Surgical Bacteriology."

We can not quote from all of the chapters, for there is so much that is worth quoting that this notice would swell to the size of the book itself. Suffice it to say that Senn's work is a résumé of the principles of modern surgery, set forth with the clearness, originality and virility characteristic of the man.

A. McS.

Medical Items.

DOCTOR OF LAWS—A DESERVED HONOR CONFERRED ON A DISTINGUISHED DOCTOR.

[*Courier-Journal*, June 18.]

His many friends and admirers in this and other states will be glad to learn that the University of South Carolina yesterday conferred the degree of doctor of laws on Dr. F. Peyre Porcher, the eminent physician, distinguished botanist and cultured gentleman of this city.

Dr. Porcher's eminence in his profession is conceded outside of his native state, and his ripe scholarship in the field of letters is evidenced by occasional addresses and articles for the newspapers, which he has found time to prepare between the busy moments of a practising physician's life; but it is probably in recognition of his exhaustive researches and publications in the department of botany that his alma mater yesterday conferred the well-merited honor of doctor of laws on Dr. Porcher.

Some idea of the extent and variety of Dr. Porcher's contributions to botany and medicine may be drawn from the following partial list taken from the "Index catalogue of the library of the Surgeon General's office" of the United States army, published in 1890:

Porcher (Francis Peyre), [1824]—"The medicinal, poisonous and dietetic properties of the cryptogamic plants of the United States, being a report made to the American Medical Association—126, pp. 80, New York; Baker, Godwin & Co., 1854. Repr. from Tr. Am. M. Assoc., N. Y., 1854, vii.

Prize essay, February, 1860. Illustrations of disease with the miscroscope. Clinical investigations, aided by the microscope and by chemical reagents, with microscopical observa-

tions of pathological specimens, medical and surgical, obtained in Charleston, S. C. Pt. 1, 133, p. 1, Tab. 80. Charleston: Evans & Cogswell, 1861.

Resources of the Southern Fields and Forests, Medical, Economical and Agricultural. Being also a medical botany of the Confederate States, with practical information on the useful properties of the trees, plants and shrubs. Prepared and published by order of the Surgeon General, Richmond, Va. XXV, 601 pages, 8 octavo. Charleston: Evans & Cogswell, 1863.

The same. New edition. Revised and largely augmented; 673 pages, 8 octavo. Charleston: Walker, Evans & Cogswell, 1869.

Yellow Fever in Charleston, 1871, with Remarks upon its Treatment. President's address before South Carolina Medical Association, 30 pages, 8 octavo. Walker, Evans & Cogswell, 1872.

Dr. Porcher was co-editor of the *Charleston Medical Journal and Review*, 1850-55: new series, 1873–77; and prepared an examination into the medicinal and chemical properties of the Sarracenia flava and variolaris (fly trap), in *Charleston Medical Journal and Review*, Vol. IV, 1849. Numerous articles and reviews in the *Charleston Medical Journal and Review*, in the *American Journal of the Medical Sciences*, and the *Medical News of Philadelphia*, an illustrated paper on "The Edible and Poisonous Fungi" of the United States, published in *Wood's Hand Book of the Medical Sciences*, New York, W. C. Wood & Co., attracted deserved attention.

During the war Dr. Porcher was surgeon to the Holcombe Legion to the Confederate Hospital, Fort Nelson, Norfolk harbor and the South Carolina Hospital, Petersburg, Va.

One of his most admirable efforts in the literary vein was an address before the Association of the Survivors of the Confederate Surgeons of South Carolina, at the annual meeting held at Columbia, S. C., in November, 1889.

HONORARY DEGREES.

Doctor of Laws—Prof. Francis Peyre Porcher, M. D., Charleston.

Doctor of Divinity—Rev. William Robert Atkinson, A. B., Columbia.

MORTUARY REPORT OF NEW ORLEANS.

For May, 1891.

CAUSE.	*White.....*	*Colored...*	*Male.....*	*Female....*	*Adults ....*	*Children.*	*Total .....*
Fever, Yellow							
" Malarial (unclassified)	4	3	5	2	3	4	7
" Intermittent							
" Remittent	3	1	1	3	2	2	4
" Congestive	4		3	1	4		4
" Typho-Malarial	4		3	1	4		4
" Typhoid or Enteric	2	1	3		2	1	3
" Puerperal		1		1	1		1
Scarlatina							
Small-pox							
Measles	10	3	7	6		13	13
Diphtheria	1	1	2			2	2
Whooping Cough							
Meningitis	14	2	11	5	2	14	16
Pneumonia	24	11	27	8	20	15	35
Bronchitis	3	7	5	5	2	8	10
Consumption	35	28	36	27	58	5	63
Cancer	9	1	3	7	10		10
Congestion of Brain	9	4	5	8	6	7	13
Bright's Disease (Nephritis)	15	7	15	7	21	1	22
Diarrhœa (Enteritis)	43	25	36	32	19	49	68
Cholera Infantum	75	19	54	40		94	94
Dysentery	6	1	5	2	6	1	7
Debility, General	3	1	2	2	4		4
" Senile	14	14	5	23	28		28
" Infantile	7	7	7	7		14	14
All other causes	202	93	161	134	186	109	295
TOTAL	487	230	396	321	378	339	717

Still-born Children—White, 19; colored, 17; total, 36.

Population of City—White, 184,500; colored, 69,500; total, 254,000.

Death Rate per 1000 per annum for City—White, 31.13; colored, 39.71. total, 33.87.

HENRY WILLIAM BLANC, M. D.,
Chief Sanitary Inspector

METEOROLOGICAL SUMMARY—MAY.

STATION—NEW ORLEANS.

Date.....	TEMPERATURE. Mean	Max..	Min..	Precipn. in inches and hund'ths..
1	75	81	65	0
2	72	80	65	0
3	75	83	67	0
4	77	84	70	0
5	74	83	67	0
6	68	74	63	T
7	62	72	53	0
8	66	74	57	0
9	69	77	61	0
10	70	79	62	0
11	72	81	63	0
12	72	78	66	.61
13	68	75	62	.14
14	70	77	63	0
15	72	81	64	0
16	73	84	62	0
17	74	83	66	0
18	74	80	67	0
19	74	82	66	0
20	76	83	69	T
21	75	83	67	0
22	77	85	69	0
23	78	85	70	.01
24	82	89	74	0
25	79	88	70	0
26	78	87	68	0
27	80	87	72	0
28	76	83	68	0
29	76	84	68	0
30	76	84	69	0
31	78	85	70	0

SUMMARY.

Mean barometer, 30.070.
Highest barometer, 30.296, 21st.
Lowest barometer, 29.852, 27th.
Mean temperature, 73.8.
Highest temperature, 89, 24th; lowest, 53, 7th.
Greatest daily range of temperature, 23, 16th.
Least daily range of temperature, 11, 6th.

MEAN TEMPERATURE FOR THIS MONTH IN—

1871.....73.2	1876.....74.6	1881 . ...76.8	1886.....72.6
1872.....75.6	1877.....72.5	1882.....74.4	1887.....75.2
1873.....73.7	1878.....75.9	1883.....74.3	1888.....72.8
1874.....75.4	1879.....76.5	1884.....76.4	1889..... 73.8
1875.....76.0	1880.....76.3	1885.....73.9	1890.....74.4
			1891.....73.8

Total deficiency in temp'ture during month, 44.
Total excess in temp'ture since Jan. 1, 55.
Prevailing direction of wind, S. W.
Total movement of wind, 6004 miles.
Extreme velocity of wind, direction, and date, 35 miles, S. E., 4th.
Total precipitation, 0.76 inches.
Number of days on which .01 inch or more of precipitation fell, 3.

TOTAL PRECIPITATION (IN INCHES AND HUNDREDTHS) FOR THIS MONTH IN—

1871..... 5.08	1876..... 7.10	1881..... 3.20	1886..... 3.07
1872..... 3.14	1877..... 1.48	1882..... 6 83	1887 ... 3.99
1873.... 18.68	1878..... 8.11	1883 .... 5.41	1888..... 9.75
1874..... 0.22	1879.... 4.63	1884..... 4.33	1889..... 1.17
1875..... 2.53	1880..... 6.55	1885..... 5.77	1890..... 5.32
			1891..... 0.76

Total deficiency in precip'n during month, 4.56.
Total deficiency in precip'n since Jan. 1, 11.22.
Number of clear days, 23; partly cloudy days, 8; cloudy days, 0.
Dates of Frost, ...
Mean maximum temperature, 81.6.
Mean minimum temperature, 65.9.

NOTE.—Barometer reduced to sea level. The T indicates trace of precipitation.

G. E. HUNT, *Sergeant, Signal Corps Observer.*

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XIX. AUGUST, 1891. No. 2.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the first day of the month preceding that in which they are expected to appear. A complimentary edition of twenty-five reprints of his article will be furnished each contributor should he so desire. Any number of reprints may be had at reasonable rates if a *written* order for the same accompany the paper.]

A CLINICAL REPORT ON INTRAVENOUS SALINE INFUSION IN THE WARDS OF THE NEW ORLEANS CHARITY HOSPITAL FROM JUNE, 1888, TO JUNE, 1891.*

BY RUDOLPH MATAS, M. D., VISITING SURGEON, ETC.

[CONCLUDED.]

PART II.—REMARKS.

In the preceding clinical report it will be noticed that in no case has a real transfusion been performed, and that in all cases in which transfusion of blood would possibly have been indicated intravenous saline infusion has been uniformly substituted and preferred. The practical and theoretical reasons for this preference while admitted by many are still the subject of contention, and deserve, if for this reason alone, some passing consideration and explanation.

It should also be remembered that the term *transfusion* should be restricted, as Roussel first indicated, to that method of intravascular medication by which the blood of one person or animal is transferred from the vascular system of one into the vascular system of the other and that the term *infusion* (*intravenous*, *intra-peritoneal* or *subcutaneous*) should be restricted to all cases in which other solutions or media than

*Read before the Louisiana State Medical Society, May, 1891. (Part I appeared in the July issue of the JOURNAL.)

blood are introduced. The injection of blood also, if not done directly into vascular system as in the subcutaneous injection of blood (e. g., Karst's or V. Ziemessen's method), can not properly be called transfusion.

* * *

Long ago, in the earlier years of the century, the need for a liquid and neutral menstruum that would be able to dilute the thick clogging blood of choleraic patients who were manifestly dying *asphyxiated* not for a want of oxygen-carrying corpuscles but simply because these could not be floated to their destination, owing to the dehydration of the blood and tissues, suggested the use of intravenous saline infusions which were first sucessfully practised by Jœnichen, of Moscow, in 1830.*

But the later experiments of Schiff and Gaule, which proved the stimulating and re-animating influence of saline solutions on the frog's heart when severed from the body, and the subsequent experiments on exsanguinated animals by Jolyet and Laffont, and the still later and confirmatory observations of Kronecker, Hayem and Fournac, led to the clinical adoption of saline infusion as a restorative method in cases of acute surgical anæmia. Bischoff, who saved a woman moribund from post-partum hemorrhage, after injecting 1250 grammes of salt solution, and the subsequent successes achieved by Kustner, Kocher, Kussmaul, Pellacani, and W. Bull, not only established the clinical utility of saline infusions, but also demonstrated that the respiratory and hæmic value of transfused blood was not as essential to the complete restoration of persons dying from the effect of acute traumatic anæmia as had been at first supposed.

* * *

Without attempting to establish a lengthy parallel between the older practice of transfusion and the more modern method of saline infusion for the restoration of patients threatened with death from the rapid depletion of their vascular system, we may at once ask: is this saline infusion a true rival or a mere succedaneum of blood transfusion? We must answer *yes* and *no*, according to certain circumstances.

**Vide* Menard, Art. Transfusion, Dict. Dechambre.

We must at once state that *mechanically* or *physically*, saline infusion are the rivals or equivalents of blood transfusion, while *physiologically* they never can rival or equal the value of blood.

In speaking of blood as a medium for transfusion we mean, of course, only pure, entire, living blood and not the altered pathological material known as defibrinated blood. We also mean blood of the same species and not that derived from heterogenous sources.

Now the superiority of entire and living blood is based on three qualities, viz: Its nutritive. 2. Its respiratory. 3. Its hemogenic value.

None of these qualities, except the last perhaps, are possessed by the inorganic saline solution. Consequently we need not discuss further the physiological superiority of blood which is here unhesitatingly admitted.

But it happens in surgical practice that in many, if not the vast majority of the cases of acute anæmia in which fatal syncope threatens life through vascular depletion, that the cry of the moment is not for physiological restitution so much as for the *mechanical* dilution of the blood remaining in the vascular system and tissues of the individual; under these circumstances, the true value of saline solutions is made clear and its position as a true rival of the more costly blood can be readily appreciated.

* * *

The question of the utility of neutral saline solutions and their ability to save the life of patients apparently moribund from loss of blood having been decided in the affirmative by superabundant clinical experience a more important problem remained to be solved and that was, what was the limit of this life-saving power. When could the action of the saline solution be expected to be permanent and when only transitory or ephemeral?

This problem was easily solved by the physiologist in his experimental laboratory but not so readily by the clinician.

The physiological limit of blood loss compatible with life has been the object of interesting and serious experimental study. From the earlier studies of Herbst (1822) to those of Renaut, Hayem, Wanner and Kermisson to the latest calcula-

tions of Rosenberg, we may admit that animals can survive the rapid loss of two-fifths of the total quantity of their blood, while the loss of more than two-fifths and less than one-half is *usually*, and more than one-half *absolutely* fatal. In his experimental use of the .7 per cent. salt solution this investigator was led to think that the injections only *temporarily* prolonged life in hemorrhages beyond one-half the total quantity of blood. This, he believed, was due to the reduction of the absolute number of corpuscles in a given bulk, resulting in a *qualitative* anæmia.

If we calculate with Bayard Holmes on Rosenberg's data, "and assume that a loss of one-half of the blood is ultimately fatal, even if infusion and resuscitation is practised, we should have a reduction in the corpuscular elements to one-half, a fatal reduction. As there are ordinarily 5,000,000 corpuscles to a cubic millimeter of blood, a loss of one-half the blood and a restoration by infusion of its bulk to the full amount would reduce the corpuscles to 2,500,000. This number has been found clinically to be compatible with life, and a fair degree of vitality. Patients recover with a presence for months of less than 2,000,000 corpuscles per cubic millimeter. But a reduction beyond 1,500,000 is usually rapidly fatal, and death occurs before the number falls below 1,000,000 to a cubic millimeter."

While this estimate of Holmes may be correct for an acute experimental or surgical anæmia it is possible that the number of corpuscles may even suddenly be reduced below these figures, and the condition be still compatible with life. In this connection the interesting observation of William Hunter should be remembered, as he has found that in certain hæmolytic diseases of the blood, such as chlorosis and pernicious anæmia, "the number of red corpuscles may be reduced to 500,000 or 600,000 instead of the full 5,000,000 to the cubic millimeter which characterize health, and yet the respiration of the individual will not appear to be perceptibly affected."

* * *

But while admitting that the physiologist may determine the precise limit of life compatible with blood loss, and thus equally determine the critical conditions in which life may be permanently or ephemerally maintained by simple dilution, it

is otherwise with the clinician, who is almost invariably called upon to rescue a patient who is laboring under a complexity of conditions that are far from representing the simple condition of the laboratory experiment.

It must be generally conceded that there are few cases, indeed, of acute traumatic anæmia in which death is threatened from pure asphyxia due to corpuscular defficiency and the consequent *respiratory* inadequacy of the blood. Death, in the majority of the cases, we repeat, is threatened and will actually take place long before the corpuscular limit has been reached. It is *syncope*, *initial circulatory failure*, and not asphyxia from lack of corpuscular respiration, that kills in acute traumatic anæmia and it is this condition that the clinician endeavors to antagonize by the timely exhibition of the saline plethorifacient.

Hunter,* a justly eminent English authority, has very correctly stated the case in a recent contribution: (1) "The value possessed by transfused blood in such cases is almost solely in virtue of its *physical* properties. The chief physical property of blood for purposes of transfusion is undoubtedly its volume. The immediate source of danger from sudden loss of blood is the fall of the blood pressure to a point where the circulation is unable to be maintained. The obvious indication, therefore, is to raise the pressure within the vessels. In health, the blood pressure is dependent mainly upon peripheral resistance.

"The effect of the loss of blood on the blood pressure is, up to a certain point, completely neutralized by an increase in the peripheral resistance, due to the stimulation of the vasomotor centers. It is only after very severe hemorrhage that the relation between the vessels and the amount of fluid they contain necessary for carrying on the circulation is disturbed. The pressure then falls rapidly and suddenly, and death will ensue unless means be taken to meet the threatened failure of the circulation. The readiest way in which this can de done is to replace the lost blood with a certain bulk of fluid. To meet the danger thus arising the amount of blood is more important than its quality.

*On Transfusion; its Physiology, Pathology, Practice, three lectures delivered before the Royal College of Surgeons, by Wm. Hunter, M. D., etc. British Med. Jour., April 10, 1889.

"In an emergency, the infusion of ordinary water (Coates) has been followed by results as successful as any ever obtained after transfusion of blood. Bulk for bulk, pure or defibrinated, blood must possess certain advantages over neutral saline solutions free from organic constituents. This doubtless possesses a certain physiological as well as physical value, inasmuch as blood must have a greater and more immediate effect in restoring the tone of the vaso-motor centers than saline solution.

"These advantages are more than neutralized by other and greater disadvantages, namely, (1) The difficulty of obtaining blood in sufficient quantity or with sufficient rapidity as compared with the ease with which simple saline solution can be prepared. (2) The dangers attending the transfusion of blood compared with the absolute freedom from danger possessed by the solution, and (3) the doubtful value of the transfusion, whether hæmogenic or physical, when compared with saline solution."

The physiological need of blood as a medium for the restoration of the vascular equilibrium in acute traumatic hemorrhage having been largely disproved and the physical reason for intravascular injection in such cases being better understood, we can easily appreciate the growing popularity and general substitution of salt water for blood media.

* * *

Returning now to the clinical aspect of this subject we must note that a certain amount of shock is almost inseparable from the acute anæmia that the surgeon is called upon to meet, and we may at once state that it is the proportion in which this element of shock is added to the anæmic element that, as a general rule, decides the permanency of the therapeutic benefit obtained by saline infusion. From the limited experience furnished by the nineteen cases reported in the first part of this paper, and a careful consideration of many other cases scattered in the literature of this subject, I have been struck with the importance of the role played by shock in deciding the final issue of the case. So forcibly have I been impressed with this observation that I believe we may safely formulate this proposition, viz: That the greater the shock complicating a

case of surgical anæmia the less the benefit of infusion and conversely, the more uncomplicated the anæmia the greater the probabilities of final and permanent recovery with infusion. The reasons for this fatal influence of shock is readily understood when we consider that the most striking manifestation of this condition is a cardio-vascular inhibition, amounting to a true circulatory paresis or even complete paralysis in the fatal cases. Shock not only weakens the cardiac pump itself but interferes most injuriously with the contractility of the peripheral vessels, and thereby with the compensating mechanism which plays so important a part in maintaining a safe degree of vascular tension in uncomplicated hemorrhage.

Previous exhaustion preceding operative procedures from acute or chronic suppurative and septic processes are also certain to neutralize the permanent benefits of saline infusion when applied for the relief of the vascular depletion consequent upon traumatisms.

These statements are well illustrated in the cases detailed in the preceding pages. Thus the effect of pure shock complicating hemorrhage is well shown in cases 1 (Amputation of Thigh for Sarcoma), 8 (Multiple Fracture of Skull), 6 (Avulsion of Arm), 12 (Supra-vaginal Hysterectomy for Myoma), 13 (Laparotomy for Gunshot Injury of Abdomen), 19 (Disarticulation of Hip for Comminuted Gunshot Fracture of Femur). While the exceedingly transitory benefit of infusion in *uncontrolled* hemorrhage is particularly well exhibited in cases 4 (Gunshot of Head, Wound of Cerebal Sinus), 11 (Unrecognized Stab of Internal Mammary Artery).

The effect of acute or chronic exhaustion (from suppuration or sepsis, etc.) as unsuccessfully met by infusion are also shown in cases 9 (Acute Dysentery), 14 (Disarticulation of Shoulder for Fractured and Suppurating Limb), 17 (Amputation of Leg for Fractured and Suppurating Limb).

On the other hand, the brilliant and permanently beneficial effects of saline infusion in cases of syncope from pure and less complicated hemorrhages are admirably illustrated in cases 2 (Wound of Axillary), 3 (Idiopathic Epistaxis), 4 (Secondary Hemorrhage after Syme's Amputation), 7 (Sec-

ondary Hemorrhage after Osteotomy for Overlapping Fracture of Femur), 18 (Stab of Brachial Artery).

From the further analysis of the cases here reported it is seen that the immediate or temporary effects of saline infusion were always good, no matter what was the cause of the vascular depletion. In the majority of the cases patients apparently moribund were revived, and in at least two instances practically dead patients whose hearts had ceased beating perceptibly, and who even had ceased breathing, were resurrected and made to return to life and consciousness by the timely stimulation of the circulatory centers and organs through the agency of the infusion. This impressive result was obtained in case 9 especially, though in both instances the brilliant result was only temporary, though sufficiently prolonged to have permitted the patients to recognize their surroundings and to have made a final disposition of their affairs, had they so desired it.

It can not, furthermore, be doubted from the evidence furnished by these observations that in all cases in which life is threatened by cardiac syncope, *i. e.*, in which the arteries are empty, whether due to vascular depletion or to loss of the contractile energy of the heart, whether from hemorrhage, shock or exhaustion, that saline infusion is a most potent restorative, producing almost invariably an immediately favorable effect. The question of the permanency of this effect is, however, as already indicated, far from being so satisfactory, as is also well shown by this report. Here so many factors of a physiological and pathological character intervene in the solution of the problem that it is practically impossible, in many cases, to be able to foresee with certainty the ultimate effect of this mode of therapeutic intervention. Nevertheless, *a priori* reasoning and the results of experience have taught us what to expect from saline infusion in the majority of cases, so that the indications and final prognosis may be pretty accurately defined, as we have attempted to do, in the following conclusions which we have drawn as the result mainly, of our hospital experience.

CONCLUSIONS.

1. In all cases in which life is threatened by circulatory failure, from any cause, saline infusion may be depended upon as a *temporary* restorative.

2. Saline infusion will act as a *permanent* as well as temporary restorative in all cases of syncope due to simple and uncomplicated hemorrhage.

3. In all cases of uncontrollable hemorrhage, in which the flow of blood can not be arrested, the beneficial effect of saline infusion must necessarily be ephemeral, though even under these circumstances an artificial circulation of short duration will be maintained which may sustain life long enough to be of value.

4. Saline infusion *may* restore permanently, as well as temporarily, in cases in which syncope threatens life from mixed vascular depletion (hemorrhage) and cardio-vascular paresis (shock) though the permanency of the effect will depend largely on the degree of the shock. The greater the shock the less permanent the beneficial effect.

5. In all cases in which syncope is due only to cardio-vascular paresis or paralysis (shock) the effect of infusion is of very doubtful value and is almost always extremely ephemeral and rarely permanent.

6. In all cases in which syncope is due to organic (nutritive) as well as dynamic alterations in the cardio-vascular apparatus (e. g., exhaustion from disease) the effect of infusion will always be ephemeral and never permanent, though even in these cases the restorative effects of infusion are worthy of remembrance.

* * *

Having stated the reasons for preferring the method of saline infusion for that of blood infusion, and its indications, let us now consider its technical application.

Much stress has been laid lately on the superiority of subcutaneous infusion over the intravenous method. My friend, Dr. Bayard Holmes, of Chicago,* has proven himself an able advocate of the subcutaneous method, and there is no doubt that by availing ourselves of the Allen surgical pump, which he recommends for the purpose, the injection of salt water into the subcutaneous tissue is indeed an easy and safe procedure. But while admitting that subcutaneous infusion is an easier and possibly safer procedure in the hands of the inexperienced, I can not admit that it is altogether superior, or

**Vide* this journal for March, 1891, p. 695-701.

even equal in any way to intravenous infusion when this is practised by a careful operator. Among the now salient advantages of the intravenous method we must recognize, (1) its immediate penetration into the circulation and certainty of absorption; (2) it is almost unrestricted in its possibilities, as far as the quantity injected; (3) it is comparatively much less painful than the subcutaneous method; (4) it requires the simplest and most readily improvised apparatus for its performance. In our hospital practice we have generally used a very simple contrivance, which was first mounted by Dr. F. W. Parham when assistant house surgeon of the institution. It consists simply of a large glass funnel to which a long drainage tubing is attached, the lower end being inserted to an elongated metallic tip which serves as a nozzle.* The flow in the tube is controlled either by the finger of an assistant or by an ordinary wooden spring clamp. The tip also may be improvised very successfully by utilizing the fine end of a long, narrow glass nozzle, such as is found in most fountain syringes. Nothing, therefore, can be easier to prepare than this simplest of transfusion instruments.

Now as to the *modus operandi*. This is equally simple: (1) *Disinfect* thoroughly the bend of the elbow with soap, hot water, ether and sublimate. (2) Expose a subcutaneous vein, the most prominent in sight, either the median cephalic or basilic. The exposure should be effected by making a linear incision 2½ inches parallel to the vein, so that the cut can be readily placed over the vein by simply sliding the loose skin over the vein. (3) *Isolate* the exposed vein by passing a groved director under it. (4) Ligate the vein with catgut one inch below (peripheral side of) the proposed puncture. (5) *Introduce* a silk or catgut ligature under the vessel about one-half an inch above (cardiac side of) the proposed puncture and leave it without tying. (6) Open the exposed vein by making a small valvular nick in it with sharply-pointed scissors, the anterior vein-wall being pinched up for the purpose by a fine-bladed dissecting forceps. (7) *Introduce* the canula of the apparatus, after having previously allowed the saline solution to flow out of the tip, so as to secure the complete exclusion of air. (8)

*The use of a glass funnel with these accessories is probably a very old one. The instruments of Bellina, Colin, Galabin and Cripps suggest the same plan.

Tie the proximal end of the vein with the second ligature that was ready for the purpose, and include the tip of the apparatus in the ligature. (9) Now allow the liquid to flow.

In the practice of saline infusion it is also important that (1) the receptacle destined to contain the fluid be perfectly aseptic; (2) that the fluid to be injected be throroughly sterilized; (3) that the solution be clear and heated to about 100°; 100⅘° F., (Hayem); 104° F., (Esmarch); 104° F., (Lorain); 107.6° F., (Lotta); (4) that the solution of salt in water do not exceed 7 to 1000 parts; (5) the fluid should not be injected too rapidly, the velocity of the stream being regulated by the length of the conveying tube and the height of the apparatus. Esmarch estimates that three fluid drachms per second should constitute the rate of injection; (6) the quantity injected should depend upon the general effect, especially upon the circulation, guided by the pulse. The rule should be to inject for the effect; *i. e.*, the return of the normal arterial tension without special regard to quantity, fifteen to thirty ounces being usually the quantity required in adults to produce a satisfactory impression.

In this connection, I should notice that larger quantities of salt solution are required and tolerated by the vascular system than in blood transfusion. Worm-Müller, Landois, Lesser, have been able to double, even treble the total amount of the systemic blood mass without dangerously increasing the intra-vascular pressure. In these cases the injections have been made very slowly. Oré (Jaccoud's Dict.) as a result of numerous experiments on dogs established the fact, based on the circulation that the total blood weight is equal to 1-10 the total body weight, that 1-20 of the total blood (or 1-200 of body weight) could always be *transfused* without any perceptible inconvenience.

Any way, in saline solution there are none of the dangers encountered in the injections of blood, and for this reason the amount injected should be almost entirely regulated by the effect on the pulse. When the pulse becomes nearly normal in frequency and volume, then stop.

No more striking illustration of the receptive capacity of the vascular system with reference to saline infusion

could be quoted than the case recently reported by Dickinson to the London Medical Society, February 28, 1890. (British Medical Journal, March 8, 1890.)

The case was one of diabetic coma in a woman aged 25 years. Intravenous infusion with a solution consisting of sodium chloride, potassium chloride, sodium sulphate and bicarbonate dissolved in water. This was slowly injected by means of a syringe, first into the right arm, then into the left until, in the course of one hour and a half, 106 ounces had been introduced. About ten minutes after the conclusion of the operation consciousness began to return and soon became so complete that the patient was able to converse with her friends and was able to take food in a natural manner.

But she relapsed into drowsiness, and the next day was as comatose as before the operation. The injection was now repeated into one of the veins of the leg, into which the fluid was allowed to flow from a funnel. Under the operation which required a little chloroform, the patient's condition appeared to improve, and with this encouragement the injection was continued until increasing fullness of the superficial veins and some general appearance of conjestion were taken as indications to stop; there was as yet no return to consciousness, in the hope of which, the proceeding had been continued. It was now found that no less than 350 ounces, or 17½ imperial pints, had passed in. This was a much larger quantity than had been intended, but the process was allowed to go on under the encouragement which the former attempt seemed to afford, and in the absence of prohibitive symptoms until the increasing conjestion was thus interpreted. Three-quarters of an hour after this second injection, consciousners returned and lasted without drowsiness for nine hours, after which, she became drowsy, but was for the most part sensible; thirty hours after which there was a lapse into coma, which was final and fatal. In this case, therefore, a total of 456 ounces of saline solution were infused into one patient in the course of about twenty-four hours.

This is certainly more than the estimated average total amount of blood in the adult body and bears out thoroughly

the experimental evidence furnished by Müller, Landois and Lesser.

Finally, to conclude with the technique, I will state that the best results have been obtained in our practice with extemporized solutions of common salt (about one teaspoonful to one pint) and in view of this experience it is unnecessary to refer to the numerous and complicated formulæ that have been recommended by various authors, (*e. g.* Schmidt's, Lotta's, Colson's, Beaumetz's, Jenning's, Hayem's, Schwartz's, etc.), anything more than a neutral solution of common salt being in all probability superfluous.

We should also add that at the end of the operation the wound in the arm should be accurately closed and dressed antiseptically. By the careful observance of these rules none of the cases in our hospital practice have been followed by the least sign of phlebitis or local disturbance, the operation being so free from complications and operative sequelae that it may be regarded as being practically innocuous.

HYSTERO-EPILEPSY.

By R. L. HUNT, M. D., Shreveport, La.

It is unnecessary to dwell at length upon the causation of this not uncommon disease, as it is a subject perfectly familiar to most of my confreres.

My main object in this paper is to relate in a succinct manner a case that recently came under my personal observation.

In the latter part of May, 1889, I was called to see Mrs. L., aged 23, married five years; nativity, Louisiana.

When first seen the patient presented the following symptons: unconsciousness, clonic and tonic spasms, labored respiration, pulse weak and extremities intensely cold.

Upon inquiry I found that these attacks were quite com-

mon, always preceded by thoracic or abdominal pain, and occurring eight or nine times a month. Further investigation showed that, though they were frequent now, they did not antedate marriage, but supervened soon after.

The length of the seizures varied from half to two and a half hours, the patient upon recovery always being completely prostrated from nervous and physical exhaustion.

At the time of her marriage she weighed one hundred pounds and was in excellent health.

Soon after she began to have "fits" (as she expressed it) and when I commenced treating her she weighed only eighty pounds.

At no time had she ever been pregnant.

No sooner had the case been confided to my care, than I instituted a thorough investigation in the hope of arriving at the real cause of the disease.

Knowing that various doctors had handled her case unsuccessfully I concluded to do nothing until absolutely satisfied about a diagnosis.

Suspecting uterine trouble as the root of all the evil, especially as there was no history of heredity, etc., I insisted upon a vaginal examination.

This was granted and I found the womb anteverted, almost complete stenosis of the os, subinvolution and a chronic endometritis.

I at once proceeded to dilate the os, curette the uterine cavity and correct the displacement.

The latter I did by means of absorbent cotton plugs, saturated in a mixture of borax, alumen, iodoform, glycerine and water.

Thinking to allay any undue nervous irritability, I prescribed a judicious combination of the bromides, but soon discovered that they depressed too greatly the already weakened heart muscle.

I thought this peculiar, as the hysterical element was well marked, and can only explain it upon the ground that the general determination of blood to the pelvic organs superinduced cerebral anæmia and impaired action of the heart.

Whenever I had reason to suspect an attack, I gave stro-

phantus or some other heart stimulant and regulator, and in this way frequently aborted a seizure.

As soon as the acute symptoms of inflammation passed away a Gehrung's pessary was inserted and a vaginal douche of borax water prescribed twice daily. Every three months since then I have dilated the os by forcible dilatation, and I have persevered in this treatment for the last year and a half.

From the very first the lady improved, and from eight or nine attacks a month, I succeeded in reducing the number to seven in eight months.

During the past ten months she has only had one seizure, and that one took place six months ago.

Now she is in excellent physical condition and weighs 125 pounds.

Two remarkable facts are connected with this case: the complete recovery and the lengthy duration of the disease, with utter failure on the part of the numerous doctors to *diagnose the cause.*

She became pregnant in March, 1891, and if nothing untoward happens she will carry the fœtus to term.

Hospital Reports and Clinical Notes.

FROM CHARITY HOSPITAL.

LARGE FIBRO-LIPOMA.—EXCISION AND RECOVERY.

By CHAS. CHASSAIGNAC, M. D., Visiting Surgeon Charity Hospital and Instructor New Orleans Polyclinic.

John Hyatt, colored, was admitted to one of my wards July 2, 1891. He states he thinks he is 50 years old, but his apparent age is 60 or over. He is hale and hearty. He presents himself to be relieved of a tumor, illustrated in an accom-

panying cut, which is a burden in the material sense of the word, and is making his life a burden in the figurative sense. This tumor, however, is only mechanically disagreeable, as it is entirely free from pain and abnormal sensibility. It interferes with sleep because the patient can not turn easily with it, and can not get on his back at all. Various estimates are made as to its weight, ranging all the way from 20 to 50 pounds, the writer's figures being 25 to 30 pounds.

The tumor is covered by skin and by a little hair at its top where the scalp has been encroached upon by being drawn down. The skin is of normal (African) hue; its pores are enlarged by the stretching, and a few good-sized veins can be traced under it. The shape and size of the growth are not unlike those of a medium-sized watermelon. It is movable, being attached apparently to the skull from just above the occipital, protuberance downwards as far as the back of the neck by a pedicle measuring about fourteen inches in circumference. The measurement from the skull down over the upper then the under surface back to the head was twenty-nine inches, while the other circumference was about twenty-five inches.

The tumor is firm, evidently solid, and while its surface is smooth, it turns out upon palpation that it is somewhat irregular in outline beneath the skin, and chiefly so as far as density is concerned; it is comparatively soft at some points, harder at others, and very hard at some again, especially at its most dependent portion.

The tumor is carried by the old man between the shoulder-blades and causes him to assume when erect the attitude of a man holding a sack on his back or, more correctly, that of a squaw carrying a papoose on her back in a basket which is suspended from her head. It interferes somewhat with locomotion by this time although the patient was able to chop his own fire-wood up to a comparatively recent date. He first noticed a lump on the back of his head about 25 years ago, it being then nearly of the size of a hen's egg. His account of how he came to discover it is amusing. His brother's wife gave birth to a child having a wen on the back of its head, whereupon the "granny" declared that some one in the family must be the possessor of such a wen; a diligent search among the members of the family led to the discovery of the tumor on our old man. The tumor has grown steadily until now, having reached the size shown in cut, and deciding the patient to part with it.

The slow growth, the absence of pain and of tenderness, the size, the solidity, together with the irregularity of density and of subdermal outline, led me to make the diagnosis of fibro-lipoma and I decided to operate the next morning.

Operation.—After the tumor and its surroundings had been soaped, scrubbed, shaved and thoroughly irrigated with a 1 to 2000 solution of sublimate, the patient was anæsthetized; chloroform was first administered, then the anæsthesia was continued by means of ether so as to avoid too depressing an effect. The tumor was raised as high as we could for a few moments to empty it of blood as much as possible and an elastic band was tied around the pedicle to control the circu-

lation during the cutting, as the the tumor seemed vascular and the effects of great loss of blood on as old a man as the patient were to be dreaded. About two inches below the elastic band I made a circular incision through the skin down to the tumor itself, taking most of the flap, however, from the upper surface where the skin seemed nicer. As the tumor was finally excised, the cut vessels were quickly caught and either twisted or tied by Dr. F. W. Parham who, together with Dr. E. D. Martin and the student of the ward, Mr. Duson, ably assisted

me. The hemorrhage once controlled, the flaps were brought together vertically by interrupted silk sutures, a drainage-tube was inserted from the upper through to the lower end of the incision and an antiseptic dressing of iodoform and of bichloride gauze was applied. The old man awoke while the last stitches were being put in; he had lost comparatively little blood and scarcely suffered from shock.

After ablation, the tumor was found to weigh twenty-four pounds, and the diagnosis of fibro-lipoma was confirmed.

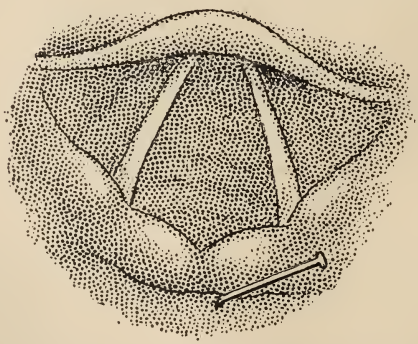
The patient sat up in bed the day after the operation; was out of bed the next day; never had any fever; the wound healed by first intention over the greater part of its extent; the drainage-tube was gradually withdrawn from the lower opening; at date of writing, about two weeks after the operation, he is ready to return home a happier and lighter man.

FROM THE EAR, EYE, NOSE AND THROAT HOSPITAL.

PIN EMBEDDED IN POSTERIOR WALL OF PHARYNX.

By A. McShane, M. D., Assistant Physician.

On July 3, 1891, Milton T., from Slidell, La., a well built young negro of twenty-eight, applied at the clinic for relief from pain caused by something that he had swallowed, and that seemed to stick in his throat. On July 1 he was eating



supper at Slidell, and while he was swallowing a piece of bread he felt a sudden and severe pain low down in his throat, as he expressed it. He had to stop eating at once. He could not eat on the following day; it was painful to drink water. On July 3 he boarded the train and came to New Orleans.

When first examined with the laryngoscope, a mass of mucus was found over the mouth of the œsophagus and covering the arytenoids. The patient said that a pin was stuck in there, somewhere. In order to examine the parts more leisurely, a solution of cocaine was sprayed into the pharynx and larynx. In the coughing and spitting following the cocaine spraying, the patient dislodged the mucus laying over the œsophagus; and when he was again examined with the laryngoscope a large pin was seen sticking out of the posterior wall of the pharynx, just above the enterance into the œsophagus as shown in the accompanying engraving. Half of the pin was embedded in the pharyngeal wall.

The part was thoroughly cocainized. In attempting to extract the pin, Mackenzie's forceps were first tried, but the pin hugged the pharyngeal wall so closely that the blade of the forceps could not be passed between them. I then resorted to Jurasz's forceps, and in a few seconds the pin was extracted, giving great and immediate relief to the patient. He returned to Slidell the same evening, and I have not yet heard of any unpleasant after-effects (abscess, etc).

I am indebted to Dr. Quitman Kohnke for the accurate drawing showing the pin *in situ*.

Proceedings of Societies.

PROCEEDINGS OF THE SHREVEPORT MEDICAL SOCIETY.

At a late regular meeting of the Shreveport Medical Society, Dr. M. C. Melansen presented a brief paper on

PUERPERAL ECLAMPSIA.

The essayist characterized this affection as epileptiform in its convulsive manifestations, though of very different clinical history, and as is well known, one of the most formidable that confronts the obstetrician. Its etiology is obscure. Very often without observable premonitory symptoms the attack is suddenly ushered in, increasing the difficulties of the physician, which might possibly have been obviated by a prophylactic course, had precursory signs been present.

In some instances these signs are present, notably, hemicrania, dizziness, impairment of vision, œdema of subcutaneous cellular tissue, especially of face and lower extremities, in which cases, of course, the cautious practitioner will institute preventive measures.

The question of precise pathology was as yet undetermined. On this point authorities widely differed. The essayist in common with many others was inclined to attribute puerperal spasms, primarily, to a vasor-motor disturbance caused by a disordered condition of the blood, the result of retained excrementitious matters in consequence of renal inactivity.

This diseased blood (so to speak) impresses the nervous centers and proves as it were the predisposing cause of the convulsion while the excited state of the nervous system, incident to pregnancy and parturition, acts as the exciting cause and precipitates the attack.

As regards the obstetrical management, the writer thought that while very many and perhaps the majority of authorities have taught the speedy evacuation of the uterus by instrumental means, as soon as possible after the inception of the attacks, he deemed this cause not always wisest and best, but preferred the more conservative course of non-interference in this particular direction. Thus Gooch said: "Attend to the convulsions and leave the labor to take care of itself," and says Schroeder: "Especially is no kind of obstetrical manipulation required for the safety of the mother," though he admits that it is sometimes necessary to hasten labor to insure the life of the child. The practice, however, of forcibly dilating the the os uteri, turning, etc., was in the judgment of the essayist, to say the least of it, very hazardous. If on the other hand the parts were in good condition, readily admitting the application of instrumental treatment, this would be indicated and should be practised.

In respect to the general treatment, the writer did not favor the time-honored practice of indiscriminate venesection. He would resort to this (if at all) only in healthy, strong and plethoric subjects. His usual course was to administer a brisk purgative if possible, and as soon as possible, and to control the paroxisms with chloroform. By this means he had succeeded in diminishing the number and frequency of these paroxysms in severe cases, that had terminated favorably in his hands. The chloroform, he did not administer continuously, as some recommend, so as to keep the patient in a state of protracted anæsthesia, but was given whenever signs of a recuring spasm were manifest.

Chloral hydrate in combination with bromide of potas-

sium in full doses demanded favorable consideration, to which might we added morphine "in desperate cases."

DISCUSSION.

Dr. T. J. Allen regretted that the essayist had not said more about the etiology of this formidable but obscure affection. Puerperal eclampsia seemed to be a disease *sui generis*, about the pathology of which as yet we know nothing or but little positively. Some have regarded the kidneys as the source of the malady, while others lay the responsibility at the door of the nervous system. As to treatment, he would, in plethoric and hyperæmic cases, advise bleeding, as was practised and so strenuously urged by Dr. Meigs, Sr., of Philadelphia. Delivery as early as possible he deemed desirable. This, with anti-spasmodics and anæsthetics, such as chloroform, chloral, etc., would be the treatment he would pursue.

Dr. Randell Hunt regarded the direct cause of death to be due to asphyxia from the convulsion. In his opinion the brain was in a state of anæmia, and required stimulation. He would therefore give brandy in connection with other well known anti-spasmodic remedies. Venesection, he thought, was contra-indicated. He ventured the opinion that the pressure of the gravid uterus upon the renal veins interfered with the excretory functions of the kidneys, and thus was explained the frequent involvement of these organs in puerperal spasms.

Dr. F. E. Yoakum had found benefit in this affection from the use of large doses of veratrum viride.

Dr. J. W. Allen's experience had been limited, but comparatively recently he had had a case in the country, and chanced to be unprovided with the usual anti-spasmodic agents, chloroform, etc. He therefore had recourse to antipyrine, and administered ten grains hypodermically—repeated in two hours. This treatment was followed by immediate improvement. In eight or ten hours afterward another dose of ten grains were given. The case recovered. These facts he reported as the result of an experiment, antipyrine not being usually included in the therapy of these convulsions. He regarded the matter as one, however, worthy of consideration.

Dr. H. C. Coty had had a similar experience. In his case he had given fifteen grains of antipyrine, repeating the dose in an hour and a half, making thirty grains in all, with most beneficial results.

Dr. A. A. Lyon arose simply to say, that the treatment as now generally resorted to, viz: chloroform, chloral and remedies of that class in puerperal eclampsia, were orthodox and clearly indicated as it appeared to him. He was moreover strongly inclined to think that the premature and forcible

evacuation of the uterus was not only not demanded but positively injurious, and that he thought there was a growing sentiment in the profession looking in this direction. The fœtus, probably, bore no important part indirectly producing the convulsions as would seem to be indicated by the fact that in a very large percentage of cases the convulsive phenomena did not appear till after delivery was completed. He would therefore advise a tentative and conservative course rather than have the radical measures so often recommended and practised. If the use of forceps is possible without violence, the delivery should of course be hastened by this means. A. A. L.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.

MAY MEETING.

The President, Dr. Henry M. Wilson, in the chair.

Dr. Brinton read a paper entitled "A Day's Work in Obstetrics." Under this title he related the following cases:

1. A case of podalic version.
2. A case of normal labor.
3. A case of shoulder presentation; efforts at version unsuccessful; vagina ruptured; the woman dying undelivered.
4. A case of placenta previa lateralis treated by internal podalic version. Mother and child saved.

Dr. Miltenberger—There is some discussion in regard to the preference for high forceps and version. I prefer version, but the profession is divided and the choice comes to a matter of skill and individual practice.

Dr. Neale—One of the points claimed for version over high forceps is that in version the narrow diameters of the head come first. It has been claimed that the same condition is brought about in the use of forceps by the diminution of the diameters of the crown, so that they are less than those of the base of the skull. I can not see how this is, for certainly the forceps do not, as a rule, compress sufficiently to reduce the diameters of the crown to less than those of the base of the head.

Repeated attempts at version often give bad results when the uterus is contracted and retracted, and when there is a neglected cross-birth and the child is dead. After a moderate attempt at version has failed, decapitation should be done.

By means of Braun's hook it is certainly a comparatively easy and safe procedure.

I have no criticisms to make upon the treatment Dr. Brinton adopted in his cases.

Dr. Brinton—Since this case of rupture of the vagina has been reported it has been stated by a pathologist of this city that it is the only one one record. I would like to ask if any of the gentlemen present know of any such cases?

Dr. Miltenberger—There are certainly on record many cases of rupture of the vagina. I have seen at least two such cases.

Dr. Thos. A. Ashby—I once passed a sound through the uterus. The sound went in easily, and could be felt just below the umbilicus. Before this the patient had had pus running slowly from the uterus which had evidently had its origin higher up. There were no bad symptoms; the woman rode home a distance of eight miles and was not heard from.

I once attempted to remove an epethelial growth from the vagina and all at once the intestines came down. I cleaned away the diseased tissue, closed up the opening with a firm stitch and the wound healed promptly. The patient lived eleven months.

Dr. Geo. W. Miltenberger read a paper upon "Superfœtation and Superfecundation."

Dr. P. C. Williams—I had a case recently of ovulation during lactation. A lady came to me who had contrived to nurse her child and is now five months pregnant. These cases show that there may be ovulation without menstruation, and are we to agree with Dr. Miltenberger.

Dr. Ashby—I have had cases similar to Dr. Williams. I have been surprised at the frequency with which menstruation returned after apparent removal of both ovaries and tubes. One of the first cases upon which I operated, was one of hystero-epilepsy. I thought I had removed all the ovarian tissue, but found subsequently that I had not. She began to menstruate about eight months after the operation, and afterwards suffered from metrorrhagia. Three years later I examined her under chloroform and found a small tumor. I operated and removed a small portion of an emptied ovay. She recovered promptly and has not menstruated. Her health is good and there has been no return of the hystero-epilepsy. I have had other cases in which some parts of the ovaries had been left behind. These women continued to menstruate. In those cases where I have succeeded in removing the ovaries entirely, I have not observed the return of menstruation.

Dr. B. B. Browne—I attended a woman a few years ago who had had seven children and had never menstruated. She was married before menstruation began, and had had children

very frequently. I think superfœtation does occur. It certainly occurs in uterus septus.

The removal of the ovaries has little to do with the cessation of menstruation, but the tubes have much to do with it, and it is when a portion of the tube remains behind that menstruation continues. Metrorrhagia will occur when the tube is closed at the outer extremity. When a part of the ovary is left, of course a part of the tube is left also.

Dr. W. E. Masely—My experience has been such as to make me believe that menstruation does not depend upon the presence of the fallopian tubes, nor is it independent of the ovaries. Eighteen months ago I opened a lady's abdomen for a very severe case of uronic pelvic peritonitis with double pyosalpin. Both tubes were tied close to the uterus and removed, but after a diligent search no trace of either ovary could be found. Dr. W. H. Welch, to whom the specimens were shown, expressed the opinion that the ovaries had probably been destroyed in the inflammatory process. The patient made a good recovery after very prolonged drainage, made necessary by the sloughy condition of the pelvic contents and the fecal fistula, which persisted for several weeks. This patient for months has been menstruating regularly and freely every three weeks. In all probability some portion of ovarian tissue escaped destruction.

In another case in which I took special pains to remove every particle of each ovary and both tubes on account of severe hemorrhage, the patient has not had a show during the past twelve months.

Dr. Ashby—Mr. Tait has maintained the position of Dr. Browne for several years.

In one case the patient had been suffering from hemorrhage of tubal origin. I removed both tubes and one ovary. The other ovary having undergone cystic degeneration, it was impossible to remove all the ovarian tissue. This patient has been cured of her metrorrhagia, but has a normal menstruation.

Dr. Opie—It seems quite well established by post-mortem results that all cases of menstruation, following öophorectomy, are not due to failure on the part of the surgeon to completely remove the ovaries.

The intero-ovarian ligament, however, is sometimes very short and the button-like section beyond the ligature which in such cases contains ovarian stroma, may keep up a dominating influence; again the anatomical shape of the ovary gradually sloping off into the ligament, causes a part of the ovarian tissue to be left on the uterine side of the ligature in spite of the utmost care on the part of the operator.

The rule after child-birth seems to be that menstruation is in abeyance for a variable number of months, but cases have doubtless occurred in the experience of most obstetricians, when it has been uninterrupted during lactation. I have met with a number of cases when women have conceived during lactation, when there was no accompanying monthly flow. Dr. Tait thinks that during and even after the menopause ovulation goes on, though the mucous membrane is disqualified for securing a fecundated ovule. Ovulation may be going on during lactation, but the mucous lining of the uterus may not be well qualified for menstruation or fecundation.

Dr. Bush, of New York, who has a dairy farm has been performing some interesting experiments to find out the mode of securing the best quality of milk. He has determined that the heifer after the removal of the ovaries can be made a perpetual milker and that the milk is of better quality than in cows subject to ovulation and impregnation.

Dr. Brinton—With reference to menstruation after the removal of the ovaries, we have the statement that 1 or 2 per cent. of women have supernumerary ovaries, and possibly the return of the menstruation is due to the presence of the third ovary.

Dr. Miltenberger—Dr. Browne laid much stress upon the fact that menstruation continued when obstructed tubes were present. Menstruation has nothing to do with the passage of the ovule along the tubes, but is due to the maturation of the ovule. Therefore, the tube may be obtructed as much as you please and there will be no results. Battey and Engleman have reported a number of cases of pregnancy after the ovaries were apparantly removed by skilful operators. In other cases the ovaries, supposed to be removed, have been found post-mortem.

Dr. Browne—In most cases where the ovary and tubes are removed the lumen of the tube is obstructed by the ligation.

Dr. Ashby—Exhibited a specimen of a ruptured tubal pregnancy which he had removed from a patient seen in consultation with Dr. Arthur Williams, of Elk Ridge, Md. The patient was 34 years of age and gave birth to one child ten years ago. She conceived, in February of this year, and about the eighth week of gestation, was seized with violent symptoms of intrapelvic hæmatocele. Dr. Williams was called in and after examination diagnosed the condition as a ruptured tubal pregnancy. I saw the patient with him the following day and, upon examination, confirmed the diagnosis. The patient rallied from the shock of the first rupture, and one week later

a second rupture took place, though not followed with such violent and dangerous symptoms as in the first instance. The surroundings of the patient were so unfavorable that she was removed from her home in Anne Arundel county to the Maryland General Hospital, where the laparotomy was performed. Upon opening the abdomen her pelvis was filled with bloody serum, blood clots and evidences of general peritonitis. The omentum was in such a condition that it was found necessary to remove about three-quarters of the tissue.

The patient was critically ill, from the third to the fifth day, from symptoms of intestinal obstruction.

Her bowels were moved by administering one grain doses of calomel every hour for twelve hours, every other method having failed. The patient has made a successful recovery.

This is the third case of tubal pregnancy I have removed by laparotomy within the past two years, all of them having recovered. WILLIAM S. GARDNER, M. D., *Secretary.*

LETTER TO THE FLORIDA MEDICAL ASSOCIATION, IN SESSION AT PENSACOLA, FLA., APRIL 14-16.

By R. B. S. HARGIS, M. D.

President and Gentlemen of the Florida Medical Association: It is in consequence of a painful indisposion that I have to deplore my inability to meet you and participate in your proceedings during the present session. That you have been duly welcomed to our city and to this hall with becoming honors, does not forbid me the pleasurable duty, as a member of your association, to extend you a kindly greeting and cordial welcome to the hospitalities of our city, and extend the right hand of fellowship due you on the occasion.

Many of you are aware that I for many years have cherished a profound interest in the advancement of the medical sciences and manifested my devotion to the profession by frequent contributions to the medical literature, a few of which were first presented to the profession through your published transactions.

It was my intention to respond promptly to the official notification of the secretary, and present a paper to the association at this meeting, but, unhappily, an engraftment of a severe "grippe" upon my chronic infirmity prevented me. I hope, however, that a kind Providence will vouchsafe to me sufficient health and strength to finish one I have in hand and present it to you ere long through another channel or at your next meeting.

Gentlemen, this noble organization, the Florida Medical Association, has been to me an object of deep and abiding interest and a prolific source of valuable knowledge, and I do most heartily congratulate you on the varied and important successes that have crowned your noble efforts to advance the medical sciences, and effect means to improve the physical condition of the people. Since its organization it has been so conducted as to give a united and emphatic expression to the views and aims of the medical profession throughout the State: and the professional mind in other States has been at no time more active, and although their means and aids from intelligent and influential outside influences have been infinitely greater the results have not been of larger utility or intrinsic value.

This association must, at all times, exercise a beneficial influence, and supply a more efficient means than have hitherto been available in our State, for cultivating and advancing medical knowledge, for elevating the standard of medical education, and promoting the usefulness, honor and interests of the medical profession; and while it enlightens and directs public opinions in regard to the duties, responsibilities and requirements of medical men, it excites and encourages emulation and concert of action in the profession, and facilitates and fosters friendly intercourse between those engaged in it.

The transactions of your last meeting at Ocala, as indicated in your published proceedings of that session promises much for the future. On reviewing it carefully with a view to examine it critically, I was deeply impressed with the precise parliamentary order of proceedings, but the work of the associations as manifested in the various papers read before it on that occasion clearly indicated that, alive to medical progress and to the interests of the State and of humanity it aspires to the conservation and perfection of the good and true of our noble profession.

The different papers bear the marks of judicious and appropriate selections of subjects and painstaking in their preparation. Taken separately or as a whole, these papers would do credit to any medical organization in this or any other country. Your proceedings should be more widely circulated amongst the people, that they may behold the results of your labors. Your "light should not be hidden under a bushel." Many, however, of intelligence and influence have borne witness to the good practical results already manifested, and fully appreciate their inestimable value. The establishment of the present Board of Medical Examiners, which has already shown itself to be a powerful protective means of rescuing the people from

the hands of unscrupulous quacks. The establishment of our State Board of Health is due to the influence of the Florida Medical Association, and the institution and practical application of sanitary measures, involving many valuable suggestions relating to quarantine, are due to its influence. The Florida Medical Association is an authority on State medicine, and should be widely known as such. I am not giving utterance to words suggested by a spirit of vain adulation or obsequious patronage. I speak the language of *truth, verum atque deus.* Ours, gentlemen, in the words of the immortal Stokes, "is a noble profession; the only one relating to earth-born things which, while it ennobles the mind of man, softens and expands his heart, whose end is good to man. It is these god-like qualities of our profession that stimulates its votaries in the pursuit of truth and the practise of benevolence. The only enemies we combat are error and disease. In assiduously cultivating the powers of discovering truth and the desire of applying it for the promotion of human happiness, we have the great end and object of our existence. In our contest, then, with error and disease we enter into to no compromise with evil, and the good we do to our fellow creatures never involves injustice to another."

The life of the medical practitioner is one of ceaseless battle not in combating disease, but to counteract the life-invading influences that men put in action. Against Nature's law we do not presume to contend, "all that is born must die." But medicine has clearly enough shown that at least three-fourth of those who perish, succumb to causes more or less due to the carelessness or ignorance of man; visit that hospital not far off, enter its wards, there you will first see a patient sick with fever or consumption, a victim to foul air emanating from the sewage or some filty excavation, or lake sodden soil reaking with decomposing organic matter or engendered in his cramped and overshadowed dwelling, never purified by the living atmosphere or the rays of the sun. The next is one whose limbs are fractured, or who has sustained some other injury, which benevolence directed by science might have averted. Further on is another one whose energies are destroyed and spirit broken, whose body is diseased, whose mind is debarred by indulgence in those "accursed drinks where use is abuse, whose purity is foulness, to adulterate is a superfluous or positive fraud."

These are but very few of the evils we have to combat in civil life. For this we never relax our efforts to acquire increased knowledge. The fascination which Nature exercises over the diciples of the healing art explains much in the con-

duct of the practitioner of medicine in which is either incomprehensible to the public or often miscontrued. The common incentive to labor among the people generally is the love of gain; the intermediate motive to exertion is money. It is very true that they may be a stimulus in the love of action. Slothfulness to most men is intolerable. Some kind of exercise for the muscles and the brain is necessary to the meanest enjoyment of life. But we may safely affirm that the truth of the maxim *Labor ipse voluptas* is by no means so thoroughly appreciated as by the physician. In the exercise of his vocation, he not only exults in the sense of healthy and honorable exertion, but he is gratified by the consciousness that he is extending acquisitions and enlarging the powers of the intellect; he feels not only the pride of new conquests, but the ever new excitement of expectation.

Medicine is essentially a progressive science. It is progressive as an abstract branch of knowledge; it is progressive as regards every individual who follows it as a profession—the physician is always and above all a student. Deprive him of the means of observing disease and you render him unhappy. Not because he is enamored with pus, miasm and microbes, still less the sight of human agony has any attraction; not because the employment is profitable in a pecuniary sense; he is unhappy because he feels that without the opportunity of observation the knowledge he possesses will decay, the faculties which are strengthened by exercise will be lost. With all his industry and zeal the physician may not find wealth but he surely will find happiness and competency. If, indeed, we do have few splendid prizes, if there be but few great fortunes amongst us, so there are but few reverses. It is one of the immunities we enjoy to a large extent with the other learned professions, that we are tolerably secure from those calamities which the errors and misfortunes of others so often entail upon those engaged in commerce and speculation. There is, perhaps, hardly any profession in which a man need depend so little for success upon extraneous aid. So long as he enjoys the blessing which is his aim to dispense to others, the physician approaches most nearly to the Horatian standard of freedom and independence, the man "*ipse totus atque rotundus.*"

This you may say is the bright side of the question. It has, no doubt, a reverse one—a side not without asperities and shadows; upon this, however, I think it unmanly and unbecoming to dwell. "Success rarely attends the garrulous man." We'll all, no doubt, have our difficulties and disappointments, our days of expectation, our hours of despondency.

In all this I, *more* than most men, can sympathize. But unalloyed prosperity is not the lot of man, nor indeed is it good for man. The true use of present adversity is to chasten and strengthen the mind for new struggles, to teach us to look hopefully into the future, not alone of this life but of the "life beyond the grave."

I can not forbear to repeat in conclusion, as a sort of summary of the text, what I said on a former occasion: The object of our Association is to further the interests of our great profession and of humanity. It is well to keep a high standard of excellence in view, and it is to be hoped that the link shown to exist between the medical minds of the seventeenth, eighteenth and nineteenth centuries and leading inventions of the eighteenth and nineteenth may inspire all to hope for solid advances in sciences by increasing devotion and observation on the part even of overworked practitioners. Medicine has proved itself resplendent in the past. Let each and all of us not *dim* the *lens* which, converging the rays of the past, almost threatens to blind us. We have but one course to pursue and that is *onward!*

Faithfully yours,

R. B. S. Hargis, M. D.

109 East Romana St., Pensacola, Fla.

AMERICAN DERMATOLOGICAL ASSOCIATION.

Programme of the Fifteenth Annual Meeting, to be held at the Shoreham Hotel, Washington, D. C., September 22, 23, 24 and 25, 1891.

Officers for 1891—President, F. B. Greenough, M. D., of Boston; vice president, L. N. Denslow, M. D., of St. Paul; secretary and treasurer, George Thomas Jackson, M. D., of New York.

FIRST DAY—SEPTEMBER 22, 1891.

Business meeting (*with closed doors*) at 9:30 A. M; report of council; nomination of officers for the ensuing year; appointment of auditing committee; proposals for active and honorary membership; miscellaneous business.

Morning session at 10:30 o'clock. Report of Committee on Nomenclature, and discussion thereon.

Papers—Dermatitis Hæmostatica, Dr. H.G. Klotz; a Case of Lupus Erythematosus with Fatal Complications, Dr. W. A. Hardaway; Report of a Case of Universal Erythema Multiform, with colored portrait and specimen, Dr. L. A. Duhring; An Unusual Case of Sarcomo, involving the Skin of the Arm; Am

putation; Recovery, Dr. F. J. Shepherd; Multiple Sarcomata, History of a Case Showing Modification and Amelioration of Symptoms with large doses of Arsenic, Dr. S. Sherwell.

SECOND DAY—SEPTEMBER 23, 1891.

Business meeting (*with closed doors*) at 9:30 A. M. Report of Treasurer and Auditing Committee; election of officers; election of active and honorary members; selection of time and place of next meeting; miscellaneous business.

Morning session at 10:30 o'clock. Report of Committee on Statistics.

Papers—Discussion on Tuberculosis of the Skin: Its Clinical Aspects and Relations, Dr. J. C. White; Its Pathology, Dr. J. T. Bowen; Its Treatment, Dr. G. H. Fox; Thirteen Cases of Tuberculosis of the Skin, with their treatment, Dr. J. S. Howe: A Case of Lichen Scrofulosorum, Dr. J. Grindon; Notes of a Visit to the Leper Hospital at San Remo, Italy, with photographs, Dr. L. A. Duhring.

THIRD DAY—SEPTEMBER 24, 1891.

Morning session at 9:30 o'clock.

Papers—The Treatment of Alopecia Areata, Dr. P. A. Morrow; A Therapeutic Note on Alopecia Areata, Dr. L. D. Bulkley; Morphia Atrophica of Wilson, Dr. R. W. Taylor; The Treatment of Pruritus, Dr. E. B. Bronson; Prairie Itch, Dr. L. N. Denslow; Diseases of the Skin Associated with Derangements of the Nervous System, Dr. W. T. Corlett; Treatment of Chronic Ringworm in an Institution for Boys, Dr. L. A. Duhring.

FOURTH DAY—SEPTEMBER 25, 1891.

Morning session at 9:30 o'clock.

Papers—Notes of a Case of Acute Dermatitis Exfoliativa, Dr. J. E. Graham; Note Relative to Pemphigus Vegetans, Dr. J. N. Hyde; A Study of Mycosis Fungoides with Report of a Case, Drs. H. W. Stelwagon and H. Leffingwell Hatch; Lymphangioma Circumscriptum with Report of a Case, Dr. M. B. Hartzell; Remarks on Carbuncle with Report of a Peculia Case, Dr. H. G. Klotz; Note on Erythema et Naevus Nuchae, Dr. C. W. Allen; A Case of Lichen Ruber, Dr. J. Grindon; The Personal Equation in Dermatology, Dr. L. D. Bulkley; The Hypodermic Use of Hydrargyrum Formamidatum in Syphilis, Dr. R. B. Morison; Retarded Hereditary Syphilis, Dr. R. B. Morison; Epilation, Its Range of Usefulness as a Dermato-Therapeutic Measure, Dr. J. Zeisler.

Retirement of old officers and induction of those newly elected.

Adjournment.

PHILADELPHIA COUNTY MEDICAL SOCIETY, APRIL 22, 1891

ON THE ANTI-MALARIAL PROPERTIES OF PAMBOTANO (CALLIANDRA HOUSTONI).

By A. E. Roussel, M. D., Demonstrator of Physical Diagnosis in the Medico-Chirurgical College; Physician to the Howard Hospital; to the Southwestern Hospital, Etc.

I take pleasure in bringing to your notice a drug which has recently been the subject of considerable experimentation as regards its anti-malarial properties, but which has not yet been tested, so far as I know, in our own country.

The pambotano, or calliandra houstoni (Baillon), is a small tree, growing from three to five feet high, and is found principally in Mexico, where it seems to have possessed considerable reputation for its medicinal qualities.

It was first prominently brought before the attention of the medical profession through an article of Dr. J. Valude, which was presented to the "Académie de Médecine" of Paris by Dr. Le Roy de Mericourt, on the 19th of November, 1889, and which resulted in a report on the subject by the "Académie" on February 18, 1890.

In this report Dr. Dujardin-Beaumetz, although doubting the ability of this drug to replace quinine, admits of its apparent value, and suggests the necessity for further experiments in this direction. Dr. Villejean, in a chemical analysis of the plant, has as yet been unable to isolate its active principle, but notes the presence of a peculiar tannin, which yields a dark-green precipitate with the perchloride of iron, and thus closely resembles the tannin of catechu and cinchona.

Dr. Valude uses a decoction and alcoholic elixir in doses of 70 grammes for an adult, and 35 grammes for a child under 12 years of age. One litre of this solution should be divided into four doses, and taken within the twenty-four hours, each dose to be sweetened and drunk hot. His report comprises personal observations of fifteen cases of malarial fever, besides a *résumé* of the results obtained in Mexico, Japan and Italy. Of the fifteen cases in question seven were complicated by other diseases, such as la grippe, tuberculosis, grave anæmia, and in one case by intermittent dental neuralgia. In the last cases the periodical attacks were suppressed, while the results in the uncomplicated cases were uniformly successful, and in the majority of instances but one dose of pambotano was necessary to effect a cure.

The following observations are related in detail:

Case I.—Girl of 16 years; very anæmic, quotidian fever beginning May 17, 1886, at 2 o'clock, and becoming permanent with exacerbation the following day at 2 o'clock. Con.

tinual headache, which increases at time of access. Decoction of pambotano May 22. Vomiting at the second dose. Nausea with first dose. Cephalalgia disappears after first dose. Since that time the fever has not returned.

Case II.—Child of 12 years; same type as above, with violent cephalalgia, which is worse at the beginning of fever, 4 and 5 o'clock in the evening. Decoction of pambotano the fourth day of the fever. Nausea and vomiting after first dose. At third dose child vomited food taken one hour before, but no medicine. Food taken twenty minutes after the last dose was followed neither by nausea nor vomiting. The bowels were opened after the first two doses. The headache disappeared after the first. At 4 o'clock fever did not return. Two doses alone had been absorbed. The cure was definite.

Case III.—Man of 22 years, suffering from intermittent fever contracted at Tonking. Four different attacks while at Tonking at two or three months interval (in September, December, February, April). Returned to France in May. Return of fever in July, tertian type. Decoction of pambotano the day of the attack. Some nausea, no vomiting. After the first dose the headache disappeared. The fever did not return. Fifteen months afterward the cure was maintained, and the fever which had previously returned every two months had not reappeared.

Case IV.—Man of 44 years. Subject to the tertian fever, two attacks of which have been treated by quinine. At the third attack decoction of pambotano. Some nausea. The fever has not returned.

Case V.—Woman, 48 years of age; quotidian type, commencing at noon with a violent pain on the right side. The elixir, containing fifty grammes of the root, was given on the 30th of March. Some nausea. One passage after the first dose, which caused the disappearance of the pain above mentioned. At 1 o'clock the customary chill did not appear, but a slight elevation of temperature was noticed. On the 31st of March the fever returned to a slight extent. On the 2d of April no fever, but the appetite was poor and the tongue coated. After the 3d of April the fever no longer returned.

Case VI.—Man 46 years of age. First attack. Suffering for eight days from well-marked attacks, with violent cephalalgia. Decoction of seventy grammes of pambotano. No bad results. At noon, the customary hour for the chill, nothing was noticed, notwithstanding that only two doses had been taken.

The following cases have also been collected by Dr. Valude:

Dr. J. M. Bandera, of the University of Mexico, after

carefully testing the drug in various hospitals, declares that he has obtained excellent results, even in cases which have not yielded to the use of quinine.

Professor J. D. Campuzano, of Tacubaya, as well as Dr. J. B. Lobato, report excellent results.

The government of Guanajuato appointed Drs. J. Hernandez, R. Lopez, and T. Dominguez to report officially on the merits of pambotano, and after careful experiments these gentlemen reported marked success.

Dr. Lafont reports having treated the conseiller-general of French Guiana, who had suffered from a severe type of malarial fever for five years, which had resisted the use of quinine, arsenic, as well as a long sojourn at Vichy. One dose of pambotano was sufficient to effect a cure, which is is maintained until the present time.

In the province of Salto, Argentine Republic, Drs. C. Cotas, J. Tedin, and A. Valdez have treated numerous cases of malarial fevers, some of which were uninfluenced by the the administration of quinine, but all of which yielded to the use of pambotano.

Concerning the results obtained by its use in the French and German hospitals at Yokohama, Japan, the Belgian minister reports that in all cases a cure resulted within forty-eight hours.

Dr. A. de Cadilhac, an Italian physician, reports the cure of a case of obstinate malarial fever contracted in the neighborhood of Rome, which has resisted the use of strong doses of quinine.

Dr. Betances, now of Paris, reports three cases of severe malarial fever, contracted at Panama by employés of the Canal Company, which had totally resisted large doses of quinine and arsenic, as well as the douche treatment. In each case one dose of pambotano resulted in a permanent cure.

Dr. Depeton, practising in the Basses Pyrénées, gives a history of three cases, with an equally successful termination.

Dr. De Chapelle, of Bordeaux, reports a case of quotidian intermittent, in a patient seventy-two years of age, where quinine at first yielded good results, but afterward lost its effect. The patient was in a desperate state when he was placed upon one day's treatment of pambotano, which resulted in a total cure.

Since the collection and publication of these statistics numerous cures have been reported by physicians in different parts of France. The results, as reported, are so uniformly successful that the question arises whether a certain allowance should not be made for the enthusiasm which so generally attends the introduction of a new remedy.

Still more recently (*La Tribune Médicale*, April 30, 1891) Dr. J. Pelletan reports the case of a man, 38 years of age, who contracted repeated attacks of malarial fever of divers types while living in various parts of South America. Returning to Paris some years since the fever reluctantly yielded to the quinine treatment, but was followed by obstinate neuralgias in various parts of the body, and particularly by an atrocious sciatica, which caused the most intense suffering.

Notwithstanding the most varied forms of treatment, nothing afforded even temporary relief, except hypodermics of morphia.

The patient at this time was marked by emaciated complexion of a pasty yellow, with a parchment-like skin, cachetic appearance, and the spleen was markedly enlarged. No history of syphilis or alcoholism.

On the 19th of January last he was ordered a dose of pambotano (Midy).

Up to the present time (April 20) he has been entirely free from all pain, notwithstanding that he was exposed to the inclement weather of a Paris winter.

My own observations are limited to eight in number as far as the malarial fevers are concerned. Each of the above cases, however, was carefully observed for a varying period of time before the administration of the medicament in order to insure accuracy of diagnosis. I have also observed its results in other diseases, such as la grippe, typhoid fever, phthisis, etc., but, frankly speaking, no influence could be detected upon the course of these different maladies.

The preparation used in these cases was an alcoholic elixir prepared by Midy, of Paris, and kindly furnished me for the purpose by Riguad and Chapoteaut. Each bottle of the elixir contains 90 grammes, representing 70 grammes of pambotano. The contents of each bottle is to be administered in four equal portions within the twenty-four hours in hot sweetened water or tea, and preferably taken on an empty stomach.

The cases are as follows:

Case I.—A clergyman, 40 years of age, contracted a quotidian intermitent while on a gunning trip in Virginia, six years ago. Since that time, he has, without exception, been subject to a renewal of the attacks every spring, and occasionally in the fall of the year. These attacks yield to treatment of large doses of quinine and arsenic, but generally incapacitate him from work for a period of about two weeks. His present attack commenced with a chill on March 2, 1891, at 4 o'clock in the afternoon, followed by a temperature of 104 deg., and a return of the same symptoms on the succeeding

day. He commenced taking the elixir of pambotano on the 4th of March, but experienced a modified chill on the afternoon of the same day; temperature 102 deg. Some nausea after the first dose. Since that time he has had no return of the above symptoms.

Case II.—Girl, aged 17 years, employed in a mill, residing in the southern section of the city, presented herself at the Southwestern Dispensary, with the history of having had a chill on the previous day followed by fever and sweating. Temperature at the present time normal, but patient feels weak and languid; tongue coated. She was directed to return the the next day. On this occasion the thermometer marked $102\frac{2}{5}$ deg. She commenced the pambotano the same afternoon, taking two doses on that day, and two the day following. The first dose was vomited within fifteen minutes, but the subsequent doses were retained. She remained under further observation for ten days, with no return of the fever.

Case III.—Woman, aged 37 years, dressmaker; has had attacks of quotidian intermittent in the spring of the year for the last four years, which kept her confined to the house for about ten days on each occasion. Was taken with a chill March 24, followed by the regular symptoms, which were again repeated the next day. Commenced the use of pambotano March 26. Some nausea after each dose, but no vomiting. Bowels opened three times during the course of the day. Resumed her occupation on the 27th, and subsequently reports (June 8, 1891) that she has been entirely well ever since.

Case IV.—Commercial traveller, aged 25 years. While in Florida last autumn he was taken ill with a severe type of remittent fever, which confined him to the hotel for a period of seven weeks, and which finally yielded to large doses of quinine and arsenic. Present attack commenced April 3 with chill, fever, intense headache, coated tongue, nausea and some vomiting. Commenced the pambotano on April 4; the patient vomited the second, third and fourth doses. On evening of same day he was given three grains of calomel in divided doses, to be followed by a saline. On the morning of the 5th, the fever still being present, the drug was ordered continued as on the previous day, but he again vomited the first and third doses, besides which the bowels were opened at least a dozen times. On the 6th the patient appearing no better, and the irritability of the stomach still being present, he was placed on suppositories of quinine, together with the use of Fowler's solution internally. After further treatment of about a week, the patient entered into a rather slow convalescence.

Case V.—A woman of 35 years, with a distinct malarial history, had been under my care for over a year suffering from severe attacks of neuralgia in various parts of the body, but particularly of the facial type. Rarely a week passed without severe suffering on her part. Quinine, arsenic, antipyrine, and the general routine treatment, including electricity, had been used without any permanent result; the same may be said of the extraction of several decayed teeth. Commenced taking pambotano on April 6 without suffering any inconvenience from the drug. The pains disappeared to a great extent until April 18, when she experienced another attack, but milder in character, according to her testimony. Another dose of pambotano was administered April 19, since which time she has been free from pain, with the exception of slight twinges occurring in damp weather.

Case VI.—Laborer, aged 40 years, applied at my service at the Howard Hospital, May 2, 1891, with a tertian intermittent, the result of an attack contracted four years ago, and which has since visited him every spring and fall. Commenced pambotano the next day, since which time the fever has not returned.

Case VII.—Laborer, aged 35 years, applied at the Howard Hospital, May 22, with a tertian intermittent, which, he thinks, he contracted while digging at Greenwich Point. Some irritability of the stomach being manifested, small doses of calomel were ordered for that day. Commenced pambotano on the 23d, but vomited the third dose. Slight chill on morning of the 24th. Drug continued during the day, after which no further treatment was necessary.

Case VIII.—Laborer, aged 32 years, applied at the Howard Hospital June 2 with quotidian type of fever, headache, vomiting and diarrhœa. Commenced pambotano June 3, but vomited each and every dose. Drug continued June 4, and only the last dose was vomited, but the number of intestinal movements were greatly increased and accompanied by some griping pain. The fever not being apparently influenced, he was placed under large doses of quinine, and is now entering convalescence.

As will be seen by the above, my results, although decidedly encouraging, are hardly as satisfactory as some of the reports from abroad. In the two cases where the exhibition of the drug remained apparently without result, the question may arise as to whether a sufficiently large quantity was really absorbed on account of the gastro-intestinal irritability. Indeed, this undesirable feature seems to play a more or less important part in most of the cases.

For the above reason it would seem especially desirable

that an active principle should be isolated. And we can only wonder that this has not already been accomplished in a drug whose action seems to be sufficiently pronounced to obtain results within such a comparatively short period of time.

In conclusion, it would seem to me that the results already obtained are sufficient for further work in this direction, especially as no opportunities for observing malarial fevers are better than those of the French physicians.

DISCUSSION.

Dr. James Collins—In our reports on malaria we are apt to lose sight of the fact that we have two distinct kinds of malaria, one the malaria of swamps and the other the malaria of great cities. This drug seems to have been used principally in the malaria of cities, and the results seem analogous to those of a remedy which we have in our country, the eupatorium perfoliatum. The paper read to-night is so much like a paper I heard read some fifteen or twenty years ago, on the drug mentioned, that I could not refrain from mentioning it.

Dr. Thomas J. Mays—This drug is entirely new to me, but it seems that it does not act like quinine. From the reports which we have presented to us here it appears that at least a part of its action is confined to the gastro-intestinal canal, stimulating the biliary secretion, etc. We know of many agents which antagonize malaria by acting in this way. Chloride of ammonium, calomel, hydrastis Canadensis are given, and have an excellent influence on malaria, and I think chiefly because they act upon the liver. Quinine is a remedy which stands by itself, and I was in hopes that in this agent we would find a prominent rival to it, but it seems not. I trust that Dr. Roussel will continue his researches into the the remedy which seems to hold out such promising results.

Dr. Roussel—In reply to Dr. Collins, I would state that while my observations were made on malaria as it occurs in large cities, the studies of the foreign observers, especially those in Mexico and Italy, were on the so-called "swamp fever" of a rather intense type.

ALLEGHENY COUNTY MEDICAL SOCIETY.

MEETING OF JUNE 16, 1891.

VOMITING OF PREGNANCY; ITS ETIOLOGY AND TREATMENT.

By F. BLUME, M. D., Allegheny, Pa.

Pregnancy, as a rule, is complicated with a variety of disorders, which, though in many instances causing much discom-

fort, are termed physiological as long as they are not associated with serious disturbances of the organism. Derangements of the gastro-intestinal canal, nausea and vomiting, to the consideration of which I invite your attention to-night, are such a regular occurrence during the early period of pregnancy, that experienced women consider them as positive signs of con ception.

The so-called morning sickness—nausea and vomiting early in the morning, or even after meals during the first few months of gestation—have, in the large majority of cases, no effect either upon the course of pregnancy or upon the health of women. Although the ordinary morning sickness sometimes persists during the whole period of pregnancy, it remains endurable, causing the patient rather annoyance than injury. There are intermissions, either spontaneously or the consequence of some treatment, the digestive functions remain more or less normal, and the vitality of the patient is not essentially impaired. In some, fortunately very rare instances, however, nausea and vomiting become incessant and uncontrollable, the stomach rejects everything, the patient grows weaker till the most extreme degree of exhaustion is reached, and death from starvation threatens.

The onset of this grave form of the affection is gradual, and does not differ in character from the usual morning-sickness. But soon the nausea becomes more intense, the vomiting more frequent. The ejected matter consists of food, mucus and bile. The appetite is more or less impaired or perverted; the thirst is excessive; constipation is more frequent than diarrhœa; the urine is scanty, concentrated and contains albumen and casts. The pulse grows small and rapid, the temperature rises and continued fever develops.

With the progress of the disease the condition of the patient becomes more and more alarming. The nausea is almost constant, adding greatly to the discomfort of the woman. The efforts at vomiting are accompanied by violent retching and pain, not the smallest amount of food or drink is retained by the rebellious stomach, the smell, even the thought of nourishment, or the slightest movement of the patient, induces an attack. The vomited matter is finally mixed with blood. The thirst is tormenting, the throat and mouth are dry, the tongue brownish, the breath fetid, the abdomen tympanitic. The consequences of this continued suffering soon become very pronounced by the marked alteration of the features, the extreme emaciation and the profound depression of the patient. Shortly before life ends vomiting ceases and coma supervenes.

Cases of persistent vomiting, which terminate fatally, are certainly very rare. Even after the application of various methods of treatment has failed to influence the course of the disease, and while the induction of abortion was earnestly considered, the patients have recovered spontaneously and have gone to full term, as I have seen in the only instance of this grave disorder which has come under my observation.

There is considerable diversity of opinion as to the causes which may incite hyperemesis, and, in spite of numerous theories and hypotheses, the etiology of this disorder is by no means clear. It is almost universally accepted to be a reflex neurosis originating in the uterus and dependent either upon pregnancy alone or upon co-existent pathological conditions.

Pregnancy itself, the growing ovum, which acts as an irritant by the simple mechanical distension of the uterine cavity and its peritoneal covering, is in the first place to be mentioned as the most potent etiological factor.

Cases of multiple pregnancy and hydramnion, which present a disproportion between the passive distension and the active growth of the uterus, and which frequently are complicated with hyperemesis, confirm this view. Moreover, the induction of artificial abortion, our last resort in desperate cases, which almost immediately relieves the patient when done in time, is founded upon this theory of passive uterine distension, and strongly supports it.

Spontaneous death of the fœtus, followed by immediate or remote abortion, is another remarkable fact in favor of this view.

A patient of mine, the mother of two children, was suffering from double laceration of the cervix, erosion and endometritis. She refused surgical treatment, and was relieved by repeated irrigations of the uterus with carbolized water, and by the application of tincture of iodine. She soon afterward conceived, and her pregnancy was complicated with the ordinary morning-sickness from the second month to the beginning of the sixth, when the vomiting suddenly ceased. Two weeks thereafter she told me that she did no longer feel the movements of the fetus, that vomiting had ceased, and that she therefore believed the child was dead. Though I could not detect the fetal heart-sounds, I gave my opinion with reserve. Three and a half months later I delivered her of a dead fetus about five months old.

This case affords the most striking evidence of the discontinuance of reflex symptoms after the removal of the exciting cause. We have here pregnancy complicated with pathological conditions of the uterus, as double laceration of

the cervix, ectropium and probably a but partially cured endomeritis, conditions which existed prior to conception and continued after the death of the fœtus. But in spite of the persistence of these pathological conditions of the uterus, and of the retention of the dead fœtus for almost four months, the vomiting disappeared with the death of the fœtus, that is, with the cessation of the mechanical distension of the uterine cavity.

The influence of primary gravidity is demonstrated by the fact that hyperemesis in its grave forms is essentially an affection of primaparous woman, and it is to be referred to the greater resistance of the virginal uterus.

Numerous other causes are given as etiological factors by different observers, among them: pathological conditions of the cervix, chronic metritis and endometritis, displacement of the uterus, inflammations of the pelvic peritoneum and connective tissue, ovarian neurosis, neurotic predisposition, hysteria, and lastly, disease of the gastro-intestinal canal, especially gastric ulcer, chronic gastritis and constipation.

Morbid changes of the uterus are frequently the cause of reflex neuroses in non-pregnant women. The dependence of gastric disturbances upon the irritability of the uterine nerve-fibers, due to flexion and version of the uterus, to an eroded and congested cervix, to metritis and endometritis, has, in many instances, evidently been proven. Relief has been obtained by the removal of the exciting cause, by the treatment of the uterine diseases after gastric medication had been tried again and again and had failed entirely.

Bearing in mind the physiological changes of the uterus during the pregnant state, its increased functional activity, the influence exerted by gestation upon the nervous system, and the relation between the neuroses and the disorders of the reproductive organs, so often conclusively proven in non-gravid women, we are compelled to acknowledge the various pathological conditions of the uterus as prominent etiological factors deserving our earnest attention. Cases are on record where the application of caustics to the eroded cervix, scarification of the congested vaginal portion, dilation of the cervical canal, correction of a flexion, have proven successful in stopping the vomiting, and thus demonstrated the connection between the uterine lesion and the reflex nerve action. In other instances, however, the result of the gynecological treatment has not been so satisfactory, either transitory or no relief has been obtained, and, as a consequence, the influence of the uterine disorders upon the gastric phenomena, their importance as the causative diseases has been questioned.

Undoubtedly it will be often found difficult to decide

whether the symptoms result from physiological or pathological causes; whether they are due to distension of the uterus or to morbid changes in the sexual organs. All methods of treatment, artificial abortion excepted, may fail to relieve the patient, and she finally may get well by absolute rest and complete abstinence to the surprise of her medical attendant.

Such cases are certainly rare, while, on the other hand, there is abundant clinical evidence of the effect of local treatment. Numerous women have been benefited by the treatment of the uterine lesion; the reflex symptoms have been mitigated or cured by the improvement of the causative disease, and the connection between both has thereby been confirmed.

Attention has been drawn to the importance of endometritis as an etiological factor by F. Veit,* who reported three cases of uncontrollable vomiting, where he was compelled to interrupt pregnancy, and where he found inflammatory processes in the decidua serotina and vera. Veit believes that by his researches the dependence of hyperemesis upon endometritis is positively proven. As a rule, the endometritis exists prior to gestation, the symptoms are but insignificant, became palpable, however, with the beginning of pregnacy, which frequently is interrupted by this complication. In many instances the endometritis will be found to be the cause of the uncontrollable vomiting; the connection through sympathetic paths must be the same as between gastric disorders and endometritis in non-gravid women. The evidence of an anotomical base, he continues, renders a most careful examination of the uterus imperative and, if the diagnosis of endometritis, which is very difficult before the removal of the ovum, can be made out, it may be of determining influence as regarding the advisability of introducing abortion.

Quite recently E. H. Grandin,† discussing this subject in the New York Obstetrical Society, suggested ovarian neurosis, pressure or unusually hyperesthetic ovaries as a cause of hyperemesis. This view, he says, would be suggested by Dr. Coe's case, which showed that the physiological vomiting of pregnancy could be palliated by teaching the patient to assume the genu-pectoral position before rising, and as often during the day as necessary. He would explain the vomiting of pregnancy, then, by the fact that during the early months the uterus lay low in the pelvis and pressed on the ovaries; at the third month, when the vomiting usually ceased, the uterus rose above the pelvic brim. In cases of pernicious vomiting it was possible the ovaries were either enlarged through disease or had

* *Berliner Klinische Wochenschrift*, 1887, p. 613.
† *American Journal of Obstetrics*, 1890, p. 1382.

become impacted between the pelvic brim and the lower uterine segment.

Grandin's theory, though it may be applicable to a given case, will probably not be favorably accepted. To-day the view is predominant that reflex-neuroses may originate in the uterus and not in the ovary. The removal of normal ovaries for the relief of reflex symptoms is at present restricted to exceptional cases, and it is believed that if a satisfactory result is obtained by the operation, this is due to the changes in the condition of the uterus, to the artificial induction of the menopause, resulting from öophorectomy. Clinical evidence supports this view.

Grandin's explanation, however, may prove valuable in so far as to induce us to carefully examine the ovaries in cases of hyperemesis. Prolapsed ovaries are by no means a rare affection, but it remains to be demonstrated whether pressure exerted upon them by the enlarged uterus stands in causal relation to gastric disturbances.

Nervous disposition and hysteria, so frequently met with among women of the better classes, add greatly to the discomfort of pregnancy, and though there are certainly many exceptions, must be considered as prominent predisposing factors of the graver forms of vomiting.

The importance of diseases of the gastro-intestinal canal, especially of gastric ulcers, is emphasized by various authors. According to Horwitz* "hyperemesis develops in some cases complicated with more or less pathological changes of the stomach and of the intestines. The greater the disturbance in the alimentary canal the easier the ordinary vomiting takes on the character of the uncontrollable form."

The diagnosis of vomiting of pregnancy is by no means as easy as one might think at first sight. While the dependence of this disorder upon the pregnant state may often be determined without much difficulty, cases—especially of the graver forms—may present themselves where this will be found impossible, and where the diagnosis, therefore, must remain doubtful. Jaggard† directs our attention to the fact "that so few cases of pernicious vomiting are recorded in German medical literature that the existence of this affection is even questioned." Carl Braun, in a fabulous experience of over one hundred and fifty thousand obstetrical cases, has never observed a single fatal termination. On the other hand, Robert Barnes has seen nine fatal cases. McClintock collected close on fifty cases, and O. W. Doe forty-eight cases with eighteen deaths occurring within the last fifteen years,

**Praktischer Arzt*, 1882, p. 261.
†American System of Obstetrics, Vol. I., pp. 411, 415.

and registered in American and English journals. Gueniot records 118 cases with forty-six deaths.

It is not at all improbable, Jaggard continues, that the difference of opinion as to the frequency of this disorder between the Germans on the one hand, and the American, French and English observers on the other, depends, in a large measure, upon the difference in diagnostic criteria insisted upon by the respective schools. In the majority of the fatal cases of alleged hyperemesis due to pregnancy reported by American, French and English observers, there is a notable absence of reliable records of *post-mortem* examinations. In the few cases collected by the Germans, on the other hand, the diagnosis during life has almost invariably been confirmed or negatived by exact investigation of the dead body. Horocks pertinently remarks: "Where there has been no *post-mortem* examination in a fatal case of vomiting, I do not think one is entitled to say that pregnancy caused the fatal vomiting. It may have been the cause, and the only cause, or it may have been an aggravation of some other cause, or it may have had nothing to do with it. Scepticism as to the alleged frequency of this disorder in the present state of our knowledge is accordingly eminently in order."

According to Gueniot* three distinct factors are to be taken into consideration in making the diagnosis of vomiting of pregnancy: (1) The diagnosis of pregnancy; (2) the diagnosis of the adjuvant or determining cause of the vomiting; (3) the differential diagnosis between obstinate vomiting due to pregnancy and that due to other causes independent of gestation.

It is both interesting and instructive to learn that errors in diagnosis have been made even by eminent clinicians. Thus Jaggard† tells us that Trousseau once diagnosticated uncontrollable vomiting, and induced abortion in a case in which the autopsy revealed cancer of the stomach. Beau erred in diagnosis in a case in which the *post-mortem* examination showed tubercular meningitis as the probable cause of the vomiting, and Cazeaux narrates the history of a fatal case of alleged hyperemesis of pregnancy where the autopsy disclosed tubercular peritonitis and the absence of pregnancy.

But a mistake in diagnosis is possible even in the other direction, that is, pregnancy may be denied by the patient or not be expected by the physician, and thus be overlooked, as shown in a case recently reported by A. H. Buckmaster‡. The patient, a governess in a respectable family, was supposed to be suffering from vomiting due to ulcer of the

*Jaggard, American System of Obstetrics, Vol. I, p. 416.
†L. c.
‡*American Journal of Obstetrics*, 1890, p. 1381.

stomach, and was under treatment two months when she died. In making the autopsy a five-months' fœtus was found, but no ulcer whatever, nothing to account for death except the uncontrollable vomiting of pregnancy.

These cases need no comment. I have cited them to demonstrate both the difficulty and the importance of an accurate diagnosis.

It is generally stated that the prognosis of hyperemesis is bad, but this, apparently, is by no means correct. As Jaggard justly remarks, "it is doubtful whether an authentic fatal case of this kind is recorded. Such cases have never been seen by observers of the largest experience."

Even the graver forms of this disease yield, as a rule, to rational treatment, unless they are complicated by serious pathological conditions which of themselves render recovery impossible. Pregnancy may aggravate such cases, and perhaps hasten death, but it must be admitted that there exists no causative relation between gestation and the lethal issue.

A great variety of remedies—still increasing in number every year—have been recommended by different writers. These remedies have proven satisfactory in some cases, but failed entirely in others. This uncertainty of the various methods of treatment, the often but little annoyance caused by the milder forms of vomiting, and the experience that in many instances spontaneous cures occur, have led to the view that interference is not required unless the case presents a more serious aspect. Such advice given in text-books is, at first sight, surprising. Even in mild cases of gastric trouble a careful examination is indicated, and should be insisted upon by the medical attendant to determine the cause of the disorder, its dependence upon physiological or pathological conditions. Are the generative organs found to be normal? Are there no indications of diseases of other vital organs, especially of the stomach? Is the effect of the vomiting upon the general health but insignificant? It may then be decided whether it be a wise plan to irritate the stomach by various drugs, which, as known from experience, are of so limited value in this reflex affection, or to desist from treatment. It is in this sense, I take it, that such advice has been given, and it is under these circumstances that it deserves recommendation. Nevertheless, such statements in text-books are misleading, fortunately, but to the superficial reader.

While mild cases of vomiting do well without treatment, diet and regulation of the bowels are usually sufficient to render the gastric disturbances tolerable, but the persistent vomiting demands our earnest attention.

Hyperemesis, a reflex neurosis, is due either to physiological changes in the uterus, distension by the growing ovum, or to pathological conditions complicating pregnancy. If we exclude co-existent diseases of the stomach, which will be considered later on, it must seem plausible that the treatment should be directed against the causes and not against the symptoms of the gastric disorder; that is, against the uterus, and not against the stomach. The stomach is not the diseased organ. Nausea and vomiting of pregnancy are only the symptoms of some functional disturbance of the nervous system, originating in the uterus, like the nausea and vomiting of seasickness, an analogous disease, dependent upon the motion of the ship. For this reason gastric medication must fail to favorably influence hyperemesis; for this reason none of the innumerable remedies recommended are found to be reliable —some of them are worse than useless.

There are three classes of cases, however, which sometimes may be relieved by the administration of drugs, viz: (1) Women who, prior to gestation, have been afflicted with diseases of the stomach, as chronic gastritis and gastric ulcer; (2) Women of an unusual nervous irritability; and (3) Hysterical women.

In cases of the first category, sub-nitrate of bismuth, bicarbonate of sodium, Carlsbad water, oxalate of cerium, the tincture of nux vomica, etc., may be tried and may sometimes be found of decided value, while the nervines and sedatives may give relief to nervous and hysterical women. Opium and its preparations, the bromides and chloral, either administered by the mouth, by the rectum, or hyperdermically, as the circumstances require, are the medicinal agents which have the best reputation, and which, in these cases, sometimes successfully depress the reflex irritability, and thus alleviate the symptoms. Blisters, the application of chloroform, ether, and of the faradic current to the epigastrium, of the ice-bag to the dorso-lumbar region have been tried and have afforded relief in some instances.

The resort to local treatment is indicated in all those cases in which a morbid condition of the uterus has been made out. Retroflexion and retroversion are to be corrected, and, if necessary, the uterus is to be retained in position by a suitable pessary. A congested vaginal portion may be relieved by scarifications, while the application of carbolic acid, or of a 10 per cent. solution of nitrate of silver to the eroded cervix will often prove successful in mitigating the distressing symptoms. Jaggard* states that in Vienna a 10 per cent. solution

*L. c.

of nitrate of silver is employed in all cases of severe vomiting, irrespective of the condition of the vaginal portion. "The weight of testimony in favor of this simple procedure, collected from innumerable sources, is so great as to make its employment absolutely obligatory before resorting to more radical methods."

Dilatation of the cervix—Copeman's method—has proven successful according to some writers, while others report negative results. In the only case of severe vomiting which I have observed it had a most remarkable effect. The nausea disappeared instantly, but only for a few hours. The method was again applied, but no result was obtained the second time.

Horwitz* recommends that in the severer cases of vomiting the patient should be placed at rest in bed in the horizontal position, that the room be darkened, and that, if the stomach rejects everything rectal alimentation should be resorted to. Crushed ice to quench the thirst is allowable. I can fully endorse this plan.

When these various methods have failed, when the vomiting actually is uncontrollable and seriously endangers the patient's life, the induction of abortion or premature labor is indicated, and will, if done in time, to a certainty save the woman.

DISCUSSION.

Dr. Le Moyne—I agree with the doctor that in a great many cases vomiting is largely due to abnormal conditions of the parts. I had the same experience with obstinate vomiting in this condition, and found it often was relieved by the correction of some erosion or displacement, although I do not believe that that always caused the condition. The doctor has very wisely laid a great deal of stress upon the matter of careful examination of the parts where these conditions exist, with the view of ascertaining and removing any such abnormal conditions.

Dr. Lange—An excellent paper the doctor has given us; it deserves our thanks. It is very comprehensive and thorough, and there is nothing in it to which any one can raise any objection, except perhaps this: the rectifications of displacements of the uterus during pregnancy by the use of pessaries. That, in my experience, is impossible. In an impregnated uterus, and perhaps in a uterus which is not impregnated, I think that it is beginning to be thoroughly understood that the pessary is a means of absolutely no value, sometimes of great discomfort, and occasionally of some danger. The only pessary which may, perhaps, be sometime of service is the ordinary

*L. c.

balloon pessary, a rubber globe which is ballooned up by inflation with air or water. This, in my experience, prevents the descent of the uterus in some cases.

The stem-pessary of Dr. Kinloch may also be an exception to the rule, that pessaries are useless for uterine displacement; this can be used of course only in the unimpregnated uterus, and may deserve consideration in flexions. Among the remedies which the doctor has mentioned are the most valuable, but I failed to hear calomel. Calomel has been, in my experience, a most valuable remedy. In proof of this, I had a lady under my care who had twice suffered abortion at four months, at the hands of the most eminent gentlemen in the profession, because of pernicious vomiting, and their conclusion was that she would die. At her third pregnancy she and her husband again concluded that she would die, and she certainly looked like it. Her adipose tissue had disappeared, her muscular system had atrophied, her belly was distended and tender, she was blanched, her pulse was small and rapid, she had an elevated temperature, and her tongue was red and dry. I gave her calomel, one-eighth grain every three hours. In forty-eight hours she was able to retain *some* food, in two weeks she left her bed, still sick, still vomiting, but able, despite her vomiting, to take a sufficient amount of food to maintain life and improve her condition. That is one instance where calomel exerted a very marked good effect, and this was not due to any organic disease of the stomach; sufficient proof of this is the fact that, before her pregnancy she was always well, and the same was true before her previous pregnancies. She is the wife of a druggist in this city. I give calomel frequently in the vomiting of pregnancy, but in the case relating it strikingly exhibited its power. The doctor mentioned a remedy with which I have no experience in the vomiting of pregnancy, but of which I have heard much good. I have always understood that the introduction of that method belonged to a Pittsburgher, namely, Dr. M. O. Jones, of Wylie avenue, who informed Dr. Marion Sims of it; the latter teaching it in Paris in 1870. I have always understood that dilatation of the cervix and the separation of the membranes a little way up, which is said to be a very excellent remedy for ordinary sickness of pregnancy, is the method of Dr. Jones.

Dr. Dagette—The doctor speaks of increased temperature being one of the symptoms of pernicious vomiting. Is that one of the signs which arise before death?

Dr. Blume—In my case, after about two weeks had passed, fever commenced, and after another week had passed,

the woman still in bed, her temperature went up to 103 and remained at that height for several weeks, and this case recovered without any medicine whatever, having nothing but absolute rest. She was in bed about six weeks.

Dr. Batten—I have had two cases of severe vomiting of pregnancy. One was in the person of an unmarried woman. At first I could not imagine (she was supposed to be a virgin) what the trouble could be. She was emaciated and her eyes were sunken; after two or three days my suspicion was aroused. There was no fever. The case went on for two weeks under my treatment with all the remedies that I knew of, excepting local applications, and from the fact that the young woman made the request that I keep her mother in darkness as to the cause of the trouble, I was prevented from making any local applications. But after exhausting everything I returned to blackberry brandy and stopped all medicine; after giving her the second dose, the vomiting ceased and she recovered after taking the remedy for some three weeks. Another case I had in 1882. A woman had seven children and never had any vomiting whatever; in this case the vomiting appeared at the end of the first month, and continued right along to the end of the fifth month, and all remedies seemed to have no control whatever of the trouble. However, at the end of the fifth month, after I had given up the treatment, she was not so prostrated as the other case. It was a twin pregnancy, and when that woman was delivered one child was fully developed and another was dead, having died evidently at about the fifth month, about the time the sickness left her. The dead fœtus was in the neighborhood of five or six inches long. The woman ran on to full time.

Dr. Connell—One point the doctor alluded to, the use of nitrate of silver. My attention was first called to the use of this remedy by Dr. Jones, whose name has been mentioned, and I think to him belongs the credit of the introduction of nitrate of silver in the treatment. In the *Journal of the American Medical Association* of two years ago, there was a paper written by a gynecologist or obstetrician of Washington, whose name I can not now recall, and in reply to that, Dr. Jones gave his experience in the use of nitrate of silver, and alluded to having spoken to Dr. Sims about it. Dr. Jones used that many years ago, and it is only a few years since the attention of the profession was called to it. I have used it and had better results with the application of the nitrate of silver than with any other remedy.

Dr. Huselton—I want to say a word in defence of the pessary. I think that we have displacements of the uterus in

the early stages of pregnancy. I also believe it possible to rectify them and maintain them in proper position by the use of Thomas' retroversion pessary. I have certainly replaced retroverted uteri and maintained them in position with this pessary. With regard to treatment, as has been properly stated, I do not know of any one remedy that will relieve all cases. I remember a very aggravated case I had a number of years ago, in which I tried everything that I could think of, which I afterwards succeeded in relieving entirely with a large dose of chloride of potassium.

Dr. Green—I have no criticism to offer on the paper. I wish to relate a case of vomiting during pregnancy which came under my observation on the 6th of this month. The lady was three months pregnant. She had been treated by two or three physicians previous to her application to me. I do not know what remedies she had taken, but no relief had been afforded by any of them. I found her very much prostrated, and for five or six weeks she had had difficulty in retaining food sufficient to afford nourishment; she had not rejected all the food and was still able to go about. An examination of the uterus discovered it to be displaced, retroflexed and apparently bound down with adhesions, and abortion was about to take place. There was evident hemorrhage, which had begun some time the previons night. She miscarried on the second day after I saw her. Again, I wish to say a word in regard to the use of the pessary. Whilst I have no doubt that the pessary may in certain cases do some damage, I have seen what I supposed was benefit, what I supposed was very great benefit, in the use of the soft pessary; especially in cases coming under the class where displacement can be assigned as the cause, I have seen permanent relief. I wish to say a word about the damage sometimes done by pessaries. About six weeks ago I delivered a lady at term. On making examination, I found a common ring pessary, hard rubber. I said: "How long have you worn this?" She replied, "About five years." Six years previously she had given birth to a child and immediately after that this pessary had been placed in the vagina and remained there ever since. I removed the pessary, and saw that it had done no harm. This, I presume, does not very often occur. It shows that the pessary does not always do very great damage.

Dr. Werder—I have no personal experience in this matter. I have had a large number of pregnant women under my observation, but have never seen a case of serious vomiting of pregnancy. There is no doubt that vomiting of pregnancy is a reflex neurosis—of course that is not saying very much—

but I think in a large number of cases it is a form of hysteria. A number of cases have been reported which were treated as hysteria and got well under that treatment; before that, other methods of treatment were employed without any benefit whatever. I think there is no doubt that a large number of cases are hysterical in their character. In regard to pessaries, I have no doubt that pessaries are used very much, and very many women would be far better without them, but there are exceptions to that. I think a good many women would not feel comfortable without the pessary. If the uterus is properly replaced and in normal position and a pessary is introduced where there is no inflammatory condition of the pelvis, in many cases it does a great deal of good. Many of these women feel very comfortable wearing a pessary for months, and women come to me with pessaries where there is no flexion at all, where there is no displacement of the womb, and sometimes there is a displacement, but it has not been reduced at all, the uterus is retroflexed just the same as it was before the pessary was introduced. In pregnancy I have had probably two or three cases of this class, and am certain that these women suffered before the uterus was put in position and before the pessary was introduced, and the benefit they derived from the pessary was also very great.

Dr. Davis—Dr. Blume certainly covers the ground in every particular very thoroughly, and there is one point that he dwelt on and that is, as he said very aptly, you would think that the diagnosis of pregnancy was a very easy thing, and yet I believe this is an important point of the question for discussion to-night. I believe that on that hangs the treatment, and that is the reason why such various treatments are recommended, and why in some cases one treatment acts very favorably and another treatment is of no effect. I think it stands to reason that if pregnancy is the cause of this vomiting, calomel would have very little effect. I think it stands to reason that if there is no (or very little) trouble of the uterus, but if there is a disease of the stomach, calomel would be very beneficial. And, therefore, while in one case I would expect benefit from it, in the other, it would be *nil*. On one occasion I was called to see two ladies, neighbors, both suffering with morning sickness of no aggravated form, but enough to give them great discomfort. To the one I prescribed to the best of my judgment what was wanted, bromide of potash. In the other I prescribed hypophosphites in an acid solution. I remember distinctly, they were given in quite large bottles; they each used about half of the bottles, which were given within a day or two of the same time, and were none the better, but rather

grew worse. Talking, as neighbors will do, over the back fence, they compared notes and traded bottles and were completely relieved. The explanation is simply this, that the acid and the hypophosphites in the state of the one stomach was just what was needed, while the nervine and the alkali was just what the other needed. I believe that as far as we possibly can we ought to ascertain what is producing this particular sickness in this particular woman, and not take it for granted that all morning sickness are from identically the same cause. In my experience I have seen a great many severe cases. Pregnancy acts differently in different persons, and the thing that would remedy one case would be useless in another. I have seen a good many that I considered very severe cases, but it has been my lot to see one that was of unusual severity, at least the result shows it to have been so.

A lady whose medical history I know comparatively little came under my observation for four visits. She was several months gone in pregnancy and was suffering with profound morning sickness. A particular characteristic of it, as I noticed in these four visits, which extended over about ten days, was ptyalism. In fact in my presence she was so overcome that she had to vomit. As I was seeing the case in connection with another physician, a friend and relative, who had been there about an hour before my last visit, I did not push the investigation at that time, as I had no particular alarm. That was on Thursday evening. It had been the case for the husband to drop in and tell me how she was feeling, and to telephone if she was feeling unusually bad. Thursday evening I saw her last. Sabbath morning the physician dropped in and told me he had called and found her in a very critical condition. It seems that on Friday morning a lady physician had been called in, and on Friday and Saturday had seen her in this condition of increasing irritation of the stomach, and vomiting of some cloudy fluid, and on Sabbath morning when her friend, the physician, saw her, she was in a critical condition, and in spite of dilatation and everything else that could be accomplished on Sabbath night, she died on Monday. I felt impressed at the time, and more impressed on hearing Dr. Blume's paper to-night, that a *post-mortem* examination should have been held on the case.

Dr. Koenig—It seems to me that in looking for a specific cause of vomiting in pregnancy, we overlook the fact that the nervous system is very powerfully affected by the pregnancy itself. Vomiting in pregnancy is so common that it can not be due to a gastric lesion; it must depend on an irritation of a nerve ganglion that transmits it to the brain. It has been said

that it is impossible to explain why the peculiar motion of a ship should produce vomiting; I have never heard it explained; I do not suppose we can explain it; nor can we explain satisfactorily how the vomiting of pregnancy is produced.

It would appear to me that the action of all remedies that are of any value can be accounted for in two ways, one a counter-irritation, which would explain the action of pessaries; explain the action of nitrate of silver when applied to the os; and would explain the action of dilatation. By these an irritation is produced which diverts the attention of nature from the disturbing causes which produce vomiting. The artificial irritation at the os distracts the attention of nature from the other point of irritation, and the vomiting ceases. The other action to which I refer is an anæsthetic action applied to the terminal nerve filaments of the stomach. I have recently seen a remedy possessing this action recommended, which Dr. Blume did not refer to in his paper, namely, menthol, in two grain doses. Menthol is a powerful anæsthetic, and by deadening the sensibility of the nerves of the stomach, I can very readily conceive how the vomiting might be arrested. We all know the tendency of disease toward recovery, and if vomiting in pregnancy is a disease, it is especially true in this case. That fact accounts for the numerous remedies that are said to be corrective. That fact might account for the results that followed the exchange of remedies in the case alluded to by the president. A large majority of cases recover without medication.

Dr. Duff—I would make the distinction in discussing this subject between simple vomiting during the ordinary morning sickness of pregnancy, the more persistent and aggravated vomiting, and the pernicious vomiting. There is a conservatism of nature in the first class; indeed, some observers declare this to be so, inasmuch as women thus affected go through their pregnancy as a rule better than do those who are not. The pernicious vomiting due entirely to pregnancy without complications is, I think, a rarity. The failure up to this time of observers to agree upon any common cause of vomiting during pregnancy is *prima facie* evidence of varying causes. Our treatment, therefore, should depend upon a rational consideration of each case presented to us. In the cases of Dr. Davis, I do not think that when the exchange of medicine was made the patients were about to get well. I think the exchange was a happy one, inasmuch as the then treatment was in accordance with the acid or alkaline condition of the secretions. I did not notice that the doctor said anything about electric treatment. I think it is sometimes efficacious. Another mode of treatment

is the application of cocaine to the cervix uteri. Injecting it into the tissues of the cervix, I think gives the best results, although painting with a 15 per cent. solution may answer as well.

Dr. Blume—It has been said that pessaries should not be employed to retain a gravid uterus which has been retroflected. Vomiting, as a rule, occurs during the first few months of pregnancy; the replaced uterus will at so early a period of gestation often need a support or become again retroflected. We have two means to retain the uterus in its normal position: 1. Tampons. 2. Pessaries. Tampons must frequently be changed; are therefore inconvenient and even injurious, as they may incite contractions and thus produce abortion. A suitable pessary does no harm under these circumstances, as I have seen in many instances. Stem-pessaries can not be considered here. In my opinion they should never be used. They are certainly contraindicated during pregnancy.

Calomel has not been mentioned by me because it failed entirely to influence the gastric disturbances in my cases. It acts as a simple purgative, and is indicated or may be tried in cases complicated with costiveness.

Gastric medication is applicable only in the milder forms of vomiting. Cases of pernicious vomiting, where everything is rejected by the stomach, can not be relieved by drugs, be they given by the mouth, by the rectum, or hypodermically. It may sometimes be possible to stop the vomiting for a few hours, but, as a consequence, the nausea becomes so intense that the patient feels relieved as soon as the vomiting commences again.

One gentleman said that dilatation of the cervical canal has been practiced many years ago. This method, first recommended by Copeman, justly bears his name: Copeman's method. Dilatation of the cervix, if carefully effected, does not interrupt pregnancy. But if the internal os is dilated, or, as one gentleman recommended to-night, if the membranes are detached around the internal os, abortion will probably be the consequence.

The view, expressed by one gentleman, that patients with the ordinary vomiting do better at term than those without this disorder, is at least surprising and by no means supported by experience.

In conclusion I wish to *touch* a point which I have not discussed in my paper, viz: when has the vomiting become uncontrollable, and when is the induction of abortion indicated? This question is a very important one, for if we wait too long the woman will in all probability lose her life. Uncontrollable

vomiting is apparently very rare in our vicinity. The case reported by Dr. Davis is the only one I heard of in this city, and I regret that no autopsy has been made. In New York where this subject has been discussed in the Obstetrical Society last fall, pernicious vomiting must be a rather frequent complication, as almost every speaker reported cases where artificial abortion had to be induced to save the patient. Several women died, the evacuation of the uterine contents having been too long delayed. All the speakers agreed that abortion should be induced before the condition of the patient had become critical.

I believe that no precise rules can be given as to when to empty the uterus, and that case must be treated according to its peculiarities. When the various methods of treatment have been tried in vain, when the patient becomes more and more emaciated, it seems hazardous to wait for the most extreme degree of exhaustion. A consultation should be held and the induction of abortion, the last chance of saving the woman's life, should not be postponed too long.

Dr. LeMoyne—In December, 1890, I was requested to see a woman in consultation, who was supposed to be six and a half months' pregnant. She had been delivered of two children at full term previously and had one miscarriage at about six months. For about two weeks she had noticed some swelling of the lower extremities and a specimen of her urine, which was procured the evening previous to my attendance, was found to be so largely composed of albumen as almost to solidify by boiling. She had taken her evening meal with her family, between six and seven o'clock, but while at the table experienced considerable pain in the abdominal region, and was compelled to retire before finishing. She was assisted to bed and medical attention procured. Between that time and six o'clock the following morning she had three very decided convulsions. At six o'clock A. M. her expression was rather dull, but she responded intelligently to questions and recognized persons who addressed her. The mouth of the uterus was sufficiently patulous to admit the point of a finger, which readily detected the body of the fœtus. No instrumental apparatus being at hand for the dilatation of the neck of the uterus, suitable appliances were immediately sent for. But the patient's condition being such as to promise an early return of the convulsions admitted of no delay, and dilatation was practiced with great perseverance and determination by means of the fingers. The success of this method was such that when the Barnes dilators and parallel steel blades arrived, the divulsion was beyond their capacity, but not sufficient to admit the hand. At 9 A. M., no relief being experienced and every

moment seemed to endanger the patient's life, the long obstetrical forceps were resorted to with the intention of either grasping the fœtus in their blades and forcing it away, or effectually dilating the mouth of the uterus by delivering the forceps in the locked position.

The first mentioned plan failed, as no engagement could be procured; but with little difficulty the blades were successfully introduced, locked and gradually delivered, dilating the uterus sufficiently to enable the hand to enter, sieze the thighs of a breech-presenting fœtus, and accomplish its speedy delivery. Two modified convulsions occurred after the delivery, and five severe ones previous to it. The normal function of the kidneys was soon reëstablished, and a very satisfactory recovery soon followed.

I offer the history of this case, believing it to illustrate a very valuable and nearly always practicable method of dilating the uterus, and thinking that it may be new to others as it has been to me.

Dr. Duff—The simple introduction of the forceps through the os, locking them without grasping any portion of the child, and withdrawing them for the purpose of dilatation, it appears to me would be impossible except where the head was still above the superior strait, where there was the same condition in a breech, or where there was an oblique presentation. I have frequently introduced the forceps where the os was only dilated sufficiently to admit of their introduction with the double purpose of dilating and of traction. I think Dr. LeMoyne's method justifiable.

Dr. Blume—If delivery by the head should be impossible, I think it is safest to turn by the hand and extract; a woman could be delivered in that way. I do not know in this case whether the child was living or not. I think we have other measures which should be tried first; for instance, anæsthesia.

Dr. LeMoyne—The dilating of the os, I stated in my paper, was done by physical means. I introduced my fingers, first one finger and then another finger beside it, and finally two fingers and the thumb, until I reached a degree of dilatation that would admit the blades of the forceps consecutively. I also stated that, having no suitable instrument for the purpose when the case was thrust upon my treatment, I had to resort to natural means, and by the time the instruments arrived by which I expected to accomplish dilatation, I had already dilated to a sufficient extent with my fingers to introduce the blades of the forceps, and my diagnosis of the position being still uncertain, I introduced the forceps with the intention of seizing any part which might present. It strikes me as a very fortunate though, and resulted certainly very favorably.

N. O. Medical and Surgical Journal,

ESTABLISHED IN 1844.

PUBLISHED MONTHLY, $2.00 A YEAR.

Articles from physicians are respectfully solicited. All articles, news and exchanges, and books for review, should be sent to the EDITOR, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL. Business communications should be addressed to the BUSINESS MANAGER, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

EDITED AND PUBLISHED BY

AUGUSTUS McSHANE, M. D.

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Editorial Articles.

THE HOMŒOPATHS AND THEIR ATTITUDE.

The International Homœopathic Convention, held in Atlantic City, N. J., last June, is attracting deserved attention. It has so long been fashionable to ascribe the so-called hostility of the regular profession to jealousy and ignorance of the truths (?) of homœopathy, that is with special satisfaction that we encounter something that will prove to intelligent, thinking people that we do not cry down homœopathy because we are unable to rise to sublime heights, and to grasp the ungraspable breadth of *similia*.

To present the case fairly, we can not do better than to quote from a work by Dr. Chas. S. Mack, one of the high priests of homœopathy. Dr. Mack, who is Professor of Materia Medica and Therapeutics in the Homœopathic Medical College of the University of Michigan, wrote a volume of essays on the "Philosophy of Homœopathy," which has been ably and dispassionately analyzed by Dr. Solomon Solis-Cohen in the *Medical News*. The thoughtfulness, scholarly ability, sincerity and candor of Dr. Mack caused the able reviewer to regard him as a fair and reliable exponent of latter-day homœopathy.

Dr. Mack's essays confirm the views expressed nearly

two years ago by Dr. Cohen, namely: (1) that homœopathy is exclusively a system of drug-therapeutics; (2) that it is an exclusive system, arbitrarily devised, and claiming infallibility; (3) it expressly prohibits the endeavor to interpret morbid symptoms as indications of changes in the structure or functional activity of definite tissues and organs, and fixes attention upon the symptoms alone, independently of their origin, as constituting the whole of the disease and affording the sole indication for treatment.

In defining what is and what is not homœopathic treatment, Prof. Mack says: "We have recognized the propriety of avoiding proximate causes of disease; to avoid them is hygienic. We have also recognized the propriety of directly attacking, and destroying, and removing such causes when they exist upon or in the body, by any means not harmful to the patient; this is prophylactic. These hygienic and prophylactic measures are *aside from the subject of homœopathy*, and, as we have seen, are not curative." * * * "We may say, moreover, that curative treatment is invariably the treatment of the patient with a drug (or drugs) indicated by the symptoms which he exhibits."

Hygiene is not homœopathy; prophylaxis is not homœopathy; the symptomatic exhibition of drugs *is* homœopathy. But even this method of giving drugs does not rest upon a knowledge of normal and morbid anatomy and physiology. Dr. Mack says: "The two sets of facts between which a law of cure must define the relation are, on the one hand, unmodified disease-effects, subjective or objective; and, on the other hand, unmodified dynamic drug-effects, subjective or objective." * * * No matter what may be the underlying pathological conditions, if the surface-play of symptoms, unmodified, but correspond to the unmodified dynamic phenomena produced by a drug, then the homœopathist knows that he has an unfailing indication in the treatment of that particular disease. It would, perhaps, be more homœopathically correct to say "treatment of that particular *patient*," for Dr. Mack labors to impress upon his readers that the *disease* is to be ignored, whereas the *patient* is to be treated. By homœopathy, a patient is *cured* of disease; by anything else, he

recovers from disease. Dr. Mack defines *cure* to be "such modification of the quality of the vital processes and their effects that whereas these processes and effects were abnormal they shall become normal, and this as the *direct* result (not an indirect) of the medicine used. A drug can be curative only by reason of its dynamic effects upon the patient. Curative treatment is invariably a treatment of the *patient*, and never a direct attack upon the cause of disease."

Does homœopathy, pure and simple, allow a man to profit by experience? Dr. Mack says that "statistics regarding results, in homœopathic practice may afford evidence of the truth of *similia*, but should never constitute our *reason* for the choice of a remedy as homœopathic in a case under treatment. The *reason* for this choice should always be that the medicine chosen is capable of producing unmodified dynamic effects similar to the disease-effects produced in our patient." * * * "To base practice simply on evidence is empiricism." In other words, as Dr. Cohen remarks, the results of treatment are to have no bearing upon the selection of remedies.

There are few mortals, we fancy, who would not make a mental note of the results of a certain line of treatment, and apply the same treatment when a similar case came under observation. Plain common sense would offset this absurd development of *pure* homœopathy.

But Prof. Mack takes special pains to weed out from homœopathy such trifles as hygiene, prophylaxis, etc.; these things are useful, he says, but they have nothing to do with homœopathy. It may be that their usefulness causes them to be outlawed by homœopathy.

Homœopathy is a crystallized piece of arbitrariness; it does not need deep scientific research; it scorns broad medical culture; and effectually provides a barrier to substantial and enduring progress.

* * *

Another, and a favorable, view of homœopathy is presented by our lay contemporary, the New Orleans *Times-Democrat*, June 26, 1891. That worthy daily is in accord with the Hahnemannian school, and wonders why intelligent men, as physicians are supposed to be, can not compose their little

differences and embrace in a brotherly manner. In an editorial, headed "The Homœopaths Make Overtures," the *Times-Democrat* said that the Fourth International Homœopathic Convention, representing the medical science of the most civilized countries of the world, held out the olive branch to their elder brethren of the allopathic persuasion.

We take issue at once with the *Times-Democrat* on a very important point. Homœopathy does not represent the *science* of any country; on the contrary, its peculiar teaching is in direct opposition to true science, founded on observation and induction. Homœopathy voluntarily draws itself apart from true science: and any attempt on its part to offer the olive branch to the regular profession can only be regarded as a ludicrous ignoring of the relation of a part to the whole, or of heresy to orthodoxy.

But the olive branch was offered in the following resolutions:

"WHEREAS, As the proceedings and papers of the Fourth Quinquennial Homœopathic Convention conclusively show that the practice of homœopathy by educated medical men and women has obtained a firm foothold in every civilized country on the globe; and

"WHEREAS, Notwithstanding the untold obstacles and opposition it has encountered, homœopathy has steadily advanced in professional and public estimation, until now at the close of nearly a hundred years of incessant and desperate struggle with its foes, and with the repressive influence of the laws, its future is (humanely speaking) assured; therefore, be it

"*Resolved*, That this International Convention would respectfully suggest to the non-homœopathic portion of the medical profession the question, whether the time has not now arrived when the policy of professional ostracism and legislative repression may not, with advantage, be abandoned as a needless discredit to our loved profession, and as a method of controversy which is daily becoming more and more unpopular and ineffective.

"*Resolved*, That we earnestly suggest that the questions that now divide the medical profession into offensive and defensive factions can never reach a solution, except through those methods of observation, experiment and logic, which form the only effectual resort in all other departments of human knowledge."

In the last resolution it is distinctly stated that the questions that now divide the medical profession into offensive and defensive factions can never reach a solution except through those methods of observations, experiment and logic which form the only effectual resort in all other departments of human knowledge.

Now, who is right, Prof. Mack or the Fourth International Homœopathic Convention? There is a contradiction, and the one or the other must be wrong. Either Prof. Mack teaches correct homœopathy, or he does not; we presume he does, otherwise he would not hold such a prominent position in a homœopathic medical college.

* * *

Oil and water can not mix. In tendering the "olive branch" did our homœopathic friends contemplate an abandonment of their own methods, or did they invite the regular profession to forswear medical and collateral sciences, antisepsis, etc., and cramp their lives in the microscopic circle of *similia?* If they put aside as unnecessary all the glorious achievements of modern medicine, they should not complain if others do not share in their blindness. In their resolutions they speak of observation, experiment and logic. Well, let them use "observation, experiment and logic," and there will be no longer need of homœopathy; it will cease to exist as a medical sect, for its members will become men of science.

* * *

Let us bring homœopathy to our own doors. How did our brethren of the sugary pellet act, last year, when an attempt was made to elevate the standard of the medical profession in Louisiana? Did they move with the procession? Did they put a shoulder to the wheel and try to have passed a law that would license only such men to practice medicine as were trained in methods of "observation, experiment and logic"? The defeat of the medical practice bill was due, in a measure, to the opposition of the homœopaths; still that law was framed in a most liberal spirit and was intended to protect men trained in "methods of observation, experiment and logic."

What would please the homœopaths? Would they unite

with the regular profession in trying to obtain a board of medical examiners that would test a man's knowledge of anatomy, physiology, chemistry, surgery, obstetrics, gynecology and hygiene? Leave out the regular materia medica and practice of medicine, and such special branches as ophthalmology and otology. A knowledge of the branches above mentioned can harm no one. Next year, another attempt will be made to secure the passage of a medical practice bill. If the homœopaths are going to be a disturbing element, it is no more than our right to demand in advance a declaration of the platform or principles on which they base their conduct. Such a declaration should be made in their own organ, and should bear, as much as possible, the official stamp of authority.

The JOURNAL will continue to agitate this matter until something comes of it.

What will the homœopaths accept as a minimum amount of knowledge which a medical man should possess to practice safely upon his fellow-creatures?

When that question is satisfactorily answered, we will be in a position to eliminate one element of discord.

McLAUGHLIN'S THEORY OF IMMUNITY, AND DR. MOOR'S THEORY.

In the *New York Medical Journal* for July 18, 1891, appears an article by Dr. Wm. Moor, on "Immunity Through Dynamic Inhibition." The author ascribes immunity to "molecular vibration," and among his conclusions he lays down the following propositions: (*a*) The normal molecular vibration of the organism checks the growth and multiplication of bacteria; (*b*) the molecules of the animal organism are endowed with a dynamic inhibitory power; (*c*) bacteria that enter the animal system can only proliferate therein if they are capable of changing the normal molecular vibration to one that corresponds to their own biological properties.

In the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL,

June and July, 1890, we gave a report of the proceedings of the Texas State Medical Society. Among the papers read was one by Dr. J. W. McLaughlin, of Austin, on "Immunity." The paper afterwards appeared *in extenso* in the published transactions of the society, and numerous reprints were sent to various parts of this country and to all of the foreign exchanges of the JOURNAL.

The similarity between the theories of these two gentlemen is most striking. Dr. Moor is evidently a great reader and student, for he makes over forty references in the course of his brief article. Still, there is a very important and very singular omission: *he says not a word of McLaughlin and theory*, which is almost the counterpart of his own, and which was given to the world one year ago. This strange lapsus is difficult to understand, except as one of those unfortunate coincidences with which Fate sometimes tantalizes men.

The two theories are not identical; and in order to set forth the amount of credit to which each writer is entitled, we can not do better than quote from a letter from Dr. McLaughlin. He says:

"The central argument advanced by Dr. Moor, the one upon which all the others are dependent, is that acute infectious diseases are caused by, and immunity is obtained through, molecular vibrations of bacteria on the one side, and of the animal tissues on the other side. Thus far the premises assumed by Dr. Moor are in accord with those contained in my paper, and as my article antedates his, I am certainly entitled to priority of claim. * * *

"In the further handling of his subject the doctor departs, in some particulars very widely, from the line of argument pursued in my paper. For example, the doctor assumes that the class of diseases under consideration are caused *directly* by molecular vibrations of such bacteria as are capable of changing the molecular vibrations of the whole organism from what he terms their normal state to those of the invading bacteria. When bacteria are not able to change the vibrations of all the organic molecules of the whole organism, the organism, he says, is immune from their influence, and the

bacteria are unable to grow and multiply under these conditions. * * *

"The illustration which follows in the printed text is not applicable to the subject, besides the theory is defective in its entire inability to explain how immunity is obtained through ptomaines. The explanation of these processes [immunity through ptomaines], as set forth in my paper, is, briefly stated, as follows:

"One-celled plants, including, of course, bacteria, possess the power, when placed under favorable conditions, of breaking up certain organic—and sometimes inorganic—molecules contained in the medium in which they are placed. This occurs in various acetic and butyric fermentations, and is also found to occur when pathogenic bacteria act upon the albuminoids of the blood, producing ptomaines, toxines, tox-albumens, etc. The explanation of these phenomena offered in my paper differs from all others, so far as I know. It is molecular vibrations which in periods of time occur in unison with those of certain less stable molecules contained in the medium, the former, through a super-position of waves or vibratory impulses increase the amplitudes of the latter and finally drive them beyond their attractive affinities and thus disrupt the compounds. The molecules thus liberated will, in accordance with chemical laws, immediately re-combine into simpler and more stable compounds. If the battlefield is the blood, the pathogenic bacteria are the assailants, and the unstable albuminoids are the assailed, there would result a disruption of these latter and a re-combination of their constituent elements into ptomaines and tox-albumens. When it is remembered under what vibratory influences these latter substances are formed, it will be readily understood that they must vibrate in periods of time which differ from both the others; that in many cases the vibrations of the ptomaines will more or less completely antagonize those of the bacteria, and when a sufficient amount of the ptomaine is formed it will arrest the disease in accordance with the "law of interference." It will not only arrest the disease, but will give immunity, more or less permanent, against other invasions of this bacterium. It is thus shown that it is the ptomaine, and not the bacterium as claimed by Dr.

Moor, that is the *direct* cause of the symptoms and pathological conditions which constitute the type of disease.

In order that we may explain in a clear manner how the products of bacterial action, viz, the ptomaines, toxines, toxalbumens, etc., cause immunity, let us bring before us all the factors of the problem. First, we have bacteria whose molecules vibrate in definite periods of time; second, we have the unstable albuminoids, whose molecules vibrate in the same period of time with those of the given bacteria, the result is a disruption of the albuminoid molecules and the formation of certain toxic substances from the elements thus liberated; these toxic substances, ptomaines, etc., will necessarily have molecular vibrations which differ in their periods of recurrence from both other factors; often the molecular vibrations of the ptomaines will more or less interfere with the other vibrations and in this way not only arrest the disease, but will so change the vibrations of the albuminoids that they will no longer be in unison with those of the given bacterium, and hence can no longer be influenced by it. When this occurs the individual will be immune from the influence of the given bacteria, at least so long as the changed molecular vibrations of the albuminoids continue. Are we warranted in assuming that this impress made by the ptomaine upon the albuminoids and manifested by the latter in changed molecular vibrations is of a permanent character, and is transmitted from albuminoids to their successors for a long period of time, perhaps in some cases during the life of the individual, in this way giving permanent immunity? I think we are. A similar change can be worked in the molecular structure of organisms much more firmly fixed than the albuminoids, and this change will be manifested for a long time, and even transmitted through heredity from generation to generation of the bacteria. I refer to the process known as attenuating bacteria. Take for example the bacillus anthracis, which is attenuated by being subjected to a temperature a little short of its thermal death point. These attenuated bacteria are found macroscopically and microscopically to be identical with the unattenuated forms; they multiply themselves by reproduction as do the others, but differ from them in their power of decomposing or breaking

up the albuminoids of the blood—the difference is not one of kind only of degree; they are weakened in this power. Now this power, I claim is the result of the periods of time in which the molecules vibrate, and if these vibrations can be altered in case of the bacteria we are warranted in believing they can be in the albuminoids, much less stable substances.

"Immunity obtained from inoculations of ptomaines in small amounts is practically the same method as using attenuated bacteria for the substance of inoculations; in both cases you get small quantities of the ptomaine and in both you get immunity."

CONTRACT-PRACTICE IN BERLIN.

The Berlin correspondent of the *Therapeutic Gazette*, July, 1891, gives some racy news from the immaculate German capital. One part of this letter possesses a special interest for the physicians of New Orleans. The correspondent describes the evils of contract-practice as it exists there, and which he denominates "society practice"—precisely what it is called in New Orleans. Our physicians may find some consolation in reading the correspondent's remarks, and if they do find it they are welcome to it. He says:

"The Berlin physicians are just now greatly agitated by the question of "Krankenkassenaerzte" (physicians of sick-benefit societies). Hitherto a member of such a society was compelled to consult the doctor of the society, who received a yearly salary for his services. As all Berlin workingmen and working women are legally compelled to belong to a sick-benefit society, the work of doctors elected by such societies is naturally an enormous one. Their houses are actually besieged by patients, while hundreds of other physicians have no patients at all. The consultations which the "society doctors," as I will call them, grant to each patient are ridiculously short and absolutely incapable of benefiting the patients.

I have heard of doctors "doing" over one hundred patients a day, and also learnt the number of minutes allotted to various consultations:

Minor surgical cases	15	minutes.
Gonorrhœal affections	10	"
Headache and other pains	5	"
Influenza	6	"
Rheumatism	6	"
Examination of the lungs	5	" etc.

It is evident that this state of affairs is an improper one and equally undesirable for both patients and doctors. To enhance the morbid character of the affair, the compensation of the physicians is a ridiculously low figure, viz: *eight Pfennige* (two cents) per consultation, on an average. This figure is no fancy of your correspondent's brain, but has been officially fixed by statistical investigations and has been published broadcast in all papers. Imagine the blissful state of the practitioner rewarded by two cents for an auscultation of the chest. At last the Berlin doctors have waked up and taken energetic steps towards extinction of this shameful condition."

Dr. F. W. Parham was elected by the Board of Health, July 6th, 1891, chief sanitary inspector, to succeed Dr. H. W. Blanc, resigned.

AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.

The American Electro-Therapeutic Association will hold its first annual meeting at the hall of the College of Physicians, corner Locust and Thirteenth streets, Philadelphia, Pa., Thursday, Friday and Saturday, September 24, 25 and 26, 1891, under the presidency of Dr. G. Betton Massey.

Physicians interested in the discussion of electricity in medicine are invited to attend without further notice.

HORATIO R. BIGELOW, M. D.,
Chairman Executive Council.
WM. H. WALLING, M. D., *Secretary.*
2005 Arch street, Philadelphia.

Abstracts, Extracts and Annotations.

MEDICINE.

PNEUMO-THERAPEUTICS.*

By Dr. Hovent, of Brussels.

Baths of compressed or rarefied air are given by means of seven iron chambers of varying capacity, some being capable of comfortably containing from two to ten persons. Each chamber is well constructed; it is supplied with several windows of glass two centimetres (three-quarters inch) thick; it has a duplicated door, or perhaps better expressed, two doors enclosing a lobby, in which the doctor, entering by the outer door, can shut himself, and then equalizing the pressure, can open the inner door and speedily reach the patient for any purpose, without great alteration of the pressure in the chamber. Another smaller door, also duplicated, serves for the purpose of handing to the patient books or whatever may be desired. Electric bell, elbow chairs, toilet tables, manometer, thermometer, hygrometer, etc., are all at hand.

From the chamber so described emerges six pipes, leading to the underground tanks of 1, compressed; 2, rarefied air; 3, nitrogen; 4, oxygen gas; the remaining two pipes are for the purpose of purifying the air. Each of the first four pipes is attached to a little tank which permits of the measurement of the quantity of air, nitrogen or oxygen introduced into the chamber, or of the quantity of air removed.

The large tanks in which the air or gas is compressed, or rarefied, are ten in number. Each holds several thousand of litres. The compression or the rarefaction of air or gas is obtained by means of a gas engine of eight-horse power. The tanks will bear seven or more atmospheres of pressures, or a corresponding degree of rarefaction.

The manipulations are as follows: If it is desired to place the patient in a chamber, and the pipe connecting the chamber with the tank of compressed air, for instance, is opened, this compressed air rushes in; its quantity can be regulated according to circumstances. The reverse takes place if rarefied air is to be used; the air of the chamber rushes out, and the patient remains in a relative vacuum.

One serious and even capital drawback to the employment of air-baths lies in the fact that in the course of the two hours,

* Abstract of a communication to the Philadelphia County Medical Society.

the duration of an ordinary sitting, the air within the cabinet soon becomes foul from the processes of respiration, perspiration, etc. The establishment at Brussels is the only one in which this inconvenience is efficaciously overcome. The air is being constantly withdrawn from the occupied chamber, and purified by being passed through several iron Wollf's jars containing chemicals, to be again introduced, the same degree of positive and negative pressure being always maintained.

It may be desirable to impregnate the atmosphere of the chambers with the vapor of a certain medicinal agents; it is an easy matter to place the substance to be used in the path of of the air current, or more simply to put some drops of an essence on boiling water into the chambers. Pumiline essence I frequently and successfully use.

The compressed air bath more completely expands the pulmonary vesicles and increases their elasticity; the diaphagm and the base of the lungs descend lower; the respiratory process is more perfectly and less frequently performed; the peripheral circulation is less active, with some degree of decongestion of the skin and the mucous membranes (nasal, laryngeal, pulmonary, etc.); the pulse is less frequent and more full; the appetite and strength increase rapidly; the nervous system is undoubtedly invigorated. One may observe that these effects are coroltaries of one another, and result either from mechanical or chemical action; indeed, the oxygen of compressed air is no longer oxygen, but some form of ozone.

The rarefied air bath has not been so well studied; nevertheless, it is employed with much success by some practitioners, who seek in it a reproduction of mountain atmosphere. It has also been recommended for rickety children, when the thorax is deformed. Recently it has been used alternately with the compressed air bath, when a doubt exists as to whether a patient should be sent to the mountains or to the seashore. The therapeutic uses of the air baths are very numerous, but easily deduced from the foregoing considerations.

Asthma is the principal affection for which compressed air baths are employed. Eighty per cent. of recoveries are obtained after from twenty to sixty sittings. During the first sitting the dyspnœa disappears when the pressure of air is sufficient; this result becomes permanent only after a number of sittings.

In pulmonary emphysema the air bath empties the vesicles and increases their elasticity, so that the dyspnœa diminishes. The first sitting is usually followed by a notable improvement. As in asthma, the success is generally striking and permanent.

Pulmonary congestions, pulmonic processes, proceeding or following pneumonia, and hæmoptysis, are cured mechanically since the compressed air provokes anæmia of the pulmonary tissues. Chronic bronchitis and bronchorrhœa are always improved, so far as concerns dyspnœa, cough, expectoration and general health. The first effects of the treatment are an increased expectoration, up to the point of completely ridding the lungs of mucous, and simultaneously a decongestion of the respiratory mucous membranes. The last action must be invoked in explaining the beneficial influence of compressed air in coryza, chronic pharyngitis and laryngitis, and in that exaggerated susceptibility of the mucous membrane, as a result of which the patient is constantly exposed to the danger of catching cold. I have recorded two cases of chronic amygdalitis, in which resection had been contemplated, and in which I obtained complete cures by compressed air baths.

In whooping-cough, "the beneficial action of air baths is undeniable," said Dujardin-Beaumitz. The cure is obtained after from ten to fifteen sittings; and generally the child gains from one to three pounds in weight. Jaccoud charges with gross neglect the physician who does not submit his consumptive patient to aëro-therapy. Oertel thinks the compressed air treatment far superior to climatic treatment in any country. Professor Bertin (Montpellier) has recorded five cases of recovery in consumption in the third stage.

Heart disease has long been considered the only drawback to aëro-therapy, but since I have successfully treated a number of cases with cardiac complications, I no longer hesitate to treat such cases, only using certain precautions.

In catarrhal deafness compressed air effects a natural catheterism. I have not infrequently seen patients suffering from asthma or other complaints emerge from the chamber declaring that their hearing was better than for many years.

Dujardin-Beaumitz says: "Compressed air baths are to be preferred to any other method of treating chlorisis, anæmia, diabetes, albuminuria and gout."

Obesity, also, is favorably influenced, as a result of the acceleration of organic combustion, and the more active elimination of urea and carbonic acid.

In conclusion, I must add that Dr. Arntzenius has cured some cases of neurasthenia, and that I have recorded three observations of dysmenorrhœa permanently cured by a pneumo-therapeutic course. I think these results are due to the general invigorating power of the treatment.—*Med. News.*

A MOST REMARKABLE FIND.—FOREIGN BODIES SWALLOWED BY A STOWAWAY.

In the issue of the *Lancet*, of London, of May 30, an editorial details the most remarkable "*find*" of foreign bodies discovered in the cadaver of an Arab we ever heard of. We quote as follows:

"On Thursday, May 21, the body of an Arab, found dead in one of the ships in the Albert docks, was taken to the Seamen's Hospital, name unknown. A necropsy was ordered by the coroner, and made by Dr. F. Croucher, house surgeon to the branch hospital. There were no signs of disease in the brain or the chest, except a few old adhesions in the left pleural cavity. The gall-bladder was very distended and full. Three small ulcers existed on the anterior coat of the stomach. Several patches of inflammation were found in the small intestine. In the cæcum were found twenty trousers buttons, three cog-wheels (apparently out of a watch, two of them 1 inch in diameter—these were doubled), one 2-inch steel screw bent double and one 1-inch screw, six pieces of a lock (the biggest piece was 1½ inches long and ½ inch broad), a circular piece of brass (1¾ inch in diameter folded into four), brass and lead and two key tallies on a ring, 1 inch in length. In the ascending colon, about five inches from the cæcum, were found a piece of steel wire ⅛ of an inch in diameter and 3½ inches in length, bent double, and one small cog-wheel. The weight of these bodies together amounted almost exactly to half a pound. The body was much emaciated; no subcutaneous fat was present in chest or abdominal walls, or any fat around the kidneys. The deceased was quite unknown; no particulars could be discovered by the police employed to take evidence for the purpose of the inquest. There was no perforation of intestines, or any sign of disease in the colon."

TREATMENT OF INFANTILE DIARRHŒA WITH SALOL.

Dr. E. Hirtz has established the great value of salol as an intestinal antiseptic; and, according to Dr. Weber, a Swiss physician, it is chiefly in infantile diarrhœa that salol manifests its antiseptic proprerties, and, in this respect, it is far superior, to other remedies recommended for the purpose.

The effect is produced almost immediately, and in 24 hours the vomiting and diarrhœa cease. Dr. Weber employs the following formula:

℞ Salol..... 3 grains.
Laudanum..... 1 drop.

M. And make one package, to be taken twice a day.—*Gazette des Hopitaux.—Lyon Medical.*

LARYNGOLOGY, RHINOLOGY AND OTOLOGY.

DIPHTHEROID STOMATITIS—ŒDEMATOUS URTICARIA OF THE THROAT AND TONGUE.

At a meeting of the Paris *Societé Medicale des Hopitaux*, held on July 3, 1891, Dr. Sevestre related a case of *diphtheroid stomatitis* due to the action of *staphylococci*, which had been mistaken for diphtheria. The saliva of the patient was slightly acid; but the majority of the children in the same service presented the same phenomenon.

Dr. Laveran presented a patient, aged 30, affected with œdematous urticaria of the throat. This man had long been subject to outbreaks of urticaria on different parts of his body; at the time of exhibition he had a patch on his tongue and another on his hip.

Dr. Moutard-Martin saw a woman who suddenly awoke one night with a feeling of suffocation and a difficulty in swallowing. The tongue, which was much swollen, projected beyond the teeth. He suspected urticaria of the mucous membrane; at night some patches did appear upon the lips and cheek; in the morning, all trace of the affection had disappeared. A physician who sees these things for the first time is apt to be embarassed.

Dr. Rendu, not long ago, saw a child, who having at first urticaria of the forehead, face and neck, was seized with urticaria of the throat with alarming symptoms of suffocation. The cutaneous eruption facilitated the diagnosis, which would have been difficult without it.

Dr. Sevestre observed similar phenomena in a woman who had eaten mussels. Some hours after urticaria appeared eqaully on the skin. One hour later her grandson was seized in the same manner.

Dr. E. Labbé was himself seized, after passing a night with a patient, with a violent attack of asthma and facial urticaria. This attack was due to urticaria of the bronchial tubes. He has since seen a patient attacked in a similar manner.—*Le Progrès Medical.* A. MCS.

BROMOFORM AS A TOPICAL APPLICATION.

By Solomon Solis-Cohen, M. D., of Philadelphia.

I have recently employed bromoform in a severe case of ozæna as a topical application to the nasal mucous membrane after thorough cleansing with hydrogen dioxide. The absence

of the severe local reaction anticipated, together with the extraordinary success of the measure, not only in destroying the odor but in controlling the morbid secretion, encouraged me, after preliminary trial upon my tongue and pharynx, to use the same agent as a topical application to tuberculous and other ulcers of the larynx, after cleansing with hydrogen dioxide. Here the agent seemed to exert analgesic as well as disinfectant properties, as pain was relieved and healing apparently promoted. The agent being extremely volatile, the immediate effect is transient, and I have, therefore, followed the application of bromoform with insufflation of iodoform in powder. While this somewhat obscures the therapy, yet the effect was better than when iodoform had been used without bromoform in the same cases. This preliminary note is published at this time to induce further trial and report by others.—*Med. News.*

State News and Medical Items.

CHARITY HOSPITAL.

At the monthly meeting held July 7, the following members of the Board were present: President, Dr. Bickham; Secretary Edwin Marks; Messrs. Sentell, Keller, McManus, Vincent and Devereux.

The clerk's report for June showed:

Number of patients in hospital June 1, 566; admitted since, 493, of whom there were, males, 336; females 144; under 10 years of age, 19; American, 363; foreign, 130.

Patients discharged—Male, 305; female, 109; under 10 years of age, 14; total 414.

Died—Male, 64; female, 22; under 10 years of age, 9; total, 86.

Patients July 1, 559, of whom there are, male, 354; female, 205.

Daily average during the month of June, 563.

The financial report showed a balance on hand to the credit of the general fund of $34,374.19; to the credit of the out-clinic building fund, $16,000.

The report called attention to the following points relative to ambulance duty:

1. Ambulance students are to render aid when needed on the spot.

2. The ambulance corps is an arm of the medical department as a charity to those who need free assistance. Those whose condition does not warrant admission are rejected as they would be if applying for aid at the gate.

3. The students have no authority to act in medico-legal matters; on the contrary, are forbidden to act in such cases.

4. Students are instructed, when in doubt, as to the line of their duty, to take that course that appears to them most compatible with the general rules, including the most humane and charitable view.

The points were set forth owing to "a misapprehension that exists regarding the duties of the ambulance corps."

The pathological report showed 19 autopsies during the past month.

The building committee reported good progress on the female out-door clinic department, the walls of which are completed. Pipes are being put in, and the builders are ready to put on the roof.

Dr. H. W. Blanc's resignation, as dermatologist, and Dr. Warren S. Bickham's, as visiting surgeon, were accepted.

Visiting surgeons J. L. Schmittle and G. B. Lawrason were granted leaves of absence.

Dr. Bloom, Dr. Miles reported, will fill Dr. Blanc's position for the unexpired term of four months.

Dr. Souchon has returned from Virginia.

Dr. Meadows returned from Arcadia to Homer last week.

Dr. Yoakum has returned to Shreveport.—*Shreveport Times.*

Dr. Chas. L. Seeman and family have returned after two months North and East.

Dr. F. M. Faught, of Dallas, Tex., is at Huntsville, Ala., for a visit.

Dr. C. N. False celebrated his 4th of July at Donaldsonville.

Dr. Randall Hunt, of Shreveport, was married at

Franklin, La., May 31, 1891, to Miss Emily Halsey, daughter of the late Major E. W. Halsey.

Dr. M. B. Tarleton, of Jeanerette, La., is visiting in Tennessee and Indiana.

Dr. and Mrs. Gayle, of New Iberia, are at Biloxi for the summer.

Dr. Murray, of the Marine Hospital Service, has been ordered to Chandeleur Island to relieve the physicians in charge who are reported ill with yellow fever.

During the absence of Dr. C. W. Jordan, in Mexico, Dr. R. T. Scott has kindly consented to look after his patients, and can be found either at the latter's office or his own in the White building, where he will promptly meet the demands of his own as well as those of Dr. Jordan. The latter has left his patients in good and competent hands.

Dr. N. B. Null, of Ruston, La., returned from his visit to Alabama about a week ago.

Dr. A. A. Batchelor, a large planter of Pointe Coupee parish, and a prominent anti-lottery member of the Legislature, with his family, is spending the summer months at Biloxi.

Mrs. Dr. R. W. Seay left home for New Orleans on Tuesday. We were pleased to meet the doctor in town that day.—*Carroll Democrat.*

Dr. Hardy and family, of Columbus, Miss., are at Biloxi.

Norton—Howard.—Last Monday, at Seashore Camp Grounds, was celebrated the marriage of Miss Hattie A. Howard and Dr. Edward W. Norton. The happy couple are well known and much esteemed in social circles in our city. Dr. and Mrs. Norton received showers of congratulations from their many friends on the grounds, who saw them depart the same evening for the mountains of Tennessee, where they will spend the summer in company with their relatives, Mr. and Mrs. Geo. E. Foster.

Dr. G. Frank Lydston has been elected Professor of Genito-urinary and Venereal Diseases, in the Chicago College of Physicians and Surgeons.

Dr. J. C. Culbertson, editor of the Cincinnati *Lancet and Clinic*, has been elected editor of the journal by the trustees of the American Medical Association, at the meeting held recently in Chicago.

On Wednesday, the first day of July, Dr. Edwin Foster, one of the oldest residents of our town, died at his home, surrounded by his family and friends, after a long and painful illness. He was in his eighty-first year, fifty-four of which had been spent in Winston county. He leaves his aged widow, who was his companion for fifty-six years, and five sons and three daughters to cherish his memory and mourn his departure. His body was laid away in the graveyard at the Baptist Church.—*Exchange.*

New York board of health has appointed two women physicians on the "summer corps," who are to inspect tenement houses and give medical advice free to mothers of sick children.

It is now an assured fact that Dr. Bransford Lewis will, immediately upon his return from Europe, commence the publication of a medical and surgical serial, conducted after his own original ideas. The doctor does not as yet reveal the title of the new journal, but has adopted a novel method of bringing his magazine to the notice of the profession. In another part of this issue will be found a design, within which is hidden the name of the magazine, and the doctor proposes to mail it free to those sending in correct solutions.

Dr. Lewis announces his intention of making this journal a surprise to the profession, inasmuch as it will be a departure from the beaten path of medical literature. *The Medical Herald* but voices the sentiment of the many friends the doctor won while editor of the *Weekly Medical Review*, when it wishes the venture abundant success.—*The Medical Herald.*

The rapid extension of leprosy in Russia has excited the alarm of the authorities, and the town council of Riga has

voted 60,000 rubles to establish a hospital for lepers, which is to be inaugurated in July.—*Times and Register.*

The Medical Record says Mexico has nine medical schools, in each of which the course of study is six years.

Sympathized with Nature.—Granger—"Doc, thar mus' be suthin' left whar ye pulled thet tooth for me, last week. It's ached ever sence." Dentist (examining the mouth)—"Nothing there, sir, but a vacuum." "How big"? "Why, about the size of a tooth, of course." "Wal, yank'er out, doc. I knowed suthin' was wrong. I've heerd thet nacher obhors a vackeyum, an' dinged ef I blame 'er 'f she ever got one stuck inter her jaw."

An Eye to Business.—A certain doctor, who was noted for a keen eye to business, was driving along the street of a country town, when his horse took fright and ran away. He was thrown violently out of his trap and rendered senseless. Presently he recovered a little from his unconsciousness, and noticing the crowd which had gathered about him, asked, "What's the matter, gentlemen? Anybody hurt? I am Dr. B——. Can I be of any service"?—*Medical Record.*

MODERN MEDICINE.

First they pumped him full of virus from some mediocre cow,
Lest the small-pox might assail him, and leave pit-marks on his brow;
Then one day a bull dog bit him—he was gunning down at Quogue—
And they filled his veins in Paris with an extract of mad dog;
Then he caught tuberculosis, so they took him to Berlin,
And injected half a gallon of baccilli into him;
Well his friends were all delighted at the quickness of the cure,
Till he caught the typhoid fever, and speedy death was sure;
Then the doctors with some sewage did inoculate a hen,
And injected half its gastric juice into his abdomen;
But as soon as he recovered, as of course had to do,
There came along a rattlesnake and bit his thumb in two;
Once again his veins were opened to receive about a gill
Of some serpentine solution with the venom in it still;
To prepare him for a voyage in an Asiatic sea,
Now blood was pumped into him from a lep'rous old Chinee;
Soon his appetite had vanished, and he could not eat at all;
So the virus of dyspepsia was injected in the fall;

But his blood was so diluted by the remedies he'd taken
That one day he laid down and died, and never did awaken;
With the Brown-Séquard elixir though they tried resuscitation,
He never showed a symptom of reviving animation;
Yet his doctor still could save him (he persistently maintains),
If he only could inject a little life into his veins.—*Puck.*

OFFICIAL LIST OF THE CHANGES OF STATION AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE HOSPITAL SERVICE FOR THE THREE WEEKS ENDED JULY 18, 1891.

MURRAY, R. D., Surgeon. To proceed to Gulf Quarantine for temporary duty, July 1, 1891.

SAWTELLE, H. W., Surgeon. Relieved from duty at Portland, Me.; ordered to Boston, Mass., July 11, 1891.

IRWIN, FAIRFAX, Surgeon. When relieved at Boston, Mass., to proceed to Buffalo, N. Y., for temporary duty, July 11, 1891.

CARTER, H. R., Passed Assistant Surgeon. Ordered to Washington, D. C., for temporary duty, July 2, 1891.

PECKHAM, C. T., Passed Assistant Surgeon. Granted leave of absence for seven days, June, 30, 1891.

DEVAN, S. C., Passed Assistant Surgeon. When relieved at Buffalo, N. Y., to proceed to Portland, Me., for duty, July 11, 1891.

BROOKS, S. D., Passed Assistant Surgeon. Granted leave of absence for thirty days, July 13, 1891.

KINYOUN, J. J., Passed Assistant Surgeon. Granted leave of absence for thirty days, July 14, 1891.

HOUGHTON, E. R., Assistant Surgeon. To proceed to Cleveland, Ohio, for temporary duty, July 8, 1891.

DEATH.

ASSISTANT SURGEON J. F. GROENEVELT died of yellow fever at the Gulf Quarantine Station, June 29, 1891.

MORTUARY REPORT OF NEW ORLEANS.

For June, 1891.

CAUSE.	White.....	Colored...	Male.....	Female....	Adults	Children.	Total .....
Fever, Yellow							
" Malarial (unclassified)	10	6	10	6	4	12	16
" Intermittent	1		1			1	1
" Remittent	3	4	2	5	5	2	7
" Congestive	12	2	7	7	6	8	14
" Typho-Malarial	2	1	2	1	2	1	3
" Typhoid or Enteric	2	5	6	1	5	2	7
" Puerperal							
Scarlatina							
Small-pox							
Measles	3	2	2	3		5	5
Diphtheria	1		1			1	1
Whooping Cough	1	1	1	1		2	2
Meningitis	13	3	8	8	3	13	16
Pneumonia	10	5	7	8	7	8	15
Bronchitis	5	2	2	5	3	4	7
Consumption	29	35	33	31	64		64
Cancer	10	5	5	10	15		15
Congestion of Brain	11	3	6	8	9	5	14
Bright's Disease (Nephritis)	5	7	9	3	11	1	12
Diarrhœa (Enteritis)	45	13	36	22	21	37	58
Cholera Infantum	46	24	34	36		70	70
Dysentery	10	7	14	3	13	4	17
Debility, General	6	1	3	4	7		7
" Senile	11	3	5	9	14		14
" Infantile	7	3	7	3		10	10
All other causes	183	92	144	131	164	111	275
TOTAL	426	224	345	305	353	297	650

Still-born Children—White, 22; colored, 10; total, 32.

Population of City—White, 184,500; colored, 69,500; total, 254,000.

Death Rate per 1000 per annum for City—White, 27.71; colored, 38.68. total, 30.71.

HENRY WILLIAM BLANC, M. D.,
Chief Sanitary Inspector.

METEOROLOGICAL SUMMARY—JUNE.

STATION—NEW ORLEANS.

Date.....	TEMPERATURE. Mean	Max...	Min...	Precipn. in inches and hund'ths..
1	79	87	71	0
2	80	87	73	0
3	80	87	72	0
4	80	88	72	0
5	82	92	73	0
6	78	89	68	.20
7	78	86	70	.09
8	78	87	70	.14
9	80	87	74	.02
10	79	86	72	T
11	81	90	72	0
12	78	85	72	.03
13	79	85	73	.28
14	82	89	74	.03
15	80	87	74	.03
16	81	86	76	.37
17	76	84	68	.50
18	72	79	66	2.08
19	80	89	71	.02
20	82	89	76	0
21	84	90	78	0
22	83	89	77	T
23	84	93	75	0
24	82	94	70	.54
25	84	91	78	.12
26	82	88	77	0
27	82	90	75	0
28	84	93	75	0
29	84	92	75	0
30	85	94	76	0
31	....	....	....	....

SUMMARY.

Mean barometer, 29.96.
Highest barometer, 30.23, 4th.
Lowest barometer, 29.75, 18th.
Mean temperature, 81.
Highest temp., 94, 24th & 30th; lowest, 66, 18th.
Greatest daily range of temperature, 24, 4th.
Least daily range of temperature, 10, 16th.

MEAN TEMPERATURE FOR THIS MONTH IN—

1871..... 82	1876..... 80	1881..... 84	1886..... 79
1872..... 80	1877..... 81	1882..... 81	1887..... 78
1873..... 80	1878..... 82	1883..... 81	1888..... 77
1874..... 81	1879..... 81	1884..... 79	1889..... 78
1875..... 80	1880..... 80	1885..... 82	1890..... 81
			1891..... 81

Total excess in temp'ture during month, 12.
Total deficiency in temp'ture since Jan. 1, 42.
Prevailing direction of wind, S.
Total movement of wind, 5070 miles.
Extreme velocity of wind, direction, and date, 38 miles, N., 17th.
Total precipitation, 4.45 inches.
Number of days on which .01 inch or more of precipitation fell, 14.

TOTAL PRECIPITATION (IN INCHES AND HUNDREDTHS) FOR THIS MONTH IN—

1871..... 8.61	1876..... 6.20	1881..... 2.84	1886..... 9.30
1872..... 5.34	1877..... 2.75	1882..... 2.71	1887 ... 11.33
1873..... 6.68	1878..... 7.35	1883 ....12.05	1888..... 9.09
1874..... 9.62	1879..... 2.96	1884..... 8.60	1889..... 7.62
1875..... 4.92	1880..... 6.43	1885..... 3.30	1890..... 7.71
			1891..... 4.45

Total deficiency in precip'n during month, 2.32.
Total deficiency in precip'n since Jan. 1, 13.54.
Number of clear days, 8; partly cloudy days, 14; cloudy days, 8.
Dates of Frost, ...
Mean maximum temperature, 88.
Mean minimum temperature, 73.

NOTE.—Barometer reduced to sea level. The T indicates trace of precipitation.

G. E. HUNT, *Sergeant, Signal Corps Observer.*

SYNOPSIS OF SUMMARY FROM SHREVEPORT, LA.

Mean barometer, 29.885.
Highest barometer, 30.136, 4th.
Lowest barometer, 29.573, 19th.
Mean temperature, 81.2.
Highest temperature, 97, 21st; lowest temperature, 62, 8th.
Greatest daily range of temperature, 26, 17th.
Least daily range of temperature, 15, 9th and 13th.
Prevailing direction of wind, S. E.
Total movement of wind, 4070 miles.
Extreme velocity of wind, direction, and date, 40, N. E., 26th.
Total precipitation, 1.34 inches.
Number of days on which .01 inch or more of precipitation fell, 10.
Total deficiency in precipitation during month, 2.35.
Total deficiency in precipitation since January 1, 11.91.
Number of clear days, 10; partly cloudy days, 16; cloudy days, 4.
Dates of frost, ——.
Mean Max., 91.0.
Mean Min., 71.3.

W. J. WRIGHT, JR., *Observer.*

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XIX. SEPTEMBER, 1891. NO. 3.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the first day of the month preceding that in which they are expected to appear. A complimentary edition of twenty-five reprints of his article will be furnished each contributor should he so desire. Any number of reprints may be had at reasonable rates if a *written* order for the same accompany the paper.]

DISSEMINATE PARASITIC PERIFOLLICULITIS.

BY A. H. OHMANN-DUMESNIL.

Professor of Dermatology and Syphilology in the St. Louis College of Physicians and Surgeons.

After a pretty thorough examination of the principal works on dermatology, which pretend to be complete treatises, I have failed to find mention of a group of symptoms observed by me a number of times. The constant presence of certain well defined lesions, accompanied by the same subjective symptoms has led me to look upon it as a distinct disease; and it is on this account that I take the opportunity of describing it, choosing as a name (for want of a better appellation) *disseminate parasitic perifolliculitis*. It shares somewhat in the nature of sycosis and seems to resemble the bacillogenic form more than any other, on account of its superficial character and the readiness with which it yields to therapeutic measures which are applied in a rational manner.

A brief description of this trouble may be summarized as follows: The first symptom noticed is a burning of the skin, accompanied by more or less itching. An examination of the affected part shows that small red macules, of the size of a pin's head, more or less aggregated, are present. In the centre of each one of these macules is a rather coarse lanugo

hair. The color of the macule is a bright red, closely bordering upon the scarlet and suggesting an acute inflammatory process. In a short time, varying from forty-eight hours to three or four days, the character of the lesion changes. It becomes yellow in color, painful to the touch, and itches more. If a hair be extracted or the epidermis be punctured a drop of pus exudes. It has become distinctly pustular. Scratching opens the pustules easily and readily, and the contained pus is found to be of an auto-infectious character. If the patient scratches the affected, and then the unaffected parts, the latter become infected and the seat of a similar process.

The portions most often affected are the anterior surface of the thigh, of the leg, the chest, the axilla, and the dorsum of the hand. In the majority of the cases it is upon the anterior surface of the thigh that the disease is first observed, consisting of a few macules. The eruption becomes rapidly disseminated and it may be found upon any portion of the integument which is supplied with coarse lanugo hairs. While I have observed it in all such localities, I have also noticed it in the axilla and upon the chest, regions supplied with coarse hairs; but never upon the scalp, face or pubis. However, it would require for the observations to confirm the fact, if it be one, that these regions are exempt.

As the lesions become more numerous the itching increases, as also the pain. This latter becomes so great, at times, that I have seen it confine a patient to his bed, he being utterly unable to walk on account of it.

A curious condition which I have also noted is that all the patients whom I have seen affected with this trouble were males and adults. Children and females do not seem to contract the disease, in my experience.

Before proceeding any further, I desire to give a short history of a few cases, illustrating different forms of the disease:

Case I.—John B., a laborer, aged 48, applied for treatment for a pustular eruption upon his right hand. The dorsum, near the thumb and extending to the wrist, was involved, the entire area being about two by two-and-a-half inches. In this space each hair forced a small collection of pus, the size of a small lentil. There was no elevation of the lesions present.

Œdema of a rather marked character involved the entire dorsum of the hand. The trouble had lasted two weeks and had gradually spread to the size it had when observed. Pain was quite marked, and the itching not so much that it could not be allayed without much difficulty. The patient's habits of cleanliness were fair, and no history of a particular irritant coming in contact with the hand could be made out. The man was still engaged at work but it caused him increased pain.

Case II.—M. S., aged twenty-eight; commercial traveller. In this case the patient was provided with a strong growth of hair upon the chest and thighs. He complained that for nearly a month he was troubled with marked itching of the anterior portion of the chest, and of the axillæ. Upon examining him but few pustules were found, some existing in each one of the portions complained of as pruritic. There was no particular pain present. The progress of the trouble had been gradual and slow, having begun upon the thighs. The entire process seemed to be rather benignant in nature, and occasioned but little discomfort beyond the itching, which became intense at times. The rapid amelioration and disappearance of the trouble were confirmatory proofs of its benign nature. One point, which must not be forgotten, was the scrupulous cleanliness of the patient. This may have had some influence upon the spread of the disease, retarding it to some degree, and making its intensity considerably less than it otherwise might have been.

Case III.—G. S., an employé in a city institution, 47 years of age, applied for the relief of what he had been told was "blood-poisoning." The eruption in this case was interesting from the fact that in addition to the lesions of the disease, there was marked erythema of the integument. The lesions consisted of a number of small, bright red macules, throughout which were flat, pin-head sized pustules, each one of which was traversed by a hair. The itching was marked, the pain being of a rather acute character, and attended with periodical exacerbations. The locality implicated was the anterior surface of each thigh. The diffuse redness or erythema had a rather dark tinge, as if it had existed for some time, so that the macules of the cutaneous trouble stood out in

a well-marked manner. The erythema was, without doubt, the result of irritant applications which had been made to the surface, the nature of which was entirely unknown to the patient. The fact that the erythema came on after their use and disappeared upon discontinuing them, would lead to the inference that the reddening was produced factitiously and did not constitute a variation in the original process.

Case IV.—This case occurred in a young man of 35, of good physique, with a well-developed pilous system. His general health is good. He is swarthy in complexion, and well designed, apparently, to resist any parasite invasion, and yet he presented the most severe case of the trouble that I ever saw. Dr. A. C. Robinson, of this city, requested me to call on the patient, whom I found in a pitiable condition. His left leg, from the ankle up to the groin, was one mass of pustules, each one traversed by a hair. The size of these lesions varied from a pin's head, to a gold quarter dollar. They were all flat and the intervening portions of integrement had taken in a bright red color, this being due to the high grade of inflammation which was present. The interior and a portion of the lateral aspects of the thigh and leg were the portions implicated. The right leg was also the seat of the trouble as well as the thigh but to a lesser degree. His right fore arm, right axilla, and right side of the chest were quickly implicated, the left arm being free and the left side of the chest having but a dozen lesions at the most. The itching was of a pronounced type and the pain in the left leg so intense that the patient could neither bend it or support his weight upon it. It was tender in the extreme; and the pain was such at the time I saw him, that he had passed several sleepless nights. In addition to this there was loss of appetite and considerable depression.

The cases I have rapidly sketched represent types of this affection, which seems to be, clinically, a sycosiform disease, and, like certain forms of sycosis, dependent upon microörganisms. The chief characteristics to be noticed are that the lesions rapidly become pustular, a well marked amount of pus being present in each. The preliminary redness which exists shows that the trouble is not so very rapid, as the erythema may exist several days before any puriform condition is estab-

lished. The pus collects around a hair and does not elevate the upper layers of the epidermis, but has a tendency to spread laterally. That it is a perifolliculitis, is evidenced by the fact that hairs which are extracted do not show any structural changes; and, after the process ceases, they have the same appearance that they had before.

Another peculiarity of the affection is that it generally begins upon the anterior surface of the thigh and is found there in almost every case. Case I, given above, is the only exception which I have seen.

The subjective symptoms are mild or severe in direct ratio to the severity of the disease. If the process be severe we have added to the pruritis a new element, that of pain, which may become exceedingly intense as in Case IV. As a rule, it is the itching that is constantly present.

The parasitic nature of the trouble is established beyond doubt in my mind, although I have had no opportunity of studying the microörganisms in this disease, nor even of verifying their existence by means of cultivations and inoculations, a task which I propose to accomplish ere long. My reasons are purely clinical in character, but they are sufficiently strong to make the basis of a good argument. In the first place, the auto-infection which takes place is undoubted. In Case IV, for instance, the disease was well established upon the left leg before it appeared in any other locality. The patient used his left hand principally to scratch with and thus infected his right leg, right forearm, axilla and chest. In other cases which I have seen, patients stated that they had scratched certain parts without any apparent reason, and these soon became infected. The infection, however, did not spread beyond the area which was scratched, and this is further proof of the manner in which the infection took place.

That the process is a superficial one is shown by the appearance of the lesions, and by the rapidity with which they yield to treatment rationally applied; that the cause is a microorganism goes without saying; and, judging by analogy, as exemplified in sycosis, by Unna, the special microörganism should certainly be a bacillus. Bacilli, in sycosiform affections, have a tendency to act superficially, the deeper involve

ments being caused by pyogenic micrococci. The absence of any marked implication of the hairs as well as the healthy condition of their bulb, points certainly to a superficial action. Bacteriological investigations, of course, will alone determine this point with sufficient accuracy to be satisfactory and positive.

The treatment of this affection has been simple and eminently successful. Of course, the first thing to do is to get rid of the pus, then prevent further suppuration, and finally encourage as rapid a *restitutio ad integrum* as possible. In order to obtain these results I have adopted the following method of procedure: To get rid of the pus, the best method is to puncture each pustule. Epilating will accomplish the same result, but it is too painful. As the hair bulb is not diseased, the pulling out is attended with pain, and when we have superadded to this the inflammatory condition of the parts, it can be easily understood that patients will protest vigorously against such a method. So that, under the circum stances, the evacuation of the pus can be affected in a better way by opening each pustule with small, sharp knife.

In order to accomplish the other two objects, parasiticides are necessary, and a number of methods may be employed. It would be difficult for me to state which one of those I have employed is the preferable, all having acted rapidly and satisfactorily. Not having a sufficient number of similar cases at any one time, comparative tests were out of the question. The methods I employed were few in number, and I restricted myself to their use, hesitating to enter into a *terra incognita* when I was certain of having a firm foothold upon which I could depend. Altogether, I rely upon three methods, each one of which is as good as the other so far as I know. There may be others which are superior, but the principle remains the same, the particular application depending, in a great measure, upon the individual.

One method which is very simple is to order the application of campho-phenique to every portion of the affected surface. The pus, as in every method, should have been previously evacuated as stated above. The surface should be kept

continuously moistened with the remedy, and a rapid result is obtained.

A second method is to wash the affected parts twice daily with a 1-500 bichloride solution, taking care not to do more than dampen the skin with the solution. A thin layer of an ointment composed of aristol, one part, and *fresh* unguentum aquæ rosæ or unguentum pomadinum, is applied immediately after each washing.

A third method is to employ a 1-500 bichloride solution as above, and a bichloride ointment of the same strength. This method is more particularly applicable to small, limited areas as in Case I. If applied to large areas there might be some danger of producing toxic effects.

I have never tried pyoctanin, for the reason that it stains in such a marked manner that patients positively refuse to employ it.

All the different methods of treatment, which have been mentioned, were successful, not only in arresting the disease, but also in bringing about a rapid return to the normal. The applications were all made as thoroughly as possible, and the utility of this procedure was demonstrated by the absence of any relapses. In view of this fact, it is not positive whether the disease is prone to relapses or not. Yet, considering the manner in which it progresses, the high degree of infectiousness possessed by it, and its restriction by anti-parasitic measures, it seems reasonable to conclude that under insufficient treatment relapses would occur.

MALARIAL HÆMATURIA.

By BRUCE M'VEY, M. D., Ella, Texas.

Black jaundice, as it is known in this country, is a very fatal disease, but fortunately not very frequent; at least not as frequent as it was a few years ago. There was a time, how-

ever, when it was unknown in these parts, notwithstanding there was more malaria, or malarial affections, then than now. As well as I can get at it, it made its appearance in this country along the Brazos and Colorado rivers, in the year 1868 or 1870, and run a very severe course for more than ten years, affecting more or less of the white population every year; most of our male adults, less frequently women and children, and never negroes of either sex or any age. It seems to occur most frequently between the ages of fifteen and thirty years, and in the late summer and early fall months, but may occur at any age or at any season of the year.

It is usually ushered in by a chill, followed by a fever of 102 to 104 deg. F.; pulse variable. Colicky pains over the abdomen, severe lumbar pains, and sometimes pains over the chest, with irritable cough and expectoration of blood, somewhat similar in appearance to fluid extract of licorice, only it was more grumous. To better illustrate it, I will relate a case of this kind. In September, 1889, I was called to see J. C., an Italian, about 28 years old, who, as I was told by the messenger, had pneumonia. I thought it was a little out of season for pneumonia, but said nothing, and waited to see. On reaching the place, I was shown into a little, dirty, hot apartment that was almost suffocationg—there a man lay as yellow as a pumpkin—literally a yellow man; his conjunctivæ were yellow, and the fur there was on his tongue had a yellow tinge. I was then shown a vessel containing about a quart of black fluid which he had passed from his bladder, and a rag covered with black sputa, and while I sat there he expectorated more of the same character as that shown me, and which was easily distinguished from the rust-colored sputa of pneumonia. The diagnosis, thus far, was black jaundice. I then proceeded to make physical examination, take temperature and pulse. Temperature was 103 deg., pulse slow and full. Examination of this man convinced me that he had neither pneumonia nor consumption to account for the character of the sputa, so my only conclusion was, that the blood had oozed through the bronchial mucous membrane, and assumed this peculiar character before being expectorated.

The patient had intense thirst, which, he told me, had

not been appeased for several hours, neither had he eaten anything for several days, as he had been having chills and fever, with nausea and vomiting, so that the sight of food was disgusting to him. His teeth were coated with sordes, and his breath was very offensive.

I ordered cold water to be given in sufficient quantities at short intervals, and notwithstanding he was experiencing some difficulty of breathing, I injected 15 drops of fluid extract juborandi hypodermically, without the slightest increased trouble of respiration, or any perceptible increase of salivation or nausea; but within ten minutes from the time of the injection he was covered with perspiration, and in a very short time his temperature was down to 101 deg., and his general condition somewhat improved. I then gave him 15 grs. of calomel with ¼ gr. of podophyllin, made into three powders; gave one every two hours, followed by 5-gr. doses of sul. quinine every four hours with 30 drops sweet spirits nitre halfway between (alternately). His bowels moved freely, and the next day he was much improved, but on the day following he had another paroxysm, though not so severe as the first, after which he made a slow but gradual recovery, on no other treatment than a tonic of iron, quinine and nitric acid, interspersed with a little toddy.

One must not suppose, however, that all cases are so amenable to treatment as this, nor is there any routine treatment. The treatment is symptomatic, and the symptoms are variable; as some one has aptly said, "if there is anything regular about black jaundice, it is its irregularities." All the symptoms that have been mentioned as belonging to the disease are not constant, though enough of them will always be present to avoid error in diagnosis, and as to treatment, I consider calomel and quinine in most cases necessary, and sometimes in enormous doses; I have given as much as 100 grs. of calomel in thirty-six hours. To make a long story short, the treatment consists in keeping all the sewers of the body open, sustaining the patient, and using an anti-periodic.

This, in my opinion, is best done by a free use of mercury and quinine, and mildly acting diuretics and diaphoretics,

and as much cold water as the condition of the stomach will allow, with a light, nourishing diet, and stimulants as needed.

Now, having seen that this malarial hæmaturia is most prevalent in malarious districts, and is treated on the basis of a malarial disease, the question arises, is it due to malarial infection? Strictly speaking, no. While malaria plays an important part, and is the chief factor, no doubt, I can not believe that it is the sole cause, for if it were, why should people not have had it before they did? for there were just as many or more cases of chills and fevers and other diseases due to miasmatic poison then than now. Some doctors say that it is due to the use of quinine; that at an early day there was little quinine used, consequently, no black jaundice, but that will not do, for I have seen cases that had not taken a dose of quinine for twelve months previous to the attack; furthermore, where is there a place where more quinine is used than in and around New Orleans? and there is little or none of the disease in question to be seen. And again, if quinine had any causative influence, why is the disease declining, when quinine is being used all the time?

I believe there is some specific germ that finds a congenial home in the poisoned blood of those living in low, damp districts, and as soon as that condition is removed by appropriate means, the germ ceases to thrive and the patient is cured. I have never seen a case that was not preceded by a so-called bilious attack of several days, weeks or months; perhaps not chills and fevers, but vomiting of bile, malaise, or other concomitant symptoms.

Now, it may be asked, to what is the decline of the disease attributable? I would answer by saying to a decline in the suitable subjects. There is not as much intermittent and remittent fever and other affections of the kind now as formerly, and this, I think, may be attributed to the condition of the soil, water supply, etc. It used to be that there was not so much land clear, and what was clear, for the most part, was freshly cleared and badly drained, and there was, consequently, a great deal of decaying matter. The timber not being cut off the land, there was but little inlet to breeze, which made it very uncomfortable during the warm months of the year. Now

there is great deal more land clear, and it is better drained; the surface wells and lagoons are supplanted by the artesian well and the cistern.

1. Malarial hæmaturia is a disease from which recovery is slow, and relapses frequent. In order to guard against relapses, the patient should be kept in cool, comfortable quarters, and all undue excitement, indiscretions of etc., avoided.

2. It is a disease that is liable to recur, one attack seeming to predispose to another.

3. Suppression of urine sometimes occurs, and is a very grave symptom; if the urine should fail to be voided, make use of the catheter, for the urine is sometimes retained.

ANENCEPHALOUS MONSTROSITY.

By Dr. HUGO A. GABERT, New Orleans, La.

[Read before the Orleans Parish Medical Society.]

Mr. President and Gentlemen: I hereby present you a report of a case of labor, showing the difficulty that may confront us in making a diagnosis of the presentation.

The patient under consideration, Mrs. B. V., is 38 years old, white, a native of New Orleans, thirteen years married, during which time she has had six children—the present one included—and one miscarriage; is of a rather slender figure, dark complexion, and weighing about one hundred and ten to fifteen pounds, proportionately well built; had been unwell in the beginning of December last, and consequently expected her confinement in the early part of September next.

Sunday morning, July 19, at a quarter to 1 o'clock, Mr. J. V. roused me out of my sleep, requesting me to go with him and relieve his wife, who was suffering unbearable pains. Some medicine had been administered to her by one of our confrerés, but without giving the desired relief.

I hesitated, but the gentlemen insisted that I should take charge of his wife during her confinement, having had the lady under my care before.

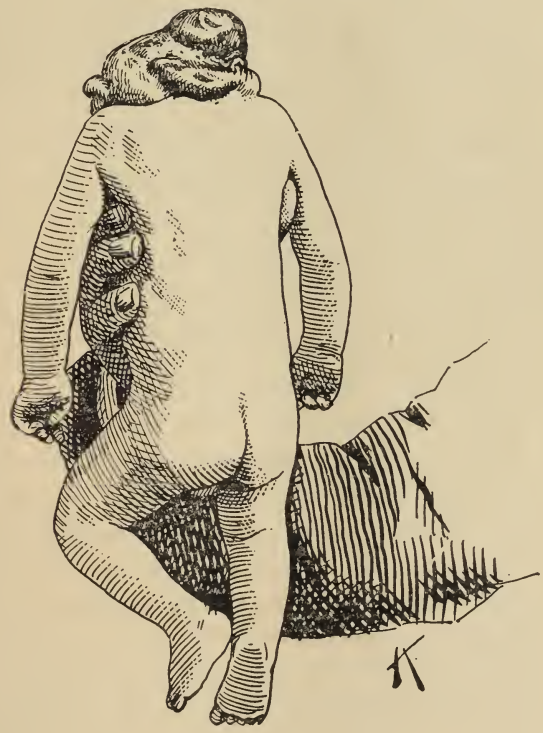
On entering the house I found the patient walking the floor with an abnormally distended abdomen (her relatives expecting to see twins), saying: "I have been suffering since last Sunday, and can't stand it any longer. I have had no sleep, and no rest for a week."

From continuous contraction the uterus had become so hard and tense that the abdomen did not yield, and palpation for fluctuation and auscultation for the fœtal heart-beat resulted in the negative.

Upon digital examination, found the neck of the uterus not yet gone, but rigid and tough as sole leather, the opening of the external os was three-quarters of an inch in diameter, large enough to admit a finger. I made forcible dilatation in

order to be able to make a thorough examination, which, instead of increasing the pains, gave her decided relief.

The introduction of my finger revealed a feeling of a bony substance like that of the posterior fontanelle, but floated away as soon as I touched it, and I perceived a most excellent ballottement; the membranes were intact, although the patient had complained of losing small quantities of water during the week. After the conclusion of the examination, I told Mrs.



V. that the parts were not ready for delivery just now, but that the incessant pains would certainly tend to bring on labor. Administered one-half of a grain of morphine hypodermically, and in one hour from my arrival at the house, left Mrs. V. quite comfortable, and at the same time left a prescription of chloral hydrate, ten grains to be given every two hours in case the pains should continue in their severity.

At my morning visit, found the patient in good humor and

almost without pains, had not taken any medicine during the interval, did not sleep any but felt easy all night.

The uterus presented about the same condition as the night before. I felt some fœcal matter in the rectum, therefore ordered Rochelle salts and cream of tartar aa ℥ij, to be taken a tablespoonful every three hours in water until the bowels were freely open. Monday morning, at the same time as the night before Mr. V. came after me again, saying that his wife commenced to suffer more than ever since 11 o'clock, attributing the pains to the effect of the powders; but upon digital examination found Mrs.V. to be in an advanced stage of labor, the os now being open to the extent of about one inch and a half in diameter, the uterus still very rigid. I felt the same bony substance as before and ballottement, and took it to be an accidental presentation; the sac was still intact and presented the same round formation which is usual in such cases. After waiting about one hour, during which time Mrs. V. had good pains, I ruptured the membranes with my fingers; when down came the water in torrents; I thought there would be nothing left of my patient; this was certainly a case of dropsy of the amnion, which condition now accounted for the negative result as to the fœtal heart. When the water had all been drained out, the abdomen appeared completely collapsed, but Mrs. V. felt quite comfortable, about the same as a person who has been relieved of an over-distended bladder.

When I examined the parts again I found a different state of affairs, felt for the rotundity of the head, but could not find it, looked for the fontanelles with the same result; but instead I felt a mass, round in shape, about the size of a good sized scrotum, and everything around felt soft and mushy, and everything pointed to a breach presentation; that bony piece might have been the coccyx; there was a depression which was similar to an anus; and I felt for the penis but could not find it. Surveying the whole situation, I must confess that I was completely perplexed.

I gave up all knowledge as to what presentation was before me, and concluded to wait for the arrival of the curiosity. Mrs. V., having had good pains, in the meantime she expelled the contents of the uterus in about half an hour, when, to my

still greater astonishment, I perceived with a most horrible feeling, a living anencephalous monster of a seven and one half months' gestation; the mother naturally asked about the condition of the child, when I explained as gently as possible what had happened, and that it was best for the child not to live. It was otherwise well developed, but quite rigid and breathing and kicking. I turned it over on its face, and it lived about ten minutes. I did not show it to the mother. The mother had no disagreeable symptoms after the birth of the child, not even an iota of after-pains, no fever up to July 28, when she sat up in bed; the lochial discharges have become scanty and of a pale color, so that I consider her in a normal condition.

The accompanying drawings, from photographs, will give an accurate idea of the character of the monster.

MEDICAL JOURNALISM.

By John Clark LeGrand, M.D., Anniston, Ala., Junior Counsellor of the Medical Association of the State of Alabama.

I shall not expect you, whom I address, to put yourself in my place and view the subject of medical journalism from the standpoint of an editor; but rather, I think it wise, that I should occupy the general ground of professional interest and pride, and with the highest good of the profession, and the deepest interest therefore, in the success of every worthy physician and helpful theory, actuating thought and expression, discuss this subject in that manner best calculated to advance the important and dignified cause we represent.

Perhaps we may not be agreed as to the details of element combination and policy which will go to make up the highest conception of professional journalism, and it is probable that no one of us could originate a journal, embracing all the in-

dividual preferences of this body, but it is safe to assume, in the light of experience and observation, that a profession representing so much intelligence and ability as ours, and one in which the members bear such vital relations one to another and the people, should have a medium of communication such as can be found only in journalism, and regardless of individual ideas and preferences, that journal is the best that most nearly and truly represents the progressive sentiment and development in our profession.

Medicine has always been an honorable and respected calling, and the vital relationship sustained to the people, and the confidence imposed in those who assume the obligations and responsibilities of physicians, demand the prosecution of every line of development and discovery, and the use of every possible means of knowledge in the accomplishment of the most good and the attainment of the highest success.

There may be basic truths that were just as clearly known a century ago as now, but the man who follows now the methods of fifty years ago, will soon find himself without patients or fellowship, and we may with much profit take a lesson from other fields of activity.

The same principles hold good now that have ever been true as to the germination of the seed, the springing of the blade, the growth of the stalk, and the perfection of the ear, but the farmer who has not risen above the plane of fifty years ago as to the implements used and the methods followed, will soon drop behind in the march of agricultural progress and improvements. Every live farmer take an agricultural paper, and the benefits from so doing are evident in the improved stock, diversified crops, and more respectable appearance of the farms of our land, and it is also true that this class, who were once considered unfit for legislative and kindred duties, are coming largely into the control of state aud national affairs, and in the accomplishment of such results, journalism has been an important factor.

In the political field, journalism is a power so far reaching and effective, that the best talent and enterprise of the land are brought into command and exercise for the dissemination and cultivation of party principles and methods.

Years ago, a paper once a month or once a week, at least, from headquarters, was considered sufficient, but now we read the enterprise and success of political parties in mammoth dailies that chronicle with wonderful quickness the news of the world.

Every religious denomination of any importance, quick to see the advantages offered, has entered the journalistic field, equipped with the best talent at command, and so efficient has been this factor of evangelization, that a denomination without a state journal, is considered lacking in the characteristics of enterprise and diligence; and so great has been the demand for the work, that journalism alone can accomplish, that every respectable order, union, aud association has its organ, and in most cases, state papers and journals. But in no other way, perhaps, has journalism more clearly shown its power and usefulness, as in the part borne in the development of the resources of the country.

The custom of organizing land companies for the development of particular locations and resources has largely obtained of late years, and the good thus done is incalculable, and the advantages offered in a paper for bringing the possibilities and prospects of a place to the knowledge of the people have been quickly recognized, and no one factor has, perhaps, done or is doing so much in the work of developing our southland.

Every city and town of any consequence has its paper or papers that go forth as the representatives to attract the attention and bring the help of such as are qualified to assist in the forwarding of industries and the development of resources.

And what is true of the agricultural, the religious, the political and financial world, in so far as journalism becomes a helpful factor in the advancement of the several interests represented, is eminently true of our profession, which in intelligence, ability and possibilities is second to none, and therefore we can not, without great injury to ourselves and to our cause, be indifferent to the opportunities offered us for the attainment of knowledge that comes only through this channel, and we would be unpardonably recreant to our high duties were we wanting in the enterprise necessary to retain our place in the front rank of the profession, and our journalism may well and

justly be taken as an exponent of professional enterprise and progress.

But let us glance at a few of the practical and active benefits of journalism to our profession. First, a journal which represents the results of the research and discovery of the medical world, puts the reader at once in touch with the hearts, purposes and accomplishments of all who labor for the good of the cause of cure and prevention, and further, the publication of any theory by a reliable and accredited journal brings such theory to the attention, scrutiny and consideration of the master minds of earth, and thus opportunity is given for the vindication of truth and its application in helpful practice which might otherwise have scarcely become known in a hundred years, and on the other hand, errors which the evil-minded, and the charlatan might use for the damage of physicians and patients can be exploded.

Other than strictly medical journals might publish these things, but so limited, unsatisfactory, unauthorized and erroneous would, in all probability, the publication be, that much harm would result.

And if we are to benefit by the work and progress of our medical brethren and co-workers in the field of practical and scientific effort, we *must* have an organ of communication and information that is reliable and authoritative, and this we can have only in a journal that is distinctly representative in character. Another feature of especial importance is the fact that in unprofessional journals, no bar is fixed as to fitness for discussing the subject in hand, and it is often the case that writers are absolutely ignorant, or sinfully vicious, and the results of such are seen in the false notions and predjudices that abound in the public mind, and give trouble to honest practitioners and retard curative means. A journal authorized and sustained by the qualified intelligence and influence of accepted physicians and cultured scholars, is authoritative and educative in an eminent degree, and through this medium we hold converse with the leading minds of our profession as they deal with the practical, ethical and scientific laws, principles and influences that govern, sustain and elevate the interests we represent.

Many men of fine ability and rare attainments, who shrink from notoriety through the public press, speak to us through the columns of a professional journal, and we are thus brought into active harmony with the moving spirit of the age, and keep abreast with the onward march of the medical mind.

And in this connection, worthy of mention, is the fact that medical manufacturers, importers and publishers, whose goods are meritorious, do not care to descend to the level of the quack, as he sports his flaming advertisement in every paper, good, bad or indifferent, that will give him or his nostrums notoriety for pay, but such will gladly avail themselves of the opportunity offered in an authorized journal to bring their goods to the attention of worthy physicians.

Moreover, journalism has been a most potent and happy factor in bringing about the marked improvements in the courses of study prescribed, and methods of instructions used in our medical colleges. In its nature free and aggressive, and being a means of direct communication between the spheres of practical and experimental life, and that of theoretical and abstractive preparation, the field and the college, the practitioner and the student, are brought near together, and an alliance is formed, out of which have grown studies and methods more in keeping with the conditions and requirements of actual practice. Without this medium it would have taken decades to have accomplished what has been done in a few years.

But suffer a few thoughts in reference to a State journal.

As before said, we are second to no other State in medical talent, ability and efficiency, and while we should cherish and cultivate an appreciative disposition for all our fellows in the profession, the necessity for a closer union of those who are most nearly governed by like conditions of climate, disposition and circumstances, is obvious to the discerning mind.

This is an age of quick and practical treatment and results, and there is little time for experimental uncertainties on the part of live practitioners. We need to pass out beyond the plane of petty jealousies and competitions, into the dignified field of professional honor, helpfulness and progress, and freely converse as to the best methods to pursue to attain the

most satisfactory results for our own good and that of suffering humanity.

Every other progressive profession has been quick to seize upon the advantages offered in authoratative communications and professional interchange of views, and the results of such a course are visible in the active unanimity and growing strength and influence of every such organization, and what is true in this repect of professions in general is conclusively true of ours, and should we lag in enterprise or be wanting in harmony, our claim to leading talent and skill would become as a sounding brass and tinkling cymbal. But so long as our desires are in the direction of a more happy and dignified proficiency in all the phases of our professional life, we will need the help that can come only through an association of such purposes and operations as are found in every worthy disciple of Esculapius, and the comparison of those experiences and observations that are the product of an active and honorable practice.

To my mind the only efficient medium of such communication and enterchange as would be profitable in state journalism, and, if you please, I mean that character of journalism that is truly and broadly representative, and worthy to become a vehicle for the transmission of the ripest thoughts of the best minds of the age, a state journal bearing upon its own heart the good of the profession, and warm with the sentiments and experiences of those who labor day and night in the cities, towns, villages and country districts of our beloved state for the cure of disease and the preservation of life.

In such an enterprise, while the money may be necessary in a certain degree, its life and character would rather receive impetus and shape from warm hearts, thinking minds, active experiences and ready pens.

No state journal can succeed unless the physicians of that state make it their paper in spirit and usefulness in subject matter, and take a pride in its welfare that places it on the highway of professional support and success.

Finally, the past has a history of which we are proud, and the present is pregnant with possibilities that each succeeding day and discovery will develop toward the birth of a happier

day in which falshood and uncertainties shall fade away before the beauty and grace of the opening light of truth.

In this desired consumation, if we do not our part, another will wear our crown, but I feel the movings of a nobler spirit than would be guilty of indifference.

With a unanimity born of the highest aspirations, a proficiency that is the product of truth and culture, we are moving toward the highest plane of professional attainment possible to man, confident that the great Physician, the master of us all, shall give to us that are worthy a fadeless crown of eternal healing.

Hospital Reports and Clinical Notes.

HOSPITAL FOR WOMEN AND CHILDREN.

PAINLESS LABOR.

Dr. E. Denegre Martin.

Mrs. S. S., white, æt. 20, primipara, was admitted to Hospital for Women and Children June 4, 1891. Patient expected to be confined about June 20. On morning of June 9 patient complained of cramps in the abdomen. My attention was called to the fact at 3 P. M., and to guard against a surprise I determined to make an examination to ascertain if labor might not be progressing. Much to the surprise of both myself and the patient I found the os fully dilated, the head presenting and in the first position. There was complete inertia of the uterus. Administered 10 grains of quinine, which patient vomited. Half hour later administered 15 grains. In three-fourths of an hour slight contractions of the uterus were apparent, but patient suffered little if any pain. Membranes were ruptured, and in half an hour patient was delivered of a 6½ pound boy baby. Slight hemorrhage followed after delivery; this was checked with hot water douches. No further trouble occurred, no elevation of temperature, nor was the patient aware of any after-pains. Said she had suffered more from constipation than from the birth of her child. The placenta weighed ¾ pounds; the umbilical cord was 41 inches

long, and was wound twice around the child's neck. There was nothing else abnormal about the labor, and no lacerations. Patient was discharged on June 30. When last seen about one month later both mother and infant were doing well.

LARGE HÆMATOMA OF INFRA-SCAPULAR REGION.

Dr. Phillip Berge.

J. R., male; white; age, 18 years; cistern maker. Sent for me on August 11. Began to suffer about two weeks previous; pain in infra-scapular region, steadily increasing with gradual tumefaction of parts involved. Attending physician had been treating patient for neuralgia, with narcotics internally, and a porous plaster externally. No positive traumatism, or cause, could be discovered, except it be that patient's occupation entailed the duty of lifting and throwing a very heavy hammer, made use of in driving down iron hoops on cisterns. Subjective symptoms on the 11th of August: anorexia, pain, insommia. Objective symptoms: fever; pulse fast and weak, and hectic sweats; swelling involving scapular region, infra-scapular principally, and infra-axillary. No fluctuation at this stage, but skin on a stretch. I ordered side painted twice daily with tincture of iodine, and quinine and opium internally; diet, egg-nogg in generous quantity. Wednesday, August 12, tumefaction lessened in area, but pain increased and localized to a focus on a line a little external to inferior angle of scapula. Ordered hot fomentations; and, a continuance of quinine and opium, and egg-nogg. Thirteenth and 14th, pain somewhat subsided, but fluctuation deep seated suggested to my mind the presence of pus. On the 14th cocainized parts, and used Dieulafoy's aspirator, and withdrew a little less than half ounce of pus. My immediate conclusion was to cut for pus pocketed beneath the deeper muscles; and, "seance-tenante," a deep incision was made in the tract of the needle, followed by a gush of dark blood, but *no* pus. Cocaine anæsthesia being dispelled, I stopped further exploring; introduced small gauze tent, and dressed wound antiseptically.

Temperature during operation, 101 deg.; same evening at 9 o'clock, temperature 99⅗; pulsations less frequent; patient resting easy. Next day, having some doubts as to the true condition of affairs, I called Dr. M. in consultation, who, having detected some more fluctuation, advised the propriety of making a much deeper and larger opening. Under cocaine anæsthesia, my bistouri pursued the same course,

making a wider sinus, with the advent of another gush of dark blood, and to our mutual surprise not the least trace of pus. An ordinary size dressing forceps introduced into the cavity could be opened to the full extent. A large rubber drainage tube was inserted, and wound dressed with iodoform gauze, etc. Next day (16th August), temperature normal; pulse normal, but weak; appetite returned. Ever since patient has been steadily improving in every respect. Dressing changed daily; secretion scanty and without foul smell. The side has resumed its natural appearance.

Diagnosis: Suppurating hæmatonia below Latissimus dorsi muscle, probably caused by rupture of muscular fibres.

New Orleans, August 23, 1891.

Proceedings of Societies.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

OFFICE OF CHAIRMAN OF COMMITTEE OF ARRANGEMENTS,
ST. LOUIS, MO., August 18, 1891.

To the Subscribers and Readers of the New Orleans Medical and Surgical Journal:

The Mississippi Valley Medical Association will hold its seventeenth annual session at the Pickwick Theatre, Jefferson and Washington avenues, St. Louis, October 14, 15 and 16. A full programme of interesting papers has been prepared, and provision has been made for the fullest, freest and most complete discussion of the same. Representative men from various sections of the country have been invited to open the discussions. The local profession of St. Louis is a unit to the end that every visiting physician shall be received and welcomed in a regular warm-hearted St. Louis style.

The same qualifications for membership are requisite in this association as for the American Medical Association, the former being subordinate to the latter. If eligible, you and your friends, together with your wives and families, are most cordially invited to visit St. Louis and enter into the scientific work and the social pleasures as you may desire.

I. N. LOVE, M. D.,
Chairman Committee of Arrangements.

MARION-SIMS COLLEGE OF MEDICINE.

At a recent meeting of the faculty of Marion-Sims College of Medicine, the dean, Dr. Young H. Bond, introduced the following resolutions, which were unanimously adopted:

WHEREAS, The position taken by this college upon the two questions of "Medical Legislation" and "Medical Education" has been intentionally confounded, and

WHEREAS, Notwithstanding the fact that, at the last meeting of the Missouri State Medical Association, the report on "Medical Education," offered by Dr. McAlester, and having as its central idea a three years' graded course of lectures, was, on motion of your dean, with the aid of the votes of all the members of this faculty then present, adopted, it has been sought to have it appear that this college is not favorable to higher medical education,

THEREFORE, To the end that our position upon the question of medical education be clearly understood,

Be it resolved, That after the session of 1891–92 the Marion-Sims College of Medicine will exact as a condition to graduation in medicine of all its students who may not have previously matriculated, attendance upon a graded course of lectures extending over three years.

And be it further resolved, That our position upon the question of medical education does not in the least abate or compromise our objection to what we regard as the attempted enactment of unjust, inefficient and class-medical legislation, and that this faculty favors an examining board as the fair and rational solution of the problem of medical legislation, and medical education as well.

MEMBERSHIP IN THE AMERICAN MEDICAL ASSOCIATION.

This is obtainable, at any time, by a member of any state or medical society which is entitled to send delegates to the association. All that is necessary is for the application to write to the treasurer of the association, Dr. Richard J. Dunlison, Lock Box 1274, Philadelphia, Pa., sending him a certificate or statement that he is in good standing in his own society, signed by the president and secretary of said society, with five dollars for annual dues. Attendance as a delegate at annual meeting of the association is not necessary in order to obtain membership. On receipt of the above amount the weekly journal of the association will be forwarded regularly.

N. O. Medical and Surgical Journal,

ESTABLISHED IN 1844.

PUBLISHED MONTHLY, $2.00 A YEAR.

Articles from physicians are respectfully solicited. All articles, news and exchanges, and books for review, should be sent to the EDITOR, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL. Business communications should be addressed to the BUSINESS MANAGER, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

EDITED AND PUBLISHED BY

AUGUSTUS McSHANE, M. D.

COLLABORATORS:

DR. F. W. PARHAM. DR. H. W. BLANC. DR. A. W. De ROALDES.
DR. R. MATAS. DR. JOHN DELL'ORTO.

Editorial Articles.

SHAKESPEARE'S REPORT ON CHOLERA.

The JOURNAL has been favored with a copy of Dr. Edward O. Shakespeare's voluminous and exhaustive report on "Cholera in Europe and India." This valuable work deserves more than the cursory notice generally afforded to books in ordinary reviews.

It will be recalled that President Cleveland, in view of the danger threatening this country from cholera, appointed Dr. Edward O. Shakespeare, of Philadelphia, as commissioner from the United States to investigate the disease in the countries it was then scourging; namely, certain parts of Europe and India. Dr. Shakespeare received his appointment in the autumn of 1885, and returned to America in about twelve months, during which time he performed a vast amount of useful work, but, unfortunately, with a great sacrifice of health.

In the course of his labors Dr. S. visited Italy, Spain, and India. It is pleasing to note that he was everywhere received with the utmost courtesy by the various officials with whom he came in contact.

After summarizing briefly the history of the scientific commissions sent out to investigate cholera, Dr. Shakespeare devotes

much space to tracing the course of the last widespread epidemic of cholera. A vast amount of information from official and private sources throws light on the various methods by which the unwelcome visitor may gain an entrance. Spain naturally claims a larger share of attention, since that country was one of the greatest sufferers from the last epidemic. Although the labor involving in comprising this part of the report was chiefly one of compilation from various sources, still a great deal of industry and selective ability was required to shape the mass into a useful and systematic whole.

As a necessary condition to a thorough understanding of the question of introduction and spread of the disease, Dr. Shakespeare describes the sanitary arrangements of the localities invaded by cholera in its march. The sanitarian sees things that are usually ignored by the historian and the traveler; but those very things sometimes become our greatest foes, and they must not be overlooked if we would devise rational and effective measures for controlling epidemic diseases. The picture drawn of privies and drinking-pools in the cities visited by the cholera is a saddening one. The minute description of the habitations of the poorer natives in India, and of the poorer classes in Palermo and other Sicilian towns, makes us wonder that the people are able to survive a year's residence among such filth. New Orleans has been much blamed for her backwardness in sanitary reforms; but this is a veritable garden-spot in comparison to the cities and villages visited by Dr. Shakespeare. It is faint praise, however, to say that our city is not as dirty as some of the cities that have suffered from the cholera.

Circular letters, containing a series of questions bearing on cholera, were sent by Dr. Shakespeare to physicians in every place in which the cholera had appeared. Much reliable information was thus obtained; and this, coupled with official government reports, makes a collection of facts upon cholera that will always be of value to students of the subject.

As scientific men, we naturally turn to that part of the report which is of special scientific interest. This more particularly concerns medical men, and yet it is the keystone of the arch, for upon it depends the absorbing question of prevention.

Many writers are quoted, and some of Koch's papers are printed in full.

The chapter on the bacteriology and diagnosis of cholera, would, in itself, be a very valuable book if printed alone. The opinions of all the eminent men who have contributed anything to the solution of a great question, are given concisely but fully. It is noticeable that a large amount of attention is given to Dr. Jaime Ferran, of Tortosa and Barcelona, who performed many inoculations for the prevention of cholera, during the last epidemic in Spain. At the time, Ferran was handled pretty roughly by American writers; but it is pleasing to note that such a competent American critic as Dr. Shakespeare pays a high tribute to his ability as an investigator, and his character as a man.

After quoting freely from the writings of other observers, Dr. Shakespeare furnishes a very fine chapter on his personal observations on the etiology of cholera. This chapter is enriched with numerous illustrations, showing the morphology of the organisms that have been put forward as the causative agents of cholera, and also of the *plasmodium malariæ*. The presence of this organism in the blood may be taken as conclusive evidence of malarial infection, and may serve to prevent any mistakes in making a differential diagnosis. The importance of finding this parasite in the blood of a patient with algid symptoms is of the utmost importance in the beginning of an outbreak of cholera. The micro-photographs are Dr. Shakespeare's own handiwork, to execute which he had to learn the art himself. They reflect great credit upon his skill and industry.

The chapters on the bacteriology of cholera form a small encyclopedia of ready reference, giving the gist of all that has been written on the subject.

The subject of preventive inoculations against cholora is fully set forth, and here, of course, Ferran comes in for a large share of attention.

From the reports and correspondence published, it will be seen that while Ferran was a capable bacteriologist, he allowed himself to be led into placing the commercial value of his method before the scientific. A diagram, compiled from

government statistics, shows the relative mortality among those who were inoculated by Ferran and those who were not; the conclusions are certainly very favorable to Ferran's method. Ferran's inoculation fluid is an extract of the culture of the commo-bacillus; Koch's tuberculosis is a fluid prepared in a similar manner from the tubercle-bacilli; and both are simply an elaboration of the method devised by Pasteur, to whom belongs the credit of placing preventive inoculations for infectious diseases on a scietific basis.

Dr. Shakespeare closes his report with sections on prevention and the clinical aspect of cholera. Measures of personal and national prophylaxis (quarantine) are detailed, and all approved methods of combating the disease are fully described. A brief clinical review closes a report that will always remain valuable as a book of reference, and as an exposition of our present knowledge of cholera.

The appearance of the report has been somewhat delayed by circumstances which Dr. Shakespeare could not control. The labor involved in preparing such a report was immense, and all of it was performed without compensation to the doctor. All in all, Dr. Shakespeare's report reflects credit upon the profession of America, and attests the industry and learning of its author.

TREASURY DEPARTMENT,
OFFICE OF THE SUPERVISING SURGEON-GENERAL,
MARINE HOSPITAL SERVICE,
WASHINGTON, D. C., August 12, 1891.

A board of surgeons for the examination of candidates for admission into the Marine Hospital Service will be convened at the United States Marine Hospital, St. Louis, Mo., October 12, 1891.

Candidates for examination should make application to the Surgeon General, United States Marine Hospital Service, Washington, D. C., as early as practicable, and should enclose testimonial from at least two reputable citizens, preferably physicians, as to their professional and moral character. No person will be considered eligible for examination whose age is less than twenty-one or more than thirty years, or who suf-

fers from any physical defect which would be liable to impair his efficiency or incapacitate him from duty. The candidate must be a graduate of a medical college of good standing, as evidence of which his diploma should be submitted to the board.

Messrs. J. B. Lippincott Company announce that they will publish, about September 1, the eighth edition of Wood's Therapeutics: its Principles and Practice; rearranged, rewritten, and enlarged. Scarcely three years have elapsed since the appearance of the seventh edition, yet the preparation of the present volume has necessitated a careful study by its author of more than seven hundred memoirs. In the present edition no revolutionary changes have been made comparable to those of the seventh revision, but great care has been exercised to see that every portion of the work has been thoroughly revised, and a number of the articles have been completely rewritten, while some new drugs have been noticed. Among those portions of the book which are practically new may be mentioned, as important, the whole subject of Anæsthetics, the articles upon Cocaine, Strophanthus, Caffeine, Antipyrin, Antifebrin, Phenactin, Hydrastin, Paraldehyd, Lead-poisoning, etc. Among the absolutely new articles may be men tioned Sulphonal, Chloralamid, Aristol, and others.

Abstracts, Extracts and Annotations.

SURGERY.

THE SUPPOSED CURATIVE EFFECT OF OPERATIONS, PER SE.

Under this title Professor J. William White, of Philadelphia, contributes a paper to the *Annals of Surgery* for August, 1891, which not only from its subject, but from the great number of authorities quoted, and from the peculiarly rich experience of the writer, makes an article of unusual interest and

importance to both surgeon and physician. The author's attention was first directed to the subject by reason of his experiment with the operation of trephining for so-called traumatic epilepsy.

During the past five years, with Dr. D. Hayes Agnew, he has trephined in fifteen cases of supposed traumatic epilepsy. All but one recovered from the operation. The patient who perished was an imbecile, and a confirmed drunkard, as well as an epileptic. Death occurred from supression of urine, probably secondary to etherization.

In one case a bullet was found imbedded in the brain substance, in another an irregular portion of the internal table was dissected out from beneath the dura mater, to which it was attached by cicatricial adhesions. In another there were projecting spicules of bone on the internal surface of the button removed and the adjacent portions of the skull. In two marked sclerosis and thickening of the cranium were observed about the field of operation. In the remaining cases nothing abnormal was seen. Although this was the case they were without exception markedly improved by trephining; in two instances even to the point of apparent cure, no return of symptoms having been observed for eighteen months, and for two years after the operation. In the other seven the results were strikingly favorable, convulsions disappearing for weeks or months, although previously of more than daily occurrence.

The author has, in so far as this is possible, classified the cases in which operation *per se* seemed to be the main factor in bringing about a cure. These cases are divided into three groups in accordance with the anatomical seat of the symptoms of the supposed disease. This brings them under the following heads:

1. Operations for the relief of nervous phenomena, as epilepsy, insanity, paralysis, etc.

2. Operations for abdominal and pelvic disorders, as peritonitis, tumors, etc.

3. Miscellaneous operations.

This classification is further carried out by grouping together, (*a*) those cases in which nothing whatever was found explanatory of the symptoms; (*b*) those in which some departure from normal conditions was observed, but was so slight as to be apparently inadequate to explain the symptoms; (*c*) those cases in which an apparently grave and irremediable condition was disclosed by an explanatory operation, but notably improved or altogether disappeared after more inspection and handling, no further surgical interference having been thought justifiable.

Under the heading of "Operations for the Relief of Nervous Phenomena," Dr. White has tabulated, including his own service, 154 cases. Many of these are given in detail, and, coming as they do from recognized authorities, are of exceeding great interest.

In fifty-six cases of trephining for epilepsy nothing abnormal was found to account for the symptoms; nineteen cases were reported in six months or less after operation; eleven cases were reported from one or two years after operation; one was reported eight years after operation.

Twenty-five of these cases were reported as cured; eighteen as improved; in three cases it was mentioned that a relapse occurred later.

In thirty cases of ligation of blood vessels for epilepsy, fourteen were reported as cured; fifteen as improved; one died seven days after operation. In the fatal case the right common carotid artery was tied. No fit occurred after the operation.

In ten cases of castration for epilepsy all were reported as cured. One case was reported four months after operation; four cases were reported more than two years after operation; in five the time when reported is not mentioned.

In nine cases of tracheotomy for epilepsy two were reported as cured; six as improved; one as much improved, though death in this case followed in two months after the operation.

In twenty-four cases of removal of the superior cervical ganglia of the sympathetic nerves six remained well at the end of three years; ten were improved; five remained unimproved; two died soon after the operation, but not from its direct effect.

In six cases of incision of the scalp for epilepsy nothing was found to account for the symptoms. Three of these cases were reported as cured at the end of one year; two were reported as cured at the end of two years; two other cases almost similar were reported as cured.

Twelve cases of epilepsy are reported as cured by such operations as stretching of the sciatic nerve, excision of the musculo-cutaneous nerve, cauterization of the larynx, circumcision, application of a seton to the back of the neck, tenotomy of the external recti-muscles, burning of the scalp, puncture of the heart, etc.

Thirteen cases of spontaneous or accidental cures of epilepsy are also reported, at a time varying from two months to five years after the traumatism, which was a fall, a burn, a wound, an amputation, for intercurrent injury of disease, etc.

Passing from the cerebral to the spinal region, Dr. White cites an illustrative case of his own. A man, aged 55, was attacked on December 25, 1887, with severe pains in his arms and shoulders. A few days later there was weakness of the thighs spreading rapidly down the legs to the feet, and upward on the body to the nipple line. In eight days there was an absolute paralysis of the parts involved, including both sphincters, while at the same time the paralyzed parts became the seat of profound anæthesia. Girdle pains developed, bedsores made their appearance, percussion of the spine over the third and fourth vertebræ became painful. The reflexes were exaggerated, and light blows on the head in the direction of the spinal axis gave rise to frightful exacerbations of the girdle pains. In spite of every remedial measure these symptoms increased in severity for ten months. An exploratory operation was then undertaken. Dr. White removed the spines and laminæ of the first five dorsal vertebræ, opened the slightly thickened dura, separated some firm adhesions to the subjacent pia matter, explored the cord, and having failed to discover any serious pathological changes closed the wounds in the dura and soft parts.

The girdle pains had entirely disappeared by the following day, sensation began to return in the feet the day after, voluntary motion in the toes after the eighth day, and so one symptom after another disappeared, until the patient completely recovered, and is now earning his living by manual labor.

In the list of abdominal and pelvic disorders apparently cured by operation, *per se*, a number of extraordinary cases are cited. The experience of Tait, who has more than once drawn attention to the astonishing disappearance of tumors, often of large size, after a mere exploratory incision, and the corroborative testimony of Von Mosetig are cited at length. Kœnig's analysis of 131 cases of tubercular peritonitis treated by abdominal incision is carefully discussed.

In response to letters of inquiry upon the subject, Dr. White received many communications from prominent operators, the great majority of them containing notes of cases not previously published.

Among the signers of these letters are to be found the names of Goodell, Hirst, Battey, Roswell Park, Lusk, Cheever, Chas. T. Parkes, Cabot, Hunter McGuire, Nancrede, Weir, Stimson, and many others of equal note.

Under the heading of miscellaneous operations the author has given several of very diverse character.

First are quoted cases of osteomalacia, cured after weeks

or months of confinement in bed, by either oöphorectomy or Cæsarian section.

Passing to another subject, the question of graduated tenotomy of the eye muscles for the relief of severe nervous symptoms is carefully discussed. The author freely acknowledges the value of tenotomies, both complete and graduated, in the restoration of equilibrium in badly balanced ocular muscles, but he is none the less convinced that in numbers of instances of reported cures of chronic chorea, petit mal, and even delusional insanity the effect of the operation, *per se*, is in large measure, the potent cause of the supposed cure. This belief is founded not alone on theory, but upon the fact, that in certain cases of roflex nervous troubles a cessation of the symptoms has followed the tenotomy although this has not produced perfect equilibrium. Again the relapses which may take place after a perfectly successful series of tenotomies would indicate that the nervous phenomena attributed to the insufficiency, for the relief of which the operations were made, were not correctly so attributed, and that the temporary relief must be ascribed to some cause other than the restoration of an imperfect balance of the external ocular muscles.

In seeking for a reasonable explanation of the phenomena observed in the above cases, the author has formulated the conditions which are common to nearly all of them. These are:

1. Anæsthesia.
2. Psychical influence or so-called mental impression.
3. Relief of Tension.
4. Reflex action of the "reaction of traumatism."

These influences were operative in the majority of cases, although not one of them except the last applies to the whole list.

With the idea that it was conceivable that a disease of the nerve centres, not reached by ordinary drugs, might be affected by agents of such volatility and diffusibility as ether and chloroform, the author instituted a series of observations upon a number of epileptics in various stages of the disease. All other treatment was withdrawn, ether was given to the production of full ansæthesia at intervals of from forty-eight to seventy-two hours. The results were either entirely negative, or in consequence of the withdrawal of their bromides the patients grew worse.

Since, in the great majority of cases upon which Dr. White based his paper, there were either undoubted symptoms, such as are habitually associated with organic disease, or there was demonstrable and unmistakable evidence of such disease, it is necessary to believe, in considering the psychical influence of

operation, that powerful impressions acting upon the emotional or intellectual nature may effect the organic processes of secretion, nutrition, etc., and may arrest pathological changes and bring about reparative or recuperative action. Cases are cited in which such influences are clearly set forth.

The author holds that the normal equilibrium which we witness between the cerebro-spinal and the sympathetic systems, as respects their influence upon the blood vessel, is obviously more or less interfered with when the brain transmits a more than wonted impulse, allowing the unrestrained action or paralyzing influence of the sympathetic vaso-motor nerve. In this relation the author narrates some remarkable cases of hypnotism and quotes some striking examples of the effect of the central nervous system upon the body.

Belief is expressed that in many of the cases described there can be but little doubt that relief of tension is an important factor in amelioration or cure. If it is assumed that preternatural tension exist in the cranial cavity, this would be relieved to an extent by trephining, and there would be but few exceptions to the rule that in each case something was done which lessened the tension in the cavity or organ of the body. There are other cases, however, in which no such relief was obtained, and yet cure resulted from operation. A diminution of the tension would manifestly alter the blood supply to any important organ in the body, and with it, the nutritive process, local and general. Beyond this, nothing definite can be said except as it applies to cases of ascites in which, as in cases of hydrarthrosis, one tapping may prove prematurely curative because the original source of irritation and hypersecretion has already disappeared.

Under the head of "Reflex Action," the author includes the "reaction of traumatism," as well as the effects of revulsion and counter-irritation.

Verneuil has long since shown that very slight traumatism sometimes excites in the entire economy a general perturbation, and sometimes, by selection of the weak point, a sudden aggravation of lesions that are only slight or have slumbered. This same excitement, usually prejudicial, may occasionally be curative. In the case of spinal surgery above detailed, Dr. White believes that the local shock of the operation was promptly followed by a corresponding reaction, in which the vitality of the tissues was raised sufficiently high to determine a return to the normal state. In this relation the reciprocal influence of one portion of the body on another is briefly discussed.

In considering abdominal tumors attention is called to the possibility of the spontaneous disappearance of such tumor,

the relation of this disappearance to the operation being coincidental; cases are cited in point. As to the cure or amelioration of growths thought to be malignant by merely exploratory operation, a long search through the literature of the subject has met with but little success.

The cure of tuberculosis of the peritoneum as the result of exploratory incision is explained on the ground that the removal of ascitic fluid allows the peritoneal surfaces to fall together and to acquire adhesions. The tubercles are then shut in between the coils of intestine, the omentum and the abdominal wall. They are thus surrounded by tissues in a high degree of activity which can now throw around them the limiting zone of young cells and eventually fibrous tissue, which, if the tuberculous process is not too far advanced, may effectually resist it and may cause it to retrograde, the process being analagous to that which we see imperfectly going on around a cancerous growth.

As a result of a study of the subject the author believes the following conclusions are warranted:

1. There are large numbers of cases of different grades of severity and varying character which seem to be benefited bo operation alone, some of them by almost any operation.

2. These cases include chiefly epilepsy, certain abdominal tumors, and peritoneal effusions and tubercle, though the improvement in the latter is, perhaps, to be explained on general principles.

3. Of the possible factors which, by reason of their constancy, must be considered, anæsthesia seems less likely to have been effective. The other three, viz., psychical influence, relief of tension, and reflex action, may enter in varying degrees into the therapeutics of these cases, and, taken together, serve to render the occurrence of occasional cures less mysterious.

4. The theory of accident or coincidence scarcely explains the facts satisfactorily.

INJURY TO THE THORACIC DUCT, WITH AN UNIQUE AND INEVITABLE DEATH BY INANITION.

By Alvin Eyer, M. D., Cleveland, O.

December 17 last, Charles G. S. was admitted into Lakeside hospital with the following history: Railway brakeman, aged twenty-eight, with ghod general health up to previous day, when he met with an accident, the following report of which is as complete as could be obtained. By the slipping

of a "push pole" (a pole attached by one end to an engine and used in moving cars), he was so caught as to be squeezed against the foremost car and bodily rolled out from between the two. When picked up he was found several feet from the train and in an unconscious state.

Upon being brought some thirty miles, an examination brought to light little beyond severe localized pain in the right lower chest with some considerable injury to the right forearm, and a distinct band of discoloration some four inches in width, encircling nearly the entire abdomen. While no crepitus was found it was still thought best to firmly strap the right chest as a precautionary measure against possible fracture of one or more ribs. This, with attention to the injured arm and such anodyne treatment as was required, was all that was deemed necessary for the time being. In the course of twenty-four hours, however, there was a rise of temperature and upon ascultation evidences of pneumonia, corresponding to point of injury over right lung, were plain. He was at once placed upon additional treatment, and for the next sixteen days seemed to run a favorable, yet perhaps severe, course of traumatic pneumonia involving the entire lung.

Beyond somewhat more pain than one generally observes in such cases, however, nothing unusual presented itself, except on the second day, when there appeared a gaseous distention of the abdomen and also enough dyspnœa with a hyper-resonance of both lungs to suggest pneumothorax; but whether pneumothorax actually existed or whether this condition depended upon the abdominal distention was not definitely determined at once, and in twenty-four or thirty-six hours the whole chain of symptoms in so far as the thorax was concerned, passed away, leaving the patient about as before, with the exception of more or less constant abdominal tympany.

On the seventeenth day there came a great and most remarkable change over our case. Pain was complained of, and upon examination, some redness with soreness upon pressure was found directly above and somewhat behind the anterior superior spinous process of the right ilium. Upon deep pressure fluctuation could be obtained; and after the introduction of an exploring needle, an opening was carefully made quite down upon the external oblique muscle.

The moment the fistulous tract was struck there came a gush of most offensive gas followed by a flow of nasty-smelling discharge, not unlike fecal matter both in appearance and odor. So offensive was this discharge that the patient had to be removed from the general ward into an appartment by himself. An intestinal fistula was at once thought of, and in the next day

or two, with the opening still dicharging a fluid very similar in appearance to what was given him to eat (expressed beef-juice, milk, and whiskey), and with repeated assurance of the orderlies that its odor was identical with what had passed per rectum, the diagnosis of such a fistula confirmed itself in our minds without further or special investigation.

After two or three more days the discharge lost its offensiveness to a very great degree; but otherwise remained much the same—opaque and milky—with marked increase of flow at any time the patient was asked to bear down as though at stool. At this time, too, rapid emaciation set in, and from these two facts—loss of odor and the unusually rapid emaciation—it was inferred that the intestinal lesion was high up and the food-stuffs given him came away as chyme. Under this belief it was deemed best to limit stomachic alimentation, as to quantity, and confine it entirely to predigested nitrogenous foods, while rectal feeding was pushed to its utmost limit. Notwithstanding, however, this forced feeding and the apparent well-doing of his pneumonia, the patient was still rapidly succumbing to starvation. So rapid was his inanition that it was estimated his body loss—from the date of fistulous formation (seventeenth day) to death (thirty-eighth day)—exceeded four pounds per diem, and that his entire loss much exceeded one-half his normal body weight.

During all this time we could see nothing to be done, more than sustain strength and life until such time as the patient's pneumonic condition would permit a restoraton of the intestinal continuity, keep the tissues of the right side well open to favor drainage, and prevent sloughs. Starvation, however, went uninterruptedly on, and as already stated, death supervened on the thirty-eighth day after injury.

This, then, briefly stated, covers the history, clinical course, diagnosis and fatal ending of our case. To sum up its clinical significance we will take up: First, our diagnosis, not in its entirety, but only in so far as the fistula was concerned; second, the autopsy and its findings; third, a study of the case, upon the whole, whith the view of establishing a differentiation between fistulæ communicating with the thoracic duct, and such other fistulous tracts as may prove undefined or doubtful as to origin.

(1.) In defence of our diagnosis of intestinal fistula I will only say: On the sixteenth day of observation of the case there were, with but three exceptions, absolutely no indications of disease or injury other than those referrible to the right lung—now in an advanced stage of pneumonia.

With the appearance, therefore, of the painful bulging, fol-

lowed by the rush of gas and fluid upon lancing, which plainly established the existence of some form of fistula, the exception—a band of discoloration, obstinate bowels, and slight tympany—were recalled; and, for the life of me, nothing could have been plainer or more easy to diagnose.

In fact, the whole case seemed too plain and simple to be mistaken. The gas and decidedly fecal smelling discharge in themselves moulded at once our belief, diagnosis, and mistake. That there was a fistula was plain; that it was fecal was too plain, and there we rested.

To give you the benefit that was given the house staff let me tell you, as was told them, how all this chain of concurrences happened:

"You see, this man was caught between the end of a pole and a box car; the little black and blue band about his waist plainly indicates to you what part of the body was caught. Now, the pole must have so squeezed the abdominal parieties up against the car, as to impinge a knuckle of gut within its embrace; and while this did no immediate or serious injury to the belly or its contents, there still must have been enough harm done to set up subsequently a low form of plastic inflammation whereby the gut and peritoneum became agglutinated and adhered one to the other.

"In due time, of course, death took place in that portion of the gut and the delicate serous membrane which was most centrally located in the adhesion, and then the tissues gave way and the fistula became established. Of course, it could not communicate with the abdominal cavity, because you see the opening through the gut and peritoneum was simultaneous; and as the healthy portions of the two are still adherent there is a sort of artificial anus formed, and through it, of course, the fecal matter must pass, then force its way on through the extra-peritoneal tissues in whatever direction it finds least resistance. Observe as you make pressure on this side a wave appears on the opposite side, not far underneath the skin, and beginning evidently in the linea alba. That is the fluid coursing its way through the newly made channel toward its outlet.

"As to what can be done in such cases, for the present we will only make a free opening, so as to give free vent and prevent the burrowing of fluids and subsequent sloughing. Later on, of course, when his pneumonia has subsided, laparotomy with, perhaps, enterectomy, will be performed, all of which will be a simple matter.

"Stimulate and feed him well, for as you see from what has been said concerning the character of the discharge, which

really seems to be nothing more than partially digested milk, whiskey, and beef juice, the lesion must be high up, and therefore the area for absorption is greatly cut off.

"The discharge which, you will remember, was so very offensive no longer smells badly, which also means that the foods leave the canal high up, and therefore have no chance for decomposition.

"This without doubt would be a nice case for Senn's hydrogen gas test, but, as the case is so plain and the poor fellow has already been badly hurt, we will pass that by. The pneumonia, of course, is a contra-indication for the use of anæsthetic, so all we have done, as you know, had to be done under the local spray and cocaine, neither of which is very effectual."

These, in substance, were the clinical points upon which was based our diagnosis two days after the fistulous formation. From then on the patient's pneumonia did well and seemed promising; and so was also our forced feeding borne, well by him, but he starved to death on the thirty-eigth day, and thus ended our first lesson.

AUTOPSY.

In making the autopsy it was at first determined to follow the tract from without in, but as it proved to run an infavorable course for such a step, the attempt was abandoned and the abdomen gone into through the linea alba—the incision extending from the ensiform cartilage to the pubes. At first glance there could be seen many evidences of starvation's fearful ravages. All the viscera presented an unusual dryness, with the surface of the intestines and liver much darker in apparence than normal. The gall-bladder, was greatly distended and seemed on the point of bursting; while the omentum, always so rich in fat, was but a mere network of blood-vessels and connective tissue. These points being noted the point of "adhesion" was at once looked for, but no such condition could be found: and then a search for the fistula began. For this we looked high and low. Applying a double ligature just above the sigmoid flexure and dividing the gut between the two, we emptied the abdomen from below up, carefully noting every pathological change as we went.

Up to the diaphragm we failed to find even evidences of inflammation, new or old. In fact, the abdominal cavity seemed absolutely free from pathological conditions, and after going over the intestinal tract again and again, we thought it possible that the œsophagus might be the seat of lesion. So accordingly the liver and pancreas were removed and the diaph-

grom, beginning at the œsophageal opening, slit up to the ensiform cartilage.

In removing the liver from its lodgment it was observed that it was adherent to, and much softened about the aortic opening in the diaphragm, with evidences of recent inflammation, and several masses of a cheesy deposit, not unlike the residue of partially digested milk in appearance, embedded in its upper surface. The diaphgram up to the œsophageal opening also showed the same evidences of inflammation, and at this latter point the bands of muscle forming the opening were so adherent and matted to the gullet that, in separating and lifting the latter out through the cut made in the diaphragm, it was so torn as to prevent us from determining whether its destruction had been ante-mortem or made by us. From the character, however, of the blackened and broken-down tissues, not only of the liver but the diaphragm and œsophagus, and our failure to find any other lesion, we momentarily concluded we had reached the seat of trouble.

The sternum and cartilages were next removed and after carefully examining the diseased right lung, which was found in various stages of hepatization, the same was lifted out of the thorax, and the upper surface of the diaphgram about its openings further examined. Its condition was similar to that found below, except, perhaps, that the inflammatory process had not been so extensive. The gullet above this point was also further examined but found to be perfectly healthy. Upon complete removal of the lung from the chest there was discovered a bulging into the cavity, from the back and uppermost point of its apex, which upon more careful investigation was found to be a post-pleural collection of fluid. Upon tapping its sac this fluid seemed to be identical with that which had been making its escape per fistulam during life, and further examination proved this finding to be correct. The pent-up fluid was our supposed chyme, and had burrowed its way between the pleura costalis and chest-wall by gravity while the patient was flat upon his back. A careful dissection also proved the incorrectness of our just-formed belief that the lesion could have been in the œsophagus at the point of opening in the diaphgram, for in no way could that tear and the newly found cavity be made to connect. This discovery, then, put us entirely at sea, and it was not until the bulging pleura was again referred to and its contents found to consist of a rich creamy clot, overrun by a brownish liquid, that a chyle-clot and lymph were thought of.

Specimens were at once examined by heat and the micros-

cope. The former clearly proved the fluid to be pure lymph, while the microscope showed us a collection of the most beautiful specimens of chyle-corpuscles ever looked upon. Thereupon the autopsy was brought to a speedy end by going directly into the posterior mediastinum, and but little deeper than we had gone for the gullet, where the hard-looked-for hole was found—not in the alimentary canal, however, but in the thoracic duct. It was through this hole, then, that all our endeavors for the poor fellow's life had slipped. The fistula was found within the very opening formed by the diaphgram for the tube's reception, and the diaphragmatic crura, fasciculi, and interdigitations surrounding it likely had much to do with its formation and probably led to the division of the stream of chyle, directing the one into the thorax and the other through the muscles of the back and abdomen to its ultimate point of outlet.

POINTS OF DIFFERENTIATION

As Presented in this Case, Bearing Directly Upon the Non-existence of Intestinal Fistula, and Somewhat Plainly Indicating Division of the Thoracic Duct.

Under this head comes, first in order, Senn's hydrogen gas test. Had this test been applied, without doubt its results would have led to such further investigation as would have ultimately led to a correct diagnosis. Second, heat test and microscopic examination of fluids discharged. Had the former test been resorted to, these would surely have followed and a correct diagnosis might possible have been arrived at. Third, shortness of inanition period. This, it would appear, should prove, in an otherwise healthy subject, a strong and emphatic diagnostic point indicative of thoracic duct destruction.

The adult subject, it is well known, succumbs to starvation in twenty to twenty–four days ; but the phenomenon generally takes place under the withdrawal of all nourishment. Here, while the subject was suffering from pneumonia, and was supposed to have an opening near the stomach through which his food escaped, death still came entirely too soon; for under the forced rectal alimentation, life should have been maintained for many weeks longer, had the fistula been elsewhere than in the thoracic duct.

COMMENTS WORTHY OF RECORD.

In endeavoring to arrive at the probable cause and time of lesion, which it seems to me would be of interest to know, two questions put themselves: Was it the destructive outcome

of existing inflammation and formed on, or about the seventeenth day? or: Was it purely traumatic and formed on the day of original injury? The inflammation about the aortic opening in the diaphragm and adjoining structures, as found in the post-mortem examination, with the intervening sixteen days before the fluid came to the surface, combined with the terrifically rapid emaciation after the seventeenth day, would all speak strongly in favor of the first proposition.

In my judgment, as formed from a careful noting of the entire case, however, it would be under the latter proposition that the actual cause and time should be placed. In support of this, I would argue that the division was sustained in the accident, but happened to be so located within the grasp of the tendinous arch, thrown from one crus of the diaphgram to the other, that immediate continuous escape of lymph was checked, and the chyle-clot (found upon the removal of the liver), allowed to form in the tissues about the lesion, and so pack and arrange itself there as temporarily to dam up the break. I believe this condition to have existed up to about the sixteenth day, when the inflamed tissues gave way and the burrowing of chyle began.

The main point in support of this theory is to be found in the peculiar tympany appearing on the second day after the injury. The distention, which was not only peculiar in its mode of coming, but remarkably so in its stay, could not, at the time, be accounted for. The symptom proved unusually distressing, because of the existing pneumonia, and in our efforts to dispose of it full doses of salts were given, but to no avail. While the bowel discharges were copious and watery, the tympany still remained. This, it now seems, must have depended upon the gas being in the peritoneal cavity, and not in the intestines; and from its existence and its time of existence I infer it to have been a phenomenon coincident to the injury to the duct and also, therefore, a datum fixing the time of said injury.

As to the cause of such an injury one could hardly conceive its possibility. Whether compression of the lower abdomen could so forcibly crowd its viscera against the diaphgram and upon the, perhaps, well-filled duct, as to injure it; or whether the squeeze to the chest could have caused such forced respiratory efforts as to produce it; or whether an overexcited diaphgram could cause it by its muscular contractions, are only possibilities to be conjectured, but not shown. How this tube, lying as it does between the aorta and vena cava, could be singled out and divided by causes either indirect and

inflammatory, or direct and traumatic, without also tapping one or the other of its fellow companions, seems to us as incomprehensible, in the study of nature's method of applying her causes in obtaining her effects, as does it seem irrational that she should assign to this poor mortal a death so sure, yet indirect and terrible, as starvation, when she might as well have decreed the tapping of either one of said vessels and let forth his simple life in a single moment, without bodily pain or mental suffering.

It will be observed that in the autopsy no evidences of inflammation were to be found other than those in the lung, diaphragm, and the structures immediately adjacent to its aortic opening. These, of course, must be regarded as entirely traumatic. The post-pleural cavity, containing at least two pounds of chyle, with the channel leading to it from the point of rupture in the duct, also the upper two thirds of the tract through the extra-peritoneal tissues, were as free from inflammation as though nature had formed and lined them. This latter condition, which positively demonstrates the non-irritability and homogeneousness of chyle to the textural structures of the human body, suggests two points of interest:

1. Could the chemico-physiologist ever be enabled to elaborate out of food stuffs a product identical with that made in the human digestive laboratory, then it would appear the surgeon's skill and ingenuity might lead to some form of venous feeding whereby life might be indefinitely maintained.

2. Bearing upon the much-discussed question of asepsis versus antisepsis the case in point furnishes much practical information favorable to the former theory. Here existed a collection of chyle, pent up between delicate and sensitive tissues for a period of at least sixteen days, without the slightest evidence of inflammatory irritation. Had it been bile, gastric or pancreatic fluid, or even blood, surely no such inaction could have been expected. Upon what, then, could this difference depend other than the possession by the four latter fluids of materials septic to the body tissues, on the one hand, and the asepsis of the sterilized chyle, by virtue of its digestion, on the other? The mechanical irritation, by contact, of this fluid must certainly be as great as that of sterilized water by boiling at blood heat; and therefore it would appear that the aseptic condition of the surgeon and his materials in use should become in the end practical, and by all means preferable to the dangerously potent antiseptic remedies used as germicides. —*Medical Record.*

MEDICINE.

DISINFECTION OF TUBERCULOUS SPUTUM.

In the *Centralblatt für Bakteriologie*, Nos. 1 and 2, 1891, Dr. Martin Kirchner points out that the general consensus of opinion has come to regard the sputum of tuberculous patients as the ordinary means by which tuberculous disease spreads from one individual to another. In many of the large military establishments in Germany it has been shown that tuberculous disease has been very widespread amongst the nurses and attendants upon the sick, and stringent rules are already in force in many such places to prevent the indiscriminate disposal of sputum. Tubercle bacilli are more resistant than some other microörganisms to the action of some antiseptic fluids, but are very easily destroyed by others. Four per cent. carbolic acid with the addition of 2 per cent. of hydrochloric acid; 2 per cent. and 5 per cent. of sulpho-carbolic acid, or 10 per cent, of creolin, will suffice to render tubercle bacilli innocuous in a very short time. Caustic soda and potash on the other hand, and 5 per cent. of permanganate of potash have no effect, nor is a solution of 1 in 1000 of corrosive sublimate sufficient, owing to the highly albuminous character of the sputum in which the bacilli are contained. It has now been proved that tuberculous sputum may retain its infective properties for ten months even after decomposition or drying up. It must, therefore, be equally active, as it lies in the various receptacles which have been devised for its reception. The methods by which these vessels are cleaned becomes a matter of considerable importance. Boiling water is used in some places, but it is open to the chance of the water becoming cool before it can be used, and does not do away with the necessity for the wiping of the adherent sputum from the sides of the vessel by the hands of the attendant. A temperature of 70 deg. C. has been shown to be insufficient to render tuberculous sputum innocuous, and the author of the paper believes that absolute disinfection is only to be obtained by means of steam. This plan was advocated by Grancher and de Gennes in 1888, but the apparatus devised for the purpose was cumbrous and costly. Now that there is a general disposition to treat tuberculous cases on much the same lines as leprosy cases, by collecting them together, it should be an absolute law that all the sputum proceeding from such cases should be rendered harmless before it is disposed of in the common drains. With this object, Dr. Kirchner has caused a

form of disinfecting kettle to be constructed, consisting of a round metal box about 10 inches high and 16 inches in diameter, its floor forming a shallow tank to hold the water to be vaporized, the whole being covered with a lid perforated at one point for the passage of a thermometer. In this box are placed two or more trays perforated to permit of the free circulation of steam, and so arranged as to carry five spitting cups of the special pattern which he uses. These cups are placed for half an hour within this apparatus, heat being maintained so that the temperature of the steam never falls below 100 deg. C. A strong protest is made against the use of the ordinary spittoon, whether filled with sawdust or some antiseptic fluid. The spittoon is of necessity too far removed from the patient's mouth to ensure that all the expectorated matters are collected by it. The state of the floor round and about any spittoon in a public place is appealed to as sufficient evidence of the truth of this statement. Small cups made of glass, with wide lips, and easily cleaned, should be used in preference to the spittoon, but must be placed within reach of the patient's hand, and be clearly labelled. These cups must be placed in the disinfecting box for half an hour before they are emptied, and their contents may then with safety be treated by simple washing.—*British Medical Journal.*

HISTOLOGICAL AND BACTERIOLOGICAL RESEARCH ON LEPROSY.

Gianturco (*Giornale della Associazione Napoltiana di Medici e Naturalisti*, 1890, Fasc. 4, p. 403) obtained fragments of cutaneous lepromas from the body of a man who had been affected with mixed leprosy. Histological examination showed these lepromas to contain a great number of bacilli. According to Gianturco, the localization of the bacilli lepræ and their relations to the cellular elements, vary during the period of the morbid process. In the most recent nodules the bacilli are almost all present in the cellular elements, and the rounded zoogloea mass which is formed later is not then produced. At a more advanced stage the bacilli multiply, forming a globular mass, rarefying the cellular protoplasm in which vacuoles form. The nucleus is in turn invaded, is badly colored, atrophies, and then, probably in consequence of the destruction of the cell, the masses of bacilli become free in the lymphatic channels. Gianturco has confirmed the existence of the same lesions in the lepromas of the larynx. In the liver he found an increase of the interstitial tissue under

the form of embryonic cells, and, in places, true nodules continuous at their periphery with the interacinous connective tissue. The hepatic cells are in a general way intact, especially those of the centre of the lobule, yet those of the periphery of the lobule may present adipose infiltration and granulations of biliary pigment; their nuclei, swollen at the commencement, afterwards present vacuoles. The lymphatic glands contained, both in the meduelary and cortical substance, leprous nodules showing a giant cell at their centre. With the juice of a cutaneous (not ulcerated) leprous nodule, Gianturco made inocculations on blood serum and on glycerine agar, the tubes being kept at a temperature of 37 deg. C. Cultures developed in all the tubes, one of which presented at the end of seven days an isolated colony of the size of a hemp-seed, somewhat projecting from the surface of the agar, of a grayish color, and perfectly similar to the colonies of bacilli lepræ described by Bordone-Uffreduzzi. The bacilli of this colony were of variable length, with clear spaces, and some coloring strongly, and possessing a terminal swelling. Inoculations made with these bacilli on glycerine agar gave rise, at the end of two days, to colonies which develop somewhat rapidly on the surface of the agar. On glycerine serum they develop rather quickly, but on the agar alone the development was very slow, and the colonies much smaller than on glycerine agar. They did not develop on other media. The colonies were rounded, with finely serrated borders, scarcely projecting from the surface of glycerine agar, a little more prominent on glycerine serum. They were of a grayish color, appearing a little yellow on the serum; and resembling small leaves of trefoil when developed along the line of inoculation. They developed well at 37 deg., but the growth was arrested at 20 deg. to 25 deg., the faculty of development being preserved for a long time. The above bacteriological researches support the statements made by Bordone-Uffreduzzi, but it must not be forgotten that other observers, and especially Campana, who has devoted much time to the matter, have never succeeded in cultivating the bacilli lepræ.—*British Medical Journal.*

[Since the above was published, the Hyderabad Leprosy Commission has succeeded in cultivating the bacillus lepra, and has successfully inoculated rabbits with the cultures.—Ed.]

THE INHALATIONS OF OSMIC ACID IN PULMONARY TUBERCULOSIS.

From *El Siglo Medico* we learn that Dr. Don Francisco Valenzuela read a very valuable paper before the Medico-

Chirurgical Academy of Madrid, at the meeting of June 1, 1891, in which he speaks of the excellent results obtained by the inhalations of osmic acid in sixteen of his hospital patients suffering from incipient pulmonary tuberculosis. The histories of the following three cases were especially reported by the doctor, the patients having been presented at the meeting. The other patients have left the hospital in a fair way of recovery.

Case I.—J. M. entered the hospital on February 3, 1891, presenting all the broncho-pneumonic symptoms of incipient tuberculosis, without signs of consumption; there were respiratory mucous rales at the apex of both lungs, accompanied by rough inspiration. He was immediately subjected to daily inhalations of osmic acid, which he is still using. The broncho-pnuemonic symptoms have disappeared; the normal respiratory murmur has returned, and no trace of the disease is left.

Case II.—In this case the tuberculous process was more advanced. The patient, F. R., entered the hospital on December 11, 1890. He had light and repeated hæmoptysis, remittent fever, profuse night sweats and abundant expectoration. Dull percussion in the right side of the chest, extending through the greatest portion of the right lung; complete absence of the respiratory murmur, with sibilant and moist rales. Treatment was commenced the same day, and the patient is still under it.

Actually all broncho-pneumonic symptoms have disappeared. The physical signs give evidence of a remarkable repair of the affected tissues; no more dullness or percussion; the air enters the lung freely; the respiratory murmur is normal, though rather rough, on account of previous disease, which left cicatrized condensations of certain portions of the lung; the heart is a little displaced upwards, probably from the same cause. The patient eats, and nourishes well; he does not cough nor spit.

Case III.—C. J. entered hospital on March 1, 1891. About the same symptoms as those of case No. 2, with the exceptions that the left lung was not the affected one. With the inhalation of osmic acid the doctor promptly obtained the return of the permeability of the lung, and the disappearance of the local and general symptoms of consumption. The only abnormality remaining is some infiltration and condensation of the same lung, which the doctor believes will not be progressive, and hopes for a quick recovery.

The three patients were examined by the members of the academy, and their remarkable improvement was acknowledged. It is to be regretted that the paper does not make any

mention about microscopical or bacteriological examination of the sputa. It would have thrown more light on the diagnosis. The results, however, so far obtained by Dr. Valenzuela are encouraging, and it is worth while that the attention of the profession be called to the treatment. If we succeed by osmic acid inhalations in arresting the progress of pulmonary tuberculosis in its incipiency, it will be a great step in the right direction—indeed, the most important one.

DELL'ORTO.

MUSCULAR RHEUMATISM AND ITS TREATMENT.

Clinical Lecture by PROF. POTAIN.

At the present moment we have in the clinic a man, age 22, who complains of generalized pains in both of his arms, and affecting slightly his legs; at the same time he has a little fever. As he is kept motionless in his bed by his pains, one might at first think that he is suffering from a general articular rheumatism; but, upon attempting to locate accurately the seat of his sufferings, it is seen that the joints are neither painful nor swollen, and that the pains are myalgias, occupying the length of the limbs outside of the articular regions.

The pains, then, are seated in the muscles. In the neck, where they are well marked, the patient complains chiefly of the sterno-cleidomastoid; in the forearm, the flexors are chiefly involved; in the legs, the pain, while affecting the whole thigh, is especially marked at the hip over the site of the tensor vaginæ femoris. The pain is not increased by pressure upon the affected muscles, while contraction of the muscles aggravates it. That is why the patient feels a severe pain in the forearm when he tries to close his fist. It is the same in the lower extremities; the pains are absent during respose, and are barely felt upon adduction and abduction. In the neck movements of the head naturally provoke pain.

In our case all the characteristics of muscular rheumatism are found: deep, dragging pains, with notable dartings situated along the muscular masses, not provoked by passive motion, barely increased upon pressure, and aggravated by active movements.

We have, therefore, a case of muscular rheumatism, which is, however, of an unusual form. This disease is almost always limited, circumscribed, and mono-muscular, or, at any rate, affects but a small group of muscles, or muscular region. It only rarely happens that it is diffuse and shifting, like the acute articular form.

Some doubts have been expressed concerning the rheu-

matic nature of the disease. In fact, we do not possess any special characteristic that would enable us to affirm absolutely the rheumatic nature of any affection. It is very probable that we have to deal with an infectious agent; but, up to the present time, this infectious agent has not been cultivated and the disease has not been reproduced by inoculation.

In acute or subacute articular rheumatism, the muscular manifestations occupy chiefly the fibrous or tendinous ends of the muscles; but in certain cases the body of the muscle is also affected.

We should be careful to distinguish muscular rheumatism from certain muscular troubles that occur in the course of acute articular rheumatism, and do not depend upon the rheumatiferous agent. The muscles surrounding a joint undergo atrophy when the articular lesion is prolonged; for instance, the quadriceps femoris often atrophies after rheumatism of the knee. In this case, as the joint is surrounded by the muscle, it might be said that latter suffered directly from the articular fluxion, and the same supposition might be advanced in regard to the deltoid; but this hypothesis can not explain in the hand the atrophy of the lumbrical muscles which gives to the fingers of rheumatic patients their peculiar aspect. Neither can it explain the atrophy of the muscles of the forearm in inflammation of the wrist. Finally, since atrophy also appears in articular lesions generally, it certainly is not to be regarded as peculiar to rheumatism.

Muscular rheumatism becomes associated very easily with articular rheumatism, when it appears in the course of the latter. It is thus that torticollis, with its peculiar pains, may be met with, indepedently of any affection of the vertebral column. In the same subject we may see muscular rheumatism and articular rheumatism occur independently of each other, under analogous causes.

Two years ago our patient had a characteristic attack of articular rheumatism; and, moreover, he regards his present malady as identical with the previous one.

As I have already remarked, muscular rheumatism so generalized as we see it in this case, is exceptional; the disease is usually limited. You all know epicranial rheumatism, rheumatism of the neck (much more frequent), of the loins (lumbago), and that of the shoulder (affecting chiefly the deltoid); the muscles of lower extremities are much more rarely affected; finally, rheumatism of the abdominal muscles is not absolutely rare.

What takes place in the affected muscles? Pathological anatomy throws no light on the subject. There is no atrophy,

except in the chronic form, and nobody ever dies with the disease, unless carried off by some concomitant affection. My colleague, Prof. Hayem, has found only a slight fluxion, but not enough to increase the volumes of the muscles. In myositis, on the contrary, there is swelling of the muscular fibres. In chronic myositis there is no sclerosis of the muscles; but these lesions are different from those of rheumatism.

Muscular rheumatism is to be recognized only by its special pain; and the diagnosis is sometimes a delicate matter. When there is an articular lesion or a lesion of a serous membrane, the clinical characters are generally clear enough to enable one to affirm or deny the rheumatic nature of the case under consideration. When the muscles or the mucous membranes are attacked by rheumatism, only functional disturbances exist with the pain, which latter is well marked in the second case and but slightly in the first. It is important to distinguish muscular rheumatism from other affections attended with diffuse pain in the limbs, or from certain intoxications accompanied by myalgias, lead poisoning, for instance. However, all the infectious diseases, offer special characters, and I will merely say a word about the form of myalgia which accompanies herpetic fever, ephemeral fever, synochus, characterized by small blisters on the lips. The fever is quite often accompanied by pains in the limbs; but those pains are more diffused, do not predominate in muscles or groups of muscles; finally the sufferings are almost continuous, which is not the case in muscular rheumatism.

The treatment of the acute form of muscular rheumatism does not differ much from that of acute articular rheumatism; there is a similarity in the nature of the two diseases, and this authorizes to employ similar remedies. Salicylate of soda is indicated, and it gives good results, though not as stikingly as in acute articular rheumatism. The remedy acts better the more acute the disease is; in chronic articular rheumatism it has no effect. The same may be said of subacute and chronic muscular rheumatism. However, there are certain cases of the chronic form, not fibrous, in which the salicylate has been successful. Antipyrine is also useful in the chronic forms.

Wet cupping, so often resorted to, has a rapid and complete effect, more by cutaneous derivation than by the small loss of blood it occasions. The same effect may be obtained by making multiple acupunctures, and then rubbing some irritating oil on the skin. Faradisation, which produces a redness of the skin also gives good results. We can cause the pain to disappear by injecting beneath the skin a feebly irritant liquid, for instance, pure water. It causes the muscular pain

to vanish at the cost of a sharp but momentary pain in the skin; if this be not felt, no therapeutic effect is produced. The first effects are produced after the injection of any liquid that causes pain, such as alcohol or either. Chloride of methyl sprayed over the affected parts may do some good. All these measures are efficacious in cases in which the rheumatism is about to recede, but are of no avail in the chronic form. Then we should resort to heat, steam baths, massage, hot sulphurous baths, etc.—*L' Union Médicale.* A. MCS.

THE DIAGNOSTIC VALUE OF THE DIPHTHERITIC BACILLUS.

Dr. Simon Flexner, of Louisville, in an article on the Diagnostic Value of the Bacillus of Diphtheria, says:

In an article contributed by Loeffler, to the *Berliner Klin. Wochenschrift*, in 1890. (*Welche Maasregeln erscheinen gegen die Verbreitung der Diphtherie geboten?*), he considers the measures which should be carried out in securing prophylaxis in diphtheria, and his conclusions are:

1. The cause of diphtheria is the bacillus diphtheriæ, and it is found in the exudation of the diseased mucous membrane.

2. The bacilli are thrown off with the membrane. They can be deposited on everything in the neighborhood of the diseased.

3. The bacilli are capable of causing infection in others as long as the slightest trace of membrane is still present, as well as for a number of days after the disappearance of the membrane.

4. Those sick of diphtheria are to be carefully isolated and kept in isolation as long as bacilli are found in the secretions. Children who have had the disease should be kept from school not less than four weeks.

5. The diptheritic bacilli retain their vitality in pieces of membrane for four or five months. It is, therefore, necessary to treat everything that may have been infected by the patient, such as wash, bed-clothes, glasses, dishes, cloths, etc., with boiling water or live steam, while the room in which the sick has lain must be carefully disinfected. The floors are to be washed with a warm solution of bichloride of mercury, 1 to 1000, and the walls and furniture are to be rubbed down with bread.

6. Investigations concerning the vitality of the bacilli in damp surroundings are not yet completed. They are probably more resistant under these conditions. Damp and dark homes seem to be favorable for the preservation of the vitality

of the diphtheritic virus, hence, such homes have to be emptied and opened for the purpose of drying them and for the entrance of light and air. In change of places of living it is especially important that a careful disinfection of the infected home and its contents be made.

7. The bacilli increase outside of the body at 64 deg. Fahrenheit. Milk is an excellent medium for their multiplication. Great care is necessary not to use milk that may come from dairies in which diphtheria is prevailing.

8. Diphtheria of many animals—pigeons, hens, calves, and pigs, is not produced by the same germ that causes the human disease. These animals are not to be feared as sources of human diphtheria. Nothing positive can be said at this time of the diphtheria of cats.

9. Lesions of the mucous membrane favor the invasion of the virus. Susceptible individuals may become affected without such previous lesion.

10. In times when diphtheria prevails, it is of importance to have the mouths, noses, and throats of children clean. For this purpose weak sublimate (1 to 10,000) or an aromatic wash is to be recommended.

The last communication by Loeffler on this matter, has for its subject the therapeutics of the disease (*Zur Therapie der Diphtherie*, *Deutsche Med. Wochenschrift*, 1891, No. 10). In the experinental examination of various drugs and agents which have been used or promised good results in the treatment of the disease, he has endeavored from the beginning of his inquiry so to conduct his work that the practical problem should be approximated as closely as possible, and a practically useful result be obtained.

In combating the diphtheritic bacilli, there are two points to be overcome:

1. To prevent the settlement of the bacilli in the intact mucous membrane of well persons, and on the adjacent unaffected mucous membrane of those suffering from the disease. This settlement of the bacilli is to be prevented either by applying to the healthy mucous membrane such substances as hinder the development of the bacilli, or, what is better, perhaps, by destroying in the shortest time possible, the somewhat non-resistant bacilli which have settled there. It is evident that the means must be such as will not injure the mucous membrane itself or affect the body by its poisonous properties.

2. The bacilli in the pseudo-membrane must be killed in order to prevent the spread of the disease in the person already affected, and to remove the danger of transmission to others.

For the proper investigation of these features it was necessary to use a culture medium in which the bacilli grow as rapidly as in the throats of children, one which is easily and perfectly capable of observation and that admits of being maintained at the proper temperature. By the use of the blood serum-bouillon medium, Loeffler believed he had secured these requirements.

His method was to inoculate such culture-tubes with a dilution in water of the bacilli by drawing a platinum needle carrying a minute quantity of the suspension of the bacilli over the surface of the solidified serum. Placed in the breeding-oven they showed a uniform coating of colonies after twenty-four hours. Into these tubes of fresh colonies, representing the bacilli in contact with the healthy mucous membrane, the reagent was brought and the contact allowed varied from momentary (the fluid being poured off immediately) to ten, twenty, or thirty seconds, corresponding to the length of time one can gargle with comfort.

As soon as the reagent was removed a fresh transplantation of the colonies treated was made, and the results watched and noted.

If the colonies of the original tubes inoculated with the suspension of the bacilli are permitted to grow for several days, a layer of colonies about ½ mm. thick is obtained. This represents the growth in the superficial portions of the mucous membrane. Tubes prepared in this way were tested also, and a large number of reagents were employed. I will give one case as an example of Loeffler's method, and then his conclusions:

A solution of corrosive sublimate of the strength of 1 to 10,000 by momentary contact would destroy the fresh culture (twenty-four hours old); with a dilution 1 to 20,000 only a few colonies remained; but after twenty-four hours longer the growth remaining after treatment with 1 to 20,000 developed into strong colonies. Essentially weaker was the effect of a 1 to 10,000 solution on the older cultures. A solution of 1 to 2000 with a contact of twenty seconds had not penetrated the deeper layers; but a similar contact with 1 to 1000 solution killed nearly all the deeper layers. Stronger solutions killed all colonies. Cyanide of mercury proved effective, and has less of the metallic taste. Carbolic acid was satisfactory also.

Hence, in conclusion, Loeffler recommends that as a prophylactic a gargle be used every three or four hours, consisting of a solution of bichloride of mercury of 1 to 15,000 to 1 to 10,000, or cyanide of mercury of 1 to 10,000 to 1 to 8000. Chloroform-water is useful for the same purpose, and not

unpleasant; and a 1 to 500 solution of thymol in 20 per cent. of alcohol.

In handling those sick of the disease he suggests using one of the weak gargles every one or two hours, and a 1 to 1000 solution of sublimate; a 3 per cent. solution of carbolic acid in 30 per cent. alcohol, or a mixture of alcohol and turpentine, equal parts, containing 2 per cent. of carbolic acid, every three or four hours. Finally, penciling the throat with a 5 per cent. solution of carbolic acid is added.

These solutions has been proven experimentally, not only to prevent the settlement and development of the bacilli on the adjacent healthy mucous membrane, but to destroy the bacilli in the deeper layers of the culture ½ mm. thick. And in two clinics in Berlin, one of Dr. Mosler and the other of Dr. Strubing, in which the carbolic acid and sublimate solutions were used respectively, the most excellent results were obtained; and, whereas by ordinary methods of treatment virulent bacilli were found in the throat after three weeks, when the above methods were followed they could not be found after a few days.

Hence, the disease is not only shortened by this treatment but the affected individual ceases to be a menace to others much earlier than he would otherwise be.

In conclusion, I wish to emphasize the fact that in the last decade, by the employmeat of modern methods of research, more light has been thrown upon this disease than in more than a half century before since its description, and that there is probably no other disease, hardly excepting tuberculosis, that has been rendered so clear in its etiology and pathology, so amenable to prophylaxis, and so promising to treatment.—*American Practitioner and News.*

LARYNGOLOGY, RHINOLOGY AND OTOLOGY.

FOREIGN BODIES IN THE AIR PASSAGES.

Dr. Jno. E. Pendleton, of Hartford, Ky., reports fourteen cases of "Foreign Bodies in the Air Passages," in the third volume of the *Southern Surgical and Gynecological Transactions:*

Case I.—Child 2 years old, suffering with a large inflam-

matory swelling of the parotid region, side of neck and head; had an attack of croup three weeks before that; came near suffocating it. Upon examining the parotid swelling, fluctuation was detected; swelling was punctured with a scalpel when there came in view pus and a hard-pointed substance that proved to be a feather, which, no doubt, had caused the croupal symptoms three weeks before.

Case II.—Mr. B., while hurriedly eating was seized with severe laryngeal spasms.

Recurring attacks came on at intervals of an hour or so, but finally subsided. Upon examination with head and throat mirrors a bit of chicken bone was noticed with its head resting on the left aryteno-epiglottidean fold, while the point was buried in the tissue at the posterior side of the larynx. It was removed with laryngeal forceps. Decided force was required in its removal which was followed by bloody expectoration. Recovery was immediate and without note.

Case III.—Fell dead upon the dining table. At the autopsy a piece of gristle was found wedged in the larynx which was doubtless the true cause of death.

FOREIGN BODIES IN TRACHEA.

Case IV.—E. M., female child, aged 18 months, was found by its mother to be choking. The suffocative paroxysms were frequent and threatened life. After a hasty physical examination the case was determined to be one of foreign body in the trachea. Delay being out of the question, chloroform was given, the trachea was opened and a seed of watermelon extracted. The relief was instantaneous and the wound healed by first intention.

Case V.—Hettie H., aged 7 years, while having a shawl pin in her mouth, was taken with a fit of sneezing, in which the pin passed into the trachea. The immediate symptoms were very distressing, but were finally followed by quiet. The symptoms becoming suddenly more threatening and the patient more exhausted, tracheotomy was performed under chloroform. The pin was searched for with a silver probe and found just below the thyroid cartilage; with forceps it was pushed through the trachea and removed through an incision made one inch above the tracheotomy wound. The wound in the neck and trachea healed after several weeks, leaving an ugly cicatrix. The young lady is now a far-famed Kentucky beauty.

Case VI.—Mary T., aged 6 years, while running at play, tripped and fell, and inspired one of several grains of corn which she was holding in her mouth at the time. The symp-

toms were at once urgent; the attending physician insisted on opening the trachea but parents obstinately refused. For six weeks patient continued to suffer dangerous paroxysms of suffocative cough. Bronchial inflammation, with pneumonia in the right lung, set in, followed by purulent expectoration, fever, and night sweats, leading to pyæmia and extreme exhaustion. Child could not tolerate pressure on chest from any direction, and for several weeks had to be supported in a sitting posture by holding her arms. Knowing that tracheotomy was the only chance, it was urged and performed. From within the trachea, through the tracheal wound, there poured out about two ounces of blood, two or three ounces of fetid pus, and following it a grain of corn. Recovery was retarded by the abscess in the lung, which, however, finally filled up, and she is now in perfect health.

Case VII.—Wm. C., aged 5 years, falling from a fence, inhaled a little bean which he had in his mouth. Blood came from the nose and mouth, the face was livid, the eyes protruding; these violent efforts at respiration left him unconscious after each paroxysm, which continued to occur until strength was exhausted. Holding him in the erect position would shorten the fit and lessen its severity. Dr. P. saw him twenty-four hours after the accident. He could not bear the least pressure on the chest. Tracheotomy was performed under chloroform, and the bean after being drawn down the trachea by a full inspiration, was expelled by a forcible expiration. The wound was completely healed in a few days.

Case VIII.—M. G., female, aged 11 months, while eating potatoes and fish prepared by her mother, became suddenly choked. A physician was called who failed to give relief. Dr. P. saw the child the next evening and thought it was moribund; however, four of the tracheal rings were incised, which immediately relieved the distressed breathing, but no foreign body could be seen in the trachea. Forceps could not be used in the trachea, because of its small size, therefore a delicate bent probe was passed upward and made to grasp the foreign substance in its curve. The foreign body was broken in two pieces by the considerable traction required to dislodge it; one piece was removed through the tracheotomy wound, and the smaller piece caught up through the mouth. It proved to be a fish bone three-fourths of an inch long, one-third of an inch wide and one-fourth of inch in thickness; rough, irregular and semi-circular in shape. Tracheotomy wound healed kindly; child is now well.

Case IX.—J. P., young college student, had a chronic pharyngitis for which he gargled with kerosene oil, through

the advice of a charlatan. Almost a tablespoonful of that irritant was inhaled into the trachea at the first experiment.

Alarming and distressing suffocative symptoms immediately ensued; the violent laryngeal spasm would only subside when life was almost extinct, to be renewed again and again. Bloody froth was blown from the mouth and nose, the eyes protruded; these efforts were continued until patient was completely exhausted.

Dangerous inflammation of the mucous lining of the air tracts and cells, and œdema of the glottis were lighted up. The œdema was punctured. The broncho-pneumonitis continued for several days; the temperature reaching as high as 104.20 deg. At the expiration of two weeks, he could speak above a whisper only. He slowly recovered.

Case X.—W. McG., aged 2 years, was seen by Dr. P. three days after a grain of corn had entered his trachea. Physical signs, paroxysmal choking cough, and history made the diagnosis certain. Tracheotomy was urged by Dr. P., but not allowed by parents. He returned home and died on the sixth day in a fit of protracted asphyxia.

Case XI.—John P., aged 18 years, inhaled a cockle-bur into his trachea, while attempting to remove it from his glove with his teeth; suffering described as terrible agony. Dr. P. saw him two hours after the accident when he was completely exhausted and partially narcotized by a dose of morphine given by the previous medical attendant. Countenance was anxious, pulse rapid, respiration asthmatic and labored. Aphonia was complete and due probably to the spires of the bur which was movable and changed its location with respiration. Tracheotomy was proposed, but most emphatically refused by the mother, notwithstanding the patient's willingness to submit to the operation after three months' of dreadful suffering that led to hectic fever, night sweats, purulent expectorations and extreme emaciation; he coughed up the bur and recovered.

Case XII.—James G., aged 18 years, came to Dr. P. with a cockle-bur in his trachea. He refused tracheotomy, went home and had a similar experience to that of the preceding case, except that the bur was not expelled until five and a half months had elapsed from the time it was inhaled.

Case XIII.—Symptoms mistaken for those of an acute asthmatic bronchitis. Jno. T., aged three years, while running, knocked his head against a chair and fell. He was picked up and found to be livid and struggling for breath. Acute distress continued until Dr. C. arrived. The doctor did not suspect the presence of a foreign body in the trachea,

but attributed the symptoms to shock. After examining the chest he gave an emetic, followed by potions containing opium. For three weeks the suffocative paroxysms of coughing continued, and the signs of broncho-pneumonitis in the right lung persisted. The distress finally became less urgent. Several physicians agreed to its being broncho-pneumonia. Dr. P. saw the case six weeks after the accident occurred and found the respiratory sounds almost entirely absent over the middle and lower posterior portions of the right lung, while over the left lung loud puerile breathing and moist râles were heard. Then a suffocative attack of cough came on which reversed the physical signs mentioned above, *i. e.*, the respiratory sounds were heard over the right, while they were suppressed over the left lung. The foreign body changed its position in the trachea. The diagnosis was clear, but tracheotomy was not urged because the history showed that the patient was gradually improving. A few days after Dr. P's visit the patient coughed up a native nut-gall about the size of a pea. It was round, smooth, except where it was broken off from the twig from which it grew, and very light. The spasmodic cough never recurred after its expulsion, and the pulmonary and bronchial troubles soon vanished.

Case XIV.—E. R., female, 2 years old, inhaled a grain of corn; symptoms were distressing at first but became less urgent in about two hours. Dr. P. saw the case forty-eight hours after the accident, when it was sleeping and respiration only slightly more rapid than normal. Respiratory sound in the left lung obtunded, with loud puerile breathing in the right lung. The dangers of letting a foreign body remain in the windpipe were explained to the parents as well as the perils of tracheotomy. They consented to the operation as it was right; the child being asleep and quiet and in no immediate danger, I determined to leave the house and return the next morning for the purpose of opening the trachea. Not long after Dr. P. left the house the child awoke with a fit of coughing and suddenly expired, the grain of corn being wedged in the rima glottidis. Dr. P. says: "Had I done as I have determined to do in the future a life would have been saved, and I would not be recriminating myself for failing to do my duty."

C. J. L.

POLYPOID DISEASE OF THE NASAL CHAMBERS.

Dr. E. B. Gleason (*American Lancet*) divides nasal polypi into three classes: mucous, fibrous and cystic polypi. Cystic polypi are extremely rare. He quotes a case reported

by Cruveilhier and referred to by Bosworth, where the membranes of the brain protruded into the nasal chambers and resembled nasal polypi; an autopsy cleared the nature of the case. Polypi are almost invariably attached to some part of the ethmoid bone. Etiology: Any irritation of the mucous membrane, especially when associated with defective nasal drainage, caused by deflected septum, ecchondroses, or hypertrophies of the inferior turbinated body, but most frequently polypi are caused by diseases of the ethmoid bone (necrosing ethmoiditis, Woakes).

The disease begins with hypertrophy of the middle turbinated bodies, which, during attacks of acute caryza, press on the septum and produce neuralgia; there is also pain about the eye, congestion of the conjunctiva and epiphora. The neuralgia during the attacks of coryza may be alleviated by applying to the nostril a piece of cotton saturated with a 4 per cent. solution of cocaine. Cocaine does not produce anæsthesia as well and as quickly when the mucous membrane of the nose, eye, or tympanic cavity is inflamed as when it is not.

After applying the cocaine, the parts should be sprayed with a 4 per cent. solution of analgesin and afterwards with a 3 per cent. solution of menthol in olive oil, to prevent the return of the swelling and inflammation which, otherwise, would be greater than before the application of cocaine. A nasal suppository containing one-eighth of a grain of cocaine and one-sixteenth grain each of analgesin and menthol in ten grains of cocoa butter may be prescribed for patient's use at home, at intervals sufficiently frequent to maintain contraction of the inflamed tissue and diminish the discharge. During the first stage of necrosing ethmoiditis certain reflex symptoms are present such as, acneiform rashes on nose or face, nasal chorea affecting the orbicularis and adjacent facial muscles, slight conjunctivitis, asthenopia, photophobia and lachrymation. The radical treatment of the first stage of necrosing ethmoiditis consists in the removal of a portion of the diseased middle turbinated body, with a properly constructed Jarvis snare. When a necrosing ethmoiditis does not terminate in polypus, it usually leaves a cleft through which bony spicules are exfoliated and the disease finally cured. Reflex asthma, petil and grand mal are common at this stage of the disease.

Fibrous polypi degenerate readily into sarcomata. They often grow to a large size and send processes into the accessory nasal cavites and cause broadening of the bridge of the nose and the deformity called "frog face."

Mucous polypi are soft, gelatinous and symmetrical,

Mucous and fibrous polypi in the nose have a pinkish color and a pearl lustre.

Nasal polypi are removed with a Jarvis snare, after cocainization, and their removal is painless and bloodless.

Dr. Gleason cites a case of asthma due to a mucous polypus and hypertrophic rhinitis, which was cured by the removal of the polypus and the application of the galvano-cautery to the hypertrophied tissues in both nostrils.

Nasal polypi due to a necrosing ethmoiditis will invariably return until the ethmoid disease is cured.

The treatment of necrosing ethmoiditis is as follows: a dental curette or scaler suitably shaped is passed into the sinus or cleft in the turbinated body until dead bone is felt; then, with the sharp edge of the instrument, but using the utmost gentleness, the necrosed spicules of bone should be scraped away until a perfectly smooth surface is produced. The procedure is nearly bloodless and painless after cocainization, but the utmost gentleness and caution should be used in all operations on the ethmoid bone. The galvano-cautery knife may be used instead of the dental curette, at a red heat. Dr. Gleason cites a case of polypi due to necrosing ethmoiditis which was completely cured after the use of the dental scraper as described above. After the removal of polypi the patient complains of loss of power to smell, and the turbinated bodies be found hypertrophied; they should be cauterized either with the galvano-cautery or chromic acid, or any piece of bone from the septum, touching the turbinated body, should be nipped off, when the loss of power of smell, asthma, shortness of breath, etc., will usually disappear. C. J. L.

MENTHOL IN LARYNGEAL AND PULMONARY TUBERCULOSIS

Assendowsky (Annales des Maladies de l'Oreille, 2 Juin 1891) relates his experience in the treatment of twelve cases of tuberculosis of the lungs; fifteen cases of tuberculosis of the larynx, with menthol used externally and by inhalation. The results in the lung case were: an amelioration in the general condition, augmentation of appetite, expectoration easy and diminished in quantity. The remedy does not expose to renal irritation nor to hemoptysis. In the laryngeal cases the remedy applied locally acts as an analgesic, diminishes inflammation and infiltration; superficial ulcers have a tendency to heal, but not the deep ones. It is better to begin with a 10 per cent. solution and increase the dose little by little; a 40 or 50 per cent. may cause irritation. The local and general treatment should be associated. C. J. L.

Book-reviews and Notices.

A Practical Treaties on Disease of the Skin. By Henry G. Piffard, A. M., M. D., Clinical Professor of Dermatology, University of the City of New York; Surgeon in charge of the New York Dispensary for Diseases of the Skin; Consulting Surgeon to Charity Hospital; Consulting Surgeon to the Bureau of Out-Door Relief, Bellevue Hospital; Consulting Dermatologist to the Board of Health, etc. Assisted by Robert M. Fuller, M. D., with full-page original plates and thirty-three illustrations in the text. New York: D. Appleton & Company, 1891.

Dr. Piffard is nothing if not original. He now appear before the public with an atlas of skin diseases, the illustrations of which are photographs taken by himself with the aid of artificial light, which the author's experience leads him to prefer for this purpose to ordinary daylight.

Many of these plates are remarkably true to life, besides being excellent examples of the diseases represented.

The greatest success is attained in those diseases accompanied by papular or tubercular projections, where light and shade can illustrate the character and extent of the lesions. An apparent exception to the fact that flat lesions are not well shown in the illustration of seborrhœal eczema, facing page 120. In this flat eruption, the gradual deepening of shades gives a clear idea of the character of the lesion. The author, accepting Unna's excellent discription of this affection, can not agree to calling it an eczema, and proposes the name of *sudolorrhœa*.

Two illustrations rarely found in other atlases, or indeed elsewhere, are well represented here. One is Paget's disease of the nipple, called by the author, *mammillitis maligna*, and the other is *psrosperinosis*.

The work is not at all an exhaustive one. The subject of pathological histology is entirely omitted, but the valuable illustrations contained therein make it a question with the surgeon and specialist not so much whether he will get the book as whether he can afford to do without it.

H. W. B.

Origin, Purpose and Destiny of Man, or Philosophy of the Three Ethers. By William Thornton, Boston, 1891. Published by the Author.

Under the foregoing high-sounding title, man's origin and destiny are discussed—or at least, occasionally alluded to. The author has some exceedingly original views and endeavors to show how medicine may be made a science. As empiricism prevails in every branch, we must endeavor to formulate medicine rationally. Disease arises from defective nutrition, and this should be remedied by returning to the body pabulum composed of chemical elements found normally there. Other substances, such as lead, mercury, digitalis, nux vomica and most of the common drugs of the pharmacopœia are incompatible.

The author claims to have made certain discoveries in diabetes mellitus and other diseases leading to a cure of them, but omits to give this formula. If this be so, he has done the profession and humanity a great injury. We regret this omission, for the practical and useful side of this work is thereby entirely lost. H. W. B.

Twelve Lectures on the Structure of the Central Nervous System, for physicians and students. By Dr. Ludwig Edinger. Second revised edition, with 133 illustrations, translated by Willis Hall Vittum, M. D., and E. Eugene Riggs, A. M., M. D. Philadelphia: F. A. Davis, publisher, 1890.

This is a good translation of a standard work on the central nervous system. The lectures open with a brief, but interesting review of the history and methods of investigating the central nervous system. The embryology and comparative anatomy take up seventeen pages of the book, and are presented in as interesting a way as the diffiulties of such intricate subjects will permit. Then the various parts of the brain are taken in their order, and described very accurately and minutely. The illustrations are numerous and well executed. There is one feature, however, which may be objectionable to American students, who are not familiar with German, namely, the German names of the parts in the illustrations. The references are not by figures, but the German names are engraved in the figures. Beneath each figure, English equivalents for the German names are given, so that the difficutty is one which will not cause any great loss of time or labor. A. McS.

Collected Contributions on Digestion and Diet. By Sir Wm. Roberts, M. D., F. R. S. (Lea Bros. & Co., Philadelphia).

This book mainly consists of the Lumleian Lectures "On the Digestive Ferments and Artificially Digested Food," delivered by the author before the College of Physicians in 1880, and a course of five lectures "On Dietetics and Dyspepsia," given at the Owens College in 1885. The author has also put in all of his other contributions on Digestion, Dietetics and Dyspepsia. He divides his work into four general sections, as follows:

1. Digestion and the Digestive Ferments.
2. Dietetics.
3. Preparation of Food for Invalids.
4. The Acid Dyspepsia of Healthy Persons.

He then subdivides these sections into many subdivisions and writes of them in detail. The whole work shows that the author has been a careful observer, and is so well written and practical, that everyone should have it W. E. P.

Surgical Bacteriology. By N. Senn, M. D., Ph. D., Professor of Surgery in Rush Medical College, etc. Second edition, thoroughly revised. Philadelphia: Lea Bros. & Co, 1891. (New Orleans: Hawkins & Co., 194 Canal Street. $2.)

The second edition of this valuable work incorporates all the advances made in bacteriology in relation to surgery. A surgeon can not be such without being a pathologist, and bacteriology is now an essential part of modern pathology. Not all men who would be enlightened surgeons can afford the time to become accomplished bacteriologists. The facts in bacteriology that bear upon surgery are scattered through a vast mass of literature. The labor of selecting them and arranging them in a systematic manner is one that involves profound erudition and great labor. The work before us attests the learning and diligence of the Milwaukee surgeon; and the rapid exhaustion of the first edition shows how fully the surgeons of our country appreciate the merits of the book. Senn has placed American surgeons under a lasting obligation for the clear and masterly manner in which he has given them the facts that will enable to form accurate ideas of surgical pathology. A. McS.

State News and Medical Items.

[Communications from Physicians of Louisiana are solicited for this Department. News of personal interest is especially desired.]

CHARITY HOSPITAL.

The regular meeting of the Board of Administrators of the Charity Hospital was held on August 4, 1891, and the Board was re-organized, the personnel remaining the same, with the exception of the new appointee, Mr. Geo. Seeman, who took his seat.

Vice President Bickham called the meeting to order. There were present: Col. W. G. Vincent, J. H. Keller, George Seeman, Hugh McManus and Secretary Edwin Marks.

The chairman explained that the meeting was one at which the newly commissioned members of the board would present their credentials, and that it was necessary to reëlect the officers of the board.

He was nominated to succeed himself, and Col. Vincent, who was called to the chair, put the motion, which was carried.

After resuming the chair, Dr. Bickham expressed his thanks for the honor done him, and with a few appropriate remarks he called for nominations for the remaining offices. The election was then proceeded with, with the following results:

Dr. A. B. Miles, house surgeon; Dr. J. D. Bloom, assistant house surgeon; Edwin Marks, secretary and treasurer; Dr. H. D. Bruns, pathologist; John Johnson, chemist and druggist; J. C. De Mahy, clerk; John Ponder, engineer; Dr. S. P. Delaup, assistant pathologist.

The regular order of business was then taken up, and under that head Secretary Marks read a letter from the firm of attorneys representing the Switzer estate, in which the tidings were conveyed to the board that the sum of $20,000 had been left by the deceased with the proviso that Mrs. Switzer would have the usufruct of the legacy during her life. Mr. Marks stated that he had called on the firm of attorneys who informed him that as the lady was possessed of considerable means there was every good chance of her relenquishing her claim to the usufruct and allowing the legacy to go to the hospital.

The news was of a very agreeable nature, and the mem-

bers of the board expressed their hearty appreciation of the timely remembrance of the institution by a vote of thanks.

Secretary-Treasurer Marks read his report for the month of July, showing the financial status of the institution. The receipts during the month amounted to $49,950.24 and the disbursements for the same period were $7471.81, leaving a balance on hand of $42,478.43.

Mr. Marks announced that, with the approval of the board, he would offer Messrs. John T. Gibbons, Col. A. W. Hyatt and Major Andrew Hero as sureties on his bond. These sureties were accepted by the board on motion of Col. Vincent.

In making his report, Dr. A. B. Miles, house surgeon of the Hospital, prefaced his remarks by returning thanks to the Board of Administrators for their kind favor in reëlecting him to the position which he had occupied for years The other members of the medical staff of the hospital joined with Dr. Miles in his return of their thanks, and through him they pledged themselves to serve the institution with conscientious attention.

Continuing his remarks, and touching on the affairs proper of the hospital, Dr. Miles said that all the reports from the special departments had been approved by him. There was about the usual number of patients in the hospital, and there was, he said, no epidemic diseases prevailing. Dr. Miles stated that applications for leaves of absence had been made to him in regular form by Dr. J. Moore Soniat, to replace whom no one had been selected; Dr. Paul Michinard, whose place will be filled by Dr. Lamb; and Dr. John Laurans, for whom no substitute had been found. Dr. Miles said that if no member of the hospital staff would take Dr. Laurans' ward he would attend to it himself. In conclusion, Dr. Miles asked for a month's leave of absence for Dr. Bloom, his assistant, who would leave first, to be followed later by himself.

On motion of Mr. McManus, the applications were all agreed to, and Vice-President Bickham stated that Dr. Bruns had made application to him for a leave of absence to go to Virginia, where his family were summering. Dr. Bruns had informed him that there was sickness in his family, and as the case was an urgent one, Dr. Bickham said he had given Dr. Bruns leave of absence for two months.

Mr. McManus moved an approval of Dr. Bickham's action, but Col. Vincent was inclined to object on account of the application not having been sent through the usual channel. He argued that the action was a disregard of the courtesy due the board and the house surgeon.

Mr. McManus took exception to the remarks of Col.

Vincent, and held that as Dr. Bickham had given the case his attention there was no further use of discussing the matter.

The vote was taken and Dr. Bruns' leave of absence was approved, Col. Vincent remarking that in the future he would oppose all applications which did not come through the proper channels.

Taking up the thread of his remarks, Dr. Miles said that in conformity with the resolution passed at the last meeting of the board he had drafted a set of rules for the governing of the outdoor clinic, now in course of preparation. The doctor stated that he did not wish to have the rules published as yet, as it would be a little premature. He said that he could furnish the gentlemen of the board with copies of the rules if such was the desire of the board. It was decided to have printed copies of the rules submitted to the members, who could make such amendments thereto as they would see fit.

Dr. Miles then read the following rules for the ambulance service:

1. The ambulance service, constituting a part of the medical department, shall be conducted under the general rules governing the hospital.

2. This shall be an emergency service, intended more especially for cases of sudden illness or injury.

3. An ambulance will be dispatched to any part of the city, at the call of patrons of the service, physicians, the city police, the fire department, or other responsible source, subject to the approval of medical officers of the hospital.

4. The ambulance on a call shall be attended only by members of the ambulance corps, in uniform and wearing a badge of the service.

5. The driver shall have special care of the ambulance, its equipments and the horses, and shall keep the harness in good order. He shall not leave his seat while in actual service.

6. The ambulance surgeons shall have executive control when on duty. They shall administer on the spot such temporary treatment as may be necessary, and except in cases specified below, convey patients without delay to the hospital.

(*a*). The ambulance shall not receive cases of smallpox or other patients rejected by the rules of the hospital, for instance those whose condition is not serious enough to warrant admission.

(*b*). Cases of emergency may be removed to their home or place of lodging, without charge, when they can not afford the fee.

7. The duties of the ambulance surgeon are strictly medical, and when out on a call they shall not give opinions bearing on medico-legal questions.

8. Upon return of the ambulance to the hospital the medical attendant shall supervise the removal of patients to the ward or operating room, and then report to the house surgeon or to the assistant. It shall also be his special duty of the day to record in the clinical notebook of the ward or the amphitheatre register his knowledge of the patient's disease or injury, and the preliminary treatment adopted.

9. In all doubtful questions regarding their duty the ambulance surgeons are instructed always to pursue the course that inclines to the side of humanity.

10. The ambulance may be hired by responsible persons and for suitable purposes; for iustance, the conveyance of patients between steamboat landings, railroad depots and the hotels, for $10, the amount thus accruing to be delivered to the treasurer and credited to the fund of the service.

11. The ambulance relief fund created by resolution of the Board of Administrators and aided by the contributions of patrons, shall be devoted exclusively to establishing and maintaining this service, and enhancing its usefulness as a public charity.

12. Subscriptions will be duly acknowledgee by the secretary and treasurer of the hospital.

Following the rules appears the ordinance (No. 978, C. S., adopted October 30, 1884), giving the ambulances the right of way through the streets. It was decided that a number of copies should be printed, and that they be placed in prominent parts of the city.

The following report for July, 1891, was then read: Number of patients in hospital July 1, 559; number of patients admitted, 537; foreigners, 168; United States, 369; males, 401; females, 136; number of patients discharged, 479; males, 354; females, 125; number of deaths, males, 51; females, 17; total, 68; number of patients in hospital August 1, 1891, males, 350; females, 199; total, 549; daily average of patients for month, 561.

A lengthy discussion as to the plans for the new buildings to be used for the out-door clinic was then indulged in, and the board resolved to make the matter the subject for a special meeting to be held on Thursday next at 7: 30 o'clock.

Nothing further being before the board, it was declared adjourned, and an executive session was held. — *Times Democrat.*

Drs. Layton and Surghnor, of Monroe, La., have organized an out-door clinic. It is meeting with success, and it has an average of forty patients at each clinic. They report good results with Koch's Lymph, in *local* tuberculosis. An infirmary will be built in September, with fifteen beds.

Dr. Julius F. Schmittle, of New Orleans, has returned to the city.

Dr. William Schuppert is the guest of Dr. and Mrs. Von Gohren, of Bay St. Louis, Miss.

Dr. Loeber is an evidence of what Bay St. Louis air can do. His health has been greatly improved.

Dr. R. W. Faulk has moved to Monroe, from Texas.

Dr. R. L. Luckett, junior class of 1891, was elected a member at the last meeting of the Rapides Parish Medical Society.

Dr. H. Dickson Bruns has gone to Virginia, to spend a few weeks. He will return by October 1.

Dr. A. De Seay, of Ruston, takes an active interest in fostering the spirit of medical organization. He has been elected president of the Lincoln Parish Medical Society.

Dr. C. A. Chandler, of New Orleans, spent his vacation at Covington, La.

Dr. C. M. Smith has returned to Franklin from a pleasant trip to Virginia.

Dr. W. F. Pearson, of Alabama, has settled in Houma, La.

Dr. R.B. Hooper, of Timpson, Tex., who has been staying in New Orleans since last February, has returned to his old home.

Dr. Ernest Laplace, formerly of New Orleans, paid a visit to the city of his birth last month. He left on August 17 to be in readiness to resume his arduous duties as professor of Pathology and Clinical Surgery in the Medico-Chirurgical College of Philadelphia.

Prof. E. S. Lewis has returned to New Orleans, after a holiday spent in the Catskill Mountains.

Dr. C. M. Fisher, of Shreveport, has been a constant reader of the Journal for many years. It is gratifying to learn that the recent changes introduced have impressed our old friend agreeably.

Dr. J. P. Runyan has returned after a month spent in Arkansas.

Dr. J. A. K. Burchett, of Vicksburg, Miss., was in the city last month.

Dr. Silva Jardin, of Rio de Janeiro, met with a terrible death—by falling into the crater of Vesuvius.

Governor Nicholls has appointed Dr. Geo. K. Pratt a member of the State Board of Health of Louisiana, vice Dr. Henry Bezou, resigned.

Mr. Joseph T. Scott, Jr., son of Dr. T. J. Scott, has been appointed resident student of the United States Marine Hospital, of this city, in place of John Archinard, resigned. Mr. Scott is a student at Tulane University.

Dr. H. Hayward has returned from a short vacation in Georgia.

The Remains of Dr. Jas. F. Heustis Interred at Mobile.—The funeral of Dr. James F. Heustis, Mobile, took place on August 30 from St. John's church, Rev. G. C. Tucker officiating. There was a large attendance and many handsome floral emblems. The medical faculty attended in a body, as did the orphans of the Church Home, of which institution he was physician. The interment was in Magnolia cemetery.

Dr. G. Frank Lydston has been elected to the Chair of Genito-Urinary and Venereal Diseases at the Chicago College of Physicians and Surgeons. Dr. Lydston's contribution to the literature of this special branch of study, have made him so well known that the college and its classes are to be congratulated on the appointment made.

Dr. J. L. Cunningham has been elected president of the Fort Worth Medical Club.

The Medical Department of the University of Texas.—This institution, located in Galveston, will open the

coming fall with nine professors, and will give three years' graded course of instruction of eight months each. We learn from the *Virginia Medical Monthly* that the pay of each professor will be, on an average, $3,000 each session. The President of the Board of Regents is Dr. Thomas D. Wooton, of Austin. The College and Hospital will occupy adjacent blocks in Galveston, immediately upon the gulf and bay. It is the determination of the Regents to make this a truly leading school of medicine in every respect, and to allow none to graduate from it who are not deemed worthy of diplomas.

A New Bureau.—Secretary of Agriculture, Rusk has recently put in working order his new bureau in Chicago for the microscopic examination of hog products for export. He selected a corps of thirty microscopists, fifteen men and as many ladies, and they were set to work under the direction of Drs. John Michels, of New York, and F. H. Bernard, of Pittsburg—microscopical experts. The force will be increased until it is large enough to examine a piece of the diaphragm and of the tenderloin of each hog killed. Those found to be diseased will be condemned.—*Science.*

Dr. Brinton, so long known for his surgical work, and his former connection with the *Philadelphia Medical and Surgical Reporter*, has received the degree of LL.D. from the Jefferson Medical College in recognition of his researches in anthropology and ethnology.

Surgeon John Godfrey, M. H. S., was appointed to represent the service at the Seventh International Congress of Hygiene and Demography, at London, July 25, 1891; detailed as member Board of Examiners August 8, 1891.

Passed Assistant Surgeon H. R. Carter was granted leave of absence for thirty days, August 8, 1891.

Sir Morrell Mackenzie, the celebrated throat specialist of London, has brought suit for $10,000 damages, for the alleged unauthorized use of his name, against the Soden Mineral Springs Company and the Eisner & Mendelson Company. An injunction has been asked for.

Cremation flourishes in Japan.—Tokio has six crematories, in which the bodies of at least one third of the dead are

burned. In 1888, 11,023 of the 34,437 persons who died were cremated, and since burial in the city has been forbidden, the number has increased. According to the style of cremation, the price is $3.75, $2, or $1. Sixty-six pounds of wood, which costs approximately 25 cents, suffices for the burning of a body in three hours.—*Clin. Rep.—Courier of Medicine.*

Dangerous Pets.—A French scientist declares that the domestic pets of the world carry at least 30 per cent. of the common contagious diseases from house to house.—*Am. Analyst.*

The first number of the *Apothecary*, published by the Illinois College of Pharmacy, has been received. *The Apothecary* is a quarterly journal, devoted to pharmacy, chemistry, botany, materia medica, metrology, and to pharmaceutical education and progress.

By the will of the late Dr. Fordyce Barker, the New York Academy of Medicine is to receive all the works in his library relating to obstetrics, gynæcology, and the diseases of children.

The lunatics and diseased persons sent back to Europe from the State of New York during the last seven years numbered in all, 1374.

Medical men have occasion to know that but a small percentage of the diseased and dependent classes are returned to their homes. One-third of our insane are foreign born, as is also over one-half of our dispensary and hospital population.

"Doctor," said a grateful patient, seizing the physician's hand, "I shall never forget that to you I owe my life." "You exaggerate," returned the doctor mildly; "you owe me for only fifteen visits. That is the point I hope you will not fail to remember."—*Exchange.*

There are altogether in the United States and Canada forty-seven faculties of medicine which receive students of both sexes, and nine devoted to the medical education of women exclusively.

The late Dr. Yandell, of St. Louis, was fond of telling the following joke on himself: A lady patient of his, on entering his consultation room one morning, greeted him with the remark: "Doctor, I had such a singular dream about you

last night." "Indeed," said the doctor, "what was it?" "Why, I dreamed that I died and went up to heaven. I knocked at the golden gate, and was answered by St. Peter, who asked my name and address, and told the recording angel to bring his book. He had considerable difficulty in finding my name, and hesitated so long over the entry when he did find it, that I was terribly afraid something was wrong, but he suddenly looked up and asked, 'What did you say your name was?' I told him again. 'Why,' said he, 'you've no business here. You're not due this ten or fifteen years yet!' 'Well, said I, 'Dr. Yandell said—' 'Oh, you're one of Yandell's patients, are you?—that accounts for it. Come right in! come right in! that man's always upsetting our cal culations in some way.' "

The county commissioners of Cook County, Illinois, have appropriated $80,000 for two new pavillions at the Cook County Hospital, $35,000 fora Morgue, $40,000 for a Detention Hospital for the insane, and $40,000 for detached wards for contagious diseases. Plans are perfected and building will go rapidly on, that for the Detention Hospital and Morgue being well under way.

It is a sad comment upon our boasted civilization for Chinese quacks to be patronized by our people; yet such is the case in our most enlightened centres. We send our missionaries to China to preach to the heathens, and at the same time the heathens are here among us with their lizard juice and pulverized bugs and worms, for which they find a ready demand from a class of people who claim "the Chinese should be civilized."—*Ex.*

Human milk was recently examined at, and reported from Tokyo (Japan) Sanitary Laboratory, and shows that the milk of Japanese women contains less nitrogenous matter and ashes, and proportionately larger amount of carbo-hydrate than that of European. This is probably due to the consumption of rice in Japan.—*Sei-i-Kwai.*

The September number of the *New Englaud Medical Monthly* is a souvenir number, issued to celebrate its tenth birthday. The enterprising editor, Dr. Wm. C. Wile, has

gathered the pictures of many doctors from all parts of the country; and the souvenir number, in addition to containing the usual amount of valuable reading matter, is a veritable picture gallery of contemporaneous medical men of eminence. The JOURNAL wishes the *Monthly* continued prosperity.

THE Alvarenga Prize for 1891, of the College of Physicians of Philadelphia, has been awarded to Dr. L. Duncan Bulkley, of New York, for his essay on Syphilis Insontium.

In the southern part of "ye olden" London was the seat of eccentric Dr. I. Lettsom, one of the most successful physicians of his day. His practice was very extensive. In some years his receipts were £12,000. He is reported to have said of himself:

"When patients come to I,
I physics, bleeds and sweats 'em,
Then—if they choose to die—
What's that to I—I let's 'em."

He was running a pile driver at the base of a slipping hillside. Mose had heard of him as a most efficient man in his business, and meeting him in a saloon, said: "Boss, I's troubled awful wid de piles; what you charge to drive 'em away?"—*Gleaner*.

It is stated in *Nature* that Siam, following the example of Japan, is commencing to Europeanize her institutions. The founding of a university has been decided upon, and Prof. Haase, of Königsberg, has accepted the appointment to the chair of physics.

"Man born of woman is of few years and full of bowel-trouble."—*Solomon, Revised*.

I think many of our examining boards have met this school boy at a somewhat maturer stage of his development. He was requested to briefly name and describe the divisions of the human body and the contents of each. "The body is divvided into three cavvyties, the head, thoracks and abbdomen; the head contains the brains, when there is enny; the thoracks contains the lungs, liver and diafram; the abbdomen contans the bowils, which is five in number, *a*, *e*, *i*, *o*, *u*, and sometimes *w* and *y*.

Practical Notes and Miscellany.

THE PROGRESS OF CHOLERA.

Cholera is still preading in Abyssinia, the disease making great progress at Massowah, where not only natives but some Europeans have been attacked. The heat is stated to be excessive. It is also alleged that some cases have occurred among pilgrims at Mecca, and that detention at Red Sea ports is already being arranged for pilgrims before returning to Egypt or passing up the Suez Canal. The occurrence of the disease at Aleppo has led to quarantine being imposed by the Austrian government on all arrivals from Syrian ports between Karatash and Latakia and the same regulation will apply to arrivals from Red Sea ports.

TRI-STATE MEDICAL ASSOCIATION.

The third annual meeting of the Tri-State Medical Association will convene in Turner Hall, Chattanooga, Tenn., Tuesday, October 27, 1891, and continue in session three days. Indications are that it will be one of the largest medical meetings ever held in the South. Representative physicans from all sections will be present.

All who desire to read papers should send title to the secretary of the association before September 1. In due time a circular will be issued giving a complete list of all papers and names of exhibitors who apply for space before October 1.

W. L. Gahagan,
Secretary of Executive Committee.

SEDATIVE FOR BABIES.

Dr. Van Goidtsnoven, of Atlanta, gives a formula with which he has had most gratifying results in restlessness, spasms, delirium, and in all cases requiring a sedative, anodyne, antispasmodic or somnifacient.

℞. Camphor, monobromat.....gr. xvi.
Ext. hyoscyami fl.....gtt. xvi-xxx.
Syrup lactucarii (Aubergier's)....f℥viij. M.
S. A tablespoonful every hour till relieved.

—*Dixie Doctor.*

INFANTILE DIARRHŒA.

1. Withdraw all milk from twenty-four to thirty-six hours. 2. Regulate the quantity and quality of the food and the frequency of giving it. 3. Give plenty of cool water. 4. Reduce the temperature with the bath. 5. Give medicines of an antiseptic and astringent character and stimulants as needed. 6. Wash out the colon two or three times a day.—*Archives of Pœdiatrics.*

IODOFORM AND ARISTOL.

Dr. Richtmann recommends (*Nouveaux Rem.*) that aristol be used to replace iodoform, since it presents all the advantages of iodine and thymol without any of their disadvantages. Aristol does not cause irritation; its absorbtion is not followed by any phenomenal intoxication, and its odor is not disagreeable. Being less volatile than thymol, its use is especially indicated in extensive burns. It may be prescribed as a powder, or an ointment, or given in solution. The preparations used by Richtmann are as follows:

℞. Aristol pure.....gm. 10.
S. For external use.

℞. Aristol.....gm. 1.
Ether.....gm. 10.
S. For external use.

℞. Aristol.....gm. 2.
Paraffin ointment.....gm. 18.
S. For local application.

℞. Aristol.....1 to 5 cgm.
Cocoa butter.....q. s.
S. For uretral or vaginal bougies.

—*Medical Standard.*

PHENACETIN IN SCIATICA.

Sciatica is not only one of those affections which are extremely annoying and painful to the patient, but on account of its persistency often greatly tries the patience of the physician. At the clinic of Prof. Landon Carter Gray most benefit has perhaps been obtained from phenacetin, given, say, in tablets of four to eight grains every three or four hours. There are a good many cases, however, which do not respond to it very markedly. Doubtless, too, there are many cases of scia-

ica neuritis, rheumatism, gout, etc., in which a diagnosis of sciatica is erroneously made; but perhaps more frequently sciatica is mistaken for one of these affections.—*Practice.*

BISMUTH FOR ECZEMA OF INFANTS.

The following formulæ is given in *Nouveaux Remèdes:*

℞. Bismuth. subnit.....ʒv.
Zinci oxidi.....ʒiss.
Acidi carbolici.....m. x.
Vaseline.....ʒj. M.

To make an ointment.

In case there is much irritation paint on the following with a soft brush:

℞. Bismuth. subnit.....gr. xl.
Glycerine.....ʒijss.
Acidi carbol.....gtts. vj.
Aquæ rosæ.....ʒiv. M.

To be well shaken.

ACUTE BRONCHITIS.

The citrate of potassium is a favorite remedy of Dr. H. C. Wood in acute bronchitis; his formula is, he says, the most reliable and efficient sedative cough mixture that he has ever used:

℞. Potass. citrat.....ʒj.
Suc. limonis.....fʒij.
Syr. ipecac.....fʒss.
Syr. q. s. ad.....fʒvj. M

Sig. A tablespoonful four to six times a day.

Another favorite expectorant with this writer is oil of eucalyptus, which may be given in five minim capsules every three hours. It is not only of use after expectoration is established.

MOUTH WASH.

David uses the following mixture as a tonic and antiseptic mouth wash (*Medical News*, February 21, 1891):

℞. Thymol.....7 grs.
Borax.....15 grs.
Water.....1½ ozs. M.

A few drops of this are to be placed in wineglassful of warm water, and the mouth rinsed with it. In cases in which the breath is fetid, owing to deposits about the tonsils and gums, the following wash is said to be serviceable:

℞. Borate of sodium.....15 grs.
Alcohol.....½ drachm.
Water.....1 pint.
Thymol.....7 grs. M.

Dr. W. B. Rogers, an editor of the *Memphis Journal of the Medical Sciences*, unburdens his weary soul in the following strain:

Bob-Tailed Medical Directory.—A new directory has recently been put off on the unsuspecting medical profession of the Southern States, and lest the same fraud is being prepared for other sections, I present a few points worthy of note concerning the *Southern Medical Directory*.

The title page reads: "Physicans, Dentists and Druggists' Directory of Alabama, Georgia, Louisiana, Mississippi, South Carolina and Tennessee—Comprising List of Physicians and Surgeons, Dentists and Druggists, arranged alphabetically, by postoffices, etc. Galen, Gonser & Co., publishers, New Orleans, La. 1891. Price $2, complete in one volume."

I have not investigated with reference to dentists and druggists, but am free to say it is an *incomplete list of the physicians* in the Southern States—since it contains but about one-third the number of names in these States, as furnished by *Polk's Directory*. That the directory was not compiled by G. Gonser & Co. within the past year is evident. This I can say because I can point out names of men whose location has been changed from that given for four on to five years; some by reason of death, others, removal to other states; others by sojourn in lunatic asylums. It is what might be termed a "short horse" directory.

My attention was called to this directory while yet ostensibly in preparation, by a canvasser who solicited the card of an institution with which I am connected, for publication among the "ads." After several visits and much annoyance to me, this canvasser secured my signature for contract for ad. and for the book on the following conditions:

1. The number of ads. was limited to thirty.

2. None but cards of recognized reputable institutions and men, were to be admitted in the book.

3. My card was to occupy page opposite index.

4. It was to contain the names of all the physicians of the states named, and five-sixths of the physicians of Mississippi were guaranteed as subscribers to the book—names of those subscribing would appear in bold type.

In due time the book was presented, together with bills—I declined to receive the book or pay the bills:

1. Because the book contained sixty-five ads. instead of thirty.

2. Because the book contained among these sixty-five ads. the cards of at least four recognized secret nostrums, bunco men.

3. Three pages has been cut out to bring my card up to face index (stubs left in *situ!!!*)

4. It was too apparent that the directory did not contain the names of half the physicians in these States. And, on sketching it, I found many towns omitted, and some names in bold type of parties whose residence had been changed for years.

These points were shown the canvasser who gave me *his* word of *honor* that only in the first hundred printed was my card misplaced. He tried manfully to convince me that the book was up to contract, until finally I urged him to leave—he left.

I have since taken occasion to address a line to eighteen members of the profession in Mississippi and Tennessee whose names appear in bold type. Eighteen answers to a unit, "have never seen or heard of any canvasser or representative of the book." I have also several copies from my friends in Georgia, South Carolina and Tennessee, and find there has been no hesitancy about cutting out pages to bring a desired ad. to preferred space.

I also took occasion to address two letters to Galen Gonser & Co., New Orleans, La., asking the name of the gentleman with gall who had obtained my ad., but no reply have I had. Another letter to Galen Gonser & Co., Chicago, the address given me by Boland & Co., St. Louis, has failed to obtain any reply. The chief of police of New Orleans writes me there is no such firm of publishers known there among publishing houses.

Now, what are we to conclude? Is it possible that a sharper has copied a limited portion of *Polk's Directory*, and is gulling the profession in various sections? It looks that way; and not being out any money, I take the liberty of warning the profession.

W. B. Rogers.

MORTUARY REPORT OF NEW ORLEANS.

For July, 1891.

CAUSE.	*White.....*	*Colored...*	*Male.....*	*Female....*	*Adults ....*	*Children.*	*Total .....*
Fever, Yellow							
" Malarial (unclassified)	6	5	7	4	4	7	11
" Intermittent	2	1	3		2	1	3
" Remittent	7	2	3	6	7	2	9
" Congestive	2	2	2	2	1	3	4
" Typho-Malarial	3	7	6	4	9	1	10
" Typhoid or Enteric	5	2	3	4	5	2	7
" Puerperal	1			1	1		1
Scarlatina							
Small-pox							
Measles							
Diphtheria	2		1	1		2	2
Whooping Cough							
Meningitis	8	4	4	8	5	7	12
Pneumonia	12	5	11	6	8	9	17
Bronchitis	5	2	4	3	3	4	7
Consumption	25	31	27	29	56		56
Cancer	8	3	5	6	11		11
Congestion of Brain	7		5	2	1	6	7
Bright's Disease (Nephritis)	13	8	14	7	20	1	21
Diarrhœa (Enteritis)	24	21	24	21	19	26	45
Cholera Infantum	19	7	16	10		26	26
Dysentery	2	1	2	1	3		3
Debility, General	3	1	1	3	4		4
" Senile	15	6	8	13	21		21
" Infantile	3	9	6	6		12	12
All other causes	173	83	151	105	162	94	256
TOTAL	345	200	303	242	342	203	545

Still-born Children—White, 29; colored, 11; total, 40.

Population of City—White, 184,500; colored, 69,500; total, 254,000.

Death Rate per 1000 per annum for City—White, 16.30; colored, 34.53. total, 24.61.

HENRY WILLIAM BLANC, M. D.,
Chief Sanitary Inspector.

METEOROLOGICAL SUMMARY—JULY.

STATION—NEW ORLEANS.

Date.....	TEMPERATURE. Mean	Max...	Min...	Precipn. in inches and hund'ths..
1	81	87	75	.03
2	82	89	74	0
3	80	84	76	.06
4	78	83	73	.01
5	76	83	70	94
6	76	84	68	95
7	79	84	74	.51
8	84	89	78	T
9	76	79	72	.04
10	78	85	70	0
11	80	86	73	0
12	82	89	75	0
13	80	86	74	.31
14	84	91	76	0
15	84	92	77	0
16	82	87	76	.11
17	84	91	76	T
18	83	90	76	0
19	83	90	76	.07
20	81	87	75	.10
21	82	88	75	.01
22	84	90	77	0
23	84	92	75	.26
24	80	88	73	.23
25	79	86	72	.34
26	82	88	75	.29
27	82	90	75	.07
28	81	88	74	.25
29	84	90	77	0
30	84	91	77	0
31	84	91	78	T

SUMMARY.

Mean barometer, 30.04.
Highest barometer, 30.18, 24th.
Lowest barometer, 29.89, 7th.
Mean temperature, 81.
Highest temp., 92, 15th; lowest, 79, 9th.
Greatest daily range of temperature, 17, 23rd.
Least daily range of temperature, 7, 9th.

MEAN TEMPERATURE FOR THIS MONTH IN—

1871.....84.0	1876.....83.0	1881.....84.0	1886.....80.0
1872.....82.0	1877.....83.0	1882.....80.0	1887.....80.0
1873.....82.0	1878.....84.0	1883.....84.0	1888.....82.0
1874.....81.0	1879.....83.0	1884.....85.0	1889.....83.0
1875.....82.0	1880.....81.0	1885.....83.0	1890.....82.0
			1891.....81.0

Total deficiency in temp'ture during month, 41.
Total deficiency in temp'ture since Jan. 1, 83.
Prevailing direction of wind, S. E.
Total movement of wind, 5531 miles.
Extreme velocity of wind, direction, and date, 38 miles, from S. E., 6th.
Total precipitation, 4.57 inches.
Number of days on which .01 inch or more of precipitation fell, 18.

TOTAL PRECIPITATION (IN INCHES AND HUNDREDTHS) FOR THIS MONTH IN—

1871..... 4.34	1876..... 4.73	1881..... 6.97	1886..... 4.35
1872..... 6.43	1877..... 6.41	1882..... 6.84	1887 ... 7.85
1873.... 5.22	1878..... 6.21	1883 .... 3.33	1888..... 2.02
1874.....12.93	1879.... 7.04	1884..... 4.12	1889..... 9.13
1875..... 6.57	1880.....11.22	1885..... 6.15	1890..... 6.59
			1891..... 4.57

Total deficiency in precip'n during month, 1.94.
Total deficiency in precip'n since Jan. 1, 15.48.
Number of clear days, 7; partly cloudy days, 18; cloudy days, 6.
Dates of Frost, ...
Mean maximum temperature, 88.0.
Mean minimum temperature, 75.0.

NOTE.—Barometer reduced to sea level. The T indicates trace of precipitation.

G. E. HUNT, *Local Forecast Official.*

SYNOPSIS OF SUMMARY FROM SHREVEPORT, LA.

Mean barometer, 29.986.
Highest barometer, 30.153, 24th.
Lowest barometer, 29.654, 6th.
Mean temperature, 80.5.
Highest temperature, 96, 14th; lowest temperature, 64, 9th.
Greatest daily range of temperature, 26, 3d.
Least daily range of temperature, 5, 8th.
Prevailing direction of wind, S. E.
Total movement of wind, 4031 miles.
Extreme velocity of wind, direction, and date, 30, S. E., 4th.
Total precipitation, 2.57 inches.
Number of days on which .01 inch or more of precipitation fell, 6.
Total deficiency in precipitation during month, 1.17.
Total deficiency in precipitation since January 1, 13.08.
Number of clear days, 15; partly cloudy days, 13; cloudy days, 3.
Dates of frost, ——.
Mean maximum temperature, 89.6.
Mean Min., 71.4.

M. J. WRIGHT, JR., *Observer.*

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XIX. OCTOBER, 1891. No. 4.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the first day of the month preceding that in which they are expected to appear. A complimentary edition of twenty-five reprints of his article will be furnished each contributor should he so desire. Any number of reprints may be had at reasonable rates if a *written* order for the same accompany the paper.]

CHAULMOOGRA OIL IN THE TREATMENT OF LEPROSY.

BY PHILLIPPE BERGÉ, M. D., NEW ORLEANS, LA.

Notes on the treatment of disease are always welcomed by the progressive physician, and I trust my results in the medication of leprosy will be viewed with a critical eye, pondered upon well, and adjudged impartially by all well-thinking medicos.

It is true that my experience is very limited, but the effects of the chaulmoogra treatment have been so marvelous that I deem it an imperative duty to impart the knowledge of the same to the profession, without awaiting further results, so confident am I of the curative properties of the oil.

When I assumed charge of the Lazaretto I found therein four patients, one of whom died a few days afterwards. I will not give a description of the pathological lesions found on her person, since she did not come under my professional care.

CASE I. Mr. W., aged 50 years, native of Germany, resident of this city for many years, shoemaker by trade; says he has had leprosy six or seven years. When first seen by me the integument of forehead and cheeks was much infiltrated and offered a very shiny appearance, with a slight formation of tubercles on forehead. An examination of the

thorax anteriorly, and a look at the surface of the abdomen, and likewise of the legs, revealed patches of macular rash. Some of the phalanges of fingers and toes were gone, and ulceration had set in on some of the stumps.

Incomplete ankylosis of several of the smaller joints of hand, anæsthesia of hands and feet. Pruritis of the unaffected portion of the skin was a very annoying symptom. Treatment began with ten drops of chaulmoogra oil in a spoonful of water, three times daily after meals, on August 7; the dosage gradually increased five drops per week until he is now taking forty-five drops three times daily. No disturbance of digestive organs followed upon the administration of the oil, at any time; except a few days back, daily motions increased to four in number, and are now reduced to one or two. The infiltration of forehead and cheeks is entirely absorbed, and the peculiar shine is wanting; leaving the skin smooth, supple and normal in color. On the body, the infiltration of the macular rash has become absorbed, and the red color has given way slowly to light copper-colored stains. These copper-colored blotches are vanishing by degrees.

This is the manner in which I observed the gradual disappearance of the coloring matter: Many large copper-colored spots became covered with vesicles of different sizes, minute, medium and large, also sudamina. These vesicles were not confined to the areas of discolored skin, but could also be seen in the intervening healthy integument. This new sign was accompanied with pronounced itching. Within a few days desiccation followed, and with it was seen streaks of skin devoid of all pigment, producing a characteristic segmentation of the large areas of copper-colored stains, and simultaneously also a decided fading of the coloring matter.

This processus having taken place, the dimming, division and subdivision of these islets into smaller islets now continues without a return of the vesicular eruption. Incomplete ankylosis of smaller joints has given way to free mobility, a very good proof of the absorptive properties of chaulmoogra oil. Sensation has returned, to a large extent, in hands and feet. Patient gives expression to a feeling of well-being, and is

jubilant over the results, anxiously awaiting an early discharge. This man, neatly clad, could walk our prominent thoroughfares unnoticed by the most educated eye, but for a missing ala of the nose. His gait is elastic, his mind clear, and has every indication of health, except the destructive lesions antedating the treatment by the curative agent under discussion.

CASE II. Mr. J., a native of England, has lived in New Orleans for many years, a seaman by calling; just before treatment with chaulmoogra oil, his whole face was shiny, deeply infiltrated, and of a dark, livid hue, with a very decided formation of tubercles on forehead. Hands and arms of a dark tan color; and loss of sensation above the elbows. The feet were very swollen, and very painful on plantar surface about metacarpo-phalangeal joints. Locomotion very limited—almost impossible; anæsthesia higher than the knee joint. Patient very despondent; anorexia. Treatment with chaulmoogra oil in the same manner as for Case I. The results are astonishingly good. The striking features attributable to the action of the remedial agent are: (1) the gradual but most positive absorption of the tuberculous deposit on the forehead, leaving, at this writing, scarcely any perceptible sign of same; (2) the slow but sure return of sensation to within a few inches of the wrist and ankle joints. The copper-colored pigmentation on the back and chest is fading. The vesicular rash has not yet put in an appearance. The absence of the vesicles at this date, I attribute to the fact that the patient had ceased taking the oil for some days before it became known to me, and consequently its alterative effect is not so far advanced as in the preceding case. Notwithstanding, the efficacy of the oil is amply manifested in the wonderful improvement brought about in this subject; swelling of feet is about all gone; only mild soreness is localized at the metacarpal phalangeal joint of big toe on plantar surface of right foot; locomotion is splendid. Patient complained in the beginning of continued cephalalgia, at times most intense; this form of neurosis has subsided entirely. His appetite has returned; his intellect is lucid; his movements are swift, denoting easy action of muscles, free mobility of joints, and suppleness of skin. Patient's countenance is also rapidly re-

suming a normal appearance, leaving no permanent traces of former disease.

Case III.—Mr. G., aged about forty years, native and resident of one of our country parishes. Ran a frame, sash and shingle factory. Developed the disease about ten years ago. On admission to the hospital, patient's general health was very poor. Heart-beats rapid and weak, respiration short, complete loss of appetite. The voice very husky, at times he would be taken with nervous phenomena, laryngismus stridulus, a flushed feeling, vertigo, palpitation, cold sweats. Feet, on admission, were about the size of a small watermelon.

The usual signs of inflammation, heat, pain, swelling, were present; besides numerous ulcers, from toes to midway up the tibiæ, added fuel to the fire. Hands in fair condition, with the exception of beginning ulceration on the site of a few finger nails which had been exfoliated. Anæthesia of all four limbs.

Hands and arms of a light tan color. Body and legs offered large copper-colored spots to inspection. Facial appearance characteristic of the typical leper; large tubercles with deep furrows between them, the integument of cheeks thickened and wrinkled; outlines of cutaneous folds irregular.

Nose sunken from necrosis of septum. Hyperplasia of skin covering the alæ of the nose; auricles of ears enlarged, particularly lobules. Very scant supply of eyebrows; a few hairs on upper lip and on chin. Mr. G. says that at one time he had no cause to feel ashamed of his eyebrows, moustache or imperial.

When treatment was begun with the oleaginous agent our man was very skeptical about the benefits to be derived from its curative principle, and reluctantly submitted to my instructions. He positively believed the death-knell had rung for him, and my endeavors in his behalf would be fruitless. To submit to the imbibition of the greasy looking medicament, it required on his part extra resolution. His plea to dispense with same was only met by me with more forcible language in praise of the medicine, so thoroughly convinced am I of the value of the medication from recent literature on the subject. He has undergone the ordeal with happy and surprising results to both himself and his doctor. The face as a whole has greatly diminished in size. The tubercles have dwindled

wonderfully, the absorption beginning at the periphery and advancing toward the centre. The furrows in consequence are very shallow—skin over cheek, nose, etc., does not offer the same excessive growth as before treatment; patient's voice much clearer; he is free from all the nervous phenomena mentioned above. Pulse good; respiration normal; appetite splendid.

The peculiar vesicular rash, which was mentioned as one of the developments during the treatment of case I, is also to be seen in this patient, making its appearance only a few days later. Pruritis is present also. No itching prior to this. At my last visit on Tuesday, desiccation and desquamation had begun where the eruption first appeared. Fading of the spots has been going on for a little while back, and I detected in some places a tendency to splitting, as alluded to in the case of Mr. W. The skin is recovering rapidly some of its former pliancy. Hands are well; no ulcers; free mobility of fingers, wrist and arm; whereas before, great or swift movements would produce pain.

Besides the absorption of the tubercles and the thickened folds of skin on the face, by which process our subject is fast losing the characteristic leonine facies, to the efficacy of this medicine for leprosy I attribute the almost astounding cure of the diseased feet, within a month from beginning of treatment. When the patient is in a prone position, or when his feet are at rest in an elevated position, there is no œdema and the feet are of a natural size. Walking, or resting the feet upon the floor for hours whilst playing at cards with his fellow-inmates, causes some swelling of the pedal extremities, which quickly leaves on lying down.

Every ulcer has long been healed, leaving scars as silent monitors of their former seat of mischief. I forgot to say that on admission to the institution, his feet had every appearance of threatening mortification. This man is highly elated over his present condition, and never tires of praising the oil.

The remedial properties of the oil externally have not been fully tested; therefore, I refrain, at present, from speaking much about this matter. However, I have seen a few abrasions of skin and one small superficial ulcer heal very rapidly by applying the oil with a feather several times daily.

From my experience with chaulmoogra oil, I have come to the conclusion that in it, we have a most powerful alterative to a certainty, and *perhaps* the only reliable remedy for leprosy.

Since I wrote the account of case I, I paid him a visit, and found him in a state of excessive hyperhidrosis. This man has had some sweating all along, but nothing to be compared with his condition when seen last. This hyperhidrosis was not observed in either of the other cases.

This oil deserves the appellation of "specific" in the treatment of this loathsome disease. Its absorptive properties are incontestable and sufficiently shown in the decrease in size of the tubercles, thickened folds of skin, and the rapid fading of the discolored portions of the body. It affords immediate arrest of all nervous phenomena. Ulceration stops at once under its use, and probably mortification and necrosis are prevented, if not too far advanced. A return to better health, and a contented state of the mind further attest the efficacy of this agent.

Dr. Beaven Rake (*Annual of the Universal Medical Sciences*, issue of 1891) finds that patients believe in the value of chaulmoogra oil, and that they frequently beg for it. Experiments upon eighteen patients show increase of perspiration, decrease of tubercles, improved appetite, and a sense of well-being, increase of sensation, and increased suppleness of skin, and lessening of pain in the joints. The oil was not administered in capsules, but drunk pure. The dose used appears to have been about half a drachm to a drachm daily. With me the dosage began with ten drops three times daily, taken in a spoonful of water, after meals, and the dose increased gradually until the patients are now taking forty-five drops three times daily. It is my intention to reach sixty drops at a dose, unless I should discover some cumulative effects with untoward effects.

THE INUTILITY OF CAUTERIZING VENEREAL SORES.

BY DR. JAMES M. GASSOWAY, M. H. S.

The misery of the unfortunate possessor of a chancre, be it hard or soft, is certainly sufficient to excuse him from any further torture in that line; yet, with singular unanimity, syphilographers still persist in urging the claims of a procedure, which if not obsolete, is unhappily very painful. Writers on venereal diseases have in this latter day descended somewhat from the high ground taken by themselves in the matter, as illustrated by the latest edition of Van Buren and Keyes—who may, not inappropriately, be taken as the type. No one of them positively advocates the claim that cauterization will, however early applied, cure or even favorably modify a hard chancre. In the article of the writers cited, this statement appears: "What more striking evidence could there be of the inability of any local cauterization to interfere with the regular development of this blood disease, after it has been once acquired, than the reports of Clerc's medical student, who washed himself, and of Hill's case of the man who tore his frænum at 4 A. M., was freely cauterized by fuming nitric acid; yet each case was followed by the regular manifestations of true syphilis at the usual interval." While thus practically abandoning cauterization as heretofore practised in hard or true chancre, after some further discussion, they exclaim, "How different with chancroid! It can be aborted by applying certain fluids to the inoculated spot within a few hours, and it can be destroyed totally by caustic after it has appeared." So far—good! A few pages previously in their article, "Treatment of Chancroid," the opening sentence speaks thus: "As a rule, chancroid does not come under the surgeon's notice until it is already advancing and beyond the reach of any abortive measures other than actual destruction by caustics;" and shortly thereafter, goes on to say, "once present, no treatment yields as satisfactory results as the entire destruction by an efficient escharotic, thus artificially imitating nature." A few applications are then mentioned, fuming nitric acid, sulphuric acid, the red-hot iron—and the article continues dogmatically: "Hence, the rule: If cauterization be decided upon, burn *every portion of every ulcer*, no matter what size;" thus in one

and the same sentence, as judged by the context, laying down an inalterable rule, and yet fatally modifying it. From these quotations, which will, I think, be found substantially the consensus of articles on this subject, it will be seen that while the cauterization of the hard, true chancre is suggested as at least a valuable experiment, the cauterization of the soft sore is a *sine qua non!* or, at least, of so great an utility, that it may be considered, indeed, almost a specific.

A few pages further on the treatment is modified. Iodoform, locally, is brought forward as superior to anything short of cauterization for those recalcitrants who decline to be burned alive, and for that further class of incorrigibles who refuse to advertise their disabilities by perfuming themselves with this product. "A simple application of a little dry, scraped lint, often renewed, is a fair treatment." I quote this last literally. The positive insistance of page *a* for cauterization, gradually gives way to iodoform locally on page *b*, and both gracefully yield at page *c* to a "little dry, scraped lint."

Some years ago I had charge of the venereal ward of one of the largest marine hospitals on the Atlantic coast. The number of venereal cases, while by no means so large as commonly supposed, yet were sufficiently numerous to occupy much time and considerable attention. The sores presented were of all ages, and, I believe, of every possible size. Cocaine had not then come into general use; indeed, it was practically unknown; and local anesthesia by rhigoline, benzole and ether sprays was as disappointing, practically speaking, in those days as in this. More so, perhaps. From want of time, ether or chloroform inhalation was out of the question, and I confess that I accidentally discovered that cases kept scrupulously clean, and saturated with a lead and opium wash, got well quite as quickly, and with much less pain to the patient, or trouble to myself, than if anointed with the time-honored nitric acid, pernitrate of mercury, or Ricord paste. From intimate connection with a respectable number, probably not less than five thousand, venereal ulcers in the marine hospital service, and through the courtesy of medical friends at the civil hospitals of the large cities where I have been stationed, I am impressed with the belief, from the small number

of cases compared with the relatively enormous number of exposures, that the "system" of the person susceptible to the inoculation is deficient in some (probably as yet unknown) factor, temporarily or otherwise, and that this deficiency is to be supplied by the alterative and corroborant group of remedies; that the cauterization of these sores in the vast majority of cases is as unnecessary as it is painful, and that the use of opium locally, and, in many cases, internally, is by far the more cleanly, agreeable, and above all, effectual method of dealing with the local manifestation.

Hospital Reports and Clinical Notes.

MALARIAL HÆMATURIA.

Editor New Orleans Medical and Surgical Journal—DEAR SIR: I was much pleased to see the article of Dr. Bruce M'Vey in the August number of the JOURNAL. I have been interested in this subject, especially of late, and have been in search of literature on this disease. I remember reading an exhaustive article a year or so ago in the JOURNAL, but, so far, have been unable to find it. I wish to make some remarks upon a severe case which I have lately treated successfully; but before doing so, let me state that I have had no very extended experience with this disease, and have no new treatment to suggest. I have practiced in this locality five years, during which time I have met with some twelve or fourteen cases. In all of these cases the disease occurred in subjects who were more or less suffering from chronic malarial poisoning. All of the cases treated with heroic doses of quinine (20 to 40 grains) have ended fatally. I wish to call special attention to this fact.

When jaundice set in to an extreme degree, and there was delirium, death followed. When large quantities of thick, brownish-black urine was voided the cases ended fatally, with the exception of the last one. In none of these cases was there any expectoration of blood. The jaundice occurred on

the second or third day. One of the cases was of a remittent type, the bloody urine being passed only during the exacerbations of fever, and death took place after the third exacerbation, in spite of the large doses of quinine, gallic acid, ergot, digitalis and iron, that I had poured into him.

Now to the case in question. On August 30, 1891, I was called to see Mrs. M., aged 55. I found that she had had repeated attacks of malarial fever during the last two months, but had been able to move around till the day of my visit, when she was attacked with high fever, and voided a quantity of bloody urine. I prescribed powders of calomel and soda, 4 grs. each, to be given every four hours; 6 grs. quinine every three hours, until cinchonism should be well marked, and twice daily thereafter. Also fluid extracts of digitalis and ergot.

August 31.—Fever 103; urine almost black, thick and muddy. Jaundice setting in. One slight action of the bowels. Great restlessness. Nausea and vomiting. To guard the stomach, I discontinued the ergot ℞. Gave her about 15 grs. of calomel immediately. Ordered the calomel and soda continued, and having seen favorable mention made of large doses of arsenic, in *The Annual of Universal Medical Sciences*, I substituted the following for the ergot and digitalis ℞, which had disagreed with the stomach.

℞ Ferri sulph. exs.....gr. x.
Acid. arsen.....gr. i.
Ext. digitalis.....gr. iv.
Ergotin (Bonjean's).....ʒ ii.
M—Ft. pill No. xx
Sig.—One every four hours, night and day.

This ℞, together with the calomel and quinine, was given with the utmost regularity. I discarded the gallic acid, as it checked the bowels.

September 1.—Temperature, 101; jaundice well marked, the conjunctivæ being yellow, and the whole body decidedly jaundiced. Urine worse, if possible, but much less in quantity, not over a pint in twelve hours. Bowels just beginning to act freely. Great restlessness, but no delirium. Patient states that she has not slept a moment. Nausea and vomiting, but not to such an extent as seriously to interfere with medication. Continued treatment.

September 2—No fever. Great restlessness. No sleep. Jaundice more marked. Little or no change in urine and other symptoms. Made no change in treatment.

September 3.—No change except that during the night there had been one voiding of urine much improved in color, though the very next sample was as bad as ever. As there was very marked cinchonism I ordered only one capsule (6 gr.) daily. Discontined calomel, as bowels were very loose. As I

was getting into my pirogue to return home, the old man came shouting down to the bayou with the *pot* in his hand, which now contained about one pint of almost natural urine. You may imagine the delight with which we viewed the contents of this humble vessel.

The patient steadily improved, in spite of the *salivation*, which was quite severe. I had risked that, in view of the gravity of the case, and had warned the family. She took in all 1¼ grains of arsenic, which puffed up her face almost beyond recognition.

And now, by way of summary, we see the irregularity of symptoms mentioned by Dr. M'Vey, and also, that in different localities we have different sets of symptoms, which are characteristic of the special locality. This has a great bearing on the case in question, for in this locality (eighty miles west of New Orleans and near the sea marshes) the disease is always almost fatal, and especially so when attended with such symptoms as we have seen in the case of Mrs. M., which gives additional strength to the supposition that she was cured by the treatment. I have heard of infallible cures, and know that many cases recover in some localities, but when I next meet the pithon of these swamps, calomel shall be my weapon, together with arsenic, digitalis, iron and ergotin, if occasion require.

GEO. W. DOUGLAS, M. D.
Morgan City, La.

EYE, EAR, NOSE AND THROAT HOSPITAL.

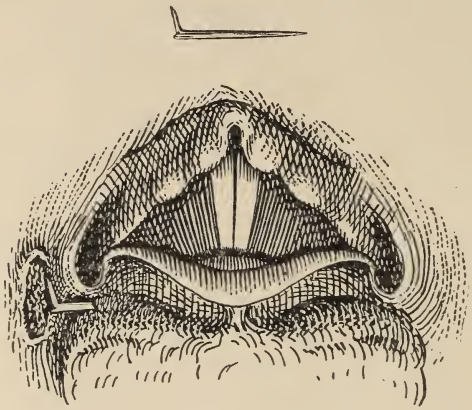
FISH-BONE EMBEDDED IN BASE OF TONGUE.

BY AUGUSTUS MCSHANE, M. D.

On August 15, 1891, Louis White, negro, age 38, applied at the clinic for relief from a very distressing dysphagia. He stated that he had swallowed a fish-bone fourteen days previously. Swallowing became continually more painful, and he applied to a physician for relief; but the doctor did not see any foreign body in his throat, and sent him away without relieving him. Another medical man passed a brush (or ramoneur) down into his œsophagus, but it brought nothing with it.

When he applied at the clinic, he had not eaten for two days; he could only swallow a few mouthfuls of water on account of extreme pain. His throat was very irritable and painful; cocain was swabbed liberally, giving him some relief. With the laryngoscopic mirror, a round, elevated, ulcerated patch was first seen on the right wall of the pharynx; touching with a

probe caused great pain. The patient before had referred his pain to a place above the roof of the mouth, but the probing showed where the pain came from.



The ulcer was cocainized. At the same time, a mass of muco-pus was seen lying on the base of the tongue, in front of the epiglottis and partly concealed by it. As the locality was very painful, cocain on a soft wad of cotton was applied. This application cleared away the muco-pus, and enabled me to make a longer and more careful laryngoscopic examination. When the tongue was pulled well forward, a small white substance was seen projecting from the base of the tongue, and scraping against the side of the pharynx, giving rise to the large painful ulcer. The foreign body was not always visible, since the epiglottis was close to the tongue and overlapped it partly.

The locality was thoroughly cocainized, and the foreign body removed with Frankel's forceps with a moderate amount of pain. The body was a fish-bone, one end of which grated against the pharynx, and caused such great distress. The patient felt relieved immediately after the removal of the fish-bone.

The position of the bone is well shown in the accompanying drawing, for which I am indebted to Dr. Quitman Kohnke.

The fish-bone is shown in natural size above.

Proceedings of Societies.

BOARD OF HEALTH OF ALEXANDRIA, LA.

A Board of Health was created on June 1, the members consisting of the town councilmen and mayor, with Dr. R. L. Randolph as president of the board. Proper ordinances regulating the sanitary condition of the town were adopted; all physicians and midwives were required to register at the Health Office; and a record of all births and deaths occurring in the town are made in a book used for that purpose. It was made obligatory that all physicians report *instanter* all cases of contagious or infectious diseases occurring in their practice. This is the first effort in this direction made to establish a permanent record of births, and a record of the deaths occurring here, and the causes thereof. RAPIDES.

ADAMS COUNTY MEDICAL SOCIETY, NATCHEZ MISS.

Pursuant to a call by the president, the Adams County Medical Society met September 1, 1891, for reörganization at the offices of Dr. N. L. Guice. The following gentlemen were present: Dr. W. A. McPheeters, Dr. N. L. Guice, Dr. L. H. Lamkin, Dr. A. J. Hall, and Dr. P. Beekman.

It was decided that the regular meetings of the Association should be held on the first Tuesday of each month, at which papers will be read and subjects of special interest to the profession be discussed.

Dr. P. Beekman was appointed essayist for the October meeting, and Dr. A. J. Hall essayist for the November meeting.

The following officers were elected for the ensuing year: Dr. N. L. Guice, president; Dr. W A. McPheeters, vice-president; Dr. P. Beekman, secretary.

After a pleasant informal discussion the meeting adjourned. PHILIP BEEKMAN, M. D., *Secretary.*

ALLEGHENY COUNTY MEDICAL SOCIETY MEETING OF AUGUST 18, 1891.

SUPRAPUBIC CYSTOTOMY.

By R. W. STEWART, M. D., Pittsburg, Pa.

The following cases operated on by myself during the present year, and given in the order of their occurrence, will serve to show some of the conditions for which this operation is in-

dicated, and also serve as a basis for further remarks on the operation.

Case I. This patient was under the care of Dr. Grube, who has kindly furnished me with the following notes of the case: February 10th, 1891. J. O., age 32, furnaceman. Patient says that about six months ago he first noticed difficulty in urination, with pain in bladder and penis. This gradually passed into chronic cystitis, accompanied by pain in legs and partial paraplegia. He was treated for cystitis at Mercy Hospital. The bladder is extremely irritable, and holds scarcely an ounce, and as the slightest distension causes intense pain, it is impossible for him to sleep longer than half-an-hour at a time; consequently he is greatly reduced in strength. The stomach is irritable, and digestion impaired; patient living almost entirely on milk. The prostate gland is slightly enlarged, and is nodular, leading to the suspicion that it is tubercular. Patient has a brother, who has pulmonary tuberculosis, and he himself has had a cough for several years, though his lungs are not perceptibly tubercular. Urine contains large quantities of muco-pus. Microscope shows pus cells, caseous flakes and debris. As patient was under Dr. Stewart's care at Mercy Hospital, I have asked him to see patient, and we have decided on suprapubic cystotomy.

February 14. Dr. Stewart operated as above, assisted by Drs. Ward, Patterson, Emmerling, and myself. As the bladder would not bear distention by fluid, the funnels was pushed up into wound by point of sound. A papillomatous growth was removed from near entrance of left ureter—about a teaspoonful of scrapings in all. Wound closed and bladder drained by single large drainage tube; directed daily washing out of bladder with boro-salicylic acid solution.

February 20. Patient has been given great relief from irritability of bladder, and is grateful accordingly. Urine still muco-purulent; general condition, bad.

March 10. Wound has healed nicely around drainage tube, and patient manages drainage and washing out of his bladder himself.

April 1. No improvement in character of urine, and patient losing ground steadily. There are occasional discharges of caseous-looking pus from urethra, which evidently comes from the prostate. Tubercles have made their appearance in the cicatricial tissue about the drainage tube.

The further progress of this case was a gradual decline, until he died about the middle of May.

Case II. Daniel R., age 54. About eight years ago he had several attacks apparently of renal colic, occurring at in-

tervals of two months. After this there was a period of quiescence until about eighteen months ago, when he complained of frequency in passing water, the termination of the act being associated with pain, which was referred to the end of the penis. Exertion of any sort aggravated the trouble, while on the contrary, rest in the recumbent position diminished it. So frequent had become the calls to urinate, and so difficult to restrain the desire, that it was necessary to wear a urinal. For about a year the patient was unable to pursue his vocation of machinist. He was referred to me for treatment by Dr. Ward.

Owing to the extreme sensitiveness of the patient, and the irritability of the bladder, an examination without the aid of an anæsthetic was a matter of considerable difficulty, and required the utmost tact and delicacy. A diagnosis of vesical calculus was made, and the patient sent to Mercy Hospital for operation. Accordingly, on March 15, the patient being anæsthetized, a rectal bag was inserted and distended with eight ounces of water. The suprapubic operation was then performed, and three calculi lying side by side were removed. A drainage tube was inserted in the bladder and the wound partially closed with three silver sutures. A loose gauze dressing was applied over all.

The condition of the patient after operation was satisfactory, and was devoid of constitutional disturbance. He left the hospital on the seventeenth day following the operation. A fistulous opening still communicated with the bladder, which was somewhat slow in healing, but eventually it closed, and at this date patient is in good health, has full control of his urine and is free from pain.

Case III. Louis M., age thirty-four, a butcher by occupation. On the evening of May 28th, he stepped on a coal-hole, the lid of which turned and he fell, the edge of the lid striking him on the perineum. He was able to walk a short distance, and then took a carriage home. On the following morning he was suffering from retention of the urine, and Dr. Speer was called to see him. With a soft catheter he withdrew a quantity of bloody urine. On the evening of the same day I was called in consultation, the doctor being unable to withdraw his urine. At that time the bladder was distended, perineum tender, swollen and much discolored, the discoloration extending to the scrotum. A diagnosis of rupture of the urethra at the triangular ligament was made, and with the assistance of Drs. Speer, Christler and Mc Kibben, the patient being anæsthetized, I opened the perineum freely in several places, through which a small quantity of bloody urine escaped. A complete rupture of the urethra was

discovered. Owing to the extravasation, the tissues were so altered in appearance that it was impossible to distinguish the vesical end of the torn urethra, and after a patient attempt I abandoned the search for it, and ordered his removal to Mercy Hospital. He did not enter the hospital on the following day, and as he was still suffering from retention it was necessary to aspirate his bladder in the morning and evening. On the following morning he entered the hospital, and I operated on him again. At this time the patient's temperature was 103 deg. F., and his general condition was bad. Being again unable to find the vesical end of the urethra, I opened the distended bladder above the pubes, the incision in the bladder being just sufficient to admit a steel sound, with which I performed retrograde catheterism. The sound, after passing from within outwards through the prostatic urethra, was made to project through the perineal opening. While in this situation a stout rubber tube was fitted on the projecting conical extremity of the sound, which together with the tube was withdrawn into the bladder, and the sound disengaged from the tube. The sound was then passed from before backwards through the pendulous urethra, the extremity again presenting through the perineal opening. On this was fitted the end of the rubber tube which projected from the perineal opening, and the sound carrying with it the tube was withdrawn. By this manœuvre a tube was inserted in the whole length of the urethra, one end being in the bladder and the other projecting from the external meatus, the central portion bringing over the torn ends of the urethra, which were separated by an interval of about three-quarters of an inch. Displacement of the tube was prevented by pinning it to the prepuce. The patient's condition improved at once; his temperature was normal on the third day. The urine drained through the tube. A slight leakage escaped through suprapubic opening. On the eighth day the tube was removed, and the patient left the hospital on the twelfth day, since which time no urine has passed by suprapubic opening. A No. 26 French sound has been passed at intervals since that date. At present the sound is passed once every two weeks to prevent the formation of a stricture at site of injury, and except for this inconvenience the patient is as well as he ever was.

Case IV. A. M. W., age 21. Ten years ago this patient was suddenly attacked with a desire to urinate frequently, which he attributed to holding his urine too long. This condition has persisted without intermission during the past ten years, passing water every twenty to forty minutes, night and day, the act being associated with violent tenesmus, and, at times,

excruciating pain. The constant straining has produced a marked prolapse of the rectum, which protrudes during the act to the extent of about five inches.

Three years after the onset of this attack he became subject to epileptic seizures, which would occur about once a month, and in some manner seemed to be associated with an exacerbation of his vesical trouble. I may anticipate by saying that since the latter has been relieved the convulsions have ceased.

During the ten years he has suffered he has tried various forms of treatment in hospitals and out of them, under regulars and irregulars, besides his attempts at self-cure with the aid of patent medicines, all of which, to use his own language, did him no good, and he was waiting to die. Finally, Dr Buchanan sent him to Mercy Hospital, and he was transferred to me. The case was and is still something of a puzzle. The sound failed to shed any light on the subject. The cystoscope was also used, but nothing abnormal could be detected; external perineal urethrotomy was performed and a digital examination of the interior of the bladder was made by Dr. Buchanan and myself, but nothing abnormal, further than a dilatation of the opening of the right ureter could be detected. Into this opening I readily inserted the beak of Thompson's searcher, which passed without obstruction along the ureter until it must have reached the pelvis of the kidney. In this situation the searcher could be readily turned in any direction, showing that the ureter was much dilated. While the searcher was in this situation the descent of the liver in inspiration could be readily felt pressing against the extremities of the instrument. The ureter contained about an ounce of apparently healthy urine, which escaped along the hollow instrument. A drainage tube was inserted into the perineal opening, and the bladder drained by this means for ten days. During this period the patient had comparative comfort, and for the first time in ten years he was able to sleep a few hours at a time. After the tube was withdrawn on the tenth day, the perineal opening closed, and the patient relapsed into his previous miserable condition.

The results of these examinations showed that we were no nearer the solution of the cause of this trouble. Whether the dilated ureter was the cause, or the result of frequent urination, we were unable to determine; one thing, however, was apparent, that drainage of the bladder relieved the symptoms, and I, therefore, decided to establish permanent drainage.

In this operation I was again assisted by Dr. Buchanan. A specially contrived sound, having a greater curve than the ordinary sound, and a tip on it over which a tube could be

readily fitted, was used. The extremity of the instrument could be felt just above the pubes. An incision was made over it, and the instrument presented itself in the wound. A tube was inserted over the tip of the instrument, which was withdrawn, leaving the tube in the bladder, and a permanent drainage was now established. The patient, in a short time, was able to manage the tube himself, taking it out twice daily, and washing the bladder with a weak bi-chloride solution, the free extremity of the tube fitting into a urinal by day, and at night connected with a long tube which carries the urine to a vessel placed at the bedside. When last seen he had gained in flesh, could sleep without interruption, and, for the first time in his life, he was making arrangements to earn a living for himself.

The operation of suprapubic cystotomy has, within the past few years, attracted considerable attention, and is now looked on with more favor than at any previous period. Some have gone so far as to condemn entirely the perineal route to the bladder, and assert that the suprapubic route should be used exclusively; but that this is going too far will be evident to any one who will give the subject a little attention. For temporary drainage and for digital exploration, the perineal method of opening the bladder is undoubtedly the simplest and the safest. On the other hand, the suprapubic method is, in the majority of cases, to be preferred for the removal of calculi too large to be crushed; also for the removal of tumors, with the possible exception of prostatic growths, and for the establishment of permanent drainage. This operation has been hedged around with so many precautions and imaginary dangers that what is really a very simple operation appears to the uninitiated to be one of great magnitude.

Elaborate dissections have been made to show the relationship of the vesico-parietal peritoneal reflection to the operation, and the benefits of rectal and vesical distension has been urged. The dangers of urinary extravasation and hæmorrhage have been pointed out, and the advantages of Trendelenberg's position dilated upon. Regarding the much-talked-of peritoneum: In none of the cases that I have recorded was it seen during the operation, and in only one of them was a rectal bag used. While vesical distension was resorted to in none, though present as an accidental occurance in Case III, the advantages of both of these have, in my opinion, been more than counterbalanced by the risks incurred from over-distension in their use. A longtitudinal incision was used, keeping close to the upper border of the symphysis pubis, and the bladder opened on the tip of a well-curved sound, the finger being kept at the

same time in the upper border of the wound to prevent displacement downwards of the peritoneum and intestines. A pair of forceps was next insinuated alongside the sound, into the bladder, and expanded so as to tear the vesical opening to the extent desired. Hæmorrhage was not troublesome in any case. No attempt was made to suture the vesical wound, nor would I recommend that it be attempted, unless the opening was very large. In three of the cases the abdominal wound was partially closed with silver sutures; but in each of these the wound reopened on removal of the sutures, so that in the future I will dispense with their use. I would recommend, however, that the incision, both in the abdominal wall and bladder, be limited to the smallest extent consistent with the requirements for operating within the bladder.

No constitutional disturbance was produced by the operation in any case, no extravasation of urine occurred, and the after-treatment consisted of frequent renewal of the dressings and washing out of the bladder with a mild antiseptic solution.

DISCUSSION.

Dr. Buchanan—I am very well acquainted with the history of the fourth case reported by Dr. Stewart, and I think the doctor deserves the greatest credit for the way in which he followed up the treatment. The case was a very mysterious one, and yet remains so. There was no obstruction of the urethra. There was no active cystitis. There was no disease in the kidney, or in the pelvis of the kidney, as far as could be discovered. There was nothing to give rise to the dilatation of the ureter, the enlarged outlet of which could be felt very plainly with the finger through the perineal incision, and demonstrated with the sound, except the constant contraction of the bladder. The opening of the bladder for permanent drainage above the pubis was an entirely arbitrary matter, not based on anything except the fact that during the time at which the bladder was open below, the patient was relieved from pain. For this reason I think Dr. Stewart deserves the more credit for following up that hint, and doing this operation without any other indication; an operation which has certainly proved very successful. The man was in a wretched condition; the contractions of the bladder were so painful as to make him cry out; he could not stand still when passing his water, and there was very extensive protrusion of the rectum.

Dr. Macfarlane—I have nothing to say except to compliment the doctor upon the manner of presenting his cases. There is one feature about the one case in which I can not help but admire the manner in which he treated it. The case is the one

in which he had rupture of the urethra. Now anybody who has ever attempted to do anything with rupture of the urethra, knows the difficulty connected with it. I have on two occasions seen men of ample experience spend two hours or more before being able to unite the urethra; on another occasion an hour and a half was spent with lack of success, the work being left to be completed at a later time, the man being, in the interval, in a precarious condition. Now, the doctor's method of treating that, I think, deserves widespread circulation, for it certainly acted very well indeed, and affords a very happy escape from the great difficulty connected with a case of rupture of the urethra.

Dr. McKennan—I have a specimen which may be of interest to the members of the society. It was sent to me by Dr. Ray Grayson, of Washington, Pa. It is a congenital malformation of the rectum. The rectum ends at the base of the bladder. It is interesting on account of the fact that we very seldom get a *post-mortem* in cases of this kind, and it represents a type of cases not at all uncommon. An examination of the rectum here discloses the fact that there is peritoneum connecting the rectum with the bladder. The rectum enters directly at the base. Some times the rectum enters the bladder at the vertex. After an examination is made, it will be seen that the peritoneum surrounds the entire lower part of the rectum, running from the bladder directly to the rectum and surrounding it. This case represents one of a type of these cases of congenital malformation of the rectum which vary from occlusion of the anus to complete absence of the lower bowel. It is said that congenital malformations of the rectum and anus occur about once in every 5000 deliveries, although some observers state that in statistics of 66,000 cases of delivery, congenital malformation of the rectum and anus occurred only three times. Other observers, however, state that congenital malformations do occur as often as one in every 5000. To my knowledge, quite a number of cases have occurred around here. It is obvious from the malformation here that operative procedures were hazardous. An attempt in this case was made to reach the rectum, but failed. The diagnosis was properly made of entrance of the rectum into the bladder by the appearance of the fæces in the urine. The operation, I believe, was made on the patient on the seventeenth day, and the patient lived until the twenty-sixth day.

Dr. Stevenson—I have seen three cases of imperforate anus; in one of the cases the rectum terminated in the bladder. In that case there was an attempt made to reach the rectum, but it failed and the child died. In two other cases I have

seen, the rectum was reached, and the method pursued was passing up a hypodermic needle and withdrawing the fæces and cutting up alongside of the needle, and the rectum was reached and drawn down and the opening stitched. These children both recovered, and had no trouble with their bowels.

Dr. Stewart—It seems to me that in this case a suprapubic cystotomy would have been proper, and would have given relief.

Dr. Buchanan—I think a very much better way would have been to open the sigmoid flexure of the colon; that can always be reached. It would be very much better to drain the fæces out by an abdominal fistula than through the bladder.

Dr. McKennan—I find that operations in cases of this kind have never been successful. Operations have been done, some operators opening the perineum, cutting into the bladder and thence making a cut clear through the opening of the rectum into the bladder, making thus a large wound into the perineum. But this method of procedure either produces peritonitis or it causes a fistulous opening in the perineum, which greatly contracts. The only operation which can be done with safety is that suggested by Dr. Buchanan, that is the operation of colotomy. I find that in malformations of the anus and rectum, that in which the rectum enters the bladder occurs in about 40 per cent. of all malformations.

GENERAL DISCUSSION ON SURGICAL JOINTS.

Dr. Murdoch—I am not exactly clear as to what is meant by surgical joints. I suppose it may be joints liable to disease or injury, or that might come under the care of the surgeon, but in that case it would properly include every joint in the body, for there is no joint that might not require surgical treatment; therefore I do not like the term wholly. I suppose, however, reference is intended to be made to those joints which more frequently come under the care of the surgeon, either for disease or injury, and as that would be so much as to include the whole subject of tuberculosis and all kinds of injury to the joints, I am not able or willing, and if I were there would not be sufficient time, to discuss the subject as a whole. It might be said, however, that there have been great changes in the surgical treatment of joints within a comparatively few years, as you are all well aware. This has arisen in a great measure from the fact that because of the great improvements in surgery since the introduction of antiseptic treatment of wounds, the joint can be invaded and dealt with with so much less risk than formerly. That is one reason. And it seems to be a sufficient reason in the minds of a great many surgeons, that

simply because joints can be got into and incised or scraped out, that is a good reason for doing it, and of course this must enter into the problem of whether such an operation should be done.

Another reason why the joints are more frequently treated surgically now than formerly is owing to the changed views with regard to the chief disease which attacks the joint, namely, tuberculosis. Without entering into a discussion of the pathology of that disease, we are all, I believe, convinced that the former ideas with regard to it were not correct. I think we all believe now that it is an infectious disease, and is not always inherited from the parent. We believe the trouble is usually of local origin, and there is a local focus from which the disease starts, and it is in that view, I think, that a great many operations are now done by surgeons who would have formerly looked with doubt upon the idea that the local focus of the tubercule can be taken away before it has found localities in other parts of the body. In my recent visit to Europe, both in Ireland and Scotland I saw surgeons there opening into the joints in cases where I am sure nobody here in the United States would think of operating upon, nor do I believe they would be permitted to operate. I saw the joints of young people opened where there were none of the aggravated signs which we look for here, with a view of excising this local focus which it was believed existed either in the bone or in the joint. I saw, for instance, a surgeon, Dr. McEwen, of Glasgow, operate on a child about fourteen years old, able to walk without much limping, but afflicted with what we call the first stage of hip joint disease. I saw him cut into the joint and remove the head of the femur. In Ireland I saw a surgeon operating by what they call there an anterior procedure. In these operations they did it in the first stage of disease, before the disease had extended and made much or any destruction of the joints, but they do this operation on an entirely different principle from what I have been in the habit of seeing. They do it with the least possible violence to the joint; the head of the bone is not thrown out of its position.

In both of these operations Dr. McEwen did his operation posteriorly, making the usual incision from the crest of the ilium down from the joint, a short incision, and then introduced his chisel through an opening not over an inch and a half long, and by its manipulation, much pressure and lateral motion, he was able in a very short time to cut off the head of the bone, and then introduce his finger and extract the head. As I said before, I do not believe this would be permitted in our country. We see so little of joint diseases here, tubercular diseases, compared with what I saw in Ireland and Scotland.

This is accounted for by the fact that the patients are not so well fed there. Among the poor in Scotland, the number of young people with joint disease is remarkable. Now, as I said before, I do not expect to be able to treat all of this subject, and I must say that I have had very little experience in the treatment of any of the joints, excepting that of the knee. I have had some experience in that, and have excised the knee some eight times, I think, and with seven successful cases. My friend, Dr. King, at the West Penn Hospital, has perhaps excised more, and has lost but one patient. I wish to speak of the difference between present practice and that in vogue when I was a young surgeon. I know of no subject which shows the great improvements that have been made in surgery more than this one of the manner in which the joints can be opened. During our late war, for gunshot injuries of the knee joint there were fifty-seven operations performed, of these fifty-seven, forty-four patients died. Mr. Otis, in his report of our late war, states that previous to the war there were some eighteen excision of the knee joint, of which sixteen were fatal. Now, the operation of excision of the knee joint is one that is almost universally successful, that is, the patient seldom dies under the operation, and it usually results in a useful limb. In Ireland, where they do this operation a great many times, with success, I was shown at the Richmond Hospital some twelve cases that Dr. Thompson had in the hospital under recovery. He told me he had done the operation forty times, with only one death, so that no doubt the operation is one recognized as proper, when formerly amputation would have been in all these cases considered the proper course. When I look back upon my practice, even as late as when I became surgeon of the West Penn Hospital, within twenty years, I can remember patients who lay there for a year, or two years, with white swelling, as we called it, and eventually perished. I have seen some of these cases amputated, and I have seen several of them succumb simply from the confinement and the inability of the doctors to do them any good. Now these cases would not be permitted to stay there two weeks before some surgical operation would be performed for their relief. As you know, a local focus exists in tuberculous disease; it may be necessary to incise the joint, but in other cases, when only the synovial membrane is involved, the operation of arthrotomy may be performed; opening the joint up widely and dissecting out the entire synovial membrane and scooping out with a gouge any local focus that may be found. The disease, I do not believe ever commences in the cartilage. I desire, however, to state at this time, and it is probably all that is necessary for me to say to you to show the method that

Dr. Thompson uses to the knee joint, after having opened it, that this is much superior to anything I have seen, although it is a good deal like the apparatus which I use myself. I have brought it with me and I will show it to you.

In operating on a knee joint, they are in the habit of making what is called the horseshoe incision. This is made by commencing well back, and carrying the knife downwards and upwards across a corresponding point on the opposite side, the joint opened, and if it is only desired to perform arthrotomy, the whole of the membrane is scraped with a scoop and cut away with the scissors, and then the flap is replaced. But if, on the other hand, it is desired to perform excision of the joint, the bones are cut off and fastened together with nails and a splint. The design of those who operate by cutting parallel with the articular surface is to leave the limb at the same relative angle. Dr. Thompson and those surgeons who have had the most experience in operating, tell me that is not the proper way to make the section of the femur; he makes the section of the femur at right angles with its axis, so as to make the leg perfectly straight, as it is in the normal leg. I am inclined to believe that is the better way. I will not go into the manner of cutting the bone, as the surgeons all know that as well as I do. The best way of fixing the limb, that is the important part of the operation. I presume part of the success of this operation in recent years has been owing to this fact. Older surgeons have been in the habit of using wire and other appliances, which did not accomplish the purpose very well. I believe the idea of doing anything to keep the parts in apposition originated in Germany, by the use of steel nails driven with a mallet into the bones. I do not think that was as good a means for keeping the bones in place as the one suggested by me. In Ireland they use silver pegs about an inch and a half long, after making a hole with a brad awl. The nails which I use are four and a half inches long for an adult. They are made for me by Mr. Helmold, and according to the pattern of Mr. Wyeth. The nail should be tapered so that it binds as it proceeds. Three nails should be used. They hold the bones in perfect apposition with the assistance of the external apparatus.

The apparatus which Dr. Thompson uses, and which I think is the best way to hold the limb steady, is made from common hoop iron, an inch and a half wide. This is easily manipulated; it is simply wrapped around with a bandage over it to hold it in place, an anterior and posterior splint. The posterior splint is put down around the ankle joint and up on the foot, the anterior one leaving a space for the dressing over

the knee joint, and after the operation it is not disturbed for three weeks, unless the elevation of temperature is over 100 deg. F. There is a drainage tube put in across the joint behind the bone, well down, and usually it is a very successful operation. I could relate some of my cases, but I will not trouble you with that; the time is passing. I will, however, mention a case that I operated upon at the West Penn Hospital, a man 47 yers old, a miner, suffering with disease of the joint. Although in his case I feared the operation could not be very successful, the man made a remarkable recovery. He walked into the operating room four weeks after the operation with a a cane, and left the hospital in eight weeks. He had been suffering for two or three years. I received a letter from him three months after he left the hospital. He said: "With the greatest pleasure I let you know that I am walking without crutch or cane. It was on the 5th of February that I walked. I was very much surprised at myself when I did it. From the day that you operated on my knee until the day that I walked was four months and eighteen days. How is that for an old man? Therefore, I thank you most respectfully for your skillful operation on me."

The joints in which operations are the most useful, and in which the surgeons now have the most experience, and have done the most benefit are the knee, the hip and the elbow. Excision of the elbow for injury is a most successful operation; so is excision of the knee. But I will say, as I said in the beginning, that there are many surgeons who think that because excision of the joint is done with such safety there is a good reason for doing it. It should always be remembered, especially by the young surgeon, that an excised joint is an admission on the part of the surgeon that he is not able to cure it. As our knowledge of tuberculosis advances, and we are able to treat tuberculosis successfully in the lung, we will be able to treat it successfully in the joint, and operative interference will not probably be essential then. It should never be forgotten, as the very first principle in the treatment of all joints, that the first consideration is rest, putting the parts at rest. If joints can be kept still even where there is a local focus of tuberculosis, if they can be kept still, and proper hygienic measures resorted to, many cases will never call for aid from the surgeon. I believe the improvement of the treatment of disease rests in an early diagnosis and early treatment. Having said this much with little regard for order, I leave the matter in your hands.

Dr. Davis—The term surgical joints has been used to describe joints that call for surgical interference.

Dr. Stevenson—I have never made claims to being a surgeon,

but have been so situated that I have had to do a little surgical work. I practiced for twelve years in Westmoreland county; I was medical man, surgical man, obstetrical man, and so forth. I had charge at that time of the Penn Gas Coal Company's works, which employed some seven hundred men, and I necessarily saw a great deal of injury. I think the first case I saw after I opened the office was a compound fracture of the ankle joint, with dislocation of the tibia. After cutting, and having two or three men exert all the strength they could, I could not get the tibia returned into the joint, so I found a meat saw and sliced off about half an inch, and got it reduced, and that man is walking about to-day. I saw not long after that a carpenter doing something with a foot adze, the corner of the adze striking him just over the joint, and penetrating the joint. When I saw him the synovial fluid was exuding. This being before the era of the antisepsis, it ended in an amputation about four inches above the knee joint. The man got well with the loss of the limb. I have no doubt the improved methods of treatment would have saved that man's leg. I saw another case which was probably a tuberculous joint. It seemed to start without any known cause, and after continuing quite a number of months the joint suppurated, and I found it necessary to amputate above the knee. That man was not so fortunate as the other; his general health gave way, and he died, although the stump had healed and done fairly well. One of the first important things is the diagnosis. What have we? Now, in joints we have a great many structures, there is bone, there is a cartilage, there is synovial membrane and ligaments, and the surroundings. Any or all of these may be involved, or none of them may be. We have what is called simulated disease in joints, the same as we have simulated diseases of other organs. We may have a mimicry of disease in a joint, and this may simulate almost anything. It is a very important matter when a surgeon or practitioner is called to a lady, nervous, of inherited tendencies, want of stability, easily excited mentally, and finds that she is complaining of severe pain in her knee. You look at the joint, you see it is swelled; she says she can not use it, you attempt to use it, she screams out with pain. No doubt it is very important to determine whether it is a hysterical joint.

The constitutional history of the patient may decide this, but if you have an inflammation of the knee joint, you will have local heat. Possibly, you will have constitutional heat. If you feel this joint and it is cool or clammy, and you take the temperature of the patient, and you find there is no fever, there is strong ground for suspecting that you have no chronic trouble in the knee joint.

Dr. Batten—In speaking of operations for joint diseases I will not go into a discussion upon surgical treatment. I believe it has been established that these diseases are of a scrofulous nature, and it was believed that that was a fact up to the time that Koch discovered his bacilli. Since that it is believed that the tubercle bacilli caused all these conditions of the joint, and that they are not hereditary. There is a question in my mind whether they are not hereditary. I believe the bacilli can be carried from the mother, a phthisical mother or a scrofulous mother, to the infant. However, that is a question. But there is one case I know in which an operation was not performed. It was a boy about ten years old, whose parents were living. He had what was called white swelling or inflammation of the knee joint. He was placed under the care of a great many physicians or surgeons, but there was no operations performed, and he finally recovered from this condition, and is at the present time using all the joints and is an active, healthy man. I would say, however, that Dr. Murdoch is deserving of a great deal of credit for the manner in which he performs these operations, and the success that he has had in giving relief to the patients upon whom he operates.

Dr. Kœnig—In surgery, I think we all admit, cleanliness ranks superior to godliness. In view of the recommendation that Dr. Murdoch has made of a certain instrument—the little household utensil with which he inserts his nails—it seems to me that we must accord him greater godliness than cleanliness. With his well known ingenuity he should be able to construct some appliance capable of being made aseptic, after which he would have no occasion to recommend the use of an instrument as crude as the one he has shown us.

Dr. Lange—I have recently seen a few surgical points. I will relate one or two cases. A boy about eight years old while playing on the carpet screamed, said he had hurt his knee, and when his mother got it uncovered, she found on the most prominent part of the knee a single drop of blood, which was wiped away, and the little fellow moved around the house, but limped. His mother instituted a search for needles and found half a needle with the thread in its eye. The accident did not seem to trouble the little fellow much until the third day. Although there was no swelling and very little heat, there was a good deal of pain, and when called, I considered it probable a piece of the needle was in the joint or about the joint, and that it would be the proper thing to anæsthetize the boy and attempt to remove it. This was done, a careful search was made for the piece of needle for more than an hour and a half. The joint, however, was not entered. After

that, the little fellow was put to bed and his limb on a straight wooden splint; he was kept in that way two weeks and then allowed to get up. He was up about a week and was again seized with pain and this time a distinct fullness of the joint. The four depressions at the four corners of the patella had disappeared and were replaced by four convexities which fluctuated.

The leg was put in plaster, and all motion of the knee joint was prohibited by the plaster for three months. Then the plaster was taken off and the boy beginning to be active, there was again a slight swelling of the joint, and the plaster was reapplied and kept on for a couple of months more, and then taken off; and finally we saw the end of that surgical joint. The needle has, in all likelihood, become encysted, and will likely do no more harm. The other case was that of a boy riding his velocipede and falling with it. He was picked up and carried home, and when his doctor saw him he concluded he had a dislocation of the femur, because the leg was fully an inch and a half or two inches longer than the other, and because it was rigid, immovable and painful. The doctor chloroformed him, and attempted to reduce the dislocation, and thought he had succeeded. He applied a bandage to the boy's thigh and pelvis, and put him to bed, and the boy complained very little for two or three days. After this the doctor took off his bandages, examined the limb, and found it was fully two inches longer than the other. It was then I saw the boy, and examined him under chloroform as the doctor had done. The curious part of the case was that when the boy was anæsthetized his limb was the same length as the other, and it was evidently not dislocated; but when the boy came from under the influence of the anæsthetic, the limb lengthened two inches. The parents sent for additional counsel, and the last medical gentleman called in concluded that the boy had hip joint disease. We could not make a diagnosis, allowed that to go, and put the boy to bed.

He was kept there two or three days, then got up and walked, and had no pain nor deformity. On a later occasion when I saw him he complained of pain, and again his leg was apparently two inches longer. We examined him very carefully, and we found that this was a stipulated disease, that, as my friend, Dr. Stevenson, has characterized it, it was a hysterical joint, and that the lengthening was not between the pel vis and the femur, but was produced by muscular tilting of the pelvis. The length from both anterior superior spinous processes, to corresponding points below, was always the same, even when the leg projected two inches beyond its fellow.

On the other hand, a line from an anterior superior spinous process to the other is not at right angles with the body, but two inches lower on the side where the leg seems longer. This boy is now actively about, painless and straight; but when he is cross, willful or disappointed, he complains of his hip, tilts his pelvis, and lengthens his leg.

Dr. Green—Dr. Lange's case reminds me of a surgical joint with which I have had some trouble. The patient, whom I have been called to see many times, has the power of dislocating the lower jaw. She is a girl of nine years; she has always been notorious for will power. Her mother told me that from childhood, whatever she asked for had to be given her. She would say: "If you don't give it to me I'll stretch," and immediately, were the request not granted, the child would begin to "stretch," and open her mouth just as wide as she possibly could, until her jaw would slip out. About two months ago I replaced the jaw; whether she has done much stretching since that time I do not know. I have known some persons who frequently had dislocations of the lower jaw, but in no other case have I seen a person who could wilfully, maliciously, bring about this condition of affairs by stretching, and this boy of whom Dr. Lange has spoken reminds me of the spoiled child who "stretches."

Dr. Buchanan—I understand the subject of the evening to be surgical joints, and those I presume, are joints which are subjects for surgical treatment, either from disease or accident injury. Vast improvements have been made in the treatment of injured joints within the last ten or fifteen years. It is within my recollection when a simple puncture of the ankle joint, and an injury requiring amputation of the anterior part of the foot, would have determined a Syme's operation, or an amputation of the leg. So great stress was laid upon the fact that *a joint had been opened*, and I believe this to be true with very many medical men to-day, that, when called to such a case, the question of amputation rises strongly in their minds. It is well known to-day by surgeons that the synovial membranes can be treated in very much the same way, and with the same impunity as the tendinous sheaths, or any other of the soft tissues of the body. The thing of importance is, when these cavities are open, to keep them aseptic. If this is done no harm can result from the opening, and in the case of the joints we have exactly the same means of keeping them aseptic as in the case of the peritoneal cavity, and we can, in addition, if desired, use antiseptic solutions.

Now, we are constantly called to dress injuries of joints, particularly fractures of the bones which go to form the

joints; and I am satisfied that the practice will be in the future, in many cases, to open joints, wash them out, repair the soft parts, and wire the fragments of bone where the joint has been subcutaneously opened, and where the bones can not be kept in apposition without great trouble, painfully pressing splints and firm bandaging. I am reminded of a case which Dr. Murdoch saw with me in consultation about a year ago. The patient had a simple fracture of the fibula and a fracture of the inner malleolus. I was called to the case and reduced the fracture without great difficulty, and was able to place the broken malleolus exactly in its position, and retain it there with a simple splint. Dr. Murdoch was called in consultation at the request of the patient, and to my satisfaction, the next day. We endeavored to replace this dressing by another more permanent in character. This set up a frightful spasm of the muscles of the fibular side of the limb, and the spasms were so great that, using all our force, we had not the power to overcome them and place the limb in shape. I never saw a patient suffer more than did this patient for a few minutes. These sharp-edged fragments threatened to break through the skin and form a compound fracture. I proposed at that time, although the patient refused to listen to any suggestion of the kind, to make an incision over the point of fracture, and put in a single silver wire to retain the inner malleolus in position, and the pressure of an ounce or two ounces on that silver wire would perfectly keep the bone in position. Having to start with a simple fracture, having made the wound ourselves, we could keep it aseptic, no harm could come to the joint.

I believe the time will come when that will be the ordinary treatment of such fractures in the neighborhood of joints, where the disposition to displacement is very great, where a very slight force exerted through a silver wire will hold the parts perfectly in apposition, and where we have every possible chance to keep the wound aseptic. There is another aspect of surgical joints not dealt with very often, and that is the advisability, where there is doubt, of making an exploratory opening. I see no reason in the world why exploratory openings should not be made into joints when we suspect disease, as well as into the peritoneal cavity, and as often; but such openings are, I believe, very rare. With regard to case reported this evening, of compound fracture of the inner malleolus and fibula, in which there was protrusion of the shaft of the tibia, in which the patient was etherized, and section of the tendo Achillis made, and a piece cut from the end of the tibia to facilitate reduction, I would say that I reported to this

society a year ago a case exactly similar in all respects. I did not find it necessary to do a tenotomy, and the bone was returned without sawing any of it off, and I can hardly imagine a case of this nature in which the same result could not be secured, providing the opening in the soft parts is sufficiently large to let the bones slip in. Muscular action is the only thing that would prevent the return of such a bone, and it can be completely abolished by anæsthetics.

Dr. Davis—All cases of joint diseases present certain characteristics peculiar to themselves, and require good judgment on the part of the surgeon at the time, and can scarcely be discussed in a general way, but there are joints that are difficult of diagnosis, that no doubt give rise to a great deal of distress to the patient, and give rise also to a good deal of of distress to the attending physician, because of the long continued suffering involved. The youngest practitioner is likely to come in contact with such joints. One of the very important questions in such joints is when a surgical operation is advisable, or whether it is advisable at all. Take, for instance the tuberculous joints referred to. The question comes up, when to operate upon it. Will the opening of these joints remove the diseased tissue? Will it give the patient a better chance of life? It is but a few years since all cases of hip joint disease were considered the property of the surgeon. We have heard to-night of this being carried to extremes on the other side of the water, and operations done which would not be allowed here, and yet in looking at the statistics the operation on the hip joint has not been satisfactory.

In the first place, quite a large percentage of those operated upon have died; perhaps not directly following the operation, but within a few days or a few weeks after it. And of those who have recovered from the direct result of the operations, over one-half have died where the diseases have been of tuberculous origin, in such a short time that it is questionable whether the operation does not hurry the general disease. I have read somewhere that out of 388 cases of hip joint disease operated on, only 61 presented results that could be called satisfactory. Of these 61 there were about 40 that had motion in the joint. Of the 40 there were about 10 who did not have to use artificial means, such as cane or crutch, in walking. Results such as these are not flattering for the operation, and do not lead us to hurry or advise our patient to go into the hands of the surgeon, and submit to the operation, so liable not to be favorable in its outcome. And then in regard to operations on the knee. While we know that under aseptics it has improved wonderfully as regards immediate death, yet

the cases, especially where it is tuberculous, have not done as well as we could wish. And so of the ankle joint. I have in mind now a tuberculous ankle joint where operations have been advised over and over again. I do not know but that if this young man would submit to the operation, and have all this bone removed, the confinement in the house would hasten his end. It is difficult for me to know whether to advise an operation or not. The difficulty with the general practitioner is to know whether to turn such cases over to the surgeon, and with the surgeon to know whether operation ought to be resorted to.

Dr. Murdoch—I think the surgeons who are in advance in this matter of treatment of joints are tending toward diminution of operations at the late stage, where there is great injury to bone. Patients in that condition do not recover well from an excision of a joint, and I believe the tendency of the better surgeons nowadays, would be to recommend radical measures in joints such as Dr. Davis has described. If the bones are extensively diseased, and the joint extensively involved, the patient would be likely with an excision, to perish from a general giving away of the system. I fully believe that such surgeons as McEwen, of Glasgow, and Barker, of London, and the surgeons most in advance, operate early, when the disease is local, and before it has yet attacked the synovial membrane, then is the time to operate at the earliest stage, when it is possible to remove the disease, and it can then be removed through a smaller incision without disturbing the relations of the joints, and a movable articulation may then be possible. In Ireland and Scotland, where there are hundreds of these cases to one here, the people have been educated up to the necessity of not allowing this disease to go on, and are willing to submit to an early operation. I am very sure the people here will not submit to the early operation thought proper there. I believe that it will yet come to be the proper practice where a diagnosis can be made sufficiently early. I will say to Dr. Kœnig that if he will come up some time to my operations, I will show him how to do the operation, and how I have been so successful in preventing infection of the wound with the washouts I use.

PRELIMINARY ANNOUNCEMENT OF THE PROGRAMME OF THE SEVENTEENTH ANNUAL SESSION OF THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION, TO BE HELD IN ST. LOUIS, OCTOBER 14, 15 AND 16, 1891.

1. "The Toxic Effect of Tobacco Vapor; with Report of Cases." W. Carroll Chapman, M. D., Louisville, Ky.

2. "The Management of Chronic Diseases." S. Baruch, M. D., New York, N. Y.

3. "The Ethics of Curing Consumption and other Chronic Diseases." John Ashburton Cutter, M. D., New York, N. Y.

4. "The Treatment of Typhoid Fever." Robert C. Kenner, M. D., Louisville, Ky.

5. "The Carbolates." William F. Waugh, M. D., Philadelphia, Pa.

6. "On Degenerative Processes in the Spinal Cord, Consequent upon Constitutional Diseases." Hugo Summa, M. D., St. Louis, Mo.

7. "Iliac Indigestion—Intestinal Dyspepsia—and its Treatment by Antiseptic Agents." Frank Woodbury, M. D., Philadelphia, Pa.

8. "The Influence of Graveyards on Public Health." S. W. Carhart, M. D., Lampasas, Texas.

9. "Rheumatism and Gout in their Casual Relation to Eczema; their Management." A. H. Ohman-Dumesnil, M. D., St. Louis, Mo.

10. "The Value of Epilation as a Dermato-Therapeutic Measure." Joseph Zeissler, M. D., Chicago, Ill.

11. "Gradation of Lenses." Dudley S. Reynolds, M. D., Louisville, Ky.

12. "The Influence of Alcohol on Vision." Francis Dowling, M. D., Cincinnati, O.

13. "Tobacco and Insanity." Ludwig Bremer, M. D., St. Louis, Mo.

14. "The present Aspect of Cerebral Surgery." Landon Carter Gray, M. D., New York, N. Y.

15. "Forensic Aspect of Bruises and Fractures in the Insane." J. G. Kiernan, M. D., Chicago, Ill.

16. "Amputation of the Scrotum, with Report of a Case." B. Merrill Ricketts, M. D., Cincinnati, O.

17. "Observation on Urethral Stricture." G. Frank Lydston, M. D., Chicago, Ill.

18. "The Mechanical Element in Treatment of Compound Fracture." Warran B. Outten, M. D., St. Louis, Mo.

19. "A Report of a Case of Retention of Urine caused by Multiple Urethral Calculi." J. V. Prewitt, M. D., West Point, Ky.

20. "Some Observations on Rectal Surgery in Europe." Leon Strauss, M. D., Louisville, Ky.

21. "A New Method of Diagnosing Obstruction in the Sigmoid Flexure." Jos. M. Mathews, M. D., Louisville, Ky.

22. "Pathology and Surgical Treatment of the so-called

Strumous Inguinal Lymphadenitis." L. T. Riesmeyere, M. D., St. Louis, Mo.

23. "The Treatment of Gonorrhœa." E. C. Underwood, M. D., Louisville, Ky.

24. "Extirpation of the Thyroid, with Report of Case." Emory Lanphear, M. D., Kansas City, Mo.

25. "Are Conservative Amputations always in the Interest of the Patient?" Charles Truax, Chicago, Ill.

26. "Sarcoma of the Dorso-Scapular Region—Operation—Recovery." George N. Lowe, M. D., Randall, Kansas.

27. "Mouth Breathing." Eric E. Sattler, M. D., Cincinnati, Ohio.

28. "Empyema of the Superior Maxillary Antrum, with only Nasal Symptoms." Hal Foster, M. D., Kansas City, Mo.

29. "A Superior Remedy for Nasal Catarrh; Campho-Menthol." Seth S. Bishop, M. D., Chicago, Ill.

30. "A Case of Reflex Aphonia; Demonstrated to be due to Pressure of the Middle Turbinated against the Septum Nasi." Hanau W. Loeb, M. D., St. Louis, Mo.

31. "Importance of Recognizing a Temporary Rachitic Condition in Infants." John A. Larabee, M. D., Louisville, Ky.

32. "A Pathological Study of Pelvic Inflammation in Women." Wm. Warren Potter, M. D., Buffalo, N. Y.

33. "Observation on the Management of Uterine Tumors." Chas. A. L. Reed, M. D., Cincinnati, Ohio.

34. "Complications Following Abdominal Section." Rufus B. Hall, M. D., Cincinnati, Ohio.

35. "Obstetric Dispensaries; their Management." L. A. Berger, M. D., Kansas City, Mo.

36. "Surgical Treatment of Peritonitis." A. V. L. Brokaw, M. D., St. Louis, Mo.

37. "Temperance No Guide in Peritonitis." H. C. Dalton, M. D., St. Louis, Mo.

38. "Some Monstrosities at and After Birth." David S. Booth, M. D., Belleville, Ill.

39. "Oophorectomy vs. Donothingism." Willis P. King, M. D., Kansas City, Mo.

40. "A Successful Gastrostomy for Impermeable Stricture of the Cardiac End of the Œosphagus—Subsequent Dilation of the Strictures." Arch. Dixon, M. D., Henderson, Ky.

41. "The Nervous Equation of Pelvic Inflammation." Geo. F. Hulbert, M. D., St. Louis, Mo.

42. "Hysterectomy for Cancer." J. M. Richmond, M. D., St. Joseph, Mo.

43. "The Application of the Obstetrical Forceps." John Bartlett, M. D., Chicago, Ill.

44. "Appendicitis." W. H. Link, M. D., Petersburg, Ind.

45. "Phthisis—Beginning its Treatment." Edward F. Wells, M. D., Chicago, Ill.

46. "The Hydrotherapy in Typhoid Fever." H. H. Middlekamp, M. D., Warrenton, Mo.

47. "Hystero-Epilepsy." Howell T. Perching, M. D., Denver, Col.

48. "Importance of Definite Strength in Mineral Waters." Geo. F. Hulbert, M. D., St. Louis, Mo.

49. "The Time and Place for Stimulants." By Chas. H. Hughes, M. D.

Regular classified programme will be issued and sent to members and the profession generally at an early date. Titles of papers must be sent to Chairman of Committee of Arrangements before October 5, 1891.

I. N. Love, M. D.,
Chairman Committee of Arrangements,
Grand and Lindell avenues, St. Louis.

E. S. McKee, M. D., *Secretary.*
C. H. Hughes, M. D., *President.*

FOURTEENTH ANNUAL MEETING OF THE AMERICAN SOCIETY OF MICROSCOPISTS NOW THE AMERICAN MICROSCOPICAL SOCIETY.

SPECIAL CIRCULAR.

From the fact of members of our society being residents in almost every State of the Union, it has always been the case that but a small proportion can make it convenient to attend any meeting—the remainder have only been able to learn what was done at any meeting, by waiting until the annual volume of proceedings was issued, usually six or more months afterward. In order that every member may know as soon as possible what was done at the late meeting in Washington City, it has been deemed advisable to publish the following statement:

The society convened according to announcement, on Tuesday, August 11, 1891, at 10 o'clock A. M., in the preparatory department of the Columbian University. After an opening prayer, by Rev. R. S. L. Wood, the address of welcome was delivered by Dr. J. S. Billings, F. R. M. S., of the Surgeon General's Office, U. S. A., followed by remarks by Dr. Thos. Taylor, President of the Washington Microscopical Society. These were responded to by President F. L. James, of St.

Louis, after which the society proceeded to the regular course of business, and so continued during the regular sessions until final adjournment on Friday afternoon, August 14. During the sessions the following papers were presented:

1. L. D. McIntosh—The portable lime light.

2. Prof. M. D. Ewell—A new form of graphological microscope.

3. Prof. M. D. Ewell—Standard glass and speculum metal centimeters.

4. Dr. James M. Flint—Apparatus for public and class exhibition of microscopic objects.

5. Wm. A. Rogers—The relations between a mikron and a wave length of sodium light.

6. Dr. J. Melvin Lamb—The microscope in government work.

7. Dr. Wm. C. Krauss—The microscope as a factor in the diagnosis, prognosis, and treatment of morbid new growths.

8. Dr. Veranus A. Moore—Apparatus for holding cover glasses when staining.

9. Dr. Veranus A. Moore—Observations on staining the flagellæ of motile bacteria.

10. Miss Vida A. Latham—A brief account of the microscopical anatomy of a case of chrome lead poisoning.

11. Miss V. A. Latham—The use of stains, especially with reference to their value for differential diagnosis.

12. Prof. Wm. H. Seaman—The phosphorescent organs of fire-flies.

13. Dr. Lucien Howe—Floating particles in the eye a source or error in microscopical observation.

14. Prof. Simon H. Gage—Notes on the fixation of serial sections, and the collodion method of histology.

15. Prof. Simon H. and Susannah P. Gage—Comparison of the epithelium of the mouth in Necturus and Diemyctelus.

16. Simon H. Gage—Preparation of the fibrin filaments of blood and lymph, and of the oxyhæmoglobin crystals of Necturus.

17. John Michels—The microscopical examination of pork by the United States government.

18. J. M. Stedman—On the nervous system of a fresh water sponge.

19. J. M. Stedman—The killing of Invertebrata in an expanded condition.

20. Dr. Lucien Howe—The mechanical stage used as a micrometer.

21. E. H. Griffith—New accessories made by additions to the Griffith Focus Indicator, etc.

22. Robert Moody—The arrangement of the muscular layers of the intestine of the cat at the junction of the large and small intestine.

23. Edward Bausch—A new microscope.

24. Dr. T. Taylor—A new revolving stage for exhibiting a large number of objects.

25. Dr. T. Taylor—An improved method of detecting lard adulterations.

26. Dr. Lyman Deck—A heliostat from a common clock works.

27. E. H. Griffith—Three new accessories for the microscope.

28. Henry L. Tolman—Hints on expert testimony.

The following persons were elected members: Dr. George N. Acker, Washington, D. C.; Dr. W. T. Baird, Dallas, Texas; Nathan Banks, Sea Cliff, N. Y.; Dr. James Barnsfather, Cincinnati, O.; Prof. Thomas D. Biscoe, Marietta, O.; N. Howland Brown, Philadelphia, Pa.; J. C. Brubaker, Kansas City, Mo.; Prof. Edward A. Burt, Albany, N. Y.; Prof. S. W. Collett, Glidden, Iowa: Dr. Rand P. Crandall, Brooklyn, N. Y.; Chas. H. Dennison, Brooklyn, N. Y.; Prof. Arthur H. Elliott, New York City; Dr. James M. Flint, Washington, D. C.; Dr. Charles B. Gilbert, Washington, D. C.; Rev. Geo. Goetz, Erie, Pa.; Dr. Julius A. Gottlieb, New York City; Prof. Gustave Guttenberg, Pittsburgh, Pa; Prof. Byron D. Halsted, New Brunswick, N. J.; Dr. Henry N. Heineman, New York City; Dr. Thomas Hood, Washington, D. C.; Dr. A. O. Ingalls, Murray, Idaho; Dr. Miles W. Ingalls, Lagrange, O.; Dr. H. L. E. Johnson, Washington, D. C.; Hebert E. Kenney, Littleton, N. H.: Dr. Joseph J. Kinyoun, Washington, D. C.; Dr. A. L. Kotz, Easton, Pa.; Dr. T. Melvin Lamb, Washington, D. C.; Prof. E. G. Love, New York City; Dr. T. W. Mecker, Nyack on Hudson, N. Y.; Dr. John Michels, Chicago, Ill.; Dr. W. S. Miller, Worcester, Mass.; Robert O. Moody, New Haven, Conn.; Dr. A. E. MacKay, Portland, Oregon; W. H. Ohler, Portland, Maine; Dr. Paul Paquin, Columbia, Mo.; F. Patrick, Topeka, Kansas; Magnus Pflaum, Pittsburg, Pa.; Dr. Otto E. Plath, Cincinnati, O.; Dr. Joseph P. Remington, Philadelphia, Pa.; Dr. Henry A. Robbins, Washington, D. C.; Dr. James Foster Scott, Washington, D. C.; Rudolph Siemon, Fort Wayne, Ind.; Dr. Chas. D. Smith, Portland, Maine; Prof. John B. Smith, New Brunswick, N. J.; Harry F. Startsman, Rochester, N. Y.; Dr. James Stimson, Watsonville, Cal.; Harry G. Wales, Philadelphia, Pa.; Dr. Geo. O. Welsh, Westborough, Mass.; Dr. Ernst Wende, Buffalo, N. Y.;

Jonathan White, Brockton, Mass.; Dr. R. S. Willard, Buffalo N. Y.; Frank Zentmayer, Philadelphia, Pa.

The annual address of the President, Dr. Frank L. James, of St. Louis, Mo., was delivered on Tuesday evening, August 11, at 8 o'clock, in the lecture room of the First Congregational Church, corner 10th and G streets.

Subject: "The Microscope in the Investigation of Scorches and Burns on Textile Fabrics," and was listened to with great attention by a large and appreciative audience.

During their stay, the members, by special invitation, visited the United States Geological Survey, on Tuesday afternoon; the Agricultural Department, Bacteriological and Chemical Laboratory, on Wednesday afternoon; the Army Medical Museum, and Fish Commission, on Thursday afternoon, and accepted an excursion to Mt. Vernon, for Saturday morning.

There was no working session as heretofore; it being believed that an inspection and explanation of the microscopic work done in the various departments of the government would be more instructive, interesting and acceptable to our members.

On Thursday evening the usual public exhibition of Microscopes and objects took place in the Armory of the Light Battery and Cavalry Troop, attended by a large and interested concourse of people. About sixty-one microscopes were set up. In an adjoining room a lantern exhibition was given by Dr. L. A. McIntosh, and Mr. W. H. Walmsley.

For several years the question of incorporation of the society has been under serious consideration by some of the leading members; this question was taken up at this meeting; and after discussion it was unanimously resolved to make application for a charter, and a committee was appointed for that purpose. This committee went immediately to work, and before the meeting finally adjourned had obtained a charter, under the law of the District of Columbia. The committee on revised constitution and by-laws reported, and were discharged; a new committee was then appointed to make such changes as were necessary by the act of incorporation.

This committee reported a temporary constitution for this year, and the executive committee were empowered to prepare a new constitution and by-laws, and present at the next meeting.

It is confidently believed that incorporating the society will assure its permanence and greatly increase its usefulness. It has now a legal existence; can own real and personal property, and defend its title thereto; can become the donee and trustee of funds directed to be used in microscopical or other research, etc., etc., wich it could not do heretofore.

It was also deemed advisable at this time to make a change in the name of the society—it is now, under the charter, entitled the "American Microscopical Society"—which it is hoped the members will find more appropriate than the original name.

It has often been cited as a reproach to American science that it contributed nothing in the way of *original research*. Our colleges and universities expend their energies in bringing young men up to the point where they are ready to begin this work, and with a few recent exceptions, offer no opportunity for them to prosecute it, when qualified.

Now the American Microscopical Society is organized for the express purpose of original research in a special field of science not covered by any other existing organization. It is composed of men who are actually engaged on the frontiers pushing their way into the boundless unknown territory of natural phenomena, and adding new areas to those we already own.

The Spencer-Tolles fund, now amounting to $292, not yielding sufficient annual revenue yet to be used as a prize for original research as intended; two of our members, believing that a prize would stimulate some investigators and redound to the honor of the society, have placed $50 at the disposal of the executive committee, to be given in two prizes, $30 and $20 respectively (in cash, or a medal of equal value), for the best two papers on subjects of original research presented at next meeting—the particulars and conditions of this feature will be announced shortly by the secretary.

The question of establishing a journal, controlled by, and published in the interests of the society, is one that has been discussed several times. Heretofore such discussions have not considered anything different in general character from the journals now published, but the fact that there are subscribed for or otherwise obtained by the government department in Washington *all* the scientific journals in the world, and that these journals are open to public use by any suitable person, renders it possible to publish a review or abstract of the microscopical literature of the *entire world*, here in Washington, without any expense for said journals. It is thought by some, that a monthly publication, consisting of abstracts of such articles as may properly come under the head of microscopical science, would be the greatest help to the advancement of and benefit to the society of anything that can now be done. The only obstacle in the way is the want of money to pay for the mere printing. The income of the society just about suffices for the publication of its annual volume of proceedings. It can not be expected in the light of experience, that such a journal

would at first pay its way, although this result is possible, after it should be fully established as a first-class reliable journal. To some members of the society, this seems to be the pressing need of American workers interested in the microscope. It has been suggested that the various colleges of the land should contribute a small sum each, and thereby secure for themselves a most valuable reference index, and the substance of the articles themselves. Also that, if possible, the object be presented to some of our wealthy men, as a mode by which they can greatly promote the advancement of scientific research in this country, by giving to the society a publication fund, to be invested and the interest used for this purpose. As the society is now incorporated, such a fund would be in responsible hands. It is believed that a corps of voluntary abstractors could be obtained that, for a time at least, would furnish the matter with little or no expense for the literary work. A committee was appointed to take the subject under consideration, and to report at the next meeting. Every member who can in any way assist in this matter, is requested to do so.

The report of the treasurer shows the society to be in satisfactory financial condition. At the opening of the meeting there was $276.99 on hand, and all debts paid. It may be stated, however, that the society needs the dues of every member—money is required to carry on the work of the society, and the more that is available for the publication of the annual volume, the better the volume can be made—better for each member, and more to the credit of the society. The volume will be issued at the earliest possible date, also a circular announcing the particulars and place of the next meeting.

The officers elected for the ensuing year are: President, Prof. M. D. Ewell, of Chicago; vice-president, Dr. Robt. Reyburn, of Washington; vice-president, Dr. R. J. Nunn, of Savannah, Ga.; secretary, Dr. W. H. Seaman, of Washington; treasurer, C. C. Mellor, of Pittsburg, Pa.; executive committee, Dr. J. A. Miller, of Buffalo, N. Y.; Prof. E. W. Claypole, of Akron, O., and Dr. J. M. Lamb, of Washington, D. C.

Prof. S. H. Gage was also selected as chairman of the working session we hope to hold at the Columbian Exposition in 1893. It was felt necessary to begin in good season in order to make satisfactory arrangements.

Mr. E. H. Griffith was appointed chairman of committee on working session for 1892. Mr. Griffith has had so much experience in this department, and is so skilful and ingenious a worker himself, that his appointment assures that the work-

ing session will be a most attractive and useful feature of the next meeting.

It is hoped that all members will use their best endeavors to make the aims and purpose of the American Microscopical Society known to those of their friends or acquaintances who do or should take an interest in microscopical study or investigation, and to induce them to join. The dues are so small, and so much is to be gained by association in such a science, that we should have on our roll every one in the United States who uses a microscope. By a small effort on the part of each member, a large accession of new members can be made at the next meeting.

It is difficult for the secretary of the society to find out in our great country, the names of all those, so numerous, who are interested in the microscope, and who would be likely to become members of the society, if its character and work are made known to them. It is therefore particularly desired that every one who knows and is favorably disposed toward the society will make known to the secretary the name and address of any who may be induced to become members, so that the secretary can send them circulars, etc., published from time to time by the society, and that they may in this way become acquainted with it and be induced to join it.

Blank application for membership may be obtained by addressing the secretary, Dr. W. H. Seaman, 1424 11th Street, Washington, D. C. The admission fee is $3, the annual dues $2, payable in advance. This amount ($5) may be forwarded with the application.

Wm. H. Seaman, *Secretary.*

Washington, D. C., September 1, 1891.

MISTAKES OF A PHYSICIAN.

First—To promise a patient that you will cure him.

Second—To promise to call at an exact specified time.

Third—To promise that the malady will not return.

Fourth—To promise that you can render more efficient service than your fellow practitioner.

Fifth—To promise that your pills are not bitter or that the knife will not hurt.

Sixth—To promise that the chill or fever will not rage so high to-morrow.

Seventh—To allow your patient to dictate methods of treatment or remedies.

Eight—To allow yourself to be agitated by the criticisms or praises of the patient's friends.

Ninth—To allow yourself to buoy the patient when the case is hopeless.

Tenth—To allow yourself to make a display of your instruments.

Eleventh—To allow yourself to experiment or exhibit your skill uncalled for.

Twelfth—To allow yourself by look or action in a consultation to show that you are displeased, and that if you had been called first matters would have been different.

Thirteeth—To allow yourself to indulge in intoxicating beverages.

Fourteenth—To allow yourself to rely wholly upon the subjective symptoms for your diagnosis.

Fifteenth—To allow yourself to tell the patient you are prescribing saccharum album when you are giving calomel.

Sixteenth—To allow yourself to give arsenic and quinine when a bread and water placebo will answer.

Seventeenth—To allow yourself to tell Mr. Smith the weak places and irregularities of habit in Mr. Jones' family.

Eighteenth—To allow yourself to give your services or an opinion without a reasonable fee or a reasonable expectancy. —*Kansas Med. Journal.—Practice.*

AMYL NITRITE IN AFTER PAINS.

Winterburn uses this drug in severe attacks of after pains. He takes a small vial (two-drachm) and inserts a piece of paper, moistened with five or six drops of the nitrate. The vial is then corked and the patient directed to remove the stopper and inhale the drug when the pains assume a severe character.—*Archives of Gynæcology.*

N. O. Medical and Surgical Journal,

ESTABLISHED IN 1844.

PUBLISHED MONTHLY, $2.00 A YEAR.

Articles from physicians are respectfully solicited. All articles, news and exchanges, and books for review, should be sent to the EDITOR, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL. Business communications should be addressed to the BUSINESS MANAGER, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

EDITED AND PUBLISHED BY

AUGUSTUS McSHANE, M. D.

COLLABORATORS:

DR. F. W. PARHAM. DR. H. W. BLANC. DR. A. W. De ROALDES.
DR. R. MATAS. DR. JOHN DELL'ORTO.

Editorial Articles.

We take pleasure in publishing the following communication from Dr. Wm. Moor, which is self-explanatory:

"DEAR SIR: The assistant librarian of the New York Academy of Medicine, was kind enough to show me an "Editorial Article," in the last number of the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL, referring to Dr. McLaughlin's and my own theory of immunity. In answer to this editorial I beg to remark the following:

1. At the time of publishing my article in the New York Medical Journal, of July 18, 1891, I had not the slightest knowledge of Dr. McLaughlin's paper.

2. My esteemed colleague's treatise and my own differ so fundamentally, that the question of priority is not to be considered in our case. The term "molecular vibration," as occurring in my papers, is used simply to convey to our mind a more definite idea of the normal and changed dynamic condition of the organic molecules of the system or a part of it, and is *not at all* essential for the maintenance of my theory of immunity, much less the starting point of it, as Dr. McLaughlin says, whereas the doctor actually applies the laws or acoustics *in toto* to the explanation of pathological phenomena; therefore, his conception of the molecular vibration of bacteria and organic molecules forms the basis of his article.

3. Though very much admiring the doctor's stylistic faculties, still I am obliged to say, that his theory is virtually the one advanced by Chauveau, which attributes the acquired immunity to substances resulting from the body-metabolism of the respective micro-organisms and held in solution hereafter by the previously infected body. Dr. McLaughlin simply adopts this view and tries to explain why these substances remaining in the system should be detrimental to a renewed growth of germs of the respective species. In my own article I have pointed out that the bacilli of tuberculosis proliferate in the lung tissues for a period extending often over many years, that the germs of anthrax septicæmia, etc., thrive in blood taken from animals that are at the height of the infection, whose blood is abounding already in the respective bacteria and their ptomaines, that the bacillus typhi abdominalis, the bacillus anthracis, spirillum choleræ asiaticæ, bacillus indicus ruber, bacillus fluorescens liquefaciens, and proteus vulgaris grow as well on culture soils that have been impregnated with their particular ptomaines as in pure media.

4. In my paper I did not dwell on the question of immunity due to inoculations with ptomaines, not having given sufficient study to this subject, but I dare state already, that such an immunity is not due to the antagonism of the ptomaines themselves or to that of newly formed molecular combinations on the ground just referred to. (See No. 3.) I trust to find soon a satisfactory explanation of these phenomenon. I am, sir, yours very truly, WILLIAM MOOR, M. D.

New York, September 3, 1891.

PROPHYLAXIS OF TUBERCULOSIS.

It has been stated by Drs. Gibbes and Shurley that the discovery, in 1882, of the bacillus of tuberculosis has not advanced the therapeutics of the disease one whit. While it is true that the treatment of pulmonary tuberculosis is far from being ideally successful, it is equally true that attention to certain simple and well defined hygienic measures will effectually prevent the

spread of the disease among unaffected persons even though these be of the kind described as "predisposed." The importance of prophylactic measures is felt by all men, and chiefly those who are engaged in laboratory studies that cause them to observe very closely the habits of the tubercle-bacillus. The laity, not possessing the knowledge of physicians, can not fully appreciate the necessity of certain precautions in the presence of possible infection; it behooves the profession constantly to instruct laymen in the methods of preventing the spread of this most formidable disease that afflicts mankind.

At the fifth session of the Association of American Physicians, among the many valuable papers contibuted there were two on "Tuberculosis" from Dr. Ernst and Dr. Shakespeare. Dr. Ernst exhibited some specimens, one of which was a rabbit with general tuberculosis of the intestines, which resulted from the subcutaneous injection of a few drops of milk from a suspected cow. A child fed on milk from this same cow died of tubercular meningitis; and a second child was showing symptoms of the same disease. Tubercle bacilli were found in the lesions.

In the course of a paper on "The Prevention of Tuberculosis," Dr. Shakespeare considers the alleged heredity of tuberculosis, and lays down general principles that should underlie a broad plan of prophylaxis. Assuming that the bacillus is the sole and efficient cause of tuberculosis, he denies the heredity of the disease as heredity is usually understood. A person may inherit from tuberculosis ancestors a lowered vitality, a predisposition to tuberculosis; but more than predisposition is required to produce the disease. Without the bacillus, there is no tuberculosis. Among transmissible diseases syphilis stands as a striking example; it is, perhaps, as often transmitted to the fœtus *in utero* as it is acquired after birth. In the face of this, however, there is strong reason to believe that diseases which are essentially infectious are also essentially non-hereditary. In tuberculosis, heredity fails to account for about eighty per cent. of the cases; and tuberculosis *in utero* is the rarest of all affections. These facts give ample ground for the belief that tuberculosis, while it is infectious, is essentially non-hereditary. Heredity,

however, does play an important part in lowering the vitality of the organism, and predisposing the patient to the invasion of tuberculosis; but this predisposition of itself does not produce the diseases of which the active causative agent is the tubercle-bacillus. It may be stated, in passing, that Dr. Thos. H. Mays has recently published a booklet in which he attributes pulmonary consumption to disease of the pneumogastric nerves; the bacillus becomes then a mere epiphenomenon. The doctor's views are at variance with those of the rest of medical mankind, and will not, we expect, receive quite as much attention as the discovery of the bacillus. We will, later on, give a summary of Dr. Mays' views in our review column.

Accepting the etiological importance of the tubercle-bacillus, Dr. Shakespeare thus states the general principles of prophylaxis:

1. Destruction of the vitality of the tubercle-bacillus wherever it may be found outside of the human body.

2. Avoidance on the part of the unaffected of unnecessary risk of introduction, into the organism, of the living bacillus tuberculosis.

3. Improve the resistant power of the individual, his personal hygiene, and that of his dwelling, in order that conditions untavorable to the presence, vitality and development of the tubercle-bacillus shall prevail as widely as possible.

The principles above stated, though brief, cover all the ground. It carried out intelligently and systematically, in all parts of the globe, consumption would, in the course of a generation, become one of the rarest diseases; but it is hoping too much, at present, to count on universal prophylaxis. In any well-regulated community, however, measures of prevention may be adopted without regard to the other communities. Among these there are two which are not difficult to secure: the destruction of phthisical sputum, and the establishment of hospitals for consumptives. When a patient fully recognizes that his sputum may be a source of infection to unaffected persons, it becomes easy to prevail upon him to adopt some one of the proposed methods for destroying the virulence of the sputum.

In general hospitals it certainly exposes non-phthisical patients to a new danger to place them in wards with persons in various stages of consumption.

Again, it was stated in Dr. Shakespeare's paper that there is no evidence showing that tubercle-bacilli propagated themselves outside of an animal organism.

* * *

A student of mortuary records, who casually glances over the monthly record of deaths in New Orleans finds no difficulty in picking out, from among the figures, the number that indicates the deaths from phthisis pulmonalis; it is always the largest on the list.

New Orleans annually pays an enormous tribute to phthisis. Must it ever continue thus? No. The people of our city, though inclined to be indolent, are still energetic enough to employ such means of making themselves non-dangerous, when they are marked out by phthisis as victims. But *they can not do anything unless they are instructed by their medical advisers.* A medical man who is consulted by a consumptive does not discharge his whole duty to his patient and to his neighbors unless he impresses the patient with the necessity of rendering his sputum innocuous, and not scattering it broadcast.

Again, it is important to detect phthisis in its early stages, since that is about the only time that we can expect to do our patients any good. Where the physical signs are not well marked, a microscopical examination of the sputum may show beyond doubt that the patient is suffering from pulmonary tuberculosis In order, then, to establish the existence or non-existence of pulmonary tuberculosis, it is necessary to call in the aid of the microscope. If the medical adviser neglects to fortify his diagnosis with an examination of the sputum, he is derelict in the performance of a sacred duty, since he thus allows to pass the only time in which there is any hope for a cure.

* * *

New Orleans has no hospital for consumptives. In the Charity Hospital, the consumptives are distributed among the

medical wards, where they may become possible sources of danger to the other patients.

The Hospital does a vast amount of good in relieving needy persons; but the isolation of consumptives and lepers would be a proceeding in line with the progressive ideas of the present administration of that time-honored institution. These ideas, however, require money to carry them out; and the exchequer of the hospital, unfortunately, is not in a condition to enable the powers that be to adopt all the measures suggested by the recent advances realized in science.

If any city ever needed a hospital for consumptives, New Orleans does. Let us hope that the public may in time be educated up to the necessity of providing separate hospitals for the care of consumptives.

* * *

In stating that the bacillus of tuberculosis did not thrive outside of the animal organism, Dr. Shakespeare made a statement which is open to debate. The bacillus is a parasitic plant that sometimes implants itself in the human organism. But it does not belong there. In its wanderings through the air or food it happens to find an organism that forms a suitable soil for its growth; but it does not originally belong to that organism. The *filaria sanguinis hominis* invades the human organism, but it certainly exists independently of man. The bacillus of tetanus affects many, but it thrives and perpetuates itself in the soil and in horse-manure; it forms no part of the animal organism. The bacillus of cholera lives perennially in India, especially near the mouth of the Hoogly river. That part of the vast delta of this river, known as the Sunderbuns, is uninhabited by man, and is given up to the wild beasts. The luxuriant vegetation of this region gives rise to an inconceivable number and variety of microörganisms, some of which may be peculiar to the locality; and Koch regards it as not improbable that the cholera-bacillus may here be propagated, to be let loose from time to time upon mankind, as circumstances favor its migration. But the cholera-bacillus does not form an integral portion of the human organism.

All of the microörganisms have a life history of their own. They probably existed before man was created or was evolved

as the case may be; we have no direct historical evidence bearing on this question, however. If the bacteria could speak English, we would probably hear a great deal about man as a parasitic organism, thriving upon bacteria, etc.; fortunately, we are spared that.

Why is it necessary to maintain that the tubercle-bacilli can not prosper without the aid of an animal organism? The bacilli probably existed before man and other organisms high in the scale of animal life. That they can exist and thrive outside of the human body is shown constantly in bacteriological laboratories by artificial cultures. Can not some place be found in Nature where the conditions are as favorable to the growth of the bacilli as the gelatine in a culture-tube? Indeed, it was the opinion of Dr. H. W. Blanc, formerly Chief Sanitary Inspector of New Orleans, that the environs of this city did furnish all the conditions necessary for the development of the bacilli. It is to be regretted that Dr. Blanc's departure from New Orleans cut short a line of investigation that might have proved profitable, not only to this city, but also to every other community on the globe.

New Orleans is surrounded by marshes, the water of which contains a large amount of decaying vegetable matter. Amid the diversity of filth, natural and excrementitious, that finds its way into swamps, it is not unreasonable to suppose that there are some ingredients that favor the development of tubercle-bacilli; if so, New Orleans is afflicted with a natural culture-garden for the growth of the deadliest foe to the human race.

Within the city limits there are not lacking conditions favorable to the growth of the bacilli. Drainage of the city and surrounding swamps would transform New Orleans—transform it into a healthy place. But the demand for better drainage must come from the people—those who vote; and they will not demand a thing of which they know not the importance; the duty of the physician and the press—lay and medical—is plain.

The constituted authorities (the Board of Health, especially), could not establish a surer claim upon the affections of the people, or vindicate their right to exist better than by making a vigorous and well maintained campaign against the fell

destroyer. The Board of Health has about solved the yellow fever question. There is no question in the whole domain of hygiene, more important than the eradication of tuberculosis.

* * *

In the discussion on Dr. Shakespeare's paper, the doctor remarked that he did not know of any city in the country where the inspection of meat and milk is provided for by law. He further said that he had read that Pittsburg had made a pioneer effort in that direction. "All honor to her," he exclaims, "and may her praiseworthy example soon be followed by others."

We venture to inform the doctor that New Orleans is very much ahead of Pittsburg in the matter of inspection of meat and milk. About ten years ago an inspector was appointed to inspect meat at the slaughter house. For some reason, the inspections were abolished, but were revived in 1889, when Dr. Wunderlich was appointed inspector. Dr. Wunderlich was succeeded by Dr. Wheeler, a graduate of the Veterinary Department of the University of Pennsylvania. The milk supply of the city is frequently examined by the officers of the Board, but not for bacilli.

This is moving in the right direction. The Board is now directing a large share of its attention to the water supply of the city, and its relation to certain diseases supposed to be attributable to it. When this important matter is finally disposed of, it is to be hoped that the Board will earnestly consider the most important medical subject of the times—tuberculosis.

Abstracts, Extracts and Annotations.

MEDICINE.

DIURETIN—ITS ACTION AND USES.

In the *Archiv. Exper. Path. und Phar.*, XXIV., p. 85, v. Schroeder gave reasons for believing that caffein produces

its diuretic effect by stimulating the epithelial cells of the kidney, but that this influence is decreased owing to the contraction of the renal vessels which caffein causes by its stimulating action on the vasa motor centre. He showed, too, that theobromine, which only differs chemically from caffein by containing one equivalent less of methyl, and which has less effect on the cebral nervous system than caffein, acts as a powerful diuretic in rabbits. He suggested, therefore, that it might be employed as a diuretic in man. Its high price prevented for some time this suggestion being acted upon, but in recent times it has fallen to one-tenth the price it formerly commanded and Dr. Gram has made a series of observations on its use as a diuretic. He got some good results, but its action was unreliable, because absorbtion does not always take place; at times, too, it caused slight sickness. After trying several combinations of theobromine, he met with a compound of theobromine and sodium salicylate, which is very soluble in water, and is now sold by Knoll & Co., under the name of diuretin. This salt is white, and soluble with heat in less than half its weight in water; and no precipitation takes place on cooling. It contains 50 per cent. of theobromine, and does not cause sickness.

Gram gives records of eight cases, in which theobromine sodium salicylate was given. Five were cases of cardiac disease, and three of renal disease. In a case of mitral insufficiency, with dropsy and albuminuria, thirty to sixty grains of theobromine caused very marked diuresis without increasing the amount of urea. Caffein, given with paraldehyde, had subsequently similar but less marked effect in increasing the quantity of urine; digitalis was without influence.

In another cardiac case in which digitalis failed, theobromine had, on two occasions, a very marked diuretic influence. Here, however, pericarditis supervened during diuresis following on the administration of theobromine. The quantity of urea passed was not altered.

In a third instance in which strophantus was of little service theobromine sodium salicylate markedly increased the amount of urine passed, and this increase was accompanied by a considerable augmentation in the amount of the urea excreted.

In a fourth case, in which cardiac degeneration with mitral stenosis and insufficiency and albuminuria were present, the diuretic effect of diuretin was on three occasions very considerable, and a calcium salt of theobromine likewise increased the amount of urine. Here digitalis also produced some influence, but strophanthus, caffein, and calomel proved useless.

In this case it is noteworthy that under the theobromine salt the urea decreased and the albumen was increased in amount.

In the fifth case the theobromine sodium salicylate salt in doses of 180 grains daily had a powerful influence in increasing both the water and urea—digitalis proved quite useless.

In three out of the five cases the influence of the theobromine salt was noticed on the same day, and on the day following the administration of the drug.

Of the three cases of nephritis reported one was treated with theobromine in doses of forty-five—sixty grains daily; the diuresis only showed itself on the fourth day. The total amount of urea decreased when diuresis set in, whilst the amount of albumen increased somewhat.

In a second case the theobromine sodium salicylate had on three occssions a powerful diuretic influence; in the third, a case of tuberculosis with nephritis, the theobromine sodium salicylate not only increased the quantity of water, but the amount of urea also.

There can be no doubt that in Dr. Gram's hands the theobromine sodium salicylate proved a powerful diuretic; he does not, however, record cases (if any), in which he tried it without success.

He found no influence on the heart or circulation produced by the drug, and in the doses in which he gave it—forty-five to ninety grains—it caused no unpleasant after effects, and did not affect the central nervous system.

Dr. Hoffman says that according to Vulpius, the preparations supplied under the name diuretin do not agree either in the amount of theobromine or in their solubility. He used the diuretin sold by Knoll & Co., which is a combination, he says, of theobromine sodium with salicylate of soda. It has a bitterish taste, and is best given in a 5 per cent. solution, with a little syrup and peppermint of fennel water. From such a solution a little theobromine in a few days is precipitated. As diuretin is decomposed in the air, it is not well to order it in powder.

Diuretin is manifestly absorbed after it is taken, for the color tests shows its presence in the urine. In the faces no trace of it can be found.

Hoffman administered the diuretin in seventeen cases, whereof five suffered from pleurisy with effusion, one from peritonitis and pleurisy, two from lukæmia and dilatation of the heart, one from cirrhosis, one from acute niphritis, one from amyloid kidney, two from chronic nephritis, aud four from organic heart disease.

In all the cases of simple pleurisy the diuretin caused, on the day following administration, an increase in the secretion of water, in some cases small, but in some cases very large, the amount of urine being doubled or trebled. When the inflammatory condition was subsiding, the increased urine flow seemed to have a favorable effect in decreasing the exudation. Slight diarrhœa occasionally occurred. No other after effects were noticed, although 75 to 105 grains were given daily.

In the patient where tubercular peritonitis and pleurisy co-existed, no diuretic effect followed the use of the drug, and it likewise failed in the case of liver cirrhosis. On the other hand, in the two cases of chronic nephritis, and in a case of acute nephritis, the diuretic effects seemed marked, but no effect was produced in a case of amyloid kidney complicating phthisis. The most marked instances of diuretic action of the theobromine compound was seen in cardiac dropsy. In these cases, diuretin was, for the most part, only given when digitalis had failed, and Hoffman records four carefully observed cases of its marked diuretic influence in cases of cardiac disease. In twenty-four hours a slight increase of the urine was often noticed. which gradually reached its maximum in two to six days, the quantity falling when the dropsy decreased or the medicine was stopped. In some of the cases recorded the drug produced a marked increase several times, which quickly ceased when it was stopped. Sometimes several days elapsed before any effect was evident, probably from a slower absorbtion of the drug. A cumulative action was not observed, and the diuretic action never lasted more than a day or two after the cessation of the drug. The urea excretion increased somewhat under its action. The pulse was usually slightly slowed, often unaltered; in the majoriry of cases it became somewhat stronger and less irregular. The appetite improved, though slight but painless diarrhœa came on not unfrequently. An improvement in general health usually followed the strengthening of the circulation, and patients slept better. Excitement was never produced by it.

Hoffman comes to the following general conclusions with regard to diuretin:

(1) It is of marked service in general dropsy. It is of less use in accumulations of fluid due to inflammations of serous membranes. Where there is congestion of the portal circulation it is of no use.

(2) Its diuretic action depends upon its influence on the kidney epithelium, but also exercises a favorable influence on the circulatory apparatus. In daily quantities of seventy-five grains it does not produce any unpleasant effects; on the contrary, it improves the general condition.

(3) It may prove of service where digitalis and caffein have failed, and may be given in combination with heart tonics.

Koritshoner records the effects of the use of diuretin in the words of Professor V. Schrotter. Here it was given in thirty-eight cases of severe dropsy—renal, cardiac and portal—and in three cases of acute rheumatism, besides being tried on several healthy men. The treatment was commenced with sixty grains daily, and the dose was increased by fifteen grains daily. In 60 per cent. seventy-five grains sufficed to produce a favorable effect; in 30 per cent. ninety grains were required; in 10 per cent. the dose had to be raised to 150 grains. No unpleasant effects were observed after taking it. In twenty-three cases the influence of diuretin surpassed that of other diuretics, and in eight of these it was extremely great. In ten it had a moderate effect, but even here it was as good or better than other diuretics. In four cases the diuresis was only slight, but in all these the patients died within four days of admission to the hospital. Only in one case was the drug without any effect. It was found most useful in cardiac dropsy, and less useful in the dropsy dependent on nephritis than in that dependent on the portal circulation. Nevertheless it was more useful than other diuretics in Bright's disease. It could not be shown to have any influence on the action of the heart.

Konindjy-Pomerantz has observed the effects of diuretin given under the directions of Dujardin–Beaumetz, in the Cochin Hospital. It is described as a compound of theobromine and sodium and salicylate of sodium.

To prepare it a molecule of the theobromine (180) is dissolved with a molecule of soda hydrate (40) and to the solution a molecule of hydrate of soda (160) is added. When evaporated to dryness, 362 parts of the double compound are obtained, in which there ought to be 49.7 per cent. of theobromine, but some specimens of diuretin do not contain above 30 to 38 per cent. of theobromine. The conclusions arrived at are much the same as those previously described. It is pointed out, however, that diuretin can not be given hypodermically.

Dr. Konindjy–Pomerantz looks upon it as a stronger diuretic than caffein, when forty-five to seventy-five grains are given daily in fifteen grain doses every two or three hours. Although diuretin acts on the renal epithelium, and it does not influence the contractions of the heart, it should be used with caution in patients suffering from organic disease of the heart.

The increased urine flow produced by diuretin is said to

last three or four times as long as that produced by caffein, and the patient does not get habituated to its use.

It should be given in milk or chocolate before eating. When the kidneys are affected, diuretin has no influence.—*Manchester Medical Chronicle.*

INHALATIONS OF OZONE IN THE TREATMENT OF WHOOPING-COUGH.

Dr. Hellet sets forth, in the *Revue Internationale d'électrothérapie*, the results which he obtained in the treatment of whooping-cough with ozone, as follows:

Ozone produced by electricity has never given rise to unpleasant effects in our hands. We have ascertained that ozone is a powerful reconstructive, an incomparable modifier of the blood, since it is necessary to breathe strongly ozonized air for only a quarter of an hour in order to increase, in certain cases, the proportion of oxyhœmoglobin one or two per cent. when it is already 14 per cent.

Though opinions may have differed concerning the beneficial therapeutic effects of ozone, there has not been any dispute about its disinfecting and antimiasmatic actions. Numerous experiments have shown that it acts powerfully upon germs and ferments, that it arrests their development and even destroys them. In view of this fact, and remembering also, that ozone is a powerful reconstructive, I did not hesitate to prescribe inhalations of ozone to little children suffering from whooping-cough, thinking that this disease, which is of microbic origin, would be favorably modified.

Up to the present time only four cases have been treated: a girl of six years, another of five, another of two, and a boy of fifteen months. These children inhaled ozone every day for fifteen minutes. In every case the number of paroxysms was carefully noted.

In all of these cases the course of the disease was favorably modified. The number of paroxysms diminished, and their general condition rapidly improved, which is a very important consideration; they became cheerful, and the appetite was restored.

The parents always noted that the children became more playful after the inhalations of ozone; their paroxysms became less violent and less exhausting.

The duration of the disease seemed to have been shortened.—*La Médecine Moderne.*

ANTIPYRINE IN INFANTILE DIARRHŒA.

In a long memoir in the *Journal de Médecine de Bordeaux*, M. Saint-Phillippe details the many reasons that led him to try antipyrine in infantile diarrhœa. He concludes thus:

"I prescribe antipyrine (which I often call by its French name of *analgesine*, in order not to disturb the imagination of the patients) in doses of 50 centigrams, mixed with 50 grams of syrup of orange-flower, and 50 grams of linden-flower water, for children of from one day to six months, and I order four, five, six or seven teaspoonfuls a day, or every two hours if the case require it, taking care to arrange the doses about fifteen minutes before taking the breast. In children of from six months to a year, I raise the quantity to 1 gram, and from one to three years, to 1½ or 2 grams. In this way, in 24 hours from 10 to 20 centigrams are administered to the smallest children, and from 60 to 80 to the largest. No other active medicament is added. Sometimes, when there is danger of choleriform diarrhœa, I substitute syrup of punch for the orange-flower syrup.

"The children take the remedy very easily and without repugnance. In these doses no accidents have ever happened. The urine shows no change, except, perhaps, a slight diminution in quantity. When vomiting is present it ceases at once under the treatment; the diarrhœa is quickly controlled, and the remedy may be diminished as the passages become less frequent. The result is rapid and striking. There is no contra-indication for the antipyrine unless it is the occasional failure to produce the happy results above described whereupon a change in the treatment must be made.

"From what precedes, favorable conclusions result, which may be concisely stated as follows: 1st. Antipyrine is a choice remedy to oppose to the various kinds of infantile diarrhœa; 2d. It acts particularly in the hypercrinical form, and in the dyspeptic, painful and reflex forms; 3d. It is usually borne and absorbed with great facility, aud deserves to replace other anti-diarrhœic remedies; 4th. Its mode of action resembles physiologically that of morphine, which is inapplicable in such cases; 5th. There is no contra-indication to its use; the dose should not be too large."—*La Medecine Moderne.*

THE ADMINISTRATION OF QUININE TO CHILDREN.

The difficulty of giving quinine to children, especially when it is desired to administer somewhat large quantities, has, of course, frequently been remarked. In order to obviate this,

it has been proposed by various physicians accustumed to practice among children to order external applications, either in the form of ointments or lotions, with the view of getting the quinine absorbed by the skin, and several continental writers have reported that this system has given good results in their hands. The amount of quinine absorbed under these circumstances, however, was not known, contradictory views on the subject being entertained, while many of the best works on children's diseases omitted all mention of the external form of administration. Dr. Troitski recently undertook a long series of observations in the children's department of a poor-house with the object of ascertaining what was the best form of external application, and how far absorption is possible under these circumstances. His experiments, which were conducted on healthy children, about fifty in number, are published in the current number of the *Vrach*. He made some trials with ointments of which the basis were vaseline, lard or lanolin, but very soon discarded this form of application, as he found that, in order to get any appreciable quantity of the drug absorbed, it was necessary to spend a long time rubbing in the preparation, which was not only tedious to the operator but very fatiguing to the child. Contrary to what most of the writers on the subject have advised, the region of the body selected for the application was the back of the thorax. Solutions of quinine were then tried, with rather more success, one part of the hydrochlorate of quinine being dissolved in 30 of rectified spirit, or in 20 of spirit and 10 of glycerine. Of this a teaspoonful or a teaspoonful and a half was rubbed in twice a day until the skin became quite dry, the precaution having been previously taken of washing the child well. The urine was examined both by the chlorine-water and by the iodine tests, and observations make of the comparative results in the same children. The conclusion come to was that, though the drug is undoubtedly absorbed by the skin from such solutions as were used, the amount was so small and uncertain as to render it impossible to administer the dose that may be desired by the external method. The good effects that are said to have been produced in fever by the lotions, Dr. Troitski would ascribe, mainly, at least, to the refrigerating action of the spirit on the skin.—*Lancet.*—*Columbus Medical Journal.*

SEXUAL LIFE OF WOMEN AFTER CASTRATION.

At the Berlin Medical Congress, D. F. Depler, of Venice, read a paper embodying the results of a study he had made in the cases of ovariotomy performed by himself. He had per-

formed castration 46 times, obtaining a cure in 39. These operations were performed for the relief of purulent or gonorrheal salpingitis, oophoritis, fibroid tumors of the uterus, etc. The following were his conclusions, derived from a study of the physiological consequences of these operations: (1.) When the operation was performed on account of salpingitis or other inflammatory process, uterine hæmorrhage never occurred subsequently. (2.) The conjugata became gradually shortened, and this was the more marked the younger the individual was when operated upon. (3.) The uterus became atrophied, the vagina grew shorter and narrower, its mucous membrane became paler, and the labia majora were somewhat thinned. (4.) The breasts grew smaller, acquiring a strong ressemblance to the male mammæ. (5.) The brown pigmentation of the nipple, areola perineum, and anus disappeared wholly as did also pathological pigmentations existing in some of the cases; the hair also turned white, (6.) The tendency to *embonpoint*, which is generally believed to exist after these operations, was not observed by the author. (7.) No changes were observed as regards the growth of the hair or the tone of the voice. (8.) The sexual desire remained, and was the more pronounced the earlier in life the operation was performed. (9.) The operation offers no impediment to marriage; three of the author's cases had married and lived happily with their husbands for years. (10.) A marriage with a castrated woman is the ideal Malthusian marriage, and the only way the Malthusian idea can be carried out without endangering the health and happiness of the woman. (11.) In the cases operated upon in early life for inflammatory conditions, no neuroses were seen to develop, which was not the case when women were operated upon late in life for fibroid tumors of the uterus. (12.) A favorable influence upon the hemorrhage was observed after operation for myoma, yet in no case did the menopause at once set in. (13.) In cases of operation for uterine fibroma, the patients, even those in full maturity, lost all sexual inclination after the operation. —*Medical Press and Circular*; *Medical Age.—Columbus Medical Journal.*

THE PROPHYLAXIS AND TREATMENT OF DIPHTHERIA.

Dr. J. Lewis Smith, of New York, read a paper on this subject. The room should be disinfected by adding to one quart of simmering water one to two fluid ounces of the following mixture:

℞. Oil of Eucalyptus ..... ℥ j.
Carbolic acid ..... ℥ j.
Turpentine q. s. ad ..... ℥ vj. to ℥ viij

Everything and every person not absolutely necessary for the comfort and management of the patient should be excluded from the sick room. Physicians undoubtedly conveyed the disease. They should always examine the fauces by standing behind or at the side of the patient so that no ejected mucus may come upon them. After each visit they should wash thoroughly in a sublimate solution, hands, face and beard. Walking cases without fever, anorexia, or malaise diffused the disease. Daily inspection of the fauces of school children had been proposed. Convalescents should not mingle with healthy children for four weeks. He admitted the full claim of the Klebs-Loeffler bacillus to be the cause of the disease. It was a surface microbe—never penetrating the interior of the body, but attacking only mucous surfaces or cutaneous abrasions. It produces a ptomaine containing carbon, hydrogen, azote, sulphur and oxygen, which by absorption through both blood and lymph channels causes the nephritis, granulo-fatty degeneration of heart-muscle and paralysis.

The treatment should embrace hygiene, diet, and alcohol. Rectal alimentation could be followed for a time. Failure of appetite rendered the outcome doubtful. Diet could embrace milk, with sarco-peptones, beef tea, or meat juice, and the various predigested compounds. Large and frequent doses of alcohol were positively necessary. It is quickly eliminated, and will often save life unless blood poisoning has actually set in. In the proportion of one to five it has been shown to have a destructive action on the growth of the bacillus.

Locally we should remember that normal epithelium was a barrier to the germ's entrance, and hence our remedies should be such as not to destroy the epithelial covering. Denuded or diseased surfaces were favorable starting points for the disease. Corrosive sublimate, 1 to 8000; carbolic acid, 1 to 50; salicylic acid, 1 to 80, had proven of service in arresting the germ growth. Potassic chlorate was useless in this direction, and he had come to discard its internal employment entirely. It had undoubtedly caused nephritis in many cases. The corrosive sublimate could be given by nasal injection, gargling and internally. Where the false membrane was very thick and tenacious equal parts of tincture of iron and glycerine should be given three or four times a day. Loeffler himself uses a mixture of carbolic acid, alcohol and distilled water for the mouth. Our local remedies should be penetrating. Therefore glycerine and water, never syrup and mucilages, should be our vehicles for all local applications. The officinal solution of iron chloride might be diluted three or four times for this purpose. While it undoubtedly contracted the vessels it was often painful. It congeals the mucos-pus of the fauces.

Carbolic acid, Monsel's solution, and glycerine could be advantageously used in this way. For nasal disinfection a saturated solution of boric acid was preferable.

For internal treatment, iron assisted the anæmic condition. Vegetable tonics, including quinine, were probably useless, as were also quinine insufflations in the oral cavity. The main reliance was to be placed on the bi-chloride. He was in the habit of giving a two-year old child $\frac{1}{72}$ grain every two hours; four years, $\frac{1}{40}$ grain; six years, $\frac{1}{36}$ grain; ten years, $\frac{1}{24}$ grain. His solution was made by dissolving the sublimate in alcohol, and adding elixir of bismuth and pepsin. Sublimate solution, two grains to the pint, could be used for the nose. The mercurial should be continued at least one week, unless diarrhœa supervened, but not longer. Calomel had been suggested. Many gave an initial dose, and some continued it through the entire disease. It undoubtedly increased the anæmia. Of late it had been given in the New York Foundling Asylum by sublimation, from ten to forty grains being used, under a tent made over the patient's bed. The indication for its use was the supervention of hoarseness. The attendants had been salivated in several instances, but the patients were apparently not injured. It seemed to lessen the necessity for intubation. The process might be repeated in three or four hours The percentage of recoveries from intubation, where necessary, was better in the calomel cases than in others. For the nephritis he gave iron, and for the paralysis tonics, strychnine, and electricity.

Dr. A. Seibert, of New York, remarked that we must see way down to the epiglottis in order to have our examination amount to anything. Children should not be allowed to kiss each other when there was any sore throat about, and very young children should not be allowed to creep around on the floor. They scraped up the dust with their fingers, which they would afterward put in their mouths. Thus the germs which settled on the floor were conveyed to the sensitive membranes. The experiments of Gebhardt, of Bonn, had shown that false membrane could be dipped in a sublimate solution, and then, after drying and teasing, cause a bacillus development in a culture medium. It was, therefore, especially under the conditions of diphtheria, slow in germicidal action, but thorough, if once brought into perfect contact with the affected areas. A 5 per cent. solution of acetic acid has been shown to be quickly penetrating.—*New York Medical Record.*

WASHING OUT THE LARGE BOWEL IN DYSENTERY

Dr. Peter S. Korytin, of Novotcherkask, describes (*Vratch*, No. 42, 1890, p. 951) fifteen successive cases of diphtheritic

(nine cases) and catarrhal (six) dysentery, which he treated daily with warm (30 deg. Reaum.) large enemata of six pints either of filtered water from the tap, or a carbolic acid solution (from ten to twenty grains to six pints of distilled water). Only one of the patients died, the remaining fourteen making excellent recoveries. The total number of the injections in individual cases varied from one to six, averaging two and a half. The injected fluid was retained by the patient mostly from five to ten minutes, being sometimes expelled in one or two, and in other cases in from fifteen to twenty minutes. The following effects were commonly observed: Abdominal distention and pain speedily subsided, the frequency of stools diminished and tenesmus decreased, the spirits, appetite, and sleep quickly improved, the stools soon became painless, more solid, and free from offensive odor, mucus, blood and sloughs or shreds, while the temperature became normal. No therapeutical difference whatever was noticed between carbolic and simple enemeta. It appears, therefore, that the beneficial results of the treatment should be attributed simply to the thorough washing out of the large intestine.—*Med. Age.*

THE LOCAL TREATMENT OF DYSENTERY.

Dr. H. C. Wood contributes the following article to the August number of the *University Medical Magazine:*

"There seems to me to be in modern medical thought a very strong tendency to consider disease as constitutional rather than local. I do not doubt but that there are one or more forms of dysentery dependent upon the presence of poisons in the blood, but I feel very confident that the dysentery, as we see it ordinarily in this climate, is essentially a local inflammation, independent of any blood poisoning. If this be true, the disease should be especially amenable to local treatment. It is true that the ordinary treatment, which seems not to be local, really owes much of its efficiency to a local influence. Thus, the purgative acts by a purely local depletion; the mercurial, or the ipecac, by a local stimulation of the glands involved; whilst the bismuth spreads itself upon the mucous membranes and by its local action lessens inflammation. It has seemed to me, however, worth while to draw the attention of practioners to the value of the direct application of remedial agents to the affected parts.

"Many years ago I published a series of cases of chronic dysentery, demonstrating the extraordinary efficiency of forced enemata containing one half a drachm to a drachm of nitrate

of silver dissolved in two or three quarts of water, and further experience has corroborated all that I said. Indeed, from time to time have appeared papers in the medical journals proposing the treatment as both novel and efficacious.

"In acute dysentery, involving the colon high up, I have found large enemata, containing two or three drachms of subnitrate of bismuth, much more efficient than the exhibition of bismuth by the mouth. When the symptoms are severe, this local treatment may often be preceded with advantage by washing out the colon with large quantities of cold water. I have never used injections of nitrate of silver in acute dysentery, although the effect of the local application of the nitrate in other inflammations of mucous membranes would justify trial of the remedy. I have seen, in one or two cases, large enemata of very hot water injected without affording relief, and believe that hot water enemata are, in their ordinary results, not at all comparable with large injections of ice-cold water.

"When the lower part of the colon is affected, the local use of ice sometimes has an almost marvelous effect. I have, indeed, seen the whole aspect of a very severe and alarming case, in which the symptoms indicated that the colon was affected high up, changed in a single hour by the continuous use of *ice suppositories*. While it is not necessary to have the pieces of ice entirely regular in shape, care should be exercised that no sharp edges are left. The suppositories should be rapidly used, one being put into the rectum every three to five minutes, so as to get, for at least half an hour to an hour, the effect of the continuous appication of cold.

"When the tenesmus is very severe, iodoform suppositories are often much more efficient than opium in bringing relief.

"A remedy which has been from time to time recommended very highly in dysentery, but has not, I think, been much used, is ergot; and when the passages contain large quantities of blood, or are nearly pure blood, the extract of ergot would seem to be indicated. I have never myself used ergot by the mouth in these cases, but have employed suppositories containing twelve grains of extract of ergot and four grains of iodoform, used every two hours, until four or five suppositories had been taken, with seemingly great advantage.

"I do not mean to advocate the local treatment of dysentery as a substitute for the use of mercurials, purgatives, and ipecacuanha, etc., but as a very important adjuvant to the older forms of treatment. Nevertheless, in my experience, the effect of local remedies has been more prompt and decided than that of drugs given by the mouth; but in case of any severity the attack upon the disease may be made from each end of the mucous tract."—*Practice.*

FORMULA FOR HYPODERMIC INJECTIONS OF QUININE.

Dr. Barillé recently stated to the *Société de Pharmacie* that the addition of antipyrine to the muriate of quinine enables the latter to dissolve easily. He recommends the following formula for hypodermic use:

℞—Muriate of quinine..... 15 grains
Antipyrine ..... 7½ grains
Distilled water..... ½ drachm

The solution causes some pain when injected; the addition of ⅓ or ½ grain of cocain would be beneficial.—*La Médecine Moderne.*

OBSTETRICS.

IS EMBRYOTOMY OF THE LIVING FŒTUS JUSTIFIABLE?

By Egbert H. Grandin, M. D.

Chairman of the Section on Obstetrics and Gynecology, New York Academy of Medicine, etc.

Of all the problems in obstetrics, the one propounded to-night is the most vexed, and the most important as well in the light of the marvellous progress of abdominal surgery during the past decade. Every physician whose practice necessitates attendance on woman during the supremest of her trials, when confronted by the necessity of destroying the lesser human life in order to succor the greater, must have felt instinctive repugnance; and every physician will hail with joy the advent of the day when the call for fœticide no longer exists, in that, through resort to the Cæsarian section the babe may be saved, and yet the mother not imperilled.

Ten years ago the answer to our question was necessarily affirmative. The maternal mortality from the Cæsarian section at that time was about forty per cent. on an average, hence absolutely no regard could be paid to the life of the fœtus. To subject the mother in those days to the Cæsarian section, except under stringent absolute indication, meant death to her, and with no certainty of saving the child. Ten years ago, cleanliness, to say nothing of antisepsis, was an almost unknown quantity in obstetrics; the proper method of suturing the uterine wound to guard against gaping and internal hæmorrhage was as yet only on the verge of evolution; the peritoneal cavity, if not a *terra incognita*, was with the vast majority of men a *nolle me tongere;* septicæmia was rife in our mater-

nity hospitals. What wonder, then, that embryotomy was a beneficent necessity, and the Cæsarian section, particularly a successful one, was a *rara avis*. To-day our knowledge and our results are very different. Septicæmia during the puerperal state means simply faulty technique in the conduct of labor. The mortality from this cause has fallen as low as one-quarter of one per cent. in our New York maternities. To-day we know how to effectively suture the uterine wound; to-day we do not fear entering the peritoneal cavity, saving many a life which formerly was doomed. The abdominal surgeon is prepared with his statistics of series after series of laparotomies, complicated and uncomplicated, with, in individual instances, a mortality of from one to five per cent. Enormous fibroids of the uterus are removed without an untoward after symptom—an operation, let it be remembered, for the removal of a tumor which of itself rarely kills and retrogrades at the menopause. In the face of all this, the time is certainly ripe for frequent discussion of this question of embryotomy. We may not solve our problem just yet in the desired direction, but, if I mistake not the signs of the times, the absolute certainty in the near future is that the physician will not be justified in sacrificing the living child because the maternal chances from the Cæsarian section are unfavorable. Modern methods of asepsis, and modern methods of operative procedure, are yielding results which will shortly prove that the only risk to which the Cæsarian section subjects the mother is shock. This factor, it must be granted, is associated to an equal degree with any and all of the methods which are at our disposal for the sacrifice of the child.

Aside from the operator himself, there are certain factors which militate against the relegation of embryotomy to its proper sphere—instances where the fœtus is dead.

One factor, and a prominent one, is the lack of thorough education in obstetrics. Midwifery must be raised to a higher plane than it has as yet secured. While the art can never become a specialty, greater stress should be laid on its practice in our medical schools. The student should be told that in no given case can it be predicated that nature will be equal to her task. He should be told to make it his rule in practice to examine every woman he is engaged to confine, in order to determine the configuration of her pelvis, and in order to estimate the probable size of the fœtus which must pass through this pelvis. Pelvimetry has with us been too much neglected, with the result that over and over again the forceps and version are resorted to in instances where accurate pelvic measurement would teach that both are contra-indicated, from the side of the

child as well as from that of the mother. The result of faulty methods of instruction, the result of blind obstetrical practice, have been most disastrous in our statistical data. Not alone have children been sacrificed, but women also, in instances where a sounder scientific training would have taught that the Cæsarean section carried with it no greater risk to the mother, and offered hope of saving the life of the child. We must learn, then, to deliberally *elect* the Cæsarean section. This accomplished, we will cease mutilating children, a procedure which every one who has been called upon to perform, will admit is repugnant to his very nature.

I will not dwell at length on the moral side of this question of embryotomy. Theologians can not decide it for obstetricians. "If you can not extract the child without killing it, it is murder to kill it," is the edict of the Church, easy to pronounce by those who are never called upon either to extract or to kill; but it is an edict which could carry absolutely no weight with the obstetrician so long as the alternative of not killing the child was the death of the mother. We must view this question purely from a scientific standpoint, and criticise it in the light of established scientific facts. Such at least is the state of the question as far as the physician is concerned. With the laity the question is a very different one. If the solution of our query is to be left in the future, as it has been largely in the past, to the relatives of the fœtus the fate of which is at stake, embryotomy of the living fœtus will always remain a justifiable procedure. The layman does not care for scientific facts, and throws statistical data to the wind where there is a choice between embryotomy and the Cæsarean section. He will insist to-day, even as he always has, on the sacrifice of the child rather than that the woman should be subjected to an operation which in the popular mind carries with it almost certain death. As for the woman, it will be rare indeed that the maternal instinct is strong enough to enable her deliberately to select the Cæsarean section in order that her unborn babe may have a chance of life. The point, then, which we as physicians will have to face sooner or later, is: should the laity have any voice in the decision whatsoever? As physicians, we are not to weigh the relative value of one life over the other. We are called upon simply to do our best by the two lives committed to our charge, and if we can once deliberately conclude that the Cæsarean section carries with it but slight, if any greater, risk to the woman than does embryotomy, then it becomes at once our duty to elect the operation. Let me state distinctly what I mean by the term *elective* Cæsarean section. To take a con-

crete case: I am asked to attend a woman in her approaching confinement. I find on inquiry and examination that she is within a few weeks of term. External pelvimetry teaches me that her pelvis lacks the normal configuration. Internal pelvimetry shows shortening of an inch and a half to two inches in all the diameters, or possibly only in the true conjugate. By means of external abdominal and combined abdomino-vaginal examination, I determine that the fœtus is probably of average size. Attempts at causing the presenting part to engage in the brim of the pelvis by means of downward pressure on the uterus suggest to me that this presenting part can not readily enter the pelvic canal. I feel, therefore, that the chances are against the birth of a living child, either through the efforts of nature or resort to forceps or version. I at once begin to prepare the patient for Cæsarean section, even as I would were the intended operation an ovariotomy. I clean out the intestinal canal; by means of daily baths I obtain ample function of the sweatglands; I have the room were the operation is to be performed throroughly cleaned; I select the day and hour for the operation, placing it as near full term as is possible; about six hours before the operation I induce labor by one or another of the recognized methods, operating therefore under the best obtainable conditions. This woman's chances of recovery, it seems to me, are absolute, barring that bugbear of all surgery —shock.

In this suppositious case, I have selected, it will be noticed, an instance of slight pelvic deformity; and further, the pregnancy has already advanced too far for anything to be gained by the induction of premature labor. I take it for granted that all will accept the Cæsarean section under the absolute indication, that is to say, where the true conjugate measures less than two and one-half inches; I further concede that where the case is seen early enough, the induction of premature labor should always be elected. Now, in this same case, can I or will I elect to perform embryotomy? No; but having first given nature a chance, I will resort to the forceps or version, or to both; and finally, these failing, perform what may turn out to be a very difficult craniotomy. The already exhausted woman is subjected to the further exhaustion which is associated with a protracted embryotomy; further, she is subjected to the risk of deep cervical rupture with profuse hemorrhage; further still, there is risk of uterine rupture, to say nothing of fistulæ or deep laceration of the pelvic muscles and fascia, which form wide avenues for the entrance of the pathogenic germ. Is the woman's chance of recovery as great as if I had deliberately elected the Cæsarean section? These companion

pictures are from life. I have seen deeper shock after embryotomy than after the Cæsarean section; I have met with profuse hæmorrhage after craniotomy; I have yet to witness sepsis after either, and I have yet to lose a case from cause directly traceable to the operation after either. But my experience with both operations has caused me to waver somewhat from my early training, and has led me to formulate for myself the following rule of practice, in which I believe the results in the next few years will justify me: In hospital practice I shall urge, and where possible reform, the elective Cæsarean section in suitable instances under the relative as well as the absolute indication; In private and consulting practice, I shall urge the section under similar indication, although I know that, for the present certainly, the advice will rarely be accepted. And why? Because of that fallible test upon which we are all too prone to ultimately rest—statistics.

I have hitherto absolutely ignored the statistical data at my disposal, for the reason that they give no fair estimate of the results obtainable after the elective Cæsarean section. If we take the statistics as collected by Harris, of Philadelphia, we find that the improved Cæsarean operation has saved nearly 76 per cent. of the women, and nearly 94 per cent of the children. The fallacy of these data as giving us a clue to the obtainable results from the operation I have pleaded for, is the fact that we do not know in how many of the instances the operation was deliberately elected. If the cases were thus sifted I question if the maternal mortality might not be lowered beyond 10 per cent. I so judge from the records of individual operators. There are German operators whose mortality is as low as 6 per cent.; Hertsch has recorded seven cases with no deaths; Cameron, of Glasgow, ten cases with one death; at the New York Maternity Hospital the record for the past two years is four cases, all successful both as regards the mothers and children. In the same hospital, during this period, there have been performed four craniotomies with one death, and in another case the shock was so extreme for hours that the patient only rallied after resort to transfusion. On the other hand, the mortality after embryotomy in the European maternities has varied from 5½ per cent. to 45 per cent., according to the degree of pelvic contraction in the presence of which the operation has been performed. Obviously, the maternal mortality after embryotomy can not fairly be juxtaposed to that after the elective Cæsarean section, for the very reason that, except in extreme degrees of pelvic contraction, destruction of the living fœtus will always remain, so long as it exists as a justifiable measure,

a matter of last resort. The point I desire, however, chiefly to emphasize is that the statistical data at present at our disposal give us absolutely no omen of the future status of the elective Cæsarean section. If those of us who are connected with maternity hospitals will only, with one accord, cease resorting to embryotomy except in instances where, for one or another reason, the woman's condition does not warrant the section, I have little question but that the results will soon prove that the safety of the mother is not imperilled by the deliberate selection of the alternative operation which avoids mutilation of the child.—*New York Medical Record.*

Book-reviews and Notices.

The Physical Examination of the Diseases of the Heart and Lungs and Thoracic Aneurism. By D. M. Cammann, A. B. Oxon, M. D. G. P. Pritrain's Sons, New York and London. (Armand Hawkins & Co., New Orleans. Cloth, price $1.25.)

Although this little book presents nothing new, the subject is well written and will be useful. It contains a good article on the stethoscope and the author's modification of it and an interesting table of measurements of the heart by auscultation and percussion. Some of the chapters, especially the one on the pulse, are rather brief, but on the whole, the book can be recommended. W. E. P.

The Vest-Pocket Anatomist (founded upon Gray). By C. Henri Leonard, A. M., M. D. (The Illustrated Journal Publishing Company, Detroit, Mich.) Fouteenth revised edition.

This little book seems to have been a very popular one. It is a compend containing dissecting hints and points on visceral anatomy. It contains an interesting little table of points, worth remembering; among other things, the author says that the common carotid is the only branchless larger artery (except the terminal branches.) Our copy of Gray says that it occasionally gives off the superior or inferior thyroid or laryngeal branch and as the thyroids are but an occasional branch of the innominata, we would place this artery in the same class. On the whole, the little work fulfills expectation. W. E. P.

PUBLICATIONS RECEIVED.

Minor Surgery and Bandaging, including the treatment of fractures and dislocations, tracheotomy, intubation of the larynx, ligations of arteries, and amputations. By Henry R. Wharton, M. D. Lea Bros & Co.

Addresses, Papers and Discussions in the section of Obstetrics and Diseases of Women at the forty-second annual meeting of the American Medical Association, at Washington, D. C., May 5–8, 1891.

Regional Anatomy. By George McClellan, M. D. Quarto. Lippincott.

Annual of the Universal Medical Sciences. Issue of 1891.

Addresses, Papers and Discussions in the Section of Surgery and Anatomy, at the forty-second annual meeting of the American Medical Association, at Washington, D. C., May 5–8, 1891.

Report of the Protestant Hospital Association, St. Louis, Mo. 1891.

Causas de la Ceguera y Modo de evitarlas. Conferencia pronunciada en la Sociedad Española de Higiene por el Dr. D. Angel Fernandez Caro, Primer Vice-presidente de la misma. 1891.

A pathological condition of the lungs hitherto undescribed in this country, but which is not infrequent. By F. Peyre Borcher, A. B., M. D.

Erythroxly on Coca:therapeutic, hygiene. By A. de Pietra Santly, M. D.

Medical Reports on Valentine's Meat-juice as a nutrient in cholera infantum, diarrhœa and dysentery.

A ready method for counter-extension at the knee. By Henry Ling Taylor, M. D.

Treatment of lateral curvature of the spine. By Henry Ling Taylor, M. D.

Adjusted locomotion in the treatment of the recovering stage of hip-joint disease. By Henry Ling Taylor, M. D.

The Surgical Treatment of Empyema. By James A. Goggans, M. D.

Report on Cholera in Europe and India. By Edward O. Shakespeare, of Philadelphia, A. M., M. D., Ph. D., United States Commissioner.

Index Catalogue of the Library of the Surgeon-General's Office, United States Army. Vol. XII.

Transactions of the Thirty-fourth Annual Session of the Medical Association of the State of Missouri, held at Excelsior Springs, Mo., May 19, 1891.

Acid Bichloride of Mercury as an Antiseptic. Its Application to Surgical Practice. By Ernest Laplace, M. D.

Resorcin as an Antipyretic. By W. Carroll Chapman, M. D.

Transactions of the Southern Surgical and Gynecological Association. Vol. III., 1891.

The Shurly-Gibbes Treatment of Tuberculosis. By E. Fletcher Ingalls, A. M., M. D.

Ueber die Physiologische Grundlage der Tuberculinwirkung. Eline Theorie der Wirkungsweise bacilärer Stoffwechselproducte. Von Prof. O. Hertwig. Jena: Gustav Fischer, 1891.

Bloodless Amputation at the Hip (Lanphear).

History of a Case of Sarcoma of the Genu of the Corpus Callosum, presenting Symptoms of Profound Hysteria; with autopsy. By Chas. A. Oliver, M. D.

Medical Progress. By C. R. Earley, M. D.

Proceedings of the Florida Medical Association, session of 1891.

How Should Girls be Educated? A public health problem for mothers, educators and physicians. By William Warren Potter, M. D., Buffalo, N. Y.

On the Use of the Oil of *Eucalyptus Globulus* Combined with Other Antiseptics in the Treatment of Scarlet Fever and all Infectious Diseases. By J. Brendon Curgenven, M. R. C. S., L. S. A.

State News and Medical Items.

[Communications from Physicians of Louisiana are solicited for this Department. News of personal interest is especially desired.]

CHARITY HOSPITAL.

MEETING OF THE BOARD OF ADMINISTRATORS.

The regular monthly meeting of the Board of Administrators of the Charity Hospital was held September 7, 1891, at 7:30. Dr. Bickham was in the chair; Mr. Marks, the secretary and treasurer, at his post, and present the following members of the board: Messrs. McManus, Keller and Dr. Wiehndahl.

After the reading and adoption of the minutes of last meeting the report of the secretary and treasurer was called for. It showed a total for the month of August of $7147.27 of expenditures, against $12,807.18 of receipts, leaving a cash balance on hand of $48,138.34 on the 1st of September. The bulk of the income for August came from the payment by the State Treasurer of State warrants for the third quarter, amounting to $10,000, while $1000 of the total came from a bequest of the heirs of the late W. H. Letchford.

The report of the house surgeon, Dr. Miles, showed everything progressing as usual. Dr. Miles was granted leave of absence for thirty days, with the permission while on his trip through the northern cities, to purchase such new and improved apparatus and paraphernalia for the hospital as, in his judgment, would prove to be to its benefit.

The report of the ambulance corps showed service performed as follows for August:

Number of calls—Surgical, 42; medical, 19; dressed, 22; conveyed home, 5; obstetrical, 4; died, 3; false, 4; refused none; not needed, 12; transfer calls, 6; total, 117. Average time of absence from hospital on calls, 34 minutes. Three pay calls at $10 each, $30; paid.

The report of Mr. Chas. de Mahy, clerk of the hospital, for August, read as follows: Number of patients remaining in the hospital August 1, 1891, 549; number of patients admitted, 574, of which 233 were foreigners and 341 citizens of the United States; 436 were males, 8 of whom were under 10 years of age; 127 females, three of whom were under 10 years of age; 400 male patients have been discharged and 104 female patients; 51 male patients and 22 female patients have died. On September 1, 343 male and 106 female patients re-

mained in the hospital. The daily average of patients during the month has been 543.

The financial report of the clerk of the hospital showed that $217 has been received from pay patients, of which $41 has been returned, leaving a balance of receipts from this source of $176. From gate fees $340 has been received, from burial certificates $12, and from legal certificates $4; making the total of receipts $532, which has been turned over to Sister Agnes for use in running expenses of the hospital. There are at present in ward No. 14 five pay patients.

Messrs. Geo. Seamen and Col. Vincent, members of the Board of Administrators, were granted leave of absence.

A communication from Messrs. Farrar, Jonas & Kruttschnitt, attorneys for the hospital, called the attention of the Board of Administrators to the fact that it would require an advance of about $250 or $300 to pay off a few remaining debts and legacies upon the Ingram succession, as a preliminary to the hospital's being put into possession of the property of that succession as universal legatee. Messrs. Farrar, Jonas & Kruttschnitt state that they have been informed by Mr. Kennedy, of Carroll parish, attorney for the succession, that the property will sell at private sale for $3000, and recommend the advance of the $300 necessary. The board authorized the advance of the necessary amount. Adjournment.—*Picayune.*

Dr. Turner, formerly of Loreauville, has located at Baldwin, La.

Dr. E. Souchon and Mr. Thomas Sully, the architect, have departed for the north to inspect the latest improvements in medical colleges, and to utilize their information in building the new Tulane Medical College, which is to be erected on Canal street, between Villere and Robertson.

Dr. D. M. Foster, of Franklin, La., has returned from the famous Brown's Wells, Miss.

Dr. J. M. Watkins has returned to the city from a trip to Boston and New York.

Dr. R. U. Borde and S. E. Hale have returned to the city.

Dr. F. N. Brian, of Boyce, La., buried his infant daughter. The doctor has our sympathy in his loss.

Dr. Wm. E. Schuppert, has returned to the city after a pleasant vacation in Bay St. Louis, Miss.

Dr. Roger de Montluzin and his accomplished wife, have moved from Bay St. Louis to Baton Rouge, the doctor's former place of residence, where their coming is viewed with great pleasure by their many friends.

Dr. A. S. Yates, of Franklin, La., was at the St. Charles recently.

Died.—Bornio.—On Wednesday morning, September 23, 1891, at 2:15 A. M., Adele Renaud, beloved wife of Dr. D. Bornio, aged twenty-six years, a native of this city.

Dr. T. W. McLeroy, of Charlieville, La., died on the 14th inst.

Married.—Stark-Fourtan.—On Wednesday, September 24, 1891, at the Jesuit Church, Rev. Father Powers officiating, Dr. Thomas Stark, of Thibodaux, La., to Miss Jeanne Fourtan, of this city. No cards.

Married, on Thursday, September 24, 1891, Dr. Dellizon Arthur Foote, editor of the *Omaha Medical and Surgical Record*, was married at Holly, Mich, to Miss Harriet Baird.

Dr. Nat. Moss and Mr. Frank Moss, of Lafayette, spent several days in the city last week, and left for home on Friday.

Dr. D. G. Chinn, who died in Lexington, Ky., on Monday last, aged ninety-four years, was at the time of his death the oldest physician in Kentucky, having been born April 1, 1797. His great-grandfather, Raleigh Chinn, came over from England and settled in Virginia, and married Miss Ball, a near relative to Gen. Washington's wife. His father, whose name was William Ball Chinn, emigrated to Kentucky in 1790, and settled in Bourbon county, where Dr. Chinn was born seven years afterward. In 1834 he moved to Lexington, where he served six years in the city council. In 1868 he was elected Mayor, and he served in that capacity several terms. Dr. Chinn was married three times and had twelve children, five of whom are living. He has had forty grandchildren. He married his last wife, who died a year ago, when he was eighty-two years old.

Dr. L. F. Reynaud has departed for Waynesville, N. C.

Mrs. Halle T. Dillon, daughter of Bishop B. T. Tanner, is not only the first colored woman physician, but the first woman of any race to pass the Alabama State medical examination. It was a written examination, and an unusually severe one, occupying ten days. Dr. Dillon, after passing with a high average, now occupies the position of resident physician at the Tuskegee (Alabama) Institute.

Dr. Braxton Wise, of Benton, has just completed a new home,

Houma *Courier*, Sept. 26: In Providence, R. I., after a short illness, Dr. Walther Bennett died. His brother, J. Y. Bennett, of Hunts, N. Y., was with him for a few days, and brought his remains to that place for burial. Nearly fifty years ago Dr. Bennett was a citizen of Lafourche parish. He was the first man to bring a sewing machine here. On July 10, 1851, he was married to Miss Mary E. Cross, who died and was buried in St. John's cemetery, Thibodaux.

Dr. W. C. Ayres, of New Orleans, has been rusticating at Pass Christian for a few days.

A young doctor, wishing to make a good impression upon a German farmer, mentioned the fact that he had received a double education, as it were. He had studied homeopathy, and was also a graduate of a "regular" medical school. "Oh, dot vas noding," said the farmer; "I had vonce a calf vot sucked two cows, and he made noding but a common schteer, after all."

BIOGRAPHICAL SKETCH.

DR. FRANCOIS QUESNAY.

By James Middleton, of New Orleans, La.

Among the great men that the eighteenth century gave to humanity, Francois Quesnay, first consulting physician to Louis XV, stands conspicuous. Though as a physician he rises immeasurably above John Locke, yet, like Locke, his fame now rests chiefly upon his great attainments as a philosopher and economist.

Of his early history, the accounts are meager and somewhat conflicting. He was probably born at Méry, about twenty eight miles from Paris, 4th of June, 1694, the same year in which Voltaire saw light.

His father is said to have been a small landed proprietor, who cultivated his own soil, though it has also been claimed that he was only a common laborer. He was probably taught to read by the village gardner after he was thirteen, though one account places the event at eleven. Be that as it may, he at once became an eager student. He learned Greek and Latin of the village doctor, under whom he also studied surgery. He soon so surpassed his teacher, that when his teacher sought to gain admission into the corporation of surgeons, he made surreptitious use of some of Quesnay's essays, and won "very great applause."

Soon afterwards Quesnay went to Paris to continue his studies, and there also began his studies in metaphysics and philosophy. He acquired considerable skill in drawing and engraving. After five or six years of intense application he went to Mantes to establish himself in the practice of his profession; but his attainments had awakened the jealousy of the surgeons, and they refused him admittance to the Maitrise or Corporation of Surgeons. He returned to Paris, was there admitted, and then returned to Mantes, and thus compelled the corporation there to admit him.

His practice rapidly extended among the best families. His skill and address, coupled with a lucky circumstance, soon brought him to the notice of Madam de Pompadour. She employed him as her physician, and in 1737 secured him the place of "surgeon in ordinary" to Louis XV. He became secretary of the Royal Academy of Surgery, member of the Academy of Sciences and member of the Royal Society of London. About 1744 he became first consulting physician to the King, Louis XV, who granted him letters of nobility, gave him a coat of arms—three flowers of the pansy (pensée), with the motto, "*Propter excogitationem mentis.*" Louis called him his thinker, *mon penseur.*

He now had greater leisure, which he ardently devoted to study and writing. He published numerous medical and surgical works which showed his great genius and research. In an age when bleeding was practiced, he distinguished himself by his active opposition. In regard to his professional works, I quote as follows, from J. R. McCullock's biography in the seventh edition of the Encyclopedia Britannica. "In 1747 he published an enlarged edition in three tomes, 12mo, of his *Essai Physique sur l'Economie Animale*, originally published in 1736; in 1748 he published an *Examen Impartiel des Con-*

testations des Medecins et des Chirurgiens des Paris; In 1749 he published a *Memoire sur la Sagesse de l'Ancienne Legislation de la Chirurgie en France;* and two separate treatises in 12mo, the one on Suppuration, and the other, *De la Gangrene;* in 1750 he republished his *Traité des Effects et de l'Usage de la Saignée*, written during his residence at Mantes, and originally published in 1730; and in 1753 he published his *Traité des Fièvres Continues.*

His chief economic writings were two articles on Fermier and Grains in the Encyclopedia, 1756-1757; the *Tableau Economique* and the *Maximes Générales du Gouvernement.* These last two were printed together by command of king Louis XV in 1758 with the remarkable epigraph: "Pauvre paysans, pauvre royaume, pauvre souverain." He wrote numerous other articles on economics and mathematics.

His writings, his achievements in medicine and surgery, his position won from obscurity easily stamp him as one of the greatest physicians and surgeons of his age. But his fame to-day rests chiefly upon his achievements as philosopher and economist, and as such he has left a deep and constantly broadening influence upon humanity, not surpassed by any of that bright galaxy of thinkers and writers, who have made the eighteenth century a beacon light to social progress.

A French economist, Joseph Garnier, in Lalor's Cyclopædia of Political Science, Vol. III, page 192, says, with Eugene Daire, that "Quesnay was really the first thinker of the eighteenth century who made the organization of society the subject of his meditations, the man who gave to the world the newest doctrine and at the same time the fittest to exercise a happy influence on the welfare of nations. Montesquieu, Voltaire and Rousseau were great minds beyond a doubt, but Quesnay served the human race most, in having shown that the happiness of the majority depends much less upon the mechanism of governmental forms than on the development of human industry, and that it is impossible to discuss politics rationally without having previously acquired a knowledge of the economy of society."

In the brief space of this article only a bare outline of his views can be given, the views which were embodied in the teachings of the school of philosophy he founded, the Physiocrats or Economists. The best résumés of these views to be had in English may be found in James Mill's article on the Physiocrats or Economists in the seventh edition of the *Encyclopædia Britannica;* in *Lalor's Cyclopædia* before referred to; and in *Blanqui's History of Political Economy.*

Prof. August Oncken, in 1888, published in French a

compilation of his economic writings, under the title *Oeuvres Economiques et Philosophiques de F. Quesnay, Fondateur du Systeme Physiocratique.* Joseph Baer, Francfort, publisher.

Quesnay held that there was a divine or natural order in human society which it was our business to discover and carry out. His philosophy started with his primary relation to earth. Man must have food, and as food can only be produced or acquired by labor, the right to labor is a physical necessity of our nature. It follows also that the product of labor also belongs of right to the laborer. The laborer, therefore, should have perfect freedom, that is he should have control of his person and of the products of his labor, which he called moveable products. As labor must be exerted upon land, property in land is essential to the well being of society. The *rights* to person, to moveable and to landed property give rise to corresponding *duties*, of each to respect the *rights* of others. *The rights and duties are reciprocal.*

All persons are not willing to respect the rights of others, hence arises the necessity of government to compel the recognition of rights where necessary.

Says James Mills, "this assuredly is the most important question to which human faculties can be directed, and the economists have never yet received the credit which is their due for the ability and success with which they labored to resolve it."

Government exists only to secure to each the fullest enjoyment of his rights. To secure rights, government, education and the fullest liberty of public opinion and public discussion are absolutely necessary. To use the words of one of his disciples translated by James Mill: "So absolutely necessary is it to leave the whole body of society the greatest possible freedom of examination and contradiction, so absolutely necessary is it to abandon evidence to its own strength, that there is no other power of what magnitude so ever, can commmand actions alone, never opinions. The experience of every day affords to this truth the evidence of our senses. So little have our physical powers any influence over our opinions that our opinions, on the contrary, exercise an uncontrollable dominion over our physical powers. Our physical powers are put in motion and guided by our opinions alone,"

Through education and full freedom of discussion we reach clear, defined views of rights and duties in social relations. These views should be expressed in definite written laws, which should contain the reasons for their existence.

"It is not, therefore, in the letter, but in the reason of the law that we must seek for the first principle of a constant submission and obedience to the laws." The magistrates should be distinct from legislative authority. It should be their province to interpret laws, give the reasons for them, and propose new laws. He held they had absolutely no right to enforce bad laws. He held that legislative and executive functions together, and should be united in one person, an hereditary sovereign, that his interests would be identical with the interests of the whole people, that as a consequence the King would only make and enforce good laws. In this view we may find one reason why the King admired him. It is difficult in the light of history to harmonize this view with his other views. It is not strange that he has been charged with teaching democratic principles under a mask.

He then considered the revenues of government, and in discussing that problem, reduced for the first time economics or political economy to a scientific form. His theory was that agriculture, mining and fishing alone added to the gross product, and produced a surplus beyond the needs of the labor and capital employed. This surplus he called the *produit net*. Out of this net product all the classes, no matter how useful, must subsist. Manufacturers and traders only replace in manufacture and trade in another form the values they consume, except sometimes in foreign trade. Hence labor and capital should not be taxed, but the tax should be taken out of the net product of the land. Such a tax, he held, would be cheapest and best for the owners of landed estates, and gives the greatest freedom to all; that so long as it followed and did not exceed the net product, the prosperity of the state and of all would be sure.

The following extracts from Quesney's "General Maxims for the Economic Government of an Agricultural Kingdom," are taken from Blaqui's "History of Political Economy."

Let the tax not be destructive nor disproportioned to the total revenue of the nation; let its increase follow the increase of the revenue; let it be assessed directly on the net product of the landed property and not on the wages of men, nor on provisions, when it would multiply expenses of collection, be prejudicial to commerce and destroy annually a part of the wealth of the nation.

Neither let it be taken from the wealth of the farmers of landed property, for the advances of the agriculture of a kingdom must be looked upon as a fixed property which must be carefully preserved for the production of the impost, the revenue, and the subsistence of all classes of citizens; otherwise,

the tax degenerates into spoliation and causes a dwindling away which quickly ruins a state.

Let openings for the sale and transportation of the products of manual labor be facilitated by the repair of roads, and by navigation on the canals, rivers and seas; because the more that is saved in the expenses of commerce, the more the revenue of the territory is increased.

Let entire freedom of trade be maintained; for the regulation of the internal and foreign trade, which is the most secure, most exact, and the most profitable for a nation and a state, consists in full liberty of competition.

These maxims should be engraven deep in the mind of all.

His doctrine of the divine right of Kings and of the necessity of an autocratic government has been abandoned by French and English speaking people. His ideas of productive labor have been expanded to manufacture and commerce. With that expansion has come the development of the net product of farming and mining lands to the economic or ground rent of all lands.

His method of raising revenues, *l'impot unique*, has been developed by such profound thinkers as James and John Stuart Mill, Thomas Chalmers, Henry George and others into the single tax upon land values, or economic rent. This tax is yet destined to be adopted as the ideal system of taxation, absolutely necessary to produce perfect freedom of human activity, the great end of all government.

Quesney died at Versailles, December, 1774, in his 80th year. Though he lived in the most corrupt court of Europe he held to the last the confidence and esteem of all who knew him, leaving a name untarnished by the breath of scandal.

His life is a grand and instructive lesson to all physicians. It shows how the physician, brought as he is, constantly in contact with the great struggle of man for bread, may become a tremendous power in bringing about a happier condition of affairs. Crime, insanity and other forms of disease are largely the result of that struggle, and to produce a social condition in which there shall be "freedom and justice in all social relations, freedom of conscience and freedom of the press, freedom of trade and commerce, equality before the law for every man," is to diminish disease and crime in all its forms.

It is just as much the province of the physician to show how to prevent disease as it is to cure it. If all physicians were to follow Quesnay's thought and example, they would be quickened and stregthened in every noble impulse and activity, and the medical fraternity would become one of the greatest forces in bringing about a just, social state, where disease would be rare and health and happiness abound.

MORTUARY REPORT OF NEW ORLEANS.

For August, 1891.

CAUSE.	*White.....*	*Colored...*	*Male.....*	*Female....*	*Adults ....*	*Children.*	*Total .....*
Fever, Yellow							
" Malarial (unclassified)	9	7	10	6	10	6	16
" Intermittent		1		1		1	1
" Remittent	9	3	7	5	9	3	12
" Congestive	9	3	5	7	10	2	12
" Typho-Malarial	6	2	6	2	3	5	8
" Typhoid or Enteric	6		2	4	4	2	6
" Puerperal		3		3	3		3
Scarlatina							
Small-pox							
Measles							
Diphtheria	1			1		1	1
Whooping Cough	1	2		3		3	3
Meningitis	6	1	4	3	1	6	7
Pneumonia	7	6	7	6	10	3	13
Bronchitis	7	1	5	3	3	5	8
Consumption	39	28	31	36	64	3	67
Cancer	10	2	6	6	12		12
Congestion of Brain	12	3	12	3	9	6	15
Bright's Disease (Nephritis)	15	5	16	4	20		20
Diarrhœa (Enteritis)	18	6	13	11	12	12	24
Cholera Infantum	9	6	10	5		15	15
Dysentery	4		2	2	4		4
Debility, General	1	3	1	3	4		4
" Senile	19	5	12	12	24		24
" Infantile	4	3	4	3		7	7
All other causes	174	67	121	120	158	83	241
TOTAL	366	157	274	249	360	163	523

Still-born Children—White, 25; colored, 19; total, 44.

Population of City—White, 184,500; colored, 69,500; total, 254,000.

Death Rate per 1000 per annum for City—White, 24.89; colored, 27.11. total, 24.71.

HENRY WILLIAM BLANC, M. D.,
Chief Sanitary Inspector.

METEOROLOGICAL SUMMARY—AUGUST.

STATION—NEW ORLEANS.

Date.....	TEMPERATURE. Mean	Max...	Min..	Precipn. in inches and hund'ths..
1	84	91	78	.31
2	84	89	78	0
3	80	82	78	.39
4	79	84	74	.04
5	82	90	74	0
6	84	91	76	0
7	80	91	70	.39
8	81	87	75	.01
9	82	89	76	T
10	82	88	76	0
11	84	93	76	0
12	84	93	76	0
13	83	91	75	0
14	81	90	72	.10
15	82	88	77	.09
16	83	90	76	.01
17	84	91	76	T
18	84	90	78	T
19	84	91	78	.11
20	86	93	78	.02
21	86	93	78	0
22	84	89	78	T
23	77	81	73	.22
24	71	79	63	0
25	72	81	63	0
26	76	84	67	0
27	80	88	71	0
28	82	89	75	0
29	78	85	70	0
30	76	86	67	0
31	80	89	72	0

SUMMARY.

Mean barometer, 30.047.
Highest barometer, 20.134, 16th.
Lowest barometer, 29.897, 1st.
Mean temperature, 81.2.
Highest temp., 93, 20th; lowest, 63, 24th.
Greatest daily range of temperature, 21, 7th.
Least daily range of temperature, 4, 3rd.

MEAN TEMPERATURE FOR THIS MONTH IN—

1871.....82.8	1876.....81.9	1881.....82.8	1886.....81.4
1872.....82.5	1877.....82.8	1882.....80.5	1887.....81.0
1873.....81.0	1878.....83.6	1883.....83.3	1888.....78.2
1874.....83.8	1879.....80.8	1884.....82.3	1889.....80.6
1875.....79.1	1880.....81.1	1885.....80.4	1890.....80.6
			1891.....81.2

Total deficiency in temp'ture during month, 11.
Total deficiency in temp'ture since Jan. 1, 94.
Prevailing direction of wind, S. W.
Total movement of wind, 4837 miles.
Extreme velocity of wind, direction, and date, 32 miles, from S. E., 7th.
Total precipitation, 1.69 inches.
Number of days on which .01 inch or more of precipitation fell, 11.

TOTAL PRECIPITATION (IN INCHES AND HUNDREDTHS) FOR THIS MONTH IN—

1871..... 7.21	1876..... 4.44	1881..... 4.21	1886..... 2.40
1872..... 3.75	1877..... 2.54	1882..... 9.47	1887..... 7.42
1873..... 8.30	1878..... 5.31	1883..... 4.12	1888..... 22.74
1874..... 4 82	1879..... 10.44	1884..... 0.87	1889..... 5 59
1875..... 8.61	1880..... 4.60	1885..... 4.25	1890..... 3.62
			1891..... 1.69

Total deficiency in precip'n during month, 4.51.
Total deficiency in precip'n since Jan. 1, 19.90.
Number of clear days, 7; partly cloudy days, 19; cloudy days, 5.
Dates of Frost, ...
Mean maximum temperature, 88.3.
Mean minimum temperature, 74.0.

NOTE.—Barometer reduced to sea level. The T indicates trace of precipitation.

G. E. HUNT, *Local Forecast Official.*

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XIX. NOVEMBER, 1891. No. 5.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the first day of the month preceding that in which they are expected to appear. A complimentary edition of twenty-five reprints of his article will be furnished each contributor should he so desire. Any number of reprints may be had at reasonable rates if a *written* order for the same accompany the paper.]

MULTIPLE LIGATURE OF VARICOSE VEINS OF THE LEGS.*

By PHILIP BEEKMAN, M. D., NATCHEZ, MISS,

Late House Physician and Surgeon, St. Vincent's Hospital, New York.

The frequency of varicose veins of the legs; the annoying and painful conditions that travel in their wake; the actual danger to life attached; and the sparcity of publication in regard the best, speediest and easiest means of effecting a radical cure, are my reasons for introducing this subject.

The procedure of obstructing the flow of blood through varicose veins is by no means a recent innovation; however, many of the means heretofore in vogue were bunglesome, tedious, intensely painful, involved the dangers of infective emboli and pyæmia, and, above all, did not remedy the condition.

In order that we may more thoroughly grasp the subject and see more distinctly the rationale of the treatment I recommend, let us turn for a few moments to a consideration of the causation and pathology of the disorder itself, as well as the conditions dependent thereon.

Sedentary habits and prolonged standing favor gravitation of blood to the lower extremities, and the burden of this increased vascularity falls upon the superficial veins. Preg-

* Read before the Adams County Medical Society, Natchez, Miss.

nancy and abdominal tumors mechanically impede return of blood from the lower extremities.

The pernicious effect of tight garters must be included among the etiological factors. The superficial veins suffer while the deep ones escape, as the former are not supported by surrounding muscular tissues.

When the veins become sufficiently dilated the valves are rendered incompetent and the condition becomes aggravated —degenerative changes take place, and these vessels are no longer capable of fulfilling their physiological functions.

Varicose veins are elongated as well as increased in diameter, forming curves and bending back and forth on themselves. Sometimes the enlargements at particular points appear like multilocular fluctuating tumors, projecting beyond the level of the surrounding skin. The walls are thinned in proportion to the dilatation.

The diagnosis of the condition is so easy that it would appear a waste of time to mention the points upon which it is made. A mere glance is often sufficient to make the diagnosis.

The prognosis and effects produced by the varicose veins are what interest us even more than the condition itself.

Spontaneous cure seldom occurs, except the vessel become plugged by a coagulum and be thus obliterated. The main evils that result are due to faulty nutrition. The skin loses its elasticity and becomes pigmented in places, especially the lower third of the leg, and ulcerations or chronic eczema, or both, ensue.

Another accident is rupture of the varicosed vein or one of its tributaries. This is usually brought about by the process of ulceration. The hemorrhage is often so profuse as to produce intense anæmia, and even death in a short time. Another accident is phlebitis, which may be followed by suppuration and embolism.

The indication for operative interference may be summarized as follows:

1. If the varix be so large as to produce inconvenience or pain.

2. If a vein have burst or is on the point of bursting.

3. If an ulcer or eczema depending on varicose veins refuses to heal.

4. If the person afflicted with varicose veins of the legs is an applicant for enlistment in the United States Army or on the police department of many of the large cities, where the existence of this disorder causes rejection.

Any procedure towards effecting a radical cure must have for its object the *total obliteration* of the *entire diseased vein or veins.*

It is obvious that obliteration at a single point would not accomplish this, as the free inosculation of the superficial veins would admit of circulation in the diseased vessel above and below the point of constriction, by virtue of their lateral branches. The vessels must be constricted at short intervals all along their course, if we wish to see any real and permanent results ensue. Therefore, from an anatomical standpoint, *single* ligature does not offer the slightest hope of permanent cure.

The question then might be pertinently raised, why, in multiple ligature, will not the blood collect in pockets between the ligatures (for inosculations take place at short intervals), and foil our efforts?

This objection can be most satisfactorily answered and brings out what I want most to impress.

When a vessel is ligated in its continuity clots are formed on both the distal and proximal side of the ligature, extending up and down the vessel for a variable distance. These are in the course of a short time organized, and clot and vessel converted into a fibrous cord. Now, when the ligatures are placed near enough to each other, the distal clot from the ligature above meets the proximal clot from the ligature next below, and thus the entire vessel between the two ligatures becomes obliterated. In this manner, from ligature to ligature the lumen of the vessel is destroyed, and it never again can become a conveyer of blood. I think this explains clearly to all the advantage of *multiple* ligature over the *single* ligature.

The idea of multiple ligature is by no means a new one, but the mode of applying them has been much improved and simplified.

The use of harelip pins by passing them beneath the vein and winding a figure-of-eight ligature over them, after placing a piece of a bougie over the vein to secure even pressure and prevent the silk from cutting, seems to have been recommended and used extensively, and no doubt with much success. However, there certainly must be considerable after-pain attending it, as the sensitive skin is included between the pin and the ligature; moreover, the presence of the pins (partially buried and partially exposed), the bougies and the silk enhances the risk of infection.

The plan I wish to submit to your consideration is the one pursued by Dr. Chas. Phelps, of New York, who I think is the originator of the operation, and to whom I am indebted for personal instructions in the technique thereof. The material used for ligature is catgut, and the number of ligatures introduced varies according to the extent of involvement. Sometimes five or six will suffice, while in other cases as many as thirty in a single leg may be required.

The manner of applying the ligatures is by the subcutaneous method, and no trace is left on the surface save the punctures produced by the entrance and exit of the needle.

The needle which I prefer is the straight varicocele needle devised by Dr. E. L. Keyes, of New York, though an ordinary straight surgical needle can be made to fulfil the purpose.

The Keyes needle is so constructed that the eye, which is near the puncturing end, is opened and closed by a slide. This does away with the tediousness of threading.

The catgut should be small enough to allow the knot to pass through the opening in the skin produced by the needle; however, there is no serious objection to the knot remaining on the outside except that perhaps the pain may be a trifle more than when it sinks below.

In tying, the friction knot, made by passing the end twice around the loop, instead of once, is preferable, as it does away with the risk of slipping.

The pain of the operation is not severe, and when only a few ligatures are to be applied it may be done without an anæsthetic, the patient standing upon the table throughout,

thus favoring the gravitation of the blood, making the veins plainly visible.

When an anæsthetic is to be given an elastic bandage is placed around the thigh with the patient standing; the leg is rendered aseptic, and as soon as as the veins become engorged the points selected for ligature are marked by dots on either side of the vein made with nitric acid or tincture of iodine on the point of a sharpened stick. The acid is preferable, as the marks are not erased by subsequent irrigation.

The limb is then wrapped in towels wrung out of a bichloride solution (1-1000); the patient assumes the recumbent posture, and the anæsthetic administered.

The ligatures are introduced as follows: The selected vein with its surrounding skin is picked up between the thumb and forefinger, and the needle (armed with a ligature) introduced through the skin on one side passing *under* the vein, and making exit on the other side. The eye of the needle is then opened and the ligature detached; the eye is closed again and the needle withdrawn.

We now have a ligature passing from the point of entrance to the point of exit *under* the vein. The needle is now reintroduced (unarmed) into the same opening produced by the former puncture, and made to pass *above* the vein—*i. e.*, between the vein and integument, making exit at the point of exit produced by the first puncture.

The eye is now opened, the ligature introduced into it, the eye closed and the needle withdrawn.

We now have the ligature around the veins and both ends making exit from the same opening. All that remains to be done is to tie as above described.

The ligatures should be placed within three to five inches of each other. When veins bend back and forth upon themselves, forming masses, be sure to tie all trunks above and below, and, if possible, ligate individual vessels within the mass.

Sometimes collateral branches are punctured; it matters naught except the annoyance of slight bleeding.

Avoid applying ligatures at points where large collateral branches are given off—rather tie the individual veins an inch

or so from the point of union. Avoid tying over bony prominences.

The entire operation should be conducted under antiseptic precautions.

Where an ulcer exists it should be thoroughly cleansed and kept covered with aseptic towels during the entire operation to prevent infection of the new wounds. In some severe cases I have found it advisable to apply one or two ligatures to the internal saphenous above the bend of the knee.

The parts should be dressed antiseptically, and where many ligatures have been applied, it is best to add a posterior splint extending above the knee to insure perfect rest.

The dressings need not be disturbed for a week or ten days, provided there be no rise of temperature. At the end of this time the wounds are usually perfectly healed. Occasionally one or two points of suppuration will occur. They never amount to more than small stitch abscesses that heal promptly after evacuation. It is extra precaution to keep the limb bandaged until the clots within the veins become organized.

The operation is applicable to all ages. One patient, in which I assisted Dr. Phelps, was seventy years of age. She made an uninterrupted recovery.

I am unable to say much about the permanency of the cure as far as my own cases are concerned, as they have not as yet had the opportunity of standing the test of time; however, Dr. Phelps reported a number of cases that had at the end of several years shown no sign of return.

The points I urge in favor of this operation are, ease of performance, little or no after-pain, freedom from danger, permanency of results.

MALARIAL HÆMATURIA.

By JOHN W. MEEK, M. D., Camden, Arkansas.

As several articles have appeared in the New Orleans Medical and Surgical Journal on the above named disease, within the past few months, I will add my experience to the

literature of this subject. If one will search the literature of this subject, as published by the journals of the south (our text-book authors have not yet found out that there is such a malady), he will be convinced that "experience does not teach all men alike." In the hands of some, quinine is the panacea —with others, it is a *poison*. My experience, meeting with an occasional case for twenty-five years, forces me to record myself with those who believe it, in this malady, to be a *poison*. As I have met it, the following have been its accompaniments: It invariably occurs in one suffering from malarial cachexia, usually of an intermittent type. The patient has a chill of no unusual severity; the fever is not excessive, but is accompanied by pains of unusual severity in loins and stomach. Usually at the end of cold stage the patient passes a large quantity of bloody urine, and in six hours or less he is completely jaundiced. Rigors, followed by rise of temperature, frequently recur every six hours. There is usually excessive nausea, and bowels are constipated. Of course the jaundice is of hæmatogenous origin. Ligation of the common duct could not so quickly jaundice the entire body. The vital fluid is being acted on by some subtle but potent agent that is disintegrating the red corpuscles and rendering them unfit to sustain life, and what we want is some agent that will arrest this retrograde metamorphosis, and at the same time "cleanse the system of that perilous stuff" that is poisoning all the organs necessary to life.

So completely is the blood devitalized that it sometimes oozes from the gums—in the latter stage is vomited as "black vomit," and in one of my cases, when a blister was placed over epigastrium, it filled with bloody serum.

As this disease occurs in malarial regions and in malarious subjects, we have naturally looked for benefit from quinine, but I have looked in vain. For the first ten years of my professional life I was zealously advocating and giving quinine to these cases, but always attended by a mortality of fully 50 per cent.

For the last ten years I have given no quinine, and have reduced the mortality to 25 per cent.

The treatment that I have followed (and it certainly is not

new nor original with me) is hyposulphite of sodium in large doses, with such other adjuncts as the symptoms may demand.

Quinine will not arrest the paroxysms, and at the same time it depresses the heart, in large doses, and completely upsets the stomach, rendering it utterly intolerant of anything. I have given it by mouth, rectum and hypodermically, and always with the same result. I have given it in 40, 60 and 80-grain allowances each day, and still without any other effect than to damage the patient's chances for recovery.

Why quinine will cure nearly all other forms of malaria but this, I will not attempt to explain, and why hyposulphite of sodium will cure many cases of malarial hæmaturia and be worthless in the ordinary manifestations of malaria is a hidden mystery. I am convinced that it will do it, in the majority of cases, and I am ready to say, "Let the miracle be done though Mahomet do it." The explanation that I will offer is that hyposulphurous acid is liberated in the blood and checks the process of devitalization that is going on there, and at the same time the hyposulphite acts as a cholagogue cathartic and thus assists in eliminating the poisonous accumulations by way of the liver and intestines.

The treatment that I would recommend then is as follows:

1. Give hyposulphite of sodium in drachm doses every two hours until patient is freely purged, and then given in smaller doses until the entire body is saturated with it.

2. Give morphia and atropia hypodermically to quiet the stomach, and to these add a blister over the epigastrium if necessary.

3. Give an abundance of water to work out the coagula that must necessarily accumulate in the urinary tubules after a hæmorrhage. Hot water or hot lemonade is frequently better borne by the stomach than cold. Cupping over loins is also to be recommended.

4. The diet should be unstimulating. Fresh buttermilk is usually well borne and is also a mild diuretic, and I have come to rely on it as an article of food in this as in many other diseases.

5. The patient should, if possible, be kept strictly in a recumbent posture. This treatment, as far as I know, origi-

nated with Dr. Wm. Wright, an old and able country practitioner, of Union Co., Arkansas (peace to his ashes!), and was communicated to me more than twenty years ago, but so strong was my faith in the indications for quinine that for years I feared to adopt it, and I was only forced to try it by my repeated failures with the latter remedy.

PORTUGUESE SURGERY AT THE COMMENCEMENT OF THE LAST CENTURY, WITH A FEW REMARKS ON THE MIRACLES OF OUR AGE.

By Dr. JOHN DELL'ORTO, New Orleans, La.

In *A Medicina Contemporanea* of Lisbon, Dr. A. L. Peres writes a very curious and interesting article on two surgical operations performed in Portugal at the commencement of the last century, which are really worthy of notice in our journal, as a valuable contribution on medical literature.

The first is a case of laparotomy for the extraction of a fœtus, who died from the effects of traumatism suffered by the mother. The operation was performed in 1733 by Surgeon Francisco Correia do Amaral e Castello Branco.

The following is the history, which we will try to translate as literally and faithfully as possible:

Theresa Maria was the name of the patient. She was the wife of Joa da Silva, a shoemaker, and a mother of eight children. On the fourth day of March, 1733, while pregnant, and within a few days of term, she fell on her abdomen. Pains resembling those of labor soon appeared. But in spite of all the medicines administered during one month the fœtus could not be brought out through the natural ways.

Meantime, the assistant surgeon declared that in order to soften the walls of the abdomen he applied a plaster of *magnetic virtues*. The plaster had its effect. On the 21st of April the umbilical region grew really softer. It looked like an abscess with small openings all around. He dilated these openings with a large incision, and then with *proper instru-*

ments he separated the muscles, taking care not to injure the guts, and finally he extracted a large fœtus in a complete state of putrefaction. After having cut off some mortified tissues, and *prevented the air from penetrating into the abdominal cavity* (how he did it, it is not reported), he *fomented* the cavity with a *remedy of his own* invention.

The paper does not say anything about suturing the wound, it only says that the cavity soon filled up with healthy granulations (*casi toda encarnada e com materias laudaveis*) and that thirty-seven days after the operation, the wound was almost healed, and a few days later the woman was perfectly well. The following quotation is very curious:

"The family of this patient," says Surgeon Coireia, candidly "was extremely poor, and perhaps it was a good luck "for her to be poor. Had she been a lady of rank and riches "there would have been more confusion and uncertainty in "the treatment, and probably more danger. And this is the "reason why a writer of medicine said: 'It is not in palaces, "that the best cures are obtained.'"

Dr. Lopes seems to be of the opinion that this was a case of abdominal or extra-uterine pregnancy. We are rather inclined to believe in a laceration of the womb, through which the fœtus passed. But this laceration must have taken place slowly and gradually, otherwise the woman would have died long time before any surgical interference. During that long period of more than forty days before the operation, the providential nature, through its mysterious *vis medicatrix* had most probably caused healthy adhesions around the cavity from which, immediately after the extraction of the fœtus, those granulations started that so rapidly closed the womb, and saved the life of the patient.

The report of the second case is extracted from a pamphlet of forty pages, published in 1735, under the title: *A surgical observation. A case not only rare but unique of a bony hernia, casually discovered, courageously extracted and happily cured by Lorenzo Pereira da Rocha, ordinary surgeon of His Majesty, whom God may help, in the city of Lamego, offered to the curious, but more especially to physicians, surgeons, anatomists, naturalists, and politicians.*

This publication, Dr. Lopes says, is a very learned one, and contains many quotations from Latin and Portuguese authors, even from Camoens. The subject of the case was a carpenter, thirty-two years of age, and a father of five children. In the month of May, 1734, Dr. Lourenço da Rocha saw him for the first time. Seven years before the patient noticed a small swelling on the left side of the scrotum, near his left groin. The swelling soon became very hard, but painless, and gradually increased to such a proportion that he was obliged to send for the surgeon. The tumor occupied the whole scrotum, extending way up the pubis, and measuring four and one-half spans (*palmos*) in circumference, and two and one-half in length. It looked like a promontory, and was as hard as a rock.

After an accurate examination, the surgeon called the tumor a fleshy hernia. (We may call this *a priori* diagnosis.)

He commenced the treatment with the use of mercurial ointment for syphilitic taint—*qualidade gallica*. No good result was obtained. Finally, seeing that the tumor was going to be mortified, and feeling some tender spots with fluctuation, surgical interference was determined upon.

On the 6th of November, 1734, a puncture was made. Nothing but some flatus came out—*um furœao de vento*. Very high fever followed the puncture, accompanied by severe pains in the abdomen, suppression of urine, etc.

A few days afterward, Dr. Pereira, encouraged by the advices of Hippocrates, trusting on the holy Virgin Mary—*fiado na protecçaon de Maria Santissima*—and with the assistance of his colleague, Lourenço da Ponte Rebeiro, and several others, made a very long incision, which enabled him to extract a big bone having the shape of *the skull of a mutton's head*, together with other smaller ones. There was a profuse hæmorrhage. In view of the aggravated condition of the patient, the operation was continued next day, when he removed a very large mass of schirrous matter, and a few little bones more. Then he discovered the peritoneum and removed the left testicle, which was in a state of *sphacelus*.

As in the other case, there was no suturing; the incision

was left open to heal by granulations. After a few days of very serious symptoms the patient had a good recovery.

Twenty-six bones were extracted—therefore the operator called the tumor a *bony hernia, caused by the stagnation of seminal matter in consequence of protracted abstinence from sexual intercourse.*

Here ends the history of this extraordinary case.

In concluding his article, Dr. Lopes eulogizes the skill of the operator, and attributes to him the honor of having discovered for the first time a clinical feature, which was in our days classically described by Velpeau under the name of scrotal inclosure.

When we think of the miracles accomplished by modern surgery with the ample materials and improvements that science and industry places at our command, and compare them to the surgery of past ages, in times of widespread superstition, when anæsthesia, asepsis, antisepsis, and even cleanliness were unknown, we have to admire the calm, the boldness and the skill of those surgeons, and to be astonished at the miraculous results they could secure in their operations. We must not laugh at them when they speak of remedies of their own invention endowed with *magnetic virtues;* we must not ridicule the gentleman who dedicates his medical works to politicians and invokes the protection of the Holy Virgin while performing an operation, because we men of the nineteenth century are no better than they were.

We have our patent magnetic and eclectic medicines, good for all diseases. The politician doctor is a specialty of our times. Bigotry, quackery, fanaticism, both political and religious, have still a strong hold on the minds of many people. The recent pilgrimage to Treves, in Germany, in *docta Germania*, where more than 2,000,000 of persons went to be cured by the healing virtues of the holy coat, is the best testimony of the truth of our assertion.

It seems that there was some excitement in Europe about that coat. According to an old tradition the honor of possessing the genuine coat of Jesus Christ belongs to the town of Argenteuil, in France, just as the Benedictine monks of Charroux

used to have, several hundred years ago, a *reliquaire* supposed to contain his prepuce.

A humorous Italian paper, which we have just received, says that the faithful have settled the matter by compromise. It was decided that Jesus Christ must have had two suits—one for the week days and the other for the Sabbath. So everybody was satisfied, and we are very glad of it. There will be no war in Europe.

CANNABIS INDICA AS AN ANODYNE AND HYPNOTIC.*

By J. B. MATTISON, M. D.

Medical Director Brooklyn Home for Habitues; member American Medical Association; American Association for the Cure of Inebriety; New York Academy of Medicine; New York Med.-Leg. Society; New York Neurological Society; Medical Society of the County of Kings.

Indian hemp is not a poison. This statement is made, just here, because the writer thinks a fear of its toxic power is one reason why this drug is not more largely used. This mistaken idea lessens its value, because it is not pushed to the point of securing a full therapeutic effect. This is a fact. One of the best pharmacologists in this country not long since expressed a very touching solicitude lest the writer's advocating robust doses of this valued drug might cause a decrease in the census that would seriously imperil his professional good repute.

There is not on record any well-attested case of death from cannabis indica. Potter says: "Death has never been produced." Hare asserts: "No case of death from its use in man is on record." Bartholow affirms: "Cases of acute poisoning have never been reported." Stillé states: "We are not acquainted with any instance of death." Wood declares: "Hemp is not a dangerous drug; even the largest doses do not compromise life. No acute fatal poisoning has been reported." A prolonged personal experience, compassing the history of many cases—men and women—and hundreds of doses, ranging from 30 to 60 minims of the fluid extract, has never brought any anxiety along toxic lines.

*Read before the Medical Society of the County of Kings, September 15, 1891.

Having thus brushed aside this bugbear, we may note, *en passant*, the statement, on high authority—Potter—that "cannabis was formerly much employed as an anodyne and hypnotic. It is now somewhat out of fashion." Why this early repute has not been continued, is due to a cause cited, coupled with non-reliable products, and, doubtless, the coming of other analgesic–soporifics. The first cause need not longer obtain; the second can be removed by careful choosing and trial; while the last should not preclude the use of a drug that has a special value in some morbid conditions, and the intrinsic merit and superior safety of which entitle it to the place it once held in therapeutics. Digitalis, for a time, was in disuse. So, too, codeine, which my experience has proved a valued anodyne—one worthy a wider use than it has had, and which I think it will surely get—and impelled me to present the American Medical Association, at its last meeting, with a paper thereon, that I trust you have done me the honor to read.

There is a consensus of opinion among writers on therapeutics as to the anti-agrypnic, analgesic and anæsthetic power of Indian hemp. For the latter it was used prior to ether. Wood, testing it in himself, asserted "marked anæsthesia of the skin all day." Stillé says: "Its anæsthetic virtue is shown in allaying the intense itching of eczema, so as to permit sleep." And that a similar seemingly trivial disorder may have a serious outcome is proven by the fact that a well-marked case of triple addiction, under my care last year—a medical man who took daily 15 grains morphine with 35 grains cocaine, subcutaneously, and 14 ounces of rum—had its rise in a morphia hypodermic taken to relieve urticaria.

Stillé says: "Its curative powers are unquestionable in spasmodic and painful affections." Noting the latter in detail, its most important use is in that opprobrium of the healing art —migraine. In a paper by the writer, eight years ago, "Opium Addiction among Medical Men,"—*Medical Record*, June 9, 1883—in reviewing the causes, this was asserted the most frequent. Enlarged experience has not changed that opinion. A case from such cause, woman, ten years morphia taking, 30 grains, by mouth, daily, is now under my care. A

sister, so situated from the same cause, awaits similar service; and her mother took morphia for headache till death ended her need.

Ringer says: "No single drug have I found so useful in migraine." He thinks it acts well in all forms, but seems most useful in preventing rather than arresting, He deems it specially effective in attacks due to fatigue, anxiety, or climacteric change. Dr. E. C. Seguin, in 1877, commended it highly.

Dr. Wharton Sinkler, in a paper on migraine, gives first place to cannabis, and thinks it of more value in this form of headache than any other. Richard Green, who first commended it in this complaint, thinks it not only relieves but cures; in nearly all cases giving lasting relief.

In the *British Medical Journal*, July 4, 1891, Dr. Suckling, Professor of Medicine, Qeeen's College, Birmingham, writes: "I have during the last few years been accustomed to prescribe Indian hemp in many conditions, and this drug seems to me to deserve a better repute than it has obtained." He calls it "almost a specific" in a form of insanity peculiar to women, caused by mental worry or moral shock, in which it clearly acts as a psychic anodyne—"seems to remove the mental distress and unrest." After commending it in melancholia and mania, he says: "In migraine the drug is of great value; a pill containing one-half grain of the extract, with or without one-quarter grain of phosphate of zinc, will often immediately check an attack, and if the pill be given twice a day continuously, the severity and frequency of the attacks are often much diminished. I have met with patients who have been incapacitated for work from the frequency of the attacks, and who have been enabled by use of Indian hemp to resume their employment." In a personal note from the doctor he wrote: "I have used Indian hemp as an anodyne and hypnotic, and find it most useful in both ways. I have never seen any ill results."

Anstie commends it in the migraine and the pains of chronic chloral and alcohol taking. In his work on neuralgia—the best ever written, and one which I advise every one to read, if not read—he says: "From one quarter to one-half grain of *good*

extract of cannabis, repeated in two hours, if it has not produced sleep, is an excellent remedy in migraine of the young. It is very important in this disease that *the habit of long neuralgic paroxysms should not be set up.*"

Russell Reynolds thinks that in neuralgia, migraine and neuritis, even of long standing, it is by far the best of drugs. Mackenzie has used it with success in constant all-day headache, not dependent on anæmia or peripheral irritation. Bastian and Reynolds commend it in the delirium of cerebral softening, and the latter says it calms the head pain and unrest of epileptics. In cardiac tumult, in senile insomnia and delirium, and the night unrest of general paresis it acts well.

In some diseases common to women hemp works well. Grailly Hewitt says that in many cases of uterine cancer it allays or prevents pain. Ringer asserts it sometimes signally useful in dysmenorrhœa. West commends it here. Potter states that its anodyne power is marked in chronic metritis and dysmenorrhœa; and Hare thinks it of great value in chronic uterine irritation and nervous and spasmodic dysmenorrhœa. Donovan and Fuller claim it of value in migraine and chronic rheumatism; and Mackenzie in hay fever and hay asthma.

In genito-urinary disorder it often acts kindly—the renal pain of Bright's disease; in vesical spasm; retention of urine, and chordee; and it calms the pain of clap equal to sandal or copaiva, and is less unpleasant. The distress of gastric ulcer and gastrodynia are eased by it, and in other and varied neuralgias it serves one well. In some cases of advanced phthisis and other cureless disease it will bring euthanasia by allaying pain and unrest.

My experience with hemp covers more than a decade, many cases, and several pounds of fluid extract. It is proper to state that these cases have been solely habitués or ex-habitués of opium, chloral or cocaine. In these, often, it has proved an efficient substitute for the poppy. Its power in this regard has sometimes surprised me. Both sexes took it, and with some no other drug anodyne was used. One of these—a naval surgeon, nine years a 10 grains daily subcutaneous morphia taker—recovered with less than a dozen doses. My oldest female patient—64—found its service complete. Its action has

varied, as some cases respond more fully. This during the early abstinence time. Later, it has done good in the post-poppy neuralgia, especially the cranial kind, and it has calmed mental pain and unrest.

As a hypnotic, Fromuller gave hemp in 1000 cases. Success, 530; partial success, 215; no success, 253. As such in delirium tremens, Potter declares it "the best." Anstie thought it better than opium when the pulse is feeble. Phillips asserts it "one of the most useful." Tyrrell and Beddoe say the same. Suckling's opinion has been given. McConnell commends it in the insomnia of chronic cardiac and renal disease. Oxley lauds it in the insomnia of severe chorea, especially in children; the tincture "more effectual than any other hypnotic."

My own results prove it a satisfactory soporific, even oftener than as an anodyne. And this, too, under conditions that test thoroughly the power of any drug in this regard, for the insomnia of ex-poppy habitués finds its equal only in the agrypnia of the insane. With many, no other hypnotic was used. The sleep has been sound and refreshing. Many cases showed a notable influence to it as regards time—somewhat akin to sulfonal. Two hours sufficed. The first, pleasant stimulation; the second, increasing drowsiness, ending in sleep.

Again, I admit my special cases may involve a condition making them more easily subject to hemp hypnosis, but these do not preclude the wisdom of its trial with other patients in whom it may act equally well.

Writers on cannabis refer to certain peculiar effects—which, in our thinking, are more often peculiar to the patient—that may here be noted. One is a mild intoxication. I say "mild," because the hashish, assassin-like, running-a-muck form is less fact than fancy. It is said temperament largely determines the mental effect, whether it be grave or gay, merry or mad. Most of my cases—when such—have been in a merry mood. Of the hundreds of times given, only once did it excite to violence. That was a young physician, six years ago, in which it came close to a personal assault on the writer that was warded off only by superior strength. The patient afterward avowed no knowledge of such situation, was profuse in

apology, and stated at once, after taking hemp simply to note results, he routed every one out of the house, including his own grandmother!

Catalepsy is a rare sequence. We have seen it once. A woman, 23, brunette, small but active, took, in early evening, 40 minims Squibb's fluid extract as a soporic. After playing cards half an hour, she began to be very jolly, and it was suggested she retire. Visiting her later, she was found completely cataleptic. It soon subsided, sleep followed, and no after ill effect.

Failure with hemp is largely due to inferior preparations, and this has had much to do with its limited use. It should never be called inert till full trial with an active product proves it.

Wood thinks the English extracts best. I have used, mainly, Squibb's fluid extract. To a small extent, Parke, Davis & Co.'s Normal Liquid. They are reliable. Hare commends the solid extract made by the latter, and by McKesson & Robbins.

Merck has produced two elegant and efficient extracts—cannabine tannate and cannabinone. They are essentially hypnotic. I show you specimens. The former has been found by Prior, Vogelsgesang, Mendel and others, a satisfactory soporific. Prior gave it one hundred times to thirty-five persons—the most with success. In hysteric cases not calmed by chloral or opium, it acts specially well. In the small dose of one grain it has brought sleep when one-third grain morphia failed.

Another cause of failure is too timid giving. I am convinced that the dose of books is often too small. The only true way is, once a good extract, push it to good effect. My doses have been large—40 to 60 minims of the fluid extract—overlarge for the narcotic habitué; but, as we years ago asserted, habitual poppy taking begets a peculiar tolerance of other nervines, and they must be more robustly given. Both sexes have taken them—women frequently—with no other effect than quiet and sleep. I think, for many, small doses are stimulant and exciting; large ones, sedative and quieting. They are the outcome of an experience with smaller doses that failed of effect desired. They prove hemp harmless, and

they add proof to the opinion of most neurologists that, once a nervine needed, it is often better to give one full dose than several small.

The tincture—3 grains to the drachm—may be given in doses of 20 to 60 minims. The fluid extract 5 to 20 minims. The solid extract ½ to 2 grains. Tannate of cannabin, 5 to 15 grains. Cannabinone, ½ to 1½ grains. Cannabinone with milk sugar, 5 to 15 grains, and each repeated or increased till a full effect is secured. It is said that in women cannabinone acts twice as strongly as in men. In headache, periodical or long continued, ½ to 2 grains solid extract may be given each hour or two till the attack is arrested, and then continued in a similar dose, morning and night, for weeks and months. It is important not to quit the drug during a respite from pain.

I close this paper by again asking attention to the need of giving hemp in migraine. Were its use limited to this alone, its worth, direct and indirect, would be greater than most imagine. Bear in mind the bane of American women is headache. Recollect that hemp eases pain without disturbing stomach and secretions so often as opium, and that competent men think it not only calmative, but curative. Above all, remember the close genetic relation of migraine relieved by opium to a disease that spares neither sex, state nor condition.

Dr. Suckling wrote me: "The young men rarely prescribe it." To them I specially commend it. With a wish for speedy effect, it is so easy to use that modern mischief-maker, hypodermic morphia, that they are prone to forget remote results of incautious opiate giving.

Would that the wisdom which has come to their professional fathers through, it may be, a hapless experience, might serve them to steer clear of narcotic shoals on which many a patient has gone awreck.

Indian hemp is not here lauded as a specific. It will, at times, fail. So do other drugs. But the many cases in which it acts well entitle it to a large and lasting confidence.

My experience warrants this statement: cannabis indica is often a safe and successful anodyne and hypnotic.

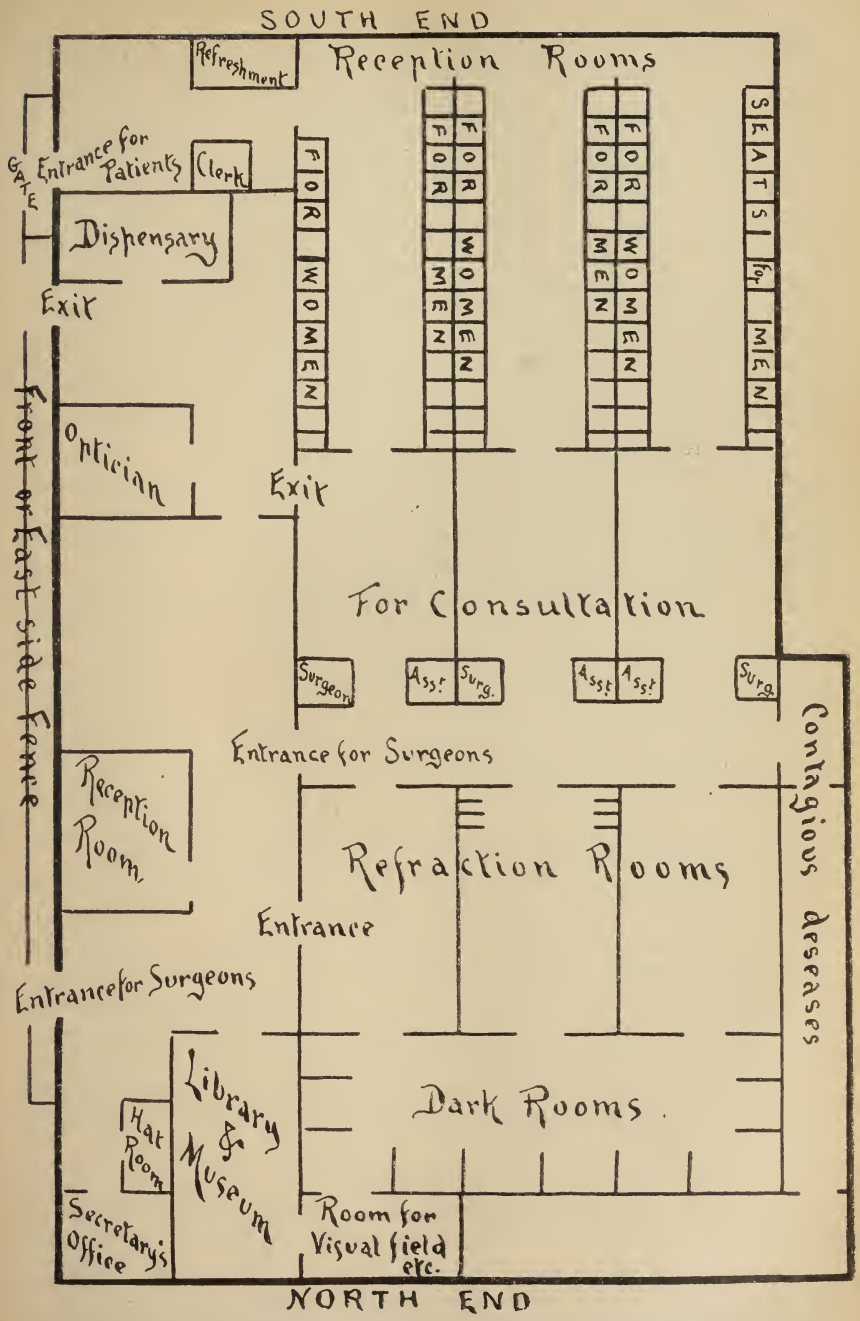
Correspondence.

[The following letter from Dr. C. A. Thigpen to Dr. A. W. de Roaldes is deemed of sufficient interest to our readers to merit publication. We are under obligations to both of these gentlemen for the privilege of publishing this interesting communication.—Editor.]

London, Eng., October, 1891.

Dr. A. W. de Roaldes, New Orleans: Dear Doctor—I have often thought that I would write you a letter, and I know of no occasion more suitable than the present one, nor can I find a subject of more interest to you, I believe, than European hospitals, knowing your great sympathy for institutions of this kind, and the much time and labor you have given in their behalf. It is not my purpose to take up each hospital as to its time and importance, for but a brief resumé of them all would afford material for volumes and be but tiresome to read. I shall therefore confine myself to some of the more important special ones in which I am at present most interested, and with the plans and workings of which I am more familiar. I shall begin, then, with Ophthalmic Hospitals, and among these I shall take first, The Royal London Ophthalmic Hospital, commonly known as Moorfields. It is situated north of the center of the city, in one of its busiest portions, is of easy access from all parts. It fronts to the east, is about 125 feet north to south, and 75 feet east to west. It is the largest and one of the oldest special eye hospitals in the world, and while it does not possess the advantages of most modern architecture, yet with its improvements and additions, it affords comforts and conveniences second to none. It is divided into four floors besides its basement, which is solely for kitchen and sundry purposes.

By reference to the enclosed sketch, which, by the way, is quite artless, you may be able to see how the first floor is divided. Viewing the eastern side, you will observe two gateways, one to the left marked for patients, the other to the right for surgeons and visitors. On entering this gate to the left, patients are directed by a notice over a doorway "entrance." Through this they pass to the clerk's office, where the names, etc., are taken, then they are provided with a card and a book, which admits them to the reception room. This room has three divisions, corresponding to the three surgeons in charge for each day. Each of these divisions has separate seats for



ROYAL OPHTHALMIC HOSPITAL LONDON.—GROUND FLOOR.

men and for women. The reception room opens into the consultation room, which again has three divisions; at the end of each are two desks for the surgeon and his assistant. Adjoining the consultation room is a room for the treatment of contagious diseases, such cases as ophthalmia neonatorum and gonorrhoica, trachoma, etc. Just behind the desks are three rooms for refraction cases. These lead into the dark room for ophthalmoscopic examination, and adjoining these is a special apartment for taking the visual field and testing color perception. All patients, on leaving, are required to pass out by a different route from which they came; this leads through the optical and dispensing departments, where each one must have his prescription prepared. For such he is required to pay according to his means, but if such is lacking on account of poverty, his glasses or medicines are cheerfully given him.

On this same floor are the library and museum. This requires more than a passing notice, for here you find the finest and most select library of all times and all languages, pertaining to ophthalmology, and never could the mind conceive of a more beautiful or valuable collection of eyes than are therein dispayed. The second floor is divided into the operating theatre, centrally situated, pathological laboratory, and wards for patients upon whom operations have been performed. The third and fourth floors are likewise divided into special wards for special diseases. Each floor has a selected ward for contagious diseases. There are one hundred beds.

The hospital is supported mainly by voluntary contributions, although a certain fee is exacted of those who can afford to pay anything. I suppose it will be an interesting fact to you to know that charities are as badly abused in England as in America, and no "well laid schemes or plans" have sufficed to prevent such abuses for these many years. The medical and surgical staff of this hospital is composed of some of the brightest minds in the world's history of medical science. Each one goes into his work, not only with the object of charity in view, but for making those observations and compiling those statistics which form the basis of the science of to-day. Toward such an end much time and care are taken in obtaining complete histories and noting accurately changes from day to day.

STAFF.

Consulting Physician: Stephen McKenzie, M. D., F. R. C. P.

Consulting Surgeons: James Dixon, Esq.; Sir Wm. Bowman, Bart., F. R. S.; Jonathan Hutchinson, F. R. S.

Visiting Surgeons: Messrs. John Cowper, Warren Tay,

John Tweedy, E. Nettleship, R. Marcus Gunn, W. Lang, A. Q. Silcock, J. B. Lawford, A. Stanford Morton.

Pathologist: E. Treocher Collins.

Besides the visiting staff, there is the house surgeon and his assistant,

Each surgeon attends twice a week, making three surgeons daily.

After a surgeon shall have become three score years (sixty), he is required to resign. He then becomes honorary.

The clinics are held daily, patients being admitted from 8 to 10 A. M. After such time none are admitted, save those of cases of emergency. The daily attendance ranges from three to five hundred. During the last year the total number of our patients was 26,868. The total number of attendances, 129,325. Total number of in-patients was 1890. Of this number 1443 required surgical operations.

The hospital is well supplied with skilful nurses, having a matron and eight trained nurses, who have had previously to entering the hospitals a course of three years' training and experience in general hospitals. And these nurses are assigned to wards of special diseases, respectively.

The classes of diseases here are about the same as those in America. Some of the diseases, however, are more obstinate to treat than those of the southern climate; for instance, iritis requires a much longer time to run its course here than in New Orleans. Corneal ulcers are very stubborn, and I might mention here that the main reliance in their treatment is placed upon the cautery.

Trachoma or granular conjunctivitis, fortunately, is not so common in this densely populated city as in America, especially New York.

All operations are performed by the surgeons in charge, beginning at 10 o'clock daily, there being three different operators for each day. The cases of refractive errors are attended by the clinical assistants; these are students from all parts of the world who visit London for study, and each one by the payment of $15 becomes officially a clinical assistant, and as such enjoys privileges and advantages for practical work excelled by none. I may say that any one who takes such a course at Moorfield is expected to know something of ophthalmology before he comes, otherwise he is at a great disadvantage, as no regular, systematic course of instruction is given.

The refraction is done by different methods, viz., by the direct method of ophthalmoscopy, retinoscopy or the shadow test, and lastly and the most reliable, by the test case. Mydri-

atics are always used in high degrees, and where any astigmatism exists. No stress is put upon muscular insufficiencies, as these are but the effects of cause, errors of refraction.

Besides all this, the student has an unlimited field for study of intra-ocular or fundus diseases. Out of such a great number of patients, every variety of inflammation and neoplasm is met with; and what is more important, such an excellent opportunity exists for the study of pathology, both mocroscopical and microscopical. There is never an end to material.

As to the treatment of the various external diseases, nothing of note, aside from the general routine we have in America; besides procedures instituted by American ophthalmologists are frequently adopted here, and particularly Dr. Noyes' treatment for trachoma by expression of the follicles with forceps. But I see I have already gone beyond the bounds of a friendly communication, so I will reserve what else I have to write for another time. Very sincerely,

C. A. Thigpen.

Proceedings of Societies.

SOUTHERN SURGICAL AND GYNECOLOGICAL SOCIETY.

Preliminary programme of the session of the Southern Surgical and Gynecological Association, to be held in Richmond, Va., November 10, 11 and 12, 1891.

President, Louis S. McMurtry, M. D., Louisville, Kentucky; Vice President, James McFadden Gaston, M. D., Atlanta, Georgia, and J. T. Wilson, M. D., Sherman, Texas; Secretary, W. E. B. Davis, M. D., Birmingham, Alabama; Treasurer, Hardin P. Cochrane, Birmingham, Alabama. Judicial Council: John S. Cain, M. D., Nashville, Tennessee; W. T. Briggs, M. D., Nashville, Tennessee; Virgil O. Hardon, M. D., Atlanta, Georgia; Bedford Brown, M. D., Alexandria, Virginia; George J. Englemann, M. D., St. Louis, Missouri. Chairman of the Committee of Arrangements, Hunter McGuire, M. D., Richmond, Virginia.

PAPERS TO BE READ.

(*Partial List.*)

The President's Annual Address, Louis S. McMurtry, M. D., St. Louis, Mo.

Remarks on Systemic Infection from Gonorrhœa, Illustrated by Cases, Bedford Brown, M. D., Alexandria, Va.

The Rational Treatment of Peritonitis Based upon the Consideration of the Pathological Conditions Present, W. D. Haggard, M. D., Nashville, Tenn.

A Medico-Legal Aspect of Pelvic Inflammation, W. W. Potter, M. D., Buffalo, N. Y.

Complications in Pelvic Surgery, and How to Deal with Them, Joseph Price, M. D., Philadelphia, Pa.

Cholecystotomy—Report of Case—52 Gallstones and 10 ounces of Pus Removed—Success, W. B. Rogers, M. D., Memphis, Tenn.

Some of the Complications of Psoas Abscess, J. McFadden Gaston, M. D., Atlanta, Ga.

Laparotomies Performed in the Past Year, Thomas Opie, M. D., Baltimore, Md.

Imperforation of the Rectum, Geo. Ben. Johnston, M. D., Richmond, Va.

A Case of Induced Abortion for the Relief of the Nausea and Vomiting of Pregnancy, with Remarks, Christopher Tompkins, M. D., Richmond, Va.

The Principle of Drainage as Applied to Surgery of the Deep Urethra, F. W. McRae, M. D., Atlanta, Ga.

The Neuroses of the Genito-Urinary System in the Male, Frank Lydston, M. D., Chicago, Ill.

Nephrectomy, with Report of Cases, Edwin Ricketts, M. D., Cincinnati, O.

Venomous Serpents of the United States, and the Treatment of Wounds Inflicted by Them, Paul B. Barringer, M. D., University of Virginia.

A Report of Some Additional Cases of External Perineal Urethrotomy Without a Guide, J. Edwin Michael, M. D., Baltimore, Md.

Growth of Fibroid Tumors of the Uterus after the Menopause, Jos. Taber Johnson, M. D., Washington, D. C.

The Part the Shoulders Play in the Production of Laceration of the Perineum, with Suggestions for its Prevention, W. D. Haggard, M. D., Nashville, Tenn.

The Pedicle in Hysterectomy. How Formed. Its Subsequent Behavior. Its Final Condition, I. S. Stone, M. D., Washington, D. C.

A Case of Pelvic Abscess, John Brownrigg, M. D., Columbus, Miss.

A Case of Cyst of the Mesentery, with Remarks, J. A. Goggans, M. D., Alexander City, Ala.

The Female Urethra, K. P. Moore, M. D., Macon, Ga.

Medico-Legal Aspect of Intestinal Surgery, J. D. S. Davis, M. D., Birmingham, Ala.

Albuminuria; Its Relation to Surgical Operations, J. W. Long, M. D., Randleman, N. C.

Senile Gangrene, Frank Prince, M. D., Bessemer, Ala.

Hemorrhage *versus* Shock, W. L. Robinson, Danville, Va.

Treatment of Gallstones, with Report of Cases, W. E. B. Davis, M. D., Birmingham, Ala.

(Title of paper not determined), Hunter McGuire, M. D., Richmond, Va.

(Title of paper not determined), Duncan Eve, M. D., Nashville, Tenn.

(Title of paper not determined), A. V. L. Brokaw, M. D., St. Louis, Mo.

(Title of paper not determined), Chas. A. L. Reed, M. D., Cincinnati, Ohio.

(Title of paper not determined), W. F. Westmoreland, M. D., Atlanta, Ga.

Members of the medical profession cordially invited to attend.

LOUIS MCMURTY, M. D.,
President.

W. E. B. DAVIS, M. D.,
Secretary.

AMERICAN DERMATOLOGICAL ASSOCIATION.

The fifteenth annual meeting was held at Washington, September 22 to 25, 1891, in conjunction with the Congress of American Physicians and Surgeons.

The meeting was called to order by Dr. F. B. Greenough, of Boston, who made the opening address.

The report of the committee on nomenclature was made and after discussion was accepted.

The first paper read was by Dr. H. G. Klotz, of New York, entitled "Dermatitis Hæmostatica." It was discussed by Drs. Piffard and Bronson.

Dr. L. A. Duhring, of Philadelphia, followed with a paper, "Report of a Case of Universal Erythema Multiforme." It was accompanied by a colored portrait of the case and speci-

mens of large plates of exfoliated epidermis shed by the patient during the latter part of the course of the disease. It was discussed by Drs. Hyde, Duhring, Sherwell, Shepherd, Fox, Allen and Bronson. Dr. Shepherd asked if any drug had been administered for the rheumatism that was a marked feature in the case, to which Dr. Duhring replied, "No! The treatment had been entirely negative." Dr. Fox had seen a case somewhat resembling that of Dr. Duhring in which there was a question if the eruption had been caused by some drug that had been taken for a co-existing gonorrhœa. He thought that it was a purely accidental occurrence. We often see cases of dermatitis exfoliativa following other diseases, such as psoriasis.

Dr. Shepherd, of Montreal, then read a paper upon "An unusual Case of Sarcoma involving the Skin of the Arm, requiring Amputation."

This was followed by a paper by Dr. S. Sherwell upon "Multiple Sarcomata. History of a Case Showing Modification and Amelioration of Symptoms with Large Doses of Arsenic." In the discussion Dr. Zeisler mentioned brilliant results in a case of lupous sarcoma for the administration of arsenic. In a case of pigmentary sarcoma he had given the drug without effect. Dr. J. C. White, of Bston, had seen good effects from the use of the drug in one case of sarcoma. Dr. Robinson, of New York, had not much success with arsenic. He believed that many cases of multiple sarcoma were in reality microbian in origin and not true tumors.

The next paper read was by Dr. R. B. Morrison, of Baltimore, on "The Hypodermic Use of Hydrargyrum Formamidatum in Syphilis," which he recommended as a treatment of great usefulness, specially as a means to fall back upon in some cases in which older forms of treatment did not succeed, or in which such a plan as that of inunction was not practicable. He always used Merck's preparation and found that it did not cause much pain nor prove objectionable. He had never used any of the insoluble salts. In the discussion Dr. Corlett said that he had found hypodermic injections of mercury of great use in some cases, such as in those cases in which the stomach has given out. Dr. Klotz had employed hypodermic injections in syphilis. While it was doubtless of value in some cases, for most cases older methods of treatment are quite as good. Dr. Greenough said that while greatly interested in the subject of hypodermic medication in syphilis, he had found it impossible to get his patient to submit to it. He thought it was useful only in exceptional cases in which other plans could not be used. Its ultimate result was no better than that of other plans.

Dr. J. Grindon, of St. Louis, read a paper upon "Lichen Scrofulosorum," which gave rise to a long discussion. Drs. Robinson, Piffard, Sherwell, Shepherd, Corlett, Bronson and Greenough, all had seen cases of this rare disease.

Multiple Sarcomata of Skin. History of a case showing modification and amelioration of symptoms with large doses of arsenic. By Dr. S. Sherwell, Brooklyn.

The author after pointing out numerically several interesting points, chief among which were, largeness of therapeutic dosage, tolerance of them by patient, complete and rapid subsidence of tumors under such dosage, rapid recurrence under suspension of same, originality of treatment instituted, etc., goes on to give a history of the patient with sarcomata, supplemented with a further history by Dr. John B. Wheeler, of Burlington, Vt.

Dr. Sherwell removed in all from this patient thirty growths, some of which were quite large, one three and one-fourth inches in diameter; Dr. Wheeler, about a year later, in a series of operations, removed the immense number of 170, large and small. In the interval between his leaving Dr. Sherwell's care and coming under that of Dr. Wheeler, he had interrupted or almost suspended treatment spoken of above, which had at the time of his leaving Dr. Sherwell caused the complete, or almost complete, disappearance of all growth. They recurred too rapidly for Dr. Wheeler to operate, when Dr. Wheeler adopted some internal treatment, as that which Dr. Sherwell had instituted, with the most decided and gratifying results, namely, the same rapid disappearance of the growths. The case ended by his leaving Dr. Wheeler's care in good condition and doing exceedingly well, irregularity or total interruption of treatment, and as before recurrences of growths, followed in a few months by death.

SECOND DAY—THURSDAY, SEPTEMBER 23, 1891.

The committee on statistics made its report through its chairman, Dr. J. H. Hyde, of Chicago.

This was followed by a discussion on "Tuberculosis of the Skin," which was opened by Dr. J. C. White, of Boston, who presented "Its Clinical Aspects and Relations;" by Dr. J. T. Bowen, of Boston, who presented "Its Pathology;" and by Dr. G. H. Fox, of New York, who presented "Its Treatment." In the discussion, Dr. H. G. Piffard drew attention to the fact that French and other competent observers had surmised the connection between what was then called pulmonary consumption and lupus and the so-called scrofulodermata. He had done so in 1878. Recent invention of the Abbe condenser

and Zeiss lenses had enabled us to discover the tubercle bacillus, and to establish the relationship on pathological grounds. He himself believes that lupus erythematosus is fully entitled to the name "lupus," as he thinks that it, too, is of bacillary origin. Nor is he alone in his opinion. Cold abscess of the skin is probably due to the same cause, as is also rodent ulcer. He would agree with Dr. White in believing that we should have some collective term for all the various tubercular diseases. In treatment he would advocate cutting out the whole diseased patch, unless it was very extensive. Next to the knife he would place the actual cautery, after removal as much as possible of the growth with the curette. Arsenic and chloride of zinc are also to be depended on.

Dr. C. W. Allen commended multiple scarification; and combined pyrogallol and mercurial plasters; he thought that there might yet be a future for Koch's tuberculin.

Dr. J. Zeisler was in thorough accord with Dr. White. By his experience at the Hospital St. Louis he had become converted to the use of the galvano-cautery. He would also testify to the efficacy of the solid nitrate of silver stick which, bored into the skin, would act both as a knife and caustic. He was not enthusiastic as to tuberculin.

Dr. E. B. Bronson believed that it was best to retain for some time our present terminology for the different tubercular diseases. In regard to tuberculin, he had seen improvement in some cases treated with it, but on the whole his experience had made him regard the remedy unfavorably. He had had good success with the dental-burr, as first advocated by Dr. G. H. Fox, The nitrate of silver stick was also good.

Dr. J. N. Hyde was glad that Dr. White had come to accept local contagion as the cause of lupus, a view that he himself was among the first to advocate. He thought that in this country there were but few cases of lupus with a history of pulmonary tuberculosis in the family, or with tubercular diseases elsewhere. He did not believe in the treatment of scarification. Both the curette and nitrate of silver were serviceable in proper cases. In regard to tuberculin, he thought it possible that in time we might find something of value in it, but it was not so now.

Dr. L. A. Duhring would retain the old names for some time to come. He had not found lupus associated with general tuberculosis in private practice. He would recommend pyrogallol most highly, using it in the form of a plaster with resin and soap plaster, three of the resin plaster and one of the soap plaster. This is to be worn continuously. Local use of bichloride of mercury he had not found beneficial. Tuber-

culin he had found helpful, though he did not report any case of cure.

Dr. P. A. Morrow would agree with Dr. White that as lupus and some other diseases had a common etiological factor, we should place them together under a common heading. He advocated the use of multiple scarifications followed by mercurial plaster. For destruction of the small lupus nodules he recommended punctate cauterization with a wite hot instrument. Chloride of zinc was superior to pyrogallol as a caustic. Excision will probably increase in favor as the means of treating lupus.

Dr. A. R. Robinson would not include lupus under a common heading with tuberculosis on account of its different clinical aspect.

Dr. H. G. Klotz was not yet satisfied with our present knowledge of the infection of the skin with the bacillus tuberculosis.

Dr. L. D. Bulkley is not satisfied with any of the plans for the external treatment of lupus. Internally he has great faith in phosphorus as a curative agent, the nodules softening up and disappearing under its continuous use. He would corroborate Dr. Fox's advocacy of fuchsin. As to pyrogallol, that too was admirable. He applies it in powder form, pure, after scraping. Salicylic acid combined with pyrogallol is also useful.

Dr. S. Sherwell was doubtful of the relationship of tuberculosis to lupus. (Adjourned.)

THIRD DAY.

Dr. Duhring read a paper upon "Notes of a visit to the Leper Hospital of San Remo, Italy." In reply to a question by Dr. White, after the paper was read, he replied that no attempt at segregation was made in San Remo. There were but few cases in the Hospital and they were in an ordinary Ward of a general Hospital. They were not permitted to leave the confines of the Hospital.

Dr. P. A. Morrow, of New York, then followed with a paper on "Skin Grafting," and showed a case in which the operation had been done by the method described by him, and with admirable results.

In the discussion of the case Dr. Duhring spoke in high praise of the operation of skin grafting as practised by Dr. Jas. E. Garrettson. Dr. Clark asked if Dr. Morrow thought that the inclusion in the graft of the deeper structures of the skin, as recommended by him, would give any better results than more superficial ones. To this Dr. Morrow replied that

he thought they would be more certain to take, and he had had not a single failure. He had made more than fifty grafts of hairy skin upon a cicatrically bald scalp and all of them had taken, and from many of them the hair was growing nicely. Dr. Sherwell had had good results, also, by deep grafts.

Dr. P. A. Morrow, of New York, then read a paper on "The Treatment of Alopecia Areata," and was followed by Dr. L. D. Bulkley, of New York, with a paper on "A Therapeutic Note on Alopecia Areata." The two papers were discussed together. Dr. J. Zeisler believed alopecia areata was due to a parasite, though perhaps there were some cases due to a neurosis. The latter were the very obstinate ones. He was in favor of treating all cases by epilation about the patches. With pilocarpine he had had no success. He regarded the use of a concentrated solution of common salt as a good remedy for stimulating hair growth.

Dr. W. T. Corlett spoke in faver of acetic acid as a remedy in alopecia areata. Cases, however, recovered spontaneously.

Dr. G. H. Fox was always pleased to hear any one speak with confidence of any treatment of alopecia areata, as Dr. Bulkley had done of carbolic acid. He was rather skeptical of any remedy. A strong solution of ammonia had proved as effective as any in his hands. He thought that general treatment of the patient was quite as important as any local application. Dr. J. E. Graham had never seen any cases that would lead him to believe that alopecia areata was contagious. He did not think that because antiparasitic remedies were useful that this was a proof of the parasitic nature of the disease. Dr. P. A. Morrow thought that there had been a sufficient number of cases of contagion reported to satisfy any reasonable doubt of the contagiousness of the disease. He quoted Eichhoff's report, in which a number of cases were traced to one barber. He had had one case of probable contagion.

Dr. L. A. Duhring said that in spite of a great deal of study of alopecia areata, he had never been able to find any parasite in the disease, nor to be convinced that the disease was contagious. He believed that there was a disease simulating alopecia areata, and often reported as such, that sometimes occurred epidemically, but was not alopecia areata. He regarded arsenic taken internally as very valuable in the treatment of the disease. He could see no reason for depilpating the healthy hair about the patches.

Dr. J. C. White said that we were still wanting positive evidence of both the parasitic and the neurotic element in the etiology of the disease. Clinical evidence points both ways.

He had seen cases of apparent contagion. He had seen thirty cases of a disease simulating alopecia areata, and that were not cases of ringworm, occurring in an asylum, which probably were instances of the so-called contagious alopecia areata. He did not think that they were true alopecia areata. His favorite remedy was half a drachm of croton oil to eight ounces of turpentine, used daily. Of course it failed in some cases, as do all remedies. If it failed he used many other remedies that had been commended, but they did not do any better. He did not believe that there was any specific remedy.

Dr. H. W. Stelwagon had never been able to trace a case to a contagious origin. Local stimulation is more to be relied on in treatment. He was fond of equal parts of turpentine, cantharides and tincture of capsicum, with arsenic internally.

Dr. J. N. Hyde believed that the time would come when alopecia areata would be regarded as simply a symptom. Some cases were doubtless parasitic and some neurotic in origin. In bad cases he used creosote locally. After say the 45th to the 48th year of life the chances of recovery were greatly decreased.

Dr. H. G. Keotz had had one case in which hereditary syphilis was probably the underlying cause, the boy getting better when under specific treatment.

Dr. C. W. Allen believed that the disease was parasitic and thought that he had in his own practice observed a case of contagion. He thought that internal treatment was valuable. Naphthol and pyrogallal had both proved useful in his hands.

Dr. S. Sherwell believed the disease to be of neurotic origin alone. Stimulation was most to be depended on.

Dr. J. Grindon had never met with a case that suggested either a parasitic or contagious origin of the disease. He believed in its trophoneurotic origin.

Dr. F. B. Greenough used in practice a half drachm of carbolic acid in an ounce of water.

Dr. L. D. Bulkley, in reply to a question of Dr. Morrow, said that he used the 95 per cent. solution of carbolic acid only to a small portion of the scalp at a time. It should be brushed over lightly at first so as to benumb sensibility and then rubbed in more thoroughly. He had not used it elsewhere than on the scalp. The skin is red for a few weeks; this disappears and the hair grows. He also administers strychnia and phosphoric acid, and keeps up the nutrition of the patient.

Dr. R. W. Taylor, of New York, read an account of a case, "Angioma Pigmentosum et Atrophicum," by Dr. A. W. Brayton, of Indianapolis. It was accompanied by an excellent portrait.

Dr. J. C. White stated that his investigations showed that the disease was not limited to Russian Jews, but was met with also in persons of English and French descent.

Dr. Bronson then read his paper upon "The Etiology of Pruritus."

THIRD DAY—AFTERNOON SESSION.

It began with a short discussion of Dr. Bronson's paper on pruritus, in which Drs. Zeisler and Morrow took part, the discussion being closed by Dr. Brown Bronson. Dr. W. T. Corlett, of Cleveland, then read a paper upon diseases of the skin, associated with derangement of the nervous system. It was discussed by Drs. Bronson, White, Fox, Duhring, Zeisler, Allen and Sherwell, who took various views of the cases reported, all agreeing that it was very difficult to diagnose what the causes were without having seen them.

Dr. L. A. Duhring read his paper entitled "Experiences in the treatment of chronic ringworm in an institution for boys." He recited the many remedies he had used. In the discussion Dr. G. H. Fox said that Dr. Duhring's experience was both interesting and valuable. He had had considerable experience in the New York Skin and Cancer Hospital. He had found chrysarobin useful, as had Dr. Duhring. He began the treatment by clipping the hair short, and shaving, either only over the patches or over the whole scalp, and applying chrysarobin in traumation. He was tired of greasy applications. Hydronaphthol plaster, as recommended by an European physician, had proved more satisfactory than chrysarobin. He advocated epilation where practicable.

Dr. J. Zeisler advocated pyrogallol as a parasiticide. Dr. Duhring, in reply to a question, said that some of the cases recovered in six weeks, and some not for a year. Dr. White thought that white chrysarobin was a good remedy. It was not a safe one to use outside of an asylum or hospital. He recommended a combination of sulphur, carbolic acid and naphthol in ointment form. Dr. Stelwagon recommended an ointment composed of tar, sulphur and citrine ointment. Dr. Sherwell advised keeping the scalp saturated with a mild oil and covered by a skull cap. Dr. B. Wigglesworth believed that it is necessary for us to have regard to the nutrition of our patients. Dr. C. W. Allen bore testimony to the value of chrysarobin. Dr. L. A. Duhring in concluding said that the cases were all well when he left off treatment, and that they remained well for at least one year. Epilation he found did not repay the vast amount of labor it cost. He regarded ointments as most useful remedies.

Dr. J. Zeisler, of Chicago, then read his paper on "Epi-

lation; its range of usefulness as a dermato-therapeutic measure." In the discussion, Dr. G. H. Fox said that he was glad to hear any one advocate epilation in sycosis, as he had found it a most useful remedy. A sulphur paste after epilation is valuable. He had not found epilation so promptly curative as had Dr. Zeisler, while he laid more stress on diathetic management than did the latter. He was sure that epilation was useful in some cases of chronic ringworm of the scalp. Dr. H. G. Klotz spoke also in favor of epilation in sycosis, though he had cured many cases without it, notably with mild naphthol ointments. He thought epilation to be valuable in syphilitic lesions about the hairs, as well as in all the pustular affections implicating the hair. Dr. L. A. Duhring had not been able to practise epilations on his patients on account of the pain it caused, specially on the upper lip. He could not see much use in epilating in alopecia areata when the hairs were firm about the patch. Dr. P. A. Morrow said that he did not think that it was necessary to pull out all the hairs about the bald patches, but it was a good thing to make traction on all of them and to remove all that were loose. Epilation was a requisite in all rebellious cases of trichophytosis. If the hair is removed by a quick, sudden movement, the operation is nearly painless. Dr. H. W. Stelwagon believed that many cases of sycosis could be cured without epilation. He would speak in special praise of Fleming's solution in trichophytosis, diluting it at first one part to five or six of water, and gradually increasing the strength to just short of marked irritation. Dr. S. Sherwell spoke of the connection between catarrhal conditions of the nose and sycosis of the upper lip. Dr. J. H. Hyde said that the last time he was in London and Paris he had observed that epilation was quite generally practised about the patches of alopecia areata. In closing, Dr. Zeisler said that when epilation was properly performed it was almost painless. As he regards alopecia as a parasitic disease spreading at the periphery he epilated about the patches to stop their spreading.

FOURTH DAY—MORNING SESSION, SEPTEMBER 25, 1891.

The first paper was by Dr. J. E. Graham upon "Molluscum Contagiosum." Dr. Bowen said that there was little question but that the disease was contagious. It is still unproven whether certain bodies found in molluscum are or are not coccidial. Dr. Allen had no doubt about the contagiousness of the disease and related cases of the disease spreading in an asylum from one case. Excision is never necessary. They can readily be squeezed out, and then lightly touched

with a caustic. He believed in their parasitic origin. Dr. E. Wigglesworth likewise cited a case of contagion. Dr. J. C. White while believing that molluscum was contagious, was not prepared to accept the psorosperm as its cause. Dr. J. N. Hyde pointed out that in the statistics for the year just closed seventeen cases of molluscum contagiosum were reported, viz: Nine from Boston, five from New York, two from Chicago, and one from St. Louis. Dr. F. B. Greenough believed them to be contagious. In treatment he simply bores them out with nitrate of silver stick. Dr. S. Sherwell concurred in the belief of their contagion. Dr. J. E. Graham thought from evidence so far brought forward, that the so-called psorosperms were simply degenerated epithelial cells.

Dr. J. N. Hyde, of Chicago, then read his paper, "Note relative to Pemphigus Vegetatus." In the discussion Dr. L. A. Duhring said that he had had the opportunity of seeing the case described and would corroborate what Dr. Hyde had said of it. It certainly was more of the nature of pemphigus than anything else. Dr. Bowen had seen a case of Neumann's in Vienna, and this one brought that one back very vividly to his mind. He regarded the term "pemphigus" as a most indefinite one, and thought that it gave very little idea of the pathology of the case under discussion. Dr. S. Sherwell had seen a case with analogous symptoms in a woman which was cured by ovariotomy. Dr. J. E. Graham related the history of a similar case of his own. It became much better under arsenic, but suffered a relapse.

Dr. J. N. Hyde, in closing, said that in his case there was no disease of the ovaries. He regarded the prognosis in his case as not good.

Dr. H. W. Stelwagon then read his paper on "A Study of Mycosis Fungoides." It was discussed by Drs. Hyde, White, Hartzell, Bowen, Duhring and Fox. Dr. Hartzell emphasized the infectious nature of the tumors, and thought that we must look to inoculation experiments for the proof. Dr. Bowen spoke of the disagreement among pathologists in regard to the nature of the tumors. Dr. Duhring said that the disease was a general one of the skin, and did not seem to affect other organs to any extent. He believed it to be an infectious disease. It may be regarded as on the border line between an inflammatory new growth and a tumor. Dr. Fox related a case of apparent infection of the disease in the New York Skin and Cancer Hospital. He also spoke of the early diagnosis of the disease, and reported a case that at first looked like an eczema marginatum, but afterward developed the characteristic tumors. Dr. Stelwagon, in closing, said that he

found, in looking up the literature of the disease, some fifty or a hundred reported cases. It was exceptional for the disease to begin as tumors.

Dr. M. B. Hartzell, of Philadelphia, then read his paper on "Lymphangioma Circumscriptum, with report of a peculiar case." It was discussed by Drs. Stelwagon and Bowen.

Dr. H. G. Klotz, of New York, followed with a paper: "Remarks on Carbuncle, with report of a peculiar case." It was discussed by Dr. Bowen, who spoke of the remarkable paper by Dr. Warren, of Boston, describing the pathological anatomy of the disease.

Dr. C. W. Allen then made some remarks on "Erythema Nuchæ." Dr. Zeisler thought it probable that erythema nuchæ was often due to pressure and rubbing. Drs. Fox, Duhring, Grindon and White also took part in the discussion.

Dr. J. Grindon read a paper on "A Case of Lichen Ruber." Dr. Zeisler would be inclined to view the case as one of lichen planus. In this disease plantar and palmar thickenings are apt to form. Arsenic often cures these patients. Dr. S. Sherwell agreed with Dr. Zeisler in his diagnosis, though the case presented many exceptional features; one especially being the involvement of the nails. Dr. White believed the case to be one of lichen planus and spoke of the uncertainty surrounding the whole question of the lichen group. Dr. Hyde said that he always found the polygonal outline of the popules to be well marked, something that does not seem to be familiar to the Germans and French. Dr. Duhring agreed with the previous speakers in this diagnosis. The polygonal shape and umbilication are often wanting. Adjourned.

ALLEGHENY COUNTY MEDICAL SOCIETY, SEPTEMBER 15, 1891.

ETIOLOGY AND PATHOLOGY OF THE PNEUMONIAS.

By J. Chris Lange, M. D., Pittsburgh, Pa.

Mr. President and Gentlemen: There are, in medical literature, more than thirty terms used to qualify the inflammation called pneumonitis, and some confusion as to the seat, products and nature of this process is a result. The endeavor to classify these inflammations can be successful only from the standpoint of the lesion, *i. e.*, their macroscopical and microscopical appearances; and while it is true that, clinically, and pathologically also, there is no absolute line of demarcation between them, it is equally true that every inflammation of the lung presents lesions sufficiently characteristic to justify its holding a place in one of three classes. Nevertheless, these

classes are not anatomically distinct, and it is important to recognize their relation to each other and the very close relationship all hold to phthisis; for phthisis consists essentially of pneumonias—is an inflammatory process always and involves the substance of the lung always.

These three classes present the following characteristics:

CROUPOUS PNEUMONIA.

Coagulable fibrinous exudation, seat in the air cells, extension to the ultimate bronchioles, involves one or more lobes, usually unilateral, acute, primary.

CATARRHAL PNEUMONIA.

Non-coagulable exudation, seat in ultimate bronchioles, extension to air cells, involves the cones supplied by one or more bronchial tubes in each lung, bilateral, acute or chronic, secondary.

INTERSTITIAL PNEUMONIA.

Hypertrophy and contraction of connective tissues, seat in connective tissue, involves part of one or more lobes in one or both lungs, unilateral or bilateral, acute or chronic, primary or secondary.

An endeavor to bring into these three classes all forms of this inflammation, clinically so very different, results in the following table:

Croupous Pneumonia.—Lobar, genuine, true, fibrinous, pleuro-pneumonia, central, crossed, typhoid, bilious, traumatic, narcotic, cerebral, epidemic, endemic, drunkards', senile, delayed.

Catarrhal Pneumonia.—Lobular, broncho-pneumonia, tubercular, cheesy, inhalation, deglutition, hypostatic, typhoid, drunkards', senile, children's.

Interstitial Pneumonia.—Fibrous, contracting, sclerotic, atrophic, syphilitic, pneumonia alba.

Senile and drunkards' pneumonia may be croupousor catarrhal. The same is true of typhoid pneumonia, which is so-called when, not typhoid fever, but the "typhoid state," is present. The pneumonia of children under 8 is almost always catarrhal; over this age the liability to the croupous form increases with each year. Delayed resolution pneumonia is applied to a form of croupous inflammation in which the exudate is not liquefied and absorption is delayed. Cerebra lpneumonia is croupous, and follows concussion of the brain, particularly in children. Narcotic pneumonia is croupous, and follows recovery from opium poisoning. Bilious pneumonia is so quali-

fied when the patient presents the slight jaundice resulting from congestion of the liver by contiguity to the inflamed lower lobe of the lung. Central pneumonia lacks the stitch until the inflammation reaches the periphery and adds the fibrinous pleurisy. A crossed pneumonia involves the upper lobe of one and the lower lobe of the other side. Traumatic pneumonia is croupous, and follows concussion of, or blows upon, the thorax.

The etiology of croupous pneumonia is not determined. The proposition that it is an acute infectious disease, the micrococcus of Friedlander being its pathogenetic agent, rests upon laboratory experiments, clinical facts, and observations of considerable weight, and is deserving of all consideration. Croupous pneumonia, if infectious, all other alleged causes fall to the rank of predisposition. Weather vicissitudes, heavy lifting and blows upon the chest, which are almost always considered to constitute the cause of the inflammation, must be considered when followed by the chill and stitch as coincident only, the inflammation having begun previous to such exposure. Every physician has knowledge of cases of which this is an improbability. But it is always a possibility. Endemics of pneumonia, and some have been malignant, are most readily explained by infection. The same is true of epidemics. Allowing that the identity of the element the atmosphere, which has been believed to be causative of pneumonia, is unknown to us; that it is neither cold, humidity, altitude, electrical influence, nor fall or rise of temperature, it becomes impossible to explain epidemics, endemics and perhaps all croupous pneumonias, except by infection. The fact that individual predisposition is established, that age has an influence, and that the inflammation occurs presenting the phenomena common to infectious diseases—for instance, the "typhoid state"—is additional evidence in favor of infection.

On the other hand, every physician is familiar with cases in which the seemingly obvious causes of the inflammation were exposure, concussions, etc., and he has frequently verified the potency of the predisposing causes—alcoholism, poverty, gout, rheumatism, Bright's disease, etc. Again there is the undeniable frequency of croupous pneumonia in areas whose climate is marked by rapid and frequent changes of humidity and temperature; and its undoubted frequency where and when other inflammations, such as coryza, tonsilitis and bronchitis, prevail. In addition, Friedlander has not always found the capsule-coccus in croupous pneumonia, and identical cocci have been demonstrated in other conditions. Talamon has produced pneumonia by the injection of this coccus, but also by injection of other cocci; and Friedlander himself now

admits that the distinguishing capsule of the pneumo-coccus may be simply accidental—an imperfection of staining or decolorization. These facts leave the etiology of croupous pneumonia undetermined.

The point of departure from the normal in croupous pneumonia, the primary histological process consists of injury and partial destruction of the pavement epithelium of the air cell and ultimate bronchiole produced by the cause—be this specific or not—of the disease. The anatomical process consists of the filling of air cells and bronchioles with a hemorrhagic coagulable exudate, and since the time of Lænnec is described in three stages, viz.: engorgement, active congestion of the pulmonary and bronchial capillaries; red hepatization, the time of the coagulated exudate and gray hepatization, the time of its liquefaction. During the latter stages the lobe, excepting its bronchial tubes, is airless, friable, enlarged and increased in weight by from two to three pounds. These three stages having been accomplished, the liquefied exudation is absorbed and a rapid and complete restoration follows in a majority of cases. In a minority of cases this does not happen, and we recognize a fourth "stage of purulent infiltration." And by the occurrence of this stage we appreciate the close relationship of croupous pneumonia to phthisis. This fourth stage is chronic pneumonia, or abscess, or gangrene.

By a termination in chronic pneumonia is understood an hypertrophy of the pulmonary connective tissue, due to its irritation by the inflammation or exudate, or both; and although the exudate is entirely or almost entirely absorbed, its presence during the inflammation, or the inflammation itself, has been an irritant sufficiently active to begin this connective tissue-hyperplasia. And it continues. In other words, such a croupous pneumonia is transformed to a pneumonia of the third class, an interstitial pneumonia, and under that head its further progress will be noted.

If the termination of the fourth stage be in gangrene, which is usually found in isolated small portions of the lobe, then there has happened an additional new infection by a putrid substance. If recovery ever happens in such a case, it can be only by an hyperplasia of connective tissue—*i. e.*, by an interstitial pneumonia.

If the fourth stage terminate in abscess, then, again, interstitial pneumonia is the only possible process of restoration. Whether the occurrence of abscess depends upon a new infection, or whether this may exceptionally happen from the presence of the croupous exudate is not definitely determined.

Catarrhal pneumonia is not, like the croupous form, a dis-

tinct disease. With the exception to be mentioned, it is always preceded by bronchitis. This bronchitis may be primary; but primary mild bronchitis is rarely followed by catarrhal pneumonia. This is a frequent result, however, of the bronchitis of whooping cough, measles and influenza, which is intense, and extending, becomes pneumonia. Any violent or prolonged bronchitis, particularly in the young, the old and the feeble, deserve high rank in the etiology of catarrhal pneumonia.

Another cause is the bronchitis common during the existence of grave and protracted diseases. Here all conditions are peculiarly favorable for the occurrence of the extension of bronchial inflammation. Everywhere in the air passages as well as in the mouth and pharynx, particles of food, mucus and saliva collect and remain. This is favored further by the constant dorsal decubitus. Fungi and bacteria, decomposition agents, find everywhere conditions favorable to development and increase. From upper situations they are drawn downward, invade the fine bronchioles, producing catarrhal pneumonia. Many patients have difficulty in swallowing; frequently they choke; frequently they inhale particles of food, secretions of mucus, and do not, like persons who are well, cough up. Such particles remain, decompose, and originate bronchitis and its extension, catarrhal pneumonia. This is the explanation why this inflammation occurs so frequently in diseases entirely dissimilar. It happens especially in patients with stupor, in severe typhoid, in meningitis, and in bulbar diseases where cough and deglutition are impaired. So originating, these inflammations have received the names inhalation and deglutition pneumonias.

A constant dorsal decubitus in conjunction with a weak heart is a third cause of catarrhal pneumonia. This is probably the only manner in which this inflammation can be induced without a preceding bronchitis. The first step is a passive congestion limited to the posterior borders of both lower lobes; very soon there is added to this an œdema equally limited; congestion and œdema is splenization, and this induces the inflammation characteristic of catarrhal pneumonia, this being called hypostatic. This different origin is followed by an anatomical difference between this hypostatic and all other catarrhal pneumonias. It is that all other forms must necessarily be located about the ramifications of the bronchial tubes from which they originated—*i. e.*, must always exist in cones —while this hypostatic pneumonia is not so limited, but involves adjacent alveoli, independent of their bronchial supply, from the lower border of both lungs, a little or a great way up. Although each of these pathogenetic conditions is entirely com-

petent to produce catarrhal pneumonia, two or all frequently act together.

The termination of catarrhal pneumonia, when this is not restoration, is abscess, gangrene or the so-called "transition to tuberculosis." Abscesses, when small and not numerous, may be emptied through bronchi, interstitial pneumonia then obliterating the cavities or become encysted and cretified, forming lung stones. Both results are innocuous. Gangrene requires a special additional infection. There remains the "transition to tuberculosis."

What is here said applies to abscess following croupous as well as catarrhal pneumonia. Excepting that the abscesses in the former may be confined to one lobe, while in the latter they may be upon both sides, they proceed substantially upon the same course and terminate in the same manner. Both are non-tubercular phthisis. Both present consolidation; the first consists of pus and the lung tissue involved in the abscess, the last of caseation of the catarrhal exudate and the lung tissue it embraces. Both soften, break down the involved lung tissue, and are extruded through the bronchi. Both leave cavities which enlarge by peripheral ulceration, and both conduct their victims to death by exhaustion from hectic and hemorrhage.

There should be now no question of a "transition to tuberculosis." With our present knowledge we can understand perfectly well how cavity ulceration conducts patients to death without the assistance of tubercle; and the time is past when every cheesy nodule must be tuberculous. Non-tubercular phthisis following croupous and catarrhal pneumonia deserves and now has recognition as a destroyer of mankind. Although there can be no "transition to," there frequently is infection by tubercle. Everything, all the conditions in abscess, whether this follow croupous or catarrhal pneumonia, is most favorable to infection, and, therefore, the termination in a majority of such cases is in tubercular phthisis. Further, patients with indiscoverable tubercular deposits are, like all other persons, subjects to croupous and catarrhal pneumonia; in such a case, the pneumonia, if it terminates in phthisis, this latter will, of course, be tubercular. Therefore, tubercular phthisis, when it follows a pneumonia of either variety, depends upon a pre-existing, perhaps undiscoverable, tuberculosis, or the patient is infected with tubercle during the time of existence of the pneumonia. In either case there can be no question of transition.

Interstitial pneumonia, finally, is a low and chronic inflammation situate in the pulmonary connective tissue, which tissue, according to its situation, is called intercellular, inter-

lobular, peri-bronchial, peri-vascular and sub-pleural. Inflammation of this tissue is provoked by any irritant, and its intensity and extent depend upon the activity and persistency of the irritant. It is frequently a beneficent, a compensatory process. This is so when it obliterates abscesses, encapsules cheesy nodules, insulates hemorrhagic infarctions, or closes phthisical cavities. Then it holds the place of a cicatrix of the skin, and is compensatory and beneficent. But it is frequently also a most malignant growth and destructive of air cells, blood vessels, bronchial tubes and all lung tissue. For its inflammation produces a hyperplasia, a hypertrophy, and, like young connective tissue in every situation, contracture; so that frequently the lung affected by its proliferation and contracture—*i*, *e*., by pressure—becomes a hard, fibrous, airless, white mass, with distorting bands running through it in every direction. And this property and action constitutes its relationship to phthisis. By its distortion and occlusion of bronchial tubes, these latter dilate between their point of injury and their origin, forming bronchiectases, which dilations become secretion depots. Their contents are infected and soon putrefy. Then peripheral ulceration of the dilated tube walls begins; the bronchial wall is perforated, and a cavity in the substance of the lung results. This is fibroid phthisis.

The irritants which produce this malignant train of processes are especially three, viz: iron, coal and stone; and for this reason this disease has been called the iron, or stone or coal lung, and knife-grinders' consumption, and mechanical phthisis. Particles of iron, coal or stone are found in the pulmonary connective tissue; for, though penetration through the bronchial wall is impossible where this is armed with cilliated epithelium, this defence ceases at the ultimate bronchiole and air cell, and it is here these irritants penetrate and are followed by the disastrous results indicated.

Irritants less sharp and less persistent induce a lesser degree of inflammation. For instance, an abscess resulting from croupous or catarrhal pneumonia irritates its surrounding connective tissue only to the extent sufficient to empty and obliterate the abscess and to form a cicatrix of its walls. A cheesy nodule irritates it to the degree necessary to produce an encysting capsule. A phthisical cavity also is contracted, emptied and cicatrized by this tissue in consequence of the irritation itself produces. Cicatrization or encapsulation having happened in this manner, no irritant remains, and hyperplasia ceases. This does not happen invariably, however; sometimes this process continues, and, when so, destruction of

lung tissue by pressure and distortion, and by cavities of bronchiectases, follow.

A very decided interstitial pneumonia, usually not advancing to phthisis, however, frequently follows chronic pleurisy and empyema; here the large area of sub-pleural connective tissue has been irritated by the adjacent inflammation and suppuration, and some hypertrophy and contraction follow. This is, probably, at least a factor in the prevention of complete expansion of the lung after an empyema has been cured. Also a limited interstitial pneumonia is common in the peri-bronchial connective tissue around such tubes as have been long involved in a chronic bronchitis. In short, interstitial pneumonia signifies a process often reparative and compensatory, and fibroid phthisis the same process pregnant with a slow, but sure, destruction of lung tissue.

DISCUSSION.

Dr. Kearns—I wish to congratulate the doctor on his paper, which was both entertaining and instructive. It should stimulate us to greater care and perseverance in diagnosticating these different forms of pneumonia. One of the classifications spoken of by the doctor has been but recently established, and that is traumatic pneumonia. It has been contended by men of very great experience that there was no real traumatic pneumonia or pneumonia from an injury or wound, but Dr. Lange has established beyond doubt from his observations that there is a traumatic pneumonia, finally resulting in an abscess. The doctor has very completely presented the subject.

Dr. J. D. Thomas—In the main I agree with all the gentleman has said. There are, however, two points of comment which I desire to make.

One is the defective logic in the statement made, if I understand him correctly, that all cases of acute lobar pneumonia depended upon the diplococcus of Frankel or they did not. We may have an acute pneumonia following a trauma; it is undoubtedly a pneumonia, but it does not depend upon the pneumonia micrococcus. The other point is, that there is a variety of pneumonia, and I have observed some six or eight of such cases, not mentioned in the paper; neither have I seen a description in any work or paper of the variety to which I wish to draw your attention. I can probably give you a better idea of the disease by describing a case. You are first called to see the patient a week or ten days after the illness began—the onset being insidious. Pain is complained of in the lung. There is fever, but not very high. There is an accelerated

pulse, but not very rapid. The temperature will be about 101 degs. Fahrenheit, and the pulse about 90. On percussion there is *flatness;* on auscultation no sounds are heard. You at first suspect pleuritis with effusion. You change the position of your patient, but no change is produced in the line of flatness; the bronchial tubes, as well as the air cells, appear to be filled with the exudate. As you follow the case the flatness passes further up the chest, and with this increased area of flatness the air sounds disappear. The process is a slow one, occupying weeks. As repair takes place the flat sound passes to dull and so on; air enters the tubes and cells, and in time you get the subcrepitantrales, but it may be a year or more until all evidence of the disease has disappeared. The signs first begin from below, and first disappear from above.

The only solution that I can give for these physical signs is, that there is an exudate filling up the bronchial tubes, as well as the air cells, thus giving the flat percussion note, and the absence of all ausculatory respiratory sounds. Pleuritis with effusion is excluded. Chronic pleuritis is usually of tubercular origin, and the prognosis bad. In these cases the prognosis is good, but convalescence tedious.

After having observed a case or two of this disease I was requested by Dr. Case to see a patient that puzzled him. Although he had been in attendance for some time he was unable to classify the disease—it was neither a pneumonia nor a pleurisy. After examining the case I recognized it as of the variety that I this evening present, and made a favorable prognosis. After a long while the patient recovered.

Dr. Buchanan—I would ask the speaker whether he made any exploratory punctures to see whether these were not cases of encysted pleuritic effusion.

Dr. Thomas—I did not, because I did not think it was necessary to do so. I did not find any evidence of pleurisy, and with effusion into the pleural sac, you would always get a change in the dullness with regard to the change of the patient. If it was pleurisy you would not get the uniform symptoms all over the lungs that you do in these cases.

Dr. Buchanan—I can understand how in cases where the lung had become adherent to the chest wall from a former pleurisy, fluid would start at the lower portion of the lung and gradually fill up, push the lung ahead of it, and give just the signs that the gentleman has spoken of. I think that view of the case would more nearly meet his description than any form of pneumonia that is recognized.

Dr. Grube—There is one statement made by the writer I would like to call attention to, and that is the statement that

pneumonias of children under eight years of age were almost always catarrhal. I know this is the older idea, and in all the older works the statement is made, but I think it is not true. It might be true between the first and second year, but certainly not between the second and eighth. I think that between the second and eighth years croupous pneumonia is more often found than the catarrhal variety. I think this older idea was obtained through not making a careful diagnosis, and from the fact that catarrhal pneumonia almost always affects both lungs.

Dr. Kœnig—I was gratified to see the non-committal stand the writer has taken with regard to the causation of what he is pleased to term croupous pneumonia. I have never been able to reconcile myself to the theory of bacterial origin. It requires butone argument to my mind to displace that theory—namely, that we can cure, that we can abort pneumonia, with remedies that have no destructive power over germs. I think there are few general practitioners here who have not seen cases of acute lobar or croupous pneumonia aborted under the influence of powerful antiphlogosis. Be it tartar emetic or aconite, or veratrum viride, no matter what the remedy may be, the action is identical. This counteracts the too great effort that nature is making in repairing damage that has been done to the lung tissue. Some years ago an article appeared in the *New York Medical Journal* on the causation of pneumonia in which a very ingenious theory was advanced. The writer claimed that pneumonia was a disease produced as a result of certain atmospheric conditions—namely, that when air was very dry it would absorb moisture from the delicate air cells very rapidly and produce a deposition of chloride of sodium which in that concentrated condition would destroy the epithelium. This theory seems to me plausible. The bacteria find a fertile soil when once the walls of the air cells are injured, and at once too much blood is sent to that very vascular part of the body, and instead of repairing the damage, nature does more damage still by the overengorgement of the lung tissue, which increases till hemorrhage into the air cells takes place. I firmly believe, in fact I have convinced myself, that if the heart's action is restrained so that just sufficient blood is sent to the lung to repair the injury, nearly every case will be cut short if treated in the first two or three days after the original injury to the air cells.

Dr. Batten—In regard to the etiology of pneumonia, the last gentleman on the floor asserted that a case of pneumonia can be controlled with drugs. Now, we all know that typhoid fever is caused by germs, and it may be said that typhoid fever

can be controlled also by drugs, but if we have a case of pneumonia in a place where the hygienic conditions are not good, as a rule the drugs which we give will not very much benefit the patient; but if we have a case of pneumonia in a place where the hygienic conditions are good, the probability is that with a little treatment the case will recover. So that this question of the germ theory would not hold in pneumonia. I believe that pneumonia is caused by a germ, and that the life of the patient will depend very much upon the environment of the patient.

Dr. Green—I am thankful that the paper has classified pneumonias and I am thankful that they are corralled in three classes; in fact, in treating cases of pneumonia, we still meet with very great obstacles. However, I was pleased with the classification of the doctor from the fact that he seemed to be governed in the classification generally by the locality of the disorder, as much if not more than by the origin or cause of the disorder. In looking over the reports of pneumonias the mortality rates under the different treatments show no difference per centum.

Another matter of which I wish to speak is in regard to microbes giving origin to pneumonia, and also to the infectious character of the disease. Now, it is a very difficult matter for the general practitioner to decide whether or not all cases are infectious. I fully believe that the vast majority of cases are infectious, but I can not see how they are all infectious; I am unable to see from the classification given by the different writers and from the history of the cases of the epidemics of the different classes of pneumonia, that all classes are infectious. Everybody had a large number of patients, and nearly every practising physician had a very great variety under his charge, and in looking about for some reliable method, I found that by some writer, I have forgotten his name, the inhalation of chloroform was recommended. I used chloroform as often as three or four hours for three days. In this case the patient seemed to recover promptly. I also used in a few cases large doses of digitalis with good results and in one instance with a bad result. The doctor did not refer exactly to the treatment of pneumonia, but granting that pneumonia is brought about by the presence of the germs, or micro-organisms, we fail to find anywhere recorded in the recent writings a case where treatment has even modified the case to any noticeable extent. I will relate an incident: In a hospital in four of the beds were cases of typhoid fever and in the remaining bed a patient suffering from pneumonia was placed; he only lasted about forty-eight hours after his admittance. The cases of typhoid fever ranged from the tenth to the twenty-first day. Within five days

these four patients took pneumonia and three of them died. The other one was then removed and we gave the room a thorough cleaning before any other was admitted. That seemed to me positive evidence of infection. I can recall another instance of a family of five where four members of the family were taken down with pneumonia within ten days. The house was well ventilated and well heated and I think clean. That appears to me to indicate that some cases of pneumonia are very much more infectious than others, with the surroundings and the sanitation good.

Dr. Allyn—I can not keep out of my mind that pneumonia bears a certain relation to the temperature and climate. Of couse there may be germs that work actively in it, but from my reading, it does seem to me that there is a causative effect produced by the climate. The paper referred to by Dr. Kœnig was written by Prof. Baker, and his tables are in the transactions of the international congress at Washington. There he has lines marking the introduction, first of the simple inflammation in the early part of the autumn, following down the air passages as the intensity of the season increases; he had his laryngitis, then his bronchitis, and finally his pneumonia. These lines correspond in a most wonderful way to the temperature of the State of Michigan where the experiments were made. We, of course, may have cold atmosphere in the fall, producing these results, but how many times do we have an atmosphere fit for the production of pneumonia? I remember on leaving college the first case I was called to—it was in the month of June—was that of a vigorous man, a cooper by trade, with lobar pneumonia of the two lower lobes of the right lung. He had contracted the disease by sleeping in a house recently plastered. There had been produced a climate which to my mind was equivalent to a late autumn climate, a depressing climate.

Dr. Christy—The question or causation of pneumonia, so far as we are concerned in America, is simplified by the statements made by the gentlemen preceding me. It is here in this country indeed a climatic disease. Those of you who are conversant with the continental population, the way in which they live, the way in which their work is done, the way in which their lives run through, know that their condition is entirely different from ours. We live in the open air here, we live on farms. Our population in the cities is not closely confined as a rule, like the population on the continent, where the people are housed in tenements and flats without ventilation, ill heated, ill lighted, with poor food and ill clothing. In this country it is purely a climatic disease. The entire subject I think is one

of renewed interest to us as medical men in the last few years since the prevalence of this epidemic which we have had. While I do not see as many acute cases as I did formerly, yet I see them where the products of pneumonia have never undergone resolution, I only heard the latter portion of the doctor's paper, in which of course he did not go into the minutia, but I think as practitioners, we are apt to overlook small portions of the lung which are involved, and while we are in charge of the case it never undergoes resolution. The case passes out of our hands, becomes a cause of irritation to the patient and may do irreparable damage. And we see more of that since the prevalence of grip than we ever did before; an almost imperceptible part of the lung not having undergone resolution and I think practitioners should be very careful in letting their patients go from under their charge until perfectly sure that every portion of the lung has undergone resolution.

The case related by our friend, Dr. Thomas, is instructive. I do not know whether I am right, but I have always considered that class of cases as beginning in the digestive tract or in the liver. Perhaps it is another class to which the doctor refers, but this is a class of cases which has given me a great deal of trouble in giving a diagnosis, and I am unable to give a favorable prognosis, not knowing how long the case will run. I think the trouble arises in the gastro-duodinal tract and gradually implicates the lung. And while perhaps not lasting as long as those Dr. Thomas speaks of, they do not get well as promptly as lobar pneumonia should get well under other circumstances, and it is a class of pneumonia which I think is too lightly looked upon. I have under my charge at the present time a case of catarrhal pneumonia which had its acute stage in February, following an attack of grip. I did not see it until midsummer. It is a case of catarrhal pneumonia, and the left lung is cleared up and the right lung does not clear up, and I do not think it ever will until the digestive tract is perfectly restored.

Dr. Lange—I am obliged to you for the kind reception accorded my paper, and would say first that I was entirely limited to the etiology and pathology of pneumonia, excluding all treatment, clinical history and symptomatology. It is common for these discussions, and I think properly, to take a wider range, but I have nothing to say of the clinical history and treatment of pneumonia, except, perhaps, that when it is remembered, as appears in the last number of the *Journal of the American Medical Association* that in a thousand cases of pneumonia treated by the three principal methods, you read to-day in the last number of the *Journal* that there is abso-

lutely no difference in result in a thousand cases of pneumonia treated by these three methods, then I think the less said about the abortion of pneumonia the better. Dr. Kœnig has said that pneumonia may be aborted by the employment of antiphlogistics. Now, in making this assertion, it must always be remembered, as Dr. Batten has pointed out, that if this disease is caused by a germ, the grade of the disease will be in accordance with the number and virulency of the germs. A man may take a pneumonia which gets well in two or three days under no treatment, while his neighbor gets a pneumonia which is so extensive and virulent that he dies; this is the only explanation. In the first instance the man has received either a less quantity of germs or germs of less virulence than the other man, or his susceptibility to the germ is less.

This is the only explanation that can be made, and as we have no means of gauging the number of germs, nor the virulence of germs, nor susceptibility to germs, we should be very careful about claiming to have aborted a pneumonia or any other infectious disease, if pheumonia be infectious. And I think, gentlemen, the same criteria will hold for croupous pneumonia, be it the result of germs, cold or blows upon the chest. These latter are the old established causes. A fall of temperature, which is properly called a blizzard, or a rise of temperature, which is popularly called a thaw, both have a reputation of being followed by pheumonias and other inflammations of the glands and mucous membrane. Can measure the quantity of cold a patient takes no better than the quantity of germs or the virulency of germs. Again, one patient exposed to the same atmospherical changes as another, the first receiving a pneumonia as the result; the other may take a bronchitis; still another may take a tonsiltis or a coryza or rheumatism. This is a matter of personal susceptibility. Now, with our patent inability to gauge or measure the potency of all the causes of pneumonia, on the one hand, and the susceptibility of patients, on the other, how can a claim to abort pneumonia by any interference we may make—how can it hold?

The case described by Dr. Thomas, if he did not inadvertently omit to mention the signs of pneumonia, was evidently one of pleuritis. Dr. Thomas said there was absolutely nothing on auscultation over the part considered to be solidified, and that the percussion note was dull or flat. This is not sufcient evidence of pneumonia. A diagnosis between pleuritis and pneumonitis can not be made by percussion. Both frequently present the same dull or flat note. Auscultation, on the other hand, will demonstrate the absence of respiration over a pleuritic effusion, or, in pneumonia, a very great

increase of respiratory sounds, viz: bronchial breathing, broncophony, whisper, etc. If change in position of the patient did not change the level or area of dullness, then, as Dr. Buchanan has said, the pleurisy was encapsuled. I have no knowledge of any form of pneumonia in which the large bronchial tubes are filled with exudate.

The objection of Dr. Grube to the statement that the pneumonia of children under eight years is almost always catarrhal, I have no desire to refute, nor statistics at hand to serve. The doctor thinks that, excepting in children under two years of age, this inflammation is, in the majority of cases, croupous. One needs but to remember whooping-cough and measles, and their mortality in patients under eight years, this mortality being largely due to catarrhal pneumonia, to make fatal catarrhal pneumonia as frequent as croupous pneumonia is rare in patients under eight years.

The pneumonia introduced by Dr. Christy, which embraces in its etiology disturbances of the liver or stomach or duodenum, I have not met and have no knowledge of. In the case related by the doctor, where the patient was ill with pneumonia three months or longer, and where gastro-duodinal disturbances also existed, I should not rank these latter as causative of the pneumonia, but as its very natural consequences.

TWO CASES OF PROSTATIC HYPERTROPHY AND PROSTATECTOMY.

Dr. R. W. Stewart—I desire to present two specimens of hypertrophied prostate; and also to report a case of prostatectomy. The first specimen is one I removed from the dead-room at Mercy Hospital. In this case there was no history of urinary trouble further than a frequency in passing water, and death was due to other causes. This specimen illustrates beautifully the resulting changes due to obstruction to the outflow of urine from the bladder, the obstruction in this case being a crescentic bar traversing the vesical orifice of the urethra. You will notice that the bladder wall is thinner than normal, and that several saccular pouches are present, caused by the yielding to the intra-vesical pressure of the bladder wall in those situations which are not strengthened by buttresses of hypertrophied muscular bands. Both ureters are dilated, the pelvis on the right side being so much so that it must necessarily interfere, to a great extent, with the excretory function of the right kidney.

A glance at this specimen will show how disastrous would be the results, should a cystitis develop in such a case, since

an extension of the inflammatory process along the dilated ureters would be almost unavoidable, and a suppurative pyelonephritis would be ushered in.

The second specimen has an interesting history. Its unfortunate possessor was a blacksmith, aged 53. About three years ago he came under my care at Mercy Hospital. At that time he was suffering from retention of urine, due to an enlarged prostate, the attack being brought on by intemperance. He recovered from this attack, and I lost sight of him until a few months ago, when he again entered Mercy Hospital, suffering intensely from retention of urine, cystitis, and the rude attempts at catheterization. His condition was evidently going from bad to worse. The urine could be only withdrawn with the greatest difficulty. He was feverish, his tongue was coated, and he was in constant agony. Nevertheless, he refused to submit to a prostatectomy, which I urged upon him, and in a few days after his admission the urine became scant and bloody, and death from suppression of the urine followed. The specimen of this case which I show you presents a typical enlargement of the prostate, the middle lobe being chiefly involved. It projects into the cavity of the bladder, acting as a ball valve in preventing the outflow of urine, and bearing on its urethral aspect abundant evidence of the rude manipulation to which it was subjected in the endeavors to force a catheter over it. The lateral lobes are also enlarged, the effect on the prostatic urethra being to convert it into a mere vertical slit of very considerable depth, the increase in the vertical diameter of the urethra rendering more prominent the projecting middle lobe, and more difficult the introduction of instrumentalities which follow the floor of the urethra. The bladder in this specimen, in contradistinction to the one previously shown, has undergone a marked hypertrophy, its caving being diminished. No sacular dilatations are to be seen, nor are the ureters dilated.

The third case I desire to speak of is one in which I performed a prostatectomy. This patient, an Italian, age 58, was sent to Mercy Hospital, on August 4, by Dr. Foster, suffering from retention of urine. On his admission, Dr. Kearns, the resident surgeon, succeeded in passing a soft catheter and withdrew a quantity of bloody urine. On the following morning attempts to pass a catheter were unsuccessful, and in the afternoon I was sent for to see him. I was unable to obtain a concise history of his case, but learned that his present condition was the culminating point of a trouble from which he had been suffering for a period of at least three months.

The bladder was distended to midway between the umbilicus and the ensiform appendix; and as the necessity for its relief was urgent, I had the patient anæsthetized and readily passed a soft catheter into the bladder, relieving the bladder of its extreme distention, but purposely not emptying it. While the most urgent symptom of the case was thus temporarily removed, the cause of the trouble, an enlarged prostate, still remained, a constant menace to the life of the patient. Under these circumstances, I decided to do a prostatectomy, choosing the perineal route. I opened the membranous urethra on a grooved staff; then pushing my index finger along the urethra into the bladder, I could distinctly feel the projection at the vesical orifice of the urethra of the enlarged middle lobe. It was about the size of a walnut, and extended further to the right than to the left side of the median line. On withdrawing my finger, about an ounce of urine gushed out, the flow being suddenly checked by the apposition to the vesical orifice of the urethra of the middle lobe. With a bone scoop I detached one side of the tumor sufficiently to enable me to insinuate my index finger between it and the body of the prostate, and by this means tore it from its attachments and readily removed it.

A microscopical examination showed it to be prostatic tissue. About half an inch of the prostatic urethra which was attached to it was also removed. This portion of the urethra was torn by the passage of the catheters, and was doubtless the source of the bleeding, which had been a marked feature of the case. The hemorrhage from the wound, while persistent, was not profuse, and was checked by the internal administration of ergot and the tincture of the chloride of iron. The urine drained through the perineal opening for about three weeks, when the patient was discharged from the hospital. Since that time it has all passed by the natural way, and, except for a slight difficulty in retaining the urine when the bladder is full, the patient suffers no discomfort. As the latter condition is steadily improving, I expect that it will ultimately disappear.

The subject of prostatic hypertrophy is, from its frequency, of interest to the general practitioner as well as the surgeon. Sir Henry Thompson states that one-third of those who have reached the age of fifty-five are affected by it, but that only one-half of those affected require treatment.

Why the prostate should become enlarged is an obscure subject on which but little light has been shed, and we have no better explanation to offer than has the gynecologist to explain why its analogue in the female uterus should undergo similar changes at middle life.

The explanation offered by Hornson, that it was the sequence of increase frequency in passing water, can not be accepted, since it never occurs before the age of fifty, even with an irritable bladder. In a case which I reported to this society one month ago the patient, from the age of eleven to twenty-one, passed water from twenty to forty times a day, yet in this case there was no enlargement of the prostate. The earliest manifestation of an hypertrophied prostate is a frequency of passing water, noticeably at night, or in the early morning, differing in this respect from the frequency of passing water where a calculus is present. The frequent urination observed in prostatic hypertrophy is due to the fact that the bladder is incapable of emptying itself. The amount of residual urine remaining in the bladder varies in different cases. Thompson reports a case where he removed six pints of urine, the patient fancying at the time that his bladder was empty. I recently removed twenty ounces in a case where I had the patient urinate before me, and he likewise assured me that his bladder was empty. Why the bladder does not empty itself under these circumstances is probably due to two factors, an atonic and weakened condition of the bladder, weakening its expulsive power, and a difficulty in opening the vesical orifice of the urethra from the increase in the development of the surrounding muscular tissue. The result being that the detrusor fibers of the bladder are only able to maintain a patency in the vesical orifice of the urethra when aided by the intravesical tension. When the latter is relieved by the escape of a definite amount of urine the efforts of the former become impotent and urination ceases.

The treatment of this condition requires the judicious use of a catheter and the treatment of cystitis if present. In those unfortunate cases were there is retention of urine the case assume a serious aspect, and may tax the patience and ingenuity of the surgeon to the utmost. Only flexible instruments should be used—the best and most often successful being the common soft rubber catheter. If this should fail, the condee catheter of Mercier should be tried. The long curved silver catheter should be avoided, as it will rarely pass where a soft instrument fails and may do considerable harm. The linen catheter manu factured by Lee, of Philadelphia, have a very defective coating, which softens if retained for a few minutes within the urethra and are rendered useless; besides the tip of these catheters is not flexible enough for easy introduction into the bladder. Where retention of urine becomes a marked feature and catheterization is difficult, the propriety of removing the obstructing portion of the prostate should meet with favorable consider ation.

Dr. Murdoch—I know of no more instructive case than the one Dr. Stewart has just described, and I feel that he has gone over the subject so thoroughly and so well that there is little left to say. I fully concur with him in most of what he has said, if not all. These certainly are cases that come under our daily observation, and to know how to manage them is something that does not at once occur to us all, and we may do, as Dr. Stewart has said, great damage to an old man by attempting to relieve his bladder where he is suffering, with a solid instrument. An old gentlemen of seventy is now under my care, who was taken with retention in the night and sent for a practitioner, and with just such an instrument as Dr. Stewart has condemned, he made a false passage in the old man's urethra. Now, the kind of catheter to be used can not be too highly emphasized, and there is probably no catheter which will reach more cases than the one Dr. Stewart refers to, the old fashioned English catheter, or the soft rubber catheter, a very long one. It will follow the circuitous route of the urethra better than any solid instrument can. I do not say there can be no case in which a silver catheter would not be better, but as a rule the soft catheter should be used. There is one thing I want to say in addition to what Dr. Stewart has said. Dr. Stewart said he did not draw off all the water from this old gentleman's bladder, but that he concluded to remove the remainder of it at another time. Now, I consider it of great importance that every one should know it would be very bad to empty the bladder at one time, and Dr. Stewart's plan of drawing off a portion of the water should be followed, a week, perhaps, being taken before getting the bladder down to its normal size. I have considered it of the greatest benefit where there is a great amount of atony, to teach these old gentlemen how to use the soft catheter. They usually get up in the night for the purpose of making water. If you can teach these old gentlemen how to relieve their bladders they will be able to get four or five hours' rest. In a great many cases I think it is better to teach these men how to use the catheter and advise them to use it continually, giving up the idea of passing the water naturally, but to drain it off at regular intervals with a soft catheter.

Dr. Thomas—I have had patients come to me who had had a catheter introduced into their bladder when there was no occasion for such treatment. If a silk catheter is left in the urethra for a few hours, there is danger of the covering coming from it, but a soft catheter may be left in for days and days.

Dr. Buchanan—I wish to come to the rescue of the silver

catheter. A very large proportion of the cases of prostatic enlargement which are seen by the surgeon and require evacuation of the urine can be reached readily and easily by the long beaked silver catheter, a specimen of which was exhibited here to-night, and in these cases there is to my mind nothing to equal this smooth, hard, inflexible instrument. Now, I know there are other cases where a flexible instrument is the safer, and of course we ought to resort to it in such cases. But to any one who has been called to see patients where the catheter must be inserted repeatedly for days, perhaps for weeks, as I presume we all have, I think the silver catheter will recommend itself. It is my experience that an old man will ask, if he has choice of the methods, that a silver instrument be used rather than any silk or rubber one, on the ground that it causes less irritation. For this reason, I think we should use the silver catheter. And in addition it is very much more easily rendered aseptic.

ADAMS COUNTY MEDICAL SOCIETY.

The Adams County Medical Society held its regular monthly meeting at the offices of Dr. N. L. Guice, Natchez, on Tuesday, October 13, 1891.

Dr. Guice presided.

Dr. H. L. Metcalf handed in his application for membership and was accepted by a unanimous vote.

Dr. P. Beckman read a paper (see original article, page 321) on Multiple Ligation of Varicose Veins of the Legs, which was discussed by the members present.

The President thought the mode of operation urged by Dr. Beckman was the proper course to pursue and offered the best results.

A motion was made by Dr. W. A. McPheeters that a committee of three, to which the president should be added, be appointed by the chair to draft a fee bill and report at the next meeting. The motion was seconded by Dr. B. D. Watkins, and was carried. The chair appointed on that committee Drs. L. H. Lamkin, B. D. Watkins and W. A. McPheeters.

Meeting then adjourned.

Experiments with Poisons.—By way of a sequel to the paper recently read by Dr. Cornil before the Academy of Medicine, concerning the experiment made by a foreign doctor, which consisted in grafting a cancer from the breast of one

woman to that of another, Dr. Ch. Daremberg gave, last week, an interesting account of the practice, so common in the Middle Ages, of experimenting with poisons on condemned criminals. He mentions the two malefactors made over by Como de Medicis to Falloppe of Pisa, who administered to each a dose of six grammes of opium. The one who survived was pardoned, but the scientist administered a second dose of the same quantity, which killed him. At Bologna the criminals experimented on were not informed of the fact, as terror might heighten the effects of the poison, and false conclusions be deduced. At Mantua and Florence, arsenic was administered to human beings; the Cardinal Archbishop of Ravenna, Pope Clement VII, made tests, generally unsuccessful, of remedies for aconite, corrosive sublimate, etc. At Paris, Charles IX invited Ambroise Paré to testify to the anti-toxic action of bezoar; the man died in terrible agony from poison, despite the supposed antidote, saying he would have preferred the gallows a thousand times. Dr. Daremberg cited, in conclusion, the numerous inoculations and injections made in more recent times, principally with regard to syphilitic disorders. He stated that between 1831 and 1837, Dr. Ricord reinoculated 1049 persons (suffering from simple non-syphilitic chancre) with a soft chancre. Lindsmann inoculated 2200 people in the same way. Many doctors, introducing new remedies—like Jenner and Koch—prove their faith in their treatment by submitting to them personally. Rabuteau killed himself in testing new medicaments.—*Bulletin of Pharmacy.*

N. O. Medical and Surgical Journal,

ESTABLISHED IN 1844.

PUBLISHED MONTHLY, $2.00 A YEAR.

Articles from physicians are respectfully solicited. All articles, news and exchanges, and books for review, should be sent to the EDITOR, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL. Business communications should be addressed to the BUSINESS MANAGER, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

EDITED AND PUBLISHED BY

AUGUSTUS McSHANE, M. D.

COLLABORATORS:

DR. F. W. PARHAM. DR. H. W. BLANC. DR. A. W. De ROALDES.
DR. R. MATAS. DR. JOHN DELL'ORTO.

Editorial Articles.

DR. McLAUGHLIN'S THEORY OF IMMUNITY.

The letter of Dr. Wm. Moor, in our last issue contained an inaccurracy which Dr. McLaughlin corrects in the follow ing communication:

Editor New Orleans Medical and Surgical Journal, New Orleans, La.: DEAR SIR—Dr. Moor, in his recent communication to the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL makes certain statements regarding the subject matter contained in an article on "Immunity and Contagion,"* which are so completely at variance with the utterances of that paper that I deem it necessary that these errors of statement should be pointed out and corrected. Another and more personal reason for this correction is to relieve myself of the unjust charge which Dr. Moore makes against me of having appropriated Chauveau's theory of immunity as my own discovery.

The following quotations from the respective papers speak for themselves.

Dr. Moore, in the communication referred to, says: "Though very much admiring the doctor's stylistic faculties, still I am obliged to say that his theory is virtually the one ad-

*"An Explanation of the Phenomena of Immunity and Contagion, Based Upon Physical and Biological Laws." By J. W. McLaughlin, M. D.

vanced by Chauveau, which attributes the acquired immunity to substances resulting from the body-metabolism of the respective micro-organisms, and held in solution thereafter by the previously infected body."

Now, that which the doctor calls "the substances resulting from the body-metabolism of the respective micro-organisms" are the substances ordinarily termed ptomaines. They are the products of bacterial action, and it is to the ptomaine of a given bacterium that Chauveau ascribes the acquired immunity from the disease of which this bacterium is the cause. This hypothesis assumes that the ptomaine must permanently reside in the blood or other tissues of man's body, in order to give him permanent immunity from the disease.

The following quotations from my paper show that this is not the theory of immunity of which I claim authorship:

"How does one attack of an acute infectious disease give man immunity from other attacks of the same disease? is the question that now offers itself for solution. A bacterium cell disrupts molecular combinations of the albuminoids when the molecules of each vibrate in the same periods of recurrence; the albuminoid molecules which are thus disrupted, shaken apart, liberated from their chemical bonds, will again immediately recombine, because of their chemical affinities, to form other combinations called ptomaines. Explanation has been made why these ptomaines will have molecular vibrations, which will interfere with those of bacterium, and when this substance accumulates in sufficient amount, its molecular vibrations will antagonize, inhibit those of the bacterium, and thus arrest its power of converting albuminoids into ptomaines.

* * * * * * *

"Now as the molecular vibrations of the bacterium must coincide in periodic time with those of the albuminoid it disrupts, it follows that a ptomaine will interfere with, inhibit both substances alike, *i. e.*, when the molecular vibrations of two substances recur in the same periods of time, a third substance that would interfere with one of these would interfere with both alike. Hence the ptomaine which interferes with the vibrations of its bacterium will also interfere with the vibration of that molecular combination which the bacterium

can disrupt. Now this interference or inhibition of the ptomaine with the albuminoid causes a change in its molecular vibration. As this is an index to and a result of molecular combination or structure the albuminoid becomes changed in its molecular structure. As long as the molecular structure of the albuminoid remains thus changed it could not be influenced by the molecular vibrations of the bacterium, could no longer be disrupted by it, and consequently is immune from the disease of which this bacterium is the cause.

"*Ptomaines are chemical substances and do not find in man's body a permanent abiding place; like other chemical substances they are eliminated in a reasonably short time.*

"How then are we to explain the more or less permanent immunity which observation and experience teach us is secured by the various artificial means which have been referred to? How are we to explain the fact that the phenomena of interference manifested as change of molecular movement in certain albuminoids of the blood persist more or less permanently after the interfering cause, the ptomaine, has been eliminated?

"The change in molecular structure of the albuminoid, which the ptomaine has imposed upon it, and which enables it successfully to resist the molecular bombardment of the bacterium to which it had previously been vulnerable, this theory claims is more or less permanent and is a process allied to that by which bacteria become 'attenuated.' Now it is well known that many varieties of bacteria, both ferment and pathogenic, can be attenuated, that is weakened in their power of producing specific products. Thus the yeast cells—*saccharomyces cervisiæ*—will, when attenuated, grow and flourish in grape juice or brewers' wort without producing a particle of alcohol; the *bacillus acidi lactici* will grow and reproduce in watery solutions of alcohol without producing vinegar; and the pathogenic bacteria will grow and thrive in suitable food media without producing their respective ptomaines. The process of attenuation need not be complete; it can be arrested at any stage, so that the capacity a bacterium has of producing its ptomaine will depend upon its degree of attenuation."

Attenuated bacteria are morphologically identical with

those not attenuated; they present the same appearance and reproduce themselves as rapidly as do those not attenuated, and what is most remarkable, a bacterium once attenuated will transmit this change to its progeny through heredity.

Now if the specific power of producing specific products which bacteria manifest is caused by their respective molecular vibrations, as this theory claims them to be, attenuation of bacteria would be a change in their molecular structure as molecular vibration. Molecular structures are so closely associated that a change in one can be made only by causing a change in the other; this at least is the teaching of spectrum analysis.

If, now, the change in molecular structure which a ptomaine will impress upon its associated albuminoid is a process similar to that of attenuation, we are prepared to understand why this change may be more or less permanent by transmission through heredity from albuminoids to albuminoid, and thus give immunity from that disease of which the bacterium was its cause and the ptomaine its product.

Immunity, then, as explained by this theory, is caused by a change in the molecular structure of the albuminoids imposed upon them by the ptomaines, which are regarded as interfering bodies capable of inhibiting bacteria in their specific work and of changing the molecular structure of albuminoids, a very different theory from that championed by Chauveau, which assumes immunity to be the direct result of ptomaines and demands that these substances shall permanently abide in the body of the previously infected individual.

J. W. McLaughlin.

POST-GRADUATE INSTRUCTION IN DISEASES OF THE EYE, EAR, NOSE AND THROAT.

Beginning with November 21, 1891, courses of instruction, lasting for six weeks, will be given at the Eye, Ear, Nose and Throat Hospital, New Orleans. The courses on diseases of the ear, nose and throat will be given by Drs. A. W. de Roaldes

and A. McShane; those on the eye, by Dr. S. D. Kennedy. The vast amount of clinical material offered by this institution presents the greatest variety of morbid manifestations. Over three thousand patients are treated annually. The hospital is provided with a complete and modern armamentarium. The opportunity here offered for the study of special diseases is unsurpassed elsewhere in this country; and in a brief period one is enabled to become practically familiar with the majority of the diseases encountered in daily practice.

INDEX CATALOGUE OF THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE.

The twelfth volume of this stupendous compilation has been received. Though only a work of compilation, it involves a vast amount of labor; and those engaged in its production deserve great praise for the thorough manner in which their work is done. These volumes are issued at long intervals, during which many contributions have been received; the titles of this new matter will fill probably five volumes.

The present volume is of special interest to us, since it contains a list of the works of the late Dr. H. D. Schmidt, pathologist of the Charity Hospital, to whom many of the younger physicians of the southwest are indebted for their introduction to the microscope in medicine.

Abstracts, Extracts and Annotations.

SURGERY.

STAB-WOUNDS OF THE SPINAL CORD.

Dr. Otto Bode (*Berliner klinische Wochenschrift*, Jahrg. xxviii., No. 22) gives an interesting account of the diagnosis,

course and proper treatment of stab-wounds of the spinal cord. He cites the case of a man who, in a street fight, received several wounds on the head; on the back of the neck there was one about five centimetres long, running obliquely down to the spinal column and exposing at its bottom the atlas and axis. At the moment of wounding the patient fell to the ground, lost consciousness for only a minute, but remained paralyzed on the right side below the point of wounding. When called upon the right lower extremity responded slowly and reluctantly, but for walking or standing was weak and useless. There were no areas of anæsthesia, nor any disturbance of the special senses. The bladder and rectum were normal; priapism not present. The muscles of respiration on the right side were decidedly implicated. The faradic excitability of the muscles remained normal. For three weeks this condition continued apparently unaltered. At the expiration of this time the patient began to gain more and more use of the paralyzed limbs, albeit at the same time the reflexes became greatly exaggerated, and at the least touch the muscles jerked. The patient was under observation for three months; the paralysis was practically gone, and even the reflexes had returned to normal, and in a year's time no evil effects of the wound remained, save at times a slight tremor in the muscles which had been paralyzed. The wound was treated solely by the antiseptic dressings.

From the anatomical relations of the vertebræ and their ligaments, Dr. Bode proceeds to show that in the cervical region when the neck is bent down, as it usually is when a man receives a wound there in a fight, the cord can be wounded at almost any point of its circumference, or indeed, may be wholly severed, without injury to the vertebræ. From the motor disturbances and the direction of the external wound in his case, he diagnoses a partial severance of the anterior column and the anterior part of the lateral column on the right side. Therefore, he maintains that it is not possible that the lateral columns in the cervical cord carry both sensory and motor fibers, since in his case there were absolutely no disturbances of sensation.

Dr. Bode cites several cases of perfect healing of wounds of the spinal cord involving not quite half its diameter, which were recognized during life to be wounds of the cord, or were subsequently clearly demonstrated at the autopsy by the cicatrices.

He goes on to explain that the appearance of symptoms which set in generally on the second to the third day after the wounding, and which might easily be mistaken for traumatic

myelitis, is due to what Schiefferdecker describes ("Ueber Regeneration, Degeneration, und Architektur des Rückenmarks," *Virchow's Archiv*, Bd. lxii.) as traumatic degeneration following wounds of the spinal cord, and setting in on the second to the third day. The degeneration begins as a disintegration of the elements of the nerves into glossy flakes. This process extends from the cut surfaces about four to six millimetres above and below. Hence, in the case of wounds in the neighborhood of the fourth cervical vertebra, although the phrenic nerve be not at first implicated, yet at the end of the second or third day that complication may arise.

The increase of the reflex excitability, Dr. Bode explains as due to what Schiefferdecker describes as secondary degeneration, which manifests itself about the fourteenth day, and which, by cutting off the influence of the reflex inhibitory fibers running down the lateral columns in the cervical cord, gives rise to an increase in the reflexes. Schiefferdecker describes a third form of degeneration, which he calls cavity formation, and to this Dr. Bode ascribes the fibrillary tremors in the limbs formerly paralyzed.

Retention of urine and feces is not uncommon following wounds in this region. The organs either return to normal, or else incontinence sets in. The height of the wound has no influence hereon. Priapism almost always occurs where there is vasomotor disturbance. Elevations of temperature are not found on the anæsthetic areas of the skin, if there be any, but only on the areas where there is motor paralysis. This proves that the vascular nerve-supply runs down the same paths as the motor fibers. Dr. Bode cites a very interesting case where he found variations of temperature of the affected part entirely independent of the temperature variations in the rest of the body.

He maintains that it is impossible to locate with absolute certainty the position of the wound on the cord from the symptoms, since some hemorrhage affecting the parts immediately adjoining is inevitable, and, furthermore, unless the assailant's knife be very sharp, it must make more or less of a contusion on the cord before its cuts through the elastic pia mater.

To sum up, the most conclusive symptom is a sharply defined paralysis below the point of wounding, coming on at the moment the wound is received.

As to treatment, he says the external wound should be enlarged and left open. Above all, free drainage should be encouraged, even to the loss of meningeal fluid, and the blood and secretions of the wound should be kept aseptic. Finally, the wound should be allowed to heal by granulations, or sewn up secondarily.—*American Journal of Medical Sciences.*

UNION OF THE DIVIDED ULNAR NERVE BY PLASTIC OPERATION.

Dittel (*Wiener klin. Wochenchr.*, Jahr. iv., No. 18) reports a successful plastic operation upon the ulnar nerve, although there was considerable loss in the continuity of this structure. The patient received a severe wound of the arm, which, together with extensive injury to the skin and muscles, destroyed about two and a half inches of the ulnar nerve. The peripheral end of this nerve could not be found. The wound was closed under antiseptic precautions. Examination on the following day showed that the sensibility of the skin supplied by the ulnar nerve was practically unimpaired, and that there was very slight difference in the muscular power of the right and left arm. This was evidently due to nervous anastomosis. Four weeks later an electrical examination showed that the muscles supplied by the ulnar nerve were completely paralyzed. By no form of current could contraction be induced. An operation for the restoration of the continuity of the nerve-trunk was at once undertaken, since it seemed desirable to accomplish this before marked degenerative changes could set in. By careful dissection the proximal and peripheral ends of the nerve were exposed. About three inches from the extremity of the peripheral nerve-end a thin-bladed scalpel was thrust directly through the center of its trunk; by carrying the blade upward the trunk was split in two equal halves. The cision stopped short before reaching the extremity of the nerve. In a similar manner the proximal end was split. By transverse cuts half the nerve was freed and carried upward from the distal end, downward from the proximal end, until the extremities of the ends thus split off were brought in contact. Sutures were applied. To cover the large defect of the soft parts resulting from the original injury, a flap of skin was transplanted from the upper portion of the arm. Suppuration set in. The wound was dressed by the open method. Eight weeks after operation an electrical examination was made as to the condition of the muscles supplied by the ulnar nerve. The results were negative. Two weeks after this, however, the muscles reacted to electricity. At the time of reporting the case contractions could be excited, not only by application of the current to the muscles, but also by excitation of the nerve-trunk.

Brenner (*Ibid.*) also reports a successful neuroplastic operation ten years after injury to a nerve.

The patient exhibited a bluish discoloration and decided emaciation of the left index and middle fingers, the nails of which were thickened and turtle-backed. Both fingers were

flexed at the metacarpo-phalangeal articulations; tendons and joints were found to be normal on manipulation. The palmar surface of both these fingers and the ulnar surface of the thumb were completely anæsthetic; the other portions of the skin of the hand were normal. Ten years before, the patient had received a stab-wound on the flexor surface of the wrist-joint. The scar of this wound lay directly over the course of the median nerve; beneath it there was a hard knot the size of a cherry; this often occasioned great pain. It was diagnosed as a neuroma, and excision was determined upon. On dissecting this tumor free, it was found attached to the extremity of the central portion of the median nerve. On dividing this connection, the cross-section of the nerve seemed perfectly healthy. It was then determined to find the distal end of the nerve and restore the continuity of this structure by a plastic operation. The two extremities of the nerves were split almost to their terminations. The halves of the split trunk were freed at the points most distant from the terminations of the nerve; the flaps thus formed, made long enough to completely bridge the gap existing between the nerve-ends, were turned down and up, respectively, and were sutured to each other and to the freshened extremity of the two nerve terminations. The wound was closed, and healed by primary intention. Two weeks after operation there was return of sensibility. A year later sensibility was completely normal, and the contracture of the fingers was no more observable. The trophic disturbances, however, did not disappear.—*American Journal of Medical Sciences.*

MEDICINE.

THE NUTRITIVE VALUE OF RECTAL INJECTION OF EGG ALBUMEN.

The assertions of Voit and Bauer and Eichorst, to the effect that egg albumen is absorbed by the rectum only in the presence of a certain proportion of chloride of sodium, but is returned unaltered with the fæces if this reagent be absent, has led the author to investigate this point anew, and to make his observations on man, and not on dogs, as his predecessors had done. The experiments were planned with great care, and the quantity of albumen removed from the body, both by the urine and the fæces, was estimated. As the outcome of

several series of experiments, the results of which show a great agreement, Huber gives as his conclusion that egg albumen simply beaten up is absorbed by the rectum, but only in very small quantities, and consequently a nutrient enema of this kind possesses hardly any value. When, however, a certain amount of common salt is added (fifteen grains to each egg in the present series of experiments), the quantity of albumen absorbed is doubled. Peptonized egg albumen was absorbed in very slightly greater proportion than that treated with common salt. Of the albumen thus treated with salt, between 60 and 70 per cent. was absorbed, and we, therefore, have in this mixture an extremely valuable material for nutrient enemata. In no case of Huber's were the enemata expelled; nor was albuminuria ever found to occur after their use.—*Medical Chronicle.*

THE MODERN TREATMENT OF SYPHILIS.

As regards the treatment of syphilis, mercury was now almost universally recognized as the best remedy for it, except in Scotland. As regards the latter, Mr. Hutchinson remarked that he thought some of his worst cases came from that country. The methods of using mercury were the internal and external. Inunction and fumigation were the most efficient measures of application for cases in which the other methods are not suitable, but for all ordinary cases the administration by the mouth is the most convenient. The gray powder is the best form to prescribe; it may be given in one-grain doses, with one grain of Dover's powder, three times a day. The frequency of the dose should be increased, not the dose itself, when further effect was desired. Simplicity in prescribing is everything to those busily engaged in practice. The mercury should be given before the appearance of the secondary symptoms, and it usually prevented the onset of the latter. Is mercury a specific for syphilis? Mr. Hutchinson considered that it certainly was, and that it killed the particulate virus upon which syphilis depends. In nine cases out of ten this treatment was probably successful in preventing secondary manifestations. Idiosyncracy as to mercury, showed itself in two ways, those in whom it acted as a poison, and those in which it failed to act. Those who are very susceptible can usually be suited by reducing the dose sufficiently.

Iodide of potassium is of very little use in the secondary stage of syphilis. The iodides of mercury are much less satisfactory than the gray powder (hyd. c. cret.). When

sores are present in the tonsils, mercury may irritate; in these cases the latter drug should be reduced, and iodide of potassium given in mixture separately. As regards phagedæna, the main point was to treat it efficiently locally, giving possibly opium internally. Iodoform is the best local measure, and since the introduction of this drug far less severe results of phagedæna had been witnessed. Cauterization with the acid nitrate of mercury may also be employed. Some of the worst forms of phagedæna occur during a second attack of syphilis.

A course of mercury should last over a long period; six months to a year. The long course usually does the patient's general health good. A minority are made irritable and susceptible to colds. Such benefits are sometimes derived from the drug, that one patient had exclaimed to Mr. Hutchinson, "Before I had syphilis my life was a burden to me." It is a valuable remedy also for dysmenorrhæ, and many forms of chronic inflammation.

Does the apparent cure of syphilis by mercury place the patient in a better position as regards the tertiary manifestations? Mr. Hutchinson stated that it was extremely difficult to decide definitely on this point by any statistics, pointing, however, strongly to the conclusion that it did so, was the fact that the severe forms of syphilis were becoming less frequent year by year. The bad cases of bone disease, periostitis, etc., were much less often seen now.—*Med. Press and Circ.—Times and Register.*

HYDRASTIS CANADENSIS.

From a physiological and therapeutic study of hydrastis Dr. Cerna (*The Therapeutic Gazette*) has arrived at the following conclusions: 1. Hydrastine is poisonous to both cold- and warm-blooded animals. 2. The minimum fatal dose of the drug in the common frog (*R. esculenta*) is 0.001 gramme for every thirty grammes of the animal's weight. 3. The minimum fatal dose of the alkaloid in the dog, by hypodermic injection, is 0.50 gramme for every kilogramme of the body weight. 4. Hydrastine destroys the irritability of the muscular tissue. 5. The alkaloid likewise destroys the excitability of the efferent or motor nerves. 6. Very large quantities produce loss of the functional activity of the efferent or sensory nerve-fibers, and also cause anæsthesia when locally applied. 7. Hydrastine, in small amounts, increases reflex activity by stimulating the spinal cord. 8. Later in the poisoning, by large quantities, hydrastine diminishes reflex action by stimu-

lating at first Setschenow's center in the medulla oblongata, and afterward abolishes it by paralyzing the spinal cord. 9. The paralysis produced by the drug is due to an action upon the muscles, the motor nerves, and spinal cord. 10. The convulsions of hydrastine are of a spinal origin. 11. Hydrastine destroys the electro-excitability of the cardiac muscle. 12. The alkaloid, in small doses, produces a primary frequency in the pulse-rate, due probably to a stimulating action on the cardiac motor ganglia. 13. In moderate and poisonous amounts it diminishes the number and increases the size of the cardiac beats by an action upon the intracardic ganglia and the heart-muscle itself. 14. Hydrastine lowers arterial pressure by a direct action on the heart, and also through a paralyzing influence exercised upon the centric vasomotor system. 15. The drug produces at first an increase, and afterward a decrease, in the number of the respiratory movements. 16. Hydrastine kills by failure of the respiration. 17. The alkaloid lowers bodily temperature. 18. The drug increases peristalsis. 19. In hydrastine-poisoning the salivary and the biliary secretions are largely increased, especially the latter. 20. Hydrastine locally applied produces at first contraction of the pupil; afterward dilatation of the same.

A RARE ANTIPYRINE RASH.

Veiel describes a case of a patient in whom antipyrine always produced a peculiar skin rash. Soon after the dose was taken there was severe itching of the palms of the hands, the lips, the soles of the feet, and of the glans penis. The lips became œdematous, and large bullæ formed on them; two bullæ also formed on the hard palate and between the toes. On the soles and palms there were deep-red urticaria-like spots with sharp contours, which itched severely but did not form bullæ. The itch lasted three or four days; the bullæ on the lips dried in four or five days; those in the toes in about eight days; the spots on the palms, soles and glans penis desquamated in large scales after about ten days, and had vanished in about three weeks.—*British and Colonial Druggist.—Medical Record.*

TREATMENT OF CHYLURIA BY THYMOL.

Two cases are reported, in which the filaria sanguinis was found, where complete cure followed the internal use of thymol. The first case was that of a man 20 years of age. The urine was white. Quinine and many other remedies were

tried without any result; the urine remained milky and the patient's fever continued. Thymol was given every four hours in doses of five-sixths of a grain. Fifteen days later the dose was doubled. A month after this treatment the patient was cured and no more filaria were found in the blood. The other patient was relieved under the same conditions after a month's treatment, taking the same dose three times a day.

These two cases suggest that the thymol destroys these organisms in the blood and in the tissues. The author has tried the effects of thymol upon other pathological organisms, such as the bacillus of tuberculoses and of leprosy, but without any result.—*Bulletin generale de Therapeutique, 1891.—American Journal of Medical Sciences.*

IN ACUTE BRONCHITIS.

A simple expectorant mixture in acute bronchitis is:

℞.—Ammon. muriat..... ℥ss.
Mist. glycyrrhiz. comp..... ℥iv.—M.
Sig.—Take a dessertspoonful every four hours.

The dose is smaller in the extremes of life, and in severe coughs it is given every three hours.

Tablets of the muriate of ammonium and the compound licorice mixture are very efficient. When the secretions are with difficulty brought up, the use of senega is advised.

When the secretions are abundant and not easily coughed up, turpentine in emulsion is an excellent remedy, not so pleasant, perhaps, as terebene or terpine hydrate, but rarely failing to do good in properly selected cases. The formula, with occasional modifications to suit particular cases, is:

℞.—Ol. terebinthin..... ℥ij. to ℥iij.
Mucil. acaciæ..... q. s.
Aq. cinnamomi..... ℥j.
Aquæ..... q. s. ad ℥vj.—M.
Sig.—A tablespoonful in a little water every four hours.

Ofttimes the cough is of such an irritating character that these ordinary expectorant mixtures avail little; then recourse must be made to a narcotic in some form. Codeine, a very useful alkaloid of opium, has the advantage of not constipating as much as morphine. A good combination is:

℞.—Codeinæ sulphat..... grs. viij.
Syr. prun. Virginian..... ℥ij.—M.
Sig.—A teaspoonful in a little water three or four times a day and at bed time if necessary.

—*Therapeutic Gazette, July, 1891.*

OBSTETRICS.

DEEP MEDICATION IN THE TREATMENT OF POSTERIOR URETHRAL CATARRH.

Dr. Edward L. Keyes read a paper on this subject. Posterior urethritis, he said, had now become very generally recognized by specialists and its management much simplified. Still, among the profession at large there existed much ignorance and misconception on the subject. As a matter of fact, the treatment was easy and did not call for expert skill in the use of instruments. The author then elaborated carefully the salient points in the various conditions of the male urethra likely to give rise to intractable discharges, especially those morbid secretions having their origin in lesions situated in the posterior urethra, taking the ground that these latter were constantly overlooked by even the best men, and that patients suffering therefrom would wander from physician to physician without the true cause of their suffering being recognized, or at any rate without proper treatment for their condition being instituted.

Dr. Keyes detected posterior urethritis as follows: He "milked" the urethra, by pressure, firmly with the finger from the perineum forward and then caused the patient to urinate into two separate conical glasses. If there was posterior urethra of mild grade, the first urinary gush would contain free pus in a quantity disproportionately great when compared with what had been milked out at the meatus by digital pressure. If the grade of posterior urethritis was high, the second urinary flow would also contain free pus. If the latter had come from a prostatic abscess or a suppurating seminal vesicle, this might be demonstrated by making the patient urinate in three parts—one to wash the prostatic sinus, a second gush to show relatively what proportion of pus had flowed backward into the bladder, and here milking the prostate or the suspected vesicle by a finger in the rectum; then a third urinary gush to show what, if any, excess of pus or prostatic or seminal matter had been added to the urine by the rectal manipulation, a point to be settled by the miscroscope. Sources of pus from the bladder or from the kidney were omitted from consideration in the paper.

For the treatment of the condition there were certain substances which might be injected into the deep urethra when once the disease was recognized, which would have a direct local effect without subjecting the patient to the danger of

cystitis or to any of the consequences of ordinary injections or the use of sounds, and would save him from the necessities of treatment by the knife. The instrument used by the speaker was the Keyes syringe, and with it twenty minims could be thrown in so that the injection would flow through the prostate and into the bladder without any of the fluid returning. He was in the habit of using four substances—sulphate of thalline, glycerole of tannin, sulphate of copper, and nitrate of silver. The thalline was bland and unirritating. He made use of a solution of 3 to 12 per cent. in water. Of the sulphate of copper he used a 10 per cent. solution in glycerin. The glycerole of tannin was too thick to use pure, and required from 25 to 75 parts of water to thin it. The nitrate of silver he used in a 10 per cent. solution, though rarely employing it, especially in catarrhal cases. By the use of these four solutions the speaker emphatically stated that the greatest advantage might be obtained in cases which were properly diagnosticated as posterior urethritis. Without these remedies he should be tempted to give up the treatment of this affection, and, when they failed, he believed the mistake in diagnosis was obvious.

The speakers who discussed Dr. Keyes' paper in the main approved his methods of diagnosticating the location of the morbid process, differing with him only as to the therapeutical agents and instruments according to individual experience. —*New York Medical Journal.*

ELEVATION OF THE PELVIS AS A MEANS OF RELIEVING VOMITING OF PREGNANCY.

By Sir James Grant, M.D., Consulting Physician General Hospital, Ottawa, etc.

In 1877 I was called to attend a lady in her first pregnancy, about the third month of utero-gestation. I learned that for fully ten days she had been unable to take food, and with great difficulty retained even the smallest quantity of liquid nourishment. Almost every form of treatment had been tried without any apparent good result. As a last expedient, I decided to test the effect of elevation of the pelvis, which was accomplished by lowering the head and thorax, and placing several pillows under the sacrum. In a short time the change for the better was encouraging, and continuing the position at intervals for a few hours, in two days the marked improvement in the system was quite evident, and utero-gestation proceeded to the full term without any return of this abnormal condition.

Within the past month, two cases of severe vomiting in

early pregnancy came under observation, in both of which I adopted the same treatment, with equally satisfactory results.

Guémot, referring to the rational treatment of vomiting during pregnancy, says that a morbid or abnormal state of the uterus, the nervous system, as the carrier of reflex action, and the stomach, are the prime factors in the malady. The idea of Smellie's, that the complaint is "chiefly occasioned by fulness of the vessels of the uterus," certainly is most rational. The elevation of the pelvis gradually lessens the quantity and force of the blood in the uterine vessels, and thus reduces the quasi-irritability, or, as Dr. James Stewart, of McGill, terms it, "the instability of the nerve elements" in the uterine nervous system, the abnormal influence of which, prior to the change of the pelvic position, had been rapidly telegraphed to the spinal and gastric nervous centres.—*Montreal Medical Journal.*

Book-reviews and Notices.

A Treatise on Pharmacology and Therapeutics. By John V. Shoemaker, A. M., M. D., Professor of Materia Medica, Pharmacology and Therapeutics in the Medico-Chirurgical College of Philadelphia, and Member American Medical Association, and John Aulde, M. D., Demonstrator of Clinical Medicine, and of Physical Diagnosis in the Medico-Chirurgical College of Philadelphia, and Member American Medical Association. In two volumes. Volume I. Philadelphia and London: F. A. Davis, Publisher, 1889.

Volume I, is devoted to pharmacy, general pharmacology and therapeutics. A large amount of space is given to electro-therapeutics, and very wisely, for many medical men who are familiar with the theory of electricity, and its various laws, find themselves at a loss when it comes to applying this knowledge to the treatment of disease.

The article on prescription writing is instructive and of practical value, and under the heading of *Dietary for the Sick* a number of useful recipes are given. Parts I and II are followed by a number of blank pages, ostensibly inserted for the purpose of making notes on new remedies or of one's personal experience in the use of the remedies therein recorded.

In Volume II, no attempt is made toward a classification of drugs, but instead they are arranged in alphabetical order. The work is quite complete and up to date, the newer remedies being given place and careful consideration.

Speaking of the *oleates* the author, whose writings did so much toward popularizing the remedies, is frank enough to acknowledge that lanolin has replaced oleic acid as a combining agent when absorption is the effect desired.

In the volume are 987 pages of printed matter, the type is good, and a number of formulæ, including those for hypodermatic use, add greatly to the value of the work. H. W. B.

State News and Medical Items.

[Communications from Physicians of Louisiana are solicited for this Department. News of personal interest is especially desired.]

CHARITY HOSPITAL.

MONTHLY MEETING OF THE BOARD OF ADMINISTRATORS.

The regular monthly meeting of the Board of Administrators of the Charity Hospital was held last night. There were present: Dr. Bickham, in the chair, and Messrs. J. H. Keller, Hugh McManus, George Seeman, and Drs. F. W. Sentell and W. H. Wiendahl.

The presiding officer made formal announcement of the death of Administrator Devereux, and resolutions of regret out of respect to his memory were presented and adopted:

The Board of Administrators of the Charity Hospital received with sincere regret the intelligence of the sudden demise, on yesterday, at Helinetta, N. J., of Mr. John G. Devereux, one of their members.

His association with us in the management of the institution throughout the administration of his Excellency Gov. Nicholls marked him as an invaluable auxiliary in our good work. His clear judgment, long experience as a financier, his scrupulous exactness in all essential requirements of this important trust, rendered him of material aid in its successful management; al

ways at its service, he never tired in devotion to its interests, ever proving himself an enlightened and conscientious coadjutor in the responsible position of administration; therefore, be it

Resolved, That the death of John G. Devereux terminates an invaluable service to this institution, a service unstintingly bestowed with marked ability, and which rendered him a valuable public servant in behalf of the State's great charity.

Resolved, That this preamble and these resolutions be inscribed upon the minutes of the board, and a duly attested copy, under seal, be transmitted to his family.

Resolved, That in the estimation of his worth and of its appreciation by the board, its membership will attend his obsequies in a body.

The report of the clerk for the month showed that there were 540 patients in the institution on September 1; 641 were admitted during the month, 78 died, 542 were discharged, and there were in the hospital on October 1, 561. In the clerk's financial report it was shown that $605.20 had been received and turned over to Sister Agnes.

The board then proceeded to the election of its visiting staff, the following gentlemen being selected:

Visiting Surgeons—Samuel Logan, Ernest Lewis, F. W. Parham, J. F. Schmittle, E. D. Martin, H. J. Scherck, E. Souchon, Paul Michinard, R. Matas, W. E. Parker, R. U. Borde, Luther Sexton.

Visiting Physicians—J. B. Elliott, L. F. Reynaud, P. E. Archinard, J. Laurans, J. T. De Grange, J. H. Bemiss, Joseph Jones, H. Bayon, H. S. Cocram, J. Hope Lamb, F. H. Brickell and J. M. Elliot.

Visiting Oculists—E. W. Jones, Wm. C. Ayres.

Visiting Aurists, Rhinologists and Laryngologists—E. W. Jones and W. C. Ayres.

Visiting Dentist—Dr. A. G. Friedrichs.

With reference to the alleged ill treatment of patients by the amulance corps, the following letter from Dr. J. D. Bloom, assistant house surgeon, was read:

To Dr. J. C. Bickham, Vice President Board of Administrators:

My Dear Doctor—Concerning the inquiry requested by you, regarding certain cases cited in complaint of the conduct of the ambulance corps, I have the statements of those gentlemen who served on the occasion referred to, to the fact that at no time were they guilty of intentional wrong doing; that they acted to the best of their ability and conscientiously. At no time did they purposely offend or knowingly evidence disre-

spect for the scenes necessitating their presence. These gentlemen claim that their actions have been misinterpreted and feel themselves unjustly accused. With a just appreciation of the tender feelings of sympathy on the part of relatives elicited by the shock of emergency cases requiring the aid of the ambulance corps, and in fair acknowledgment of the active and heroic efforts oftentimes necessitated by students in attendance, in their efforts to succor—and admitting the ambulance service—a public charity open to public complaint at all times; I feel satisfied in the instances of which this report pertains in recommending the exoneration of the gentlemen to whom these charges refer. With much respect, yours very truly,

J. D. Bloom, *Assistant Surgeon.*

New Orleans, October 5, 1891.

The board decided to attend the funeral of the deceased administrator, Mr. Devereux, in a body.

It was their intention to adjourn the meeting out of respect to his memory, but owing to the necessity of appointing a visiting staff for the next six months, this was denied them.

Baton Rouge, Oct. 22.—A commission has been issued to Leon Joubert as a member of the Charity Hospital Board of New Orleans, vice John G. Devereux, deceased.—*Times-Democrat.*

Dr. Souchon has returned to New Orleans. He spent his time examining the medical colleges of eastern cities.

Dr. A. W. De Roaldes has returned to the city after a three months' trip.

Drs. F. Formento and L. F. Salomon left the city to attend the American Public Health Association convention, which will be held at Kansas City, Mo., October 20 to 24 inclusive.

Married.—Magruder–Favre.—At Pearlington, Miss., Wednesday, October 14, 1891, by Rev. T. W. Adams, Dr. M. J. Magruder of New Orleans and Miss E. A. Favre. No cards.

Archinard–Joubert.—At the St. Louis Cathedral, New Orleans, on Tuesday, October 20, 1891, Dr. P. E. Archinard to Mrs. Joubert, both of New Orleans.

Kilpatrick–Pierson.—In Natchitoches, October 15, 1891, Dr. Ralph Kilpatrick to Miss Alice Pierson.

Dr. L. T. Postell, of Plaquemine, visited New Orleans last month.

Dr. W. G. Young, formerly of Rayne, has located in Centreville, La.

Dr. A. Maguire, of Jeannerette, was in the city a few days. The doctor was accompanied by his wife.

Dr. Wm. Martin U. S. N., has gone to Washington, D. C.

Dr. G. M. Guiteras, M. H. S., was in New Orleans last month on his way to Mobile, Pensacola and Mullet Key on special duty.

Mississippi.—Dr. E. A. Guilbert, of Jackson, died recently, and Dr. A. Johnson, of Purvis, died September 12.

New Medical College.—The bequest of $100,000, left by Mrs. Ida Richardson to the Tulane Medical College, is to be applied by the trustees to the erection of buildings specially adapted to the purpose. The site which has been chosen is the old Woods' Cotton Press on Canal street, between Robertson and Villere. Plans are now being elaborated by Mr. Thos. Sully, the architect, and will be presented to the board as soon as completed. Dr. Souchon has visited the medical colleges of Baltimore, Philadelphia, Boston and New York. He was very cordially received everywhere and afforded every facility for study of their system and observation of their defects and advantages. Dr. Souchon has made the subject a matter of no little study, and by elimination of the faults and defects and incorporation of the perfections and advantages into the proposed system and building of the college has arrived at a plan which will make the institution a model of correct principles. The present school has been found too small. Advanced schools of medicine require large and extensive laboratories for chemical, microscopical, pathological and bacteriological study.

The amount of iodoform used in the Paris Hospital is something extraordinary, and seems to be "progressing favorably." The authorities contracted for a supply of 48,000 kilograms (about twenty-four tons) at the beginning of the year, but by last month the supply had run out, and the surgeons, like the daughters of the horseleech, were asking for more.

Medical Practice in Connecticut.—The following reply was sent to a doctor inquiring of a State official if he will be allowed to practise in Connecticut by registering his name and the college from which he was graduated:

"Sir—Anybody can practise medicine in Connecticut. You do not need to register; you do not need a medical diploma; you do not need to know the difference between opium and peppermint: you do not, indeed, need to know anything. You can simply come and live here and begin to practise. The laws of Connecticut will sustain you in collecting your fees for professional services, if you render any which you choose to call such. But if you undertake to carry me or my trunk to the depot for pay, you must get a license. If you peddle matches or peanuts, you must get a license. If you collect the swill from your neighbors to feed your pigs, you must get a license. If you want to empty your cesspool, you must get a license. But you can practise medicine in Connecticut *without a license.*"—*Hartford Post—Times and Register.*

Ringworm in Demand.—The following advertisement appeared the other day in a British paper: "Lady, having the care of two little boys with ringworm, wishes to meet with one or two others to share their educational advantages."—*Med. Record.*

From an Amusing Paper on "Our Predecessors, the Barber Surgeons," read by Dr. Embleton before the Newcastle Society of Antiquaries, we learn that the barbers were fined for trimming their customers on the Sabbath day, and fines were also imposed when members used "ill words" to each other. For "giving" members the "lie" fines respectively of from three to six pence had been made. Were these excellent rules in force now-a-days, and if the proceeds were put into a medical poor-box, instituted *ad hoc*, we should have the nucleus of a very useful charity to assist those left destitute by our less fortunate fellows. A rough calculation, based on the number of infractions committed during the last few weeks, shows that several "most potent, grave, and reverend seigniors" would be mulcted in very substantial sums, and one can only regret that no machinery exists for levying this tribute.—*Medical Record.—The Hospital Gazette.*

ORGANIZATION OF THE SCHOOL OF MEDICINE OF THE UNIVERSITY OF TEXAS.

At a meeting of the regents of this university, held in June, at Austin, steps were taken to put the medical branch into operation next October. It was determined to arrange for eight chairs, with salaries affixed, ranging from $3000 to $2000 each. Dr. H. A. West, of Galveston, was elected to fill the chair of practice of medicine, and Dr. J. F. T. Paine, of Galveston, the chair of obstetrics and gynecology. The board determined also to have a three years' graded course, a session of seven months, and require an entrance examination. The medical branch of the university is located at Galveston. The State has about completed a building for the school on the block adjoining the Sealy Hospital, the gift to the State of Mrs. John Sealy. An election to fill the vacant chairs will take place in Galveston the latter part of August next.—*Medical Record.*

THE LATE DR. FORDYCE BARKER.

At a meeting of the medical board of Bellevue Hospital held on June 1, 1891, the following resolutions were adopted:

Resolved, That it is with the deepest sentiments of regret that this board has learned of the death of Fordyce Baker, M. D., LL. D., who has been identified for so many years with the medical staff of this hospital as one of its most distinguished and deservedly esteemed members, that his removal at this time is felt by his colleagues as a special loss to this institution;

Resolved, That in Dr. Barker his colleagues have always recognized a man of exceptional endowments, both of mind and of education, which made him the ornament and pride of medicine, which caused him to be an example in these respects to his fellows;

Resolved, That the thirty-five years spent in ministering to the sick in this hospital with the faithfulness to that duty which characterized Dr. Barker is of itself a testimony to the worth of the life which has now closed. But, in addition to this, Dr. Barker used the opportunities of his connection with this hospital to teach others by his experience, by his wide knowledge, by his exceptional skill, and by his great literary gifts, to an extent which has been widely appreciated by the whole medical profession in America and abroad.

[Signed] GEORGE WOOLSEY, M. D.,
Secretary of the Medical Board.

MORTUARY REPORT OF NEW ORLEANS.

For September, 1891.

CAUSE.	*White.....*	*Colored...*	*Male.....*	*Female....*	*Adults ....*	*Children.*	*Total .....*
Fever, Yellow							
" Malarial (unclassified)	6	9	10	5	5	10	15
" Intermittent							
" Remittent	2	3	3	2	4	1	5
" Congestive	7	3	6	4	9	1	10
" Typho-Malarial	6	4	6	4	6	4	10
" Typhoid or Enteric	8	2	4	6	9	1	10
" Puerperal	1	1		2	2		2
Scarlatina							
Small-pox							
Measles							
Diphtheria	2	1		3	1	2	3
Whooping Cough							
Meningitis	3	2	4	1	3	2	5
Pneumonia	7	7	9	5	7	7	14
Bronchitis	7	2	4	5		9	9
Consumption	33	34	30	37	65	2	67
Cancer	4	1	2	3	5		5
Congestion of Brain	10		6	4	6	4	10
Bright's Disease (Nephritis)	13	4	8	9	15	2	17
Diarrhœa (Enteritis)	13	5	14	4	13	5	18
Cholera Infantum	2	3	3	2		5	5
Dysentery	9	1	11	1	12		12
Debility, General	4	1	2	3	5		5
" Senile	11	8	5	14	19		19
" Infantile	5	4	6	3		9	9
All other causes	136	76	124	88	137	75	212
TOTAL	289	173	257	205	323	139	462

Still-born Children—White, 24; colored, 25; total, 49.

Population of City—White, 184,500; colored, 69,500; total, 254,000.

Death Rate per 1000 per annum for City—White, 18.80; colored, 27.87. total, 21.83.

F. W. PARHAM, M. D.,
Chief Sanitary Inspector.

METEOROLOGICAL SUMMARY—AUGUST.

STATION—NEW ORLEANS.

Date.....	TEMPERATURE. Mean	Max...	Min..	Precipn. in inches and hund'ths..
1	81	90	72	.22
2	80	88	73	.01
3	80	87	73	.02
4	73	80	66	.03
5	72	81	63	0
6	72	82	63	0
7	75	83	67	0
8	77	85	69	0
9	78	88	69	0
10	76	80	73	.62
11	74	78	69	.09
12	71	76	66	.03
13	78	86	69	0
14	80	87	73	0
15	81	89	73	0
16	81	88	74	0
17	80	87	73	0
18	80	87	72	0
19	80	87	72	0
20	78	85	70	.44
21	78	87	68	1.85
22	78	84	73	.09
23	80	88	71	.01
24	80	88	72	T
25	78	83	72	0
26	78	84	72	0
27	79	85	73	T
28	79	86	71	0
29	80	87	74	.02
30	80	87	74	0
....	.....	.....	.....	.....

SUMMARY.

Mean barometer, 30.078.
Highest barometer, 30.264, 17th.
Lowest barometer, 29.924, 20th.
Mean temperature, 77.9.
Highest temp., 90, 1st; lowest, 63, 5th.
Greatest daily range of temperature, 19, 9th.
Least daily range of temperature, 7, 10th.

MEAN TEMPERATURE FOR THIS MONTH IN—

1871.....82.8	1876.....81.9	1881.....82.8	1886.....81.4
1872.....82.5	1877.....82.8	1882.....80.5	1887.....81.0
1873.....81.0	1878.....83.6	1883.....83.3	1888.....78.2
1874.....83.8	1879.....80.8	1884.....82.3	1889.....80.6
1875.....79.1	1880.....81.1	1885.....80.4	1890.....80.6
			1891.....81.2

Total deficiency in temp'ture during month, 10.
Total deficiency in temp'ture since Jan. 1, 104.
Prevailing direction of wind, N. E.
Total movement of wind, 5673 miles.
Extreme velocity of wind, direction, and date, 48 miles, from N. E., 20th.
Total precipitation, 3.43 inches.
Number of days on which .01 inch or more of precipitation fell, 12.

TOTAL PRECIPITATION (IN INCHES AND HUNDREDTHS) FOR THIS MONTH IN—

1871..... 7.21	1876..... 4.44	1881..... 4.21	1886..... 2.40
1872..... 3.75	1877..... 2.54	1882..... 9.47	1887 ... 7.42
1873..... 8.30	1878..... 5.31	1883 .... 4.12	1888.....22.74
1874..... 4 82	1879.... 10.44	1884..... 0.87	1889..... 5.59
1875..... 8.61	1880..... 4.60	1885..... 4.25	1890..... 3.62
			1891..... 1.69

Total deficiency in precip'n during month, 1.50.
Total deficiency in precip'n since Jan. 1, 21.40.
Number of clear days, 10; partly cloudy days, 17; cloudy days, 3.
Dates of Frost, ...
Mean maximum temperature, 85.1.
Mean minimum temperature, 70.7.

NOTE.—Barometer reduced to sea level. The T indicates trace of precipitation.

G. E. HUNT, *Local Forecast Official.*

SYNOPSIS OF SUMMARY FROM SHREVEPORT, LA.

Mean barometer, 30.066.
Highest barometer, 30.249, 18th.
Lowest barometer, 29.913, 27th.
Mean temperature, 75.6.
Highest temperature, 91, 2d; lowest temperature, 54, 5th.
Greatest daily range of temperature, 28, 6th.
Least daily range of temperature, 8, 10th.
Prevailing direction of wind, S. E.
Total movement of wind, —— miles.
Extreme velocity of wind, direction, and date, 26, S. E., 21st.
Total precipitation, 4.35 inches.
Number of days on which .01 inch or more of precipitation fell, 5.
Total deficiency in precipitation during month, .22.
Total deficiency in precipitation since January 1, 4.42.
Dates of frost, ——.
Mean maximum temperature, 91.
Mean Min., 54.

M. J. WRIGHT, JR., *Observer.*

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XX. DECEMBER, 1891. NO. 6.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the first day of the month preceding that in which they are expected to appear. A complimentary edition of twenty-five reprints of his article will be furnished each contributor should he so desire. Any number of reprints may be had at reasonable rates if a *written* order for the same accompany the paper.]

LYSÆMIA, OR MALARIAL HÆMATURIA.

BY E. H. MARTIN, M. D., GREEN GROVE, MISS.

An article under this heading in the September number of the JOURNAL by Dr. Bruce McVey, and another in the October number by Dr. Geo. W. Douglas, have interested me much; and I am influenced to add my feeble light on this dark subject by the belief that I really have a light to add, that it is apparently much needed and because I firmly believe that hundreds of patients with this disease are annually hurried to the grave by their physicians. This broad statement will come with better grace when I explain that I have in times past done my own share of the hurrying; indeed in those days I never let a case of "hematuria" live more than three or four days and have wound them up in much less time; and after that came a distrust of the teachings of the text-books and the profession at large upon this subject and a wild grasping at any sort of treatment that would give the patient half a chance.

And then I read an article in another journal by Dr. R. S. Williams, of Mount Meigs, Ala., in which he advocated an infallible cure—a plan of treatment so simple and so directly at variance with orthodox teaching on the subject that it required the courage born of desperation to apply it and trust it in the first case.

I found this treatment as infallible as Dr. Williams had promised; and now, after a series of cases brought speedily from conditions of hopelessness, at times with suppression of urine and grave uremic symptoms, to rapid and complete convalescence, it is as rare for me to feel any anxiety concerning even the most severe cases as it was for me to formerly have hope.

Some of my professional neighbors have tried Dr. Williams' treatment, and no one who has tried it has been disappointed.

And now that I have struck the right path, I often wonder why every one does not see it all at a glance, and I am amazed that I myself should have so long gone wrong. So much depends upon the point of view.

However, I find it very difficult to get some physicians to change their treatment, even when they admit a mortality of from 50 to 80 per cent.; a few because they would rather be orthodox than right; more, because the treatment is so simple that they are afraid to trust it when in the presence of the frightful disease. And, lest some who read this may be deterred from giving it a trial for the latter reason, as Naaman of old refused to merely dip seven times in the river Jordan, for which we can scarcely blame him; lest the treatment appear too simple to be useful I will give what is in my humble opinion the modus operandi of the cure.

Malarial hematuria, as we call it, occurs only in persons who are suffering from chronic malarial toxæmia. They may or may not have had frequent attacks of malarial disease, but they have always been exposed to the action of the poison for some length of time.

The blood of such a patient has become deteriorated, and a tendency to dissolution and disintegration of the red corpuscles exists.

Second, the long continued state of malnutrition has so weakened the walls of the capillaries that they are easily ruptured outright, the slightest trauma producing a bruise, or else allow a transudation of serum, as is shown by the œdema and anasarca often seen in such patients. Now add, as a third factor, a local increase of blood pressure in any part or organ

and we have an outpouring of blood coloring matter and broken down corpuscles through the ruptured capillaries.

The hemoglobin set free rapidly stains the sclera and skin an intense yellow, a jaundice generally without bile. The toxic agents set free by this process or retained by the disordered secretions, soon cause an uncontrollable vomiting and incessant nausea, at times delirium, always a relatively slow pulse until just before the end, a generally slight rise of temperature after the sweating stage of the final malarial attack; finally, after the kidneys are choked up by disintegrated corpuscles, suppression of urine takes place, and, if not speedily relieved, is followed by coma and death. All this may occur in less than twenty-four hours from the beginning of the attack, or it may take days.

Now it is evident that the first two essential conditions, those of the blood and capillaries, arise from malarial toxæmia; the third factor, the localized increase of blood pressure, is generally from the congestion of the internal organs incident to a chill and, I believe, almost always directed to the kidneys by the increased work these organs are performing in eliminating the quinia which has been given to abort that same chill.

I have never seen a case in which the patient had not been more or less cinchonized at the time of the attack; and judging from the bad effect that this drug has when administered after the disease is established it is but natural to suppose that in most cases it is more or less an exciting cause of the disease. Not always, for Dr. McVey asserts that he has seen cases who had not taken quinine for a year previous, and we are bound to believe that he is correct or at least that he had been so informed by the patients. And there may be much of coincidence in the results of my observation, for I am afraid that there is not a white person in this county who has not taken quinine within the past three months.

But, leaving out the quinine factor, the three essentials before mentioned are sufficient to explain the occurrence of the disease; and without the theory of a special hematuric germ as advanced by Dr. McVey. We speak of "malarial hematuria" as a disease, but, as I have tried to show, it is not

a disease *per se*, but a morbid condition resulting from a specific disease; a condition for which I have suggested the name "Lysæmia," in a recent article published in another journal,* in lieu of the clumsy nomenclature now in vogue.

And as this morbid condition is far more serious than the causative disease, it becomes evident that the treatment should be directed first to the correction of the condition, for from the disease malaria there is but little more to fear.

The aims of treatment in the order of their importance are:

1. To clear up the urine.

2. To evacuate the bowels and keep them acting that they may aid in freeing the system from the toxic agents set free by the explosion, and better the state of the system for absorption of remedies and nourishment.

3. To repair the damage done to blood and blood vessels.

4. To administer any anti-malarial remedy which will not interfere with carrying out the other indications.

I place the clearing of the urine first in order of importance, because death almost always results from suppression of urine, and the suppression is due to the hemorrhage into the stroma of the kidney. The Malpighian tufts and uriniferous tubules must be kept free from clots with lumen clear; and if this is done the patient is not in imminent danger even if malarial paroxysms occur, which fortunately is not often the case.

The propriety and place in order of importance of the second and third indications will be admitted by all; and the fourth indication I place last for the reasons just mentioned, because the actual history of these cases gives few examples of recurrences of the malarial attack.

Just why this is the case I do not know, but the fact stands on record in nine cases out of ten. And if, with Dr. McVey, I may be permitted to indulge in a little private theorizing I will say that there may be certain chemical compounds formed or freed by the dissolution of the blood which are deleterious to the malarial germ, just as in alcoholic fermentation the process is retarded and stopped by the formation of the alcohol. This, of course, is only a speculative suggestion, but the fact remains that a patient with what we call "malarial

Atlanta Medical and Surgical Journal, February, 1891.

hematuria" has *malaria* to fear the least of all the evils of his condition.

And now as to the means of fulfilling these four indications.

1. The one remedy *par excellence* for clearing the urine is turpentine. I usually give to an adult ten drops or a No. 1 capsule full every four hours, and have never failed to clear up the urine in from twelve to forty-eight hours. Improvement generally begins as soon as the odor of violets is noticeable.

The turpentine, in my opinion, acts not directly as a hemostatic, but as a reparative to the capillaries and as a diuretic.

I object to ergot or gallic acid for the reasons that, first they can have but very little if any effect; second, if they have, it is bound to be a bad effect, as they have no diuretic action. The ergot might increase the pressure in the capillaries, and the gallic acid give a tendency to clot formation, both of which we wish to avoid. As for digitalis, I do not think it is ever needed; the circulation is always oppressed and relatively slow, in some cases as low as sixty pulsations per minute—this from uremia; and if the digitalis has any effect toward contracting the capillaries that would certainly increase the blood pressure in them and enhance the danger; and digitalis can not have its usual diuretic action, for the kidneys are already engorged with blood.

Turpentine alone, given persistently as I have mentioned, will do all that one can wish toward carrying out the first indication.

2. The second indication may be accomplished by means of any purgative at hand. Calomel has no specific action; I give it in moderate doses in the beginning of the attack where vomiting is most severe, but prefer Epsom salts, and as routine treatment prescribe a tablespoonful of the latter every four hours until six or more actions have been produced and then *pro re nata*.

3. The third indication is met with nourishment and iron, preferably in the form of the tincture of the chloride. In a vitiated state of the stomach I do not believe that any other preparation of iron compares in utility with the old fashioned tincture. I

generally give a little nourishment, followed by from four to six drops of the tincture, well diluted, every four hours.

Suitable nourishment is generally difficult to obtain, for these cases occur mostly in the country away from markets and prepared foods. The most useful article in the largest number of cases in my hands has been buttermilk; it is always at hand in the country and generally more relished by the patient than anything else obtainable.

If a point is made with the patient and nurses that the iron is very necessary but will do harm if given on an empty stomach, there will be no trouble about the patient being nourished.

4. The fourth or anti-malarial indication I prefer to meet with arsenic—because it does no harm, because in the form of Fowler's Solution, it is palatable and readily retained; and further, because there is no hurry and we can well afford to await its slow but certain effect. Why not use quinine instead? I do not give it because quinine has killed every hematuric patient I ever treated with it. I have known many patients to recover from this trouble who had been treated with quinine, but the weeks of illness, the many relapses and the months of convalescence show too clearly that the recovery took place, not as a result of treatment, but in spite of it. The quinine must be eliminated, the kidneys have to do the work and they are not in condition to stand the additional strain. The urine becomes more scanty, more viscid and more tarry; suppression and death rapidly supervene. If the patient has the constitution to withstand the diseased condition and the quinine, too, he recovers, though very slowly.

Now for the sake of comparison, which is often as useful as odious, let us glance at a typical case of the severest kind treated by the usual method and a similar case treated by what I choose to call the rational method.

You are called to see a patient, probably a young man of thirty; he gives a history of chills and possibly has been taking much quinine. Before sending for you he has had a severe chill and is suffering much from nausea and vomiting, temperature 103 deg., pulse 90. You observe a slight degree of jaun-

dice and the pot contains half pint or so of bloody or blackish urine. You prescribe calomel, also quinine and other drugs to meet the symptoms and leave. You return in the evening and find your patient very yellow, with uncontrollable vomiting, bowels may or may not have acted, urine is scanty and very thick ,the color of coffee grounds, temperature 101 deg., pulse 75. Treatment continued; the dose of the quinine is doubled. The next morning you find the symptoms intensified, the urine is suppressed, temperature 99 deg., pulse 65. Night comes and with it delirium, temperature 99 deg., pulse 70. Coma supervenes. You wait and watch. Before daylight you notice that your patient's pulse is 90; an hour later it is 120; in another hour it is 160; the respirations are more and more slow and labored; soon the pulse is so fast and feeble that it seems a mere flutter and you can not count it. The patient gasps for breath now but once or twice a minute; now he gives a last gasp; the heart still flutters for a minute or more and then all is still. Your work is done.

This is not exactly an imaginary case; I have had the unpleasant experience several times.

And now for a similar case treated without quinine. We will suppose it even worse and say that you are not called in until suppression has taken place and delirium ensued. You find a man more deeply yellow than a lemon, tossing in the bed or gazing into vacancy while plucking the cover. He rouses only to vomit and call for more water. You are shown the last urine that has passed; it looks like tar inspected through a red glass. His bowels are not acting; temperature 99, pulse 70. Your first instruction is *that no more quinine be given.* Next you prepare your remedies in suitable form for administration. Then you write out a schedule something like this.

1 P. M.—Turpentine.
2 P. M.—Nourishment; iron and arsenic.
3 P. M.—Epsom salts (or other purgative).
4 P. M.—Arsenic alone (2 drops).

And so on for each succeeding four hours of the twenty-four, then the schedule to be repeated.

If the vomiting is exceptionally troublesome you omit the nourishment, arsenic and iron for the first twenty-four hours.

You write across the list in large letters, and add verbal emphasis, that any dose if vomited is to be repeated at once. You give instructions that the nausea and vomiting are to be controlled by wetting the face and neck and rapid fanning after each dose and oftener if needed. You will have to explain to the friends that only one drug at your command will in the least degree control the vomiting, and that is morphia hypodermically, and that you do not wish to give morphia as it will have a bad effect on the secretions.

You return the next day to find but little change. The nausea is probably less, since the bowels have acted several times; there has been a little urine passed about as bad to behold as before, otherwise no change; temperature 99 deg., pulse 70 deg. You return on the next day to find your patient resting better, and rational; bowels open and salts discontinued; urine free and fluid but still bloody; temperature 99 deg., pulse 80 deg. The next day patient is better, but very weak; retains his nourishment and medicine; urine a transparent red; temperature 99 deg., pulse 90.

On the following day the urine is clear and the turpentine is discontinued; salts to be given as needed; complexion is becoming more clear; a little solid food is allowed, but not relished; temperature 99 deg., pulse 85. The treatment now is only the iron and arsenic given in increased doses, and only after food is taken. The appetite mends apace, and in another week the patient is out of bed. Convalescence is speedy; iron and arsenic continued a month. This is also not an imaginary case. I have had to make use of suppositious cases because my cases have been or are to be reported elsewhere, but the above is typical of them all. Where you are called in sooner the recovery is correspondingly more rapid.

And now why was this disease not observed before the 50's? I believe that it did occur in those days; we hear of unaccountable cases of "yaller janders" following chills many years before that time, and quite recently I have known a physician to diagnosticate a case of this kind as "yellow jaundice;" another called a case yellow fever and created a sensation; every day there are being discovered new diseases which existed always though unobserved or undifferentiated.

Kidney disease must have been a very ancient complaint before the time of Bright. But "hematuria" was certainly not so frequent forty years ago as now. First, there were not so many people and these were hardy pioneers; second, there was not so much quinine used. For, while cases may occur without quinia, I firmly believe it precipitates the explosion in a large majority of instances. I know of subjects in whom I can produce a typical case at any time (after one or two chills) by giving twenty grains of quinine.

As to its not occurring in and around New Orleans where quinine is much used—it *does* occur there, as the records of Charity Hospital will show. That it should be less frequent in a city is to be expected, as suitable subjects are rarer. A person of means calls in his physician, and the poorer classes can go to the dispensaries after the first chill. It is more often the planter, the levee builder or the civil engineer, far from a physician, who try to doctor themselves and become fit subjects for this condition. The fact that quinine is much used in New Orleans goes to show that the people have treatment early and are not allowed to run on until ready for "lysæmia."

Why are most of these cases of the male sex? Because the women are less exposed and better cared for, hence are less liable to become fit subjects. And why is the negro race partially exempt? Because nature gives them more power against malaria; but there have been five cases of "hematuria" in negroes in this neighborhood in the past two years, so nature does not exempt that race entirely.

I must beg to differ from the two gentlemen who have lately written on this subject on one more point. That is as to the reported irregularity of the symptoms in different cases and different localities. True, each patient marks his own case with his own individuality and personal idiosyncrasies; and some have symptoms that others have not. One may have black sputum just because he happens to have a chronic passive hyperæmia of the lungs, due maybe to semilunar obstruction or other cause, and other patients will not have this symptom; just as one patient may have blackish effusion in a blister which others have not because they are not blistered.

But above all of these personal symptoms for which the disease and condition is not wholly responsible, there stand preëminent the three cardinal symptoms which, taken with the history, are pathognomonic:

1. Hemaglobinuria.
2. Nausea and vomiting.
3. Intense janudice.

And a comparison of the apparently very different cases of Drs. McVey and Douglas will show these cardinal signs in each.

But while personal idiosyncrasy may impress each case, I can not believe that a change in locality could influence the natural history of the disease except as to frequency and possibly severity.

And now a word as to the nomenclature of this condition. The word hematuria is incorrect, for pure blood is not found in the urine. Hæmaglobinuria is better, but is merely naming a symptom, not describing the pathological state. So with yellow chills, swamp yellow fever, black chills, etc.

Hemorrhagic malarial fever is a glaring misnomer. To begin with, there is generally but little fever, and this is nearly always septic rather than malarial; and true hemorrhage does not occur in this or any malarial fever unless from secondary causes. Finding all of the names in use open to objection I have suggested the name *lysæmia* (λυω, to lose, and αιμα, blood) as more nearly descriptive of the pathological condition, better expressing the fact that there has been a dissolution of the blood and a loosing of the integral parts of it as a cause of the objective symptoms. But I will not press the matter; it makes little difference what we call it; a disease by another name will kill as quickly.

Of my brethren of the profession I wish to make an earnest request. I am attempting to secure reports of a sufficient number of cases treated by different plans to warrant the drawing and comparing of percentages of successes by each treatment. It will take several hundred cases to arrive at anything like correct statistical conclusions. And I will greatly appreciate the kindness if you will send me reports of either *all* of your cases, or of *all occurring in a given period of time*. No

selected cases desired. If the results of this compilation are ever published, each physician will be credited with his own cases.

* * *

Since sending in the above I have read the article of Dr. John W. Meek in the November number of the JOURNAL. It gratifies me to see that he has fathomed the question as to the usefulness of quinine in this condition. But I can not agree that "in the hands of some, quinine is the panacea—" for its most ardent advocates admit a high mortality rate due, they say, to the natural malignancy of the disease.

He abandoned quinine, and was more successful with hyposulphite of sodium. Hence, he very naturally (but to my mind, erroneously) concluded that hyposulphite of sodium has a specific action. If he will but consider that in these cases it is not the malarial toxæmia, but the condition of lysæmia, which we must first treat, he will no longer feel called on to explain "why quinine will cure nearly all other forms of malaria but this;" and "why hyposulphite of sodium will cure many cases of malarial hæmaturia, and be worthless in the ordinary manifestations of malaria" will no longer be a hidden mystery.

The hyposulphite simply acts as an excellent purgative, and nature, unmolested by quinine, does the rest. I can not but think that if he will add turpentine and leave off the morphia, his 25 per cent. of mortality will be reduced to almost nothing.

If space will permit, I will give some lay evidence on this subject. An old negro, recently from North Carolina, whose child I had been treating for intermittent fever, came into my office the other day to report that his child was no better. I accused him of not having given the quinine. He acknowledged this, saying that he was afraid to give it, as quinine made some of his children have Roanoke fever. I naturally asked what he meant by Roanoke fever. He replied that it was the North Carolina name for the disease from which his nephew had recently died. Now I had seen his nephew when in articulo mortis and knew that he died from lysæmia. The history given by this patient to the attending physician had been

as follows: He had been having chills and was told to take quinine; he took a large dose and in about an hour had a hard "shake," and his urine became bloody; he took more quinine and had another "shake," and again and again, each time producing a "shake."

I asked the old man if any of his children now with him were affected thus by quinine. He cited his grown daughter, who he claimed had had at least half a dozen attacks, every time in fact that she had ever taken quinine. He stated that she would take a dose of quinine, and in a few hours would have a hard chill and bloody urine. When asked how the doctors treated her for this he very frankly stated that the doctors had given it to her and he was afraid to call them back again; that he always took her in hand himself, filled her full of hot water and put her to bed to sweat, and that he kept giving her all the hot water she could drink until she got well. Now this old negro has evidently cured at least half a dozen cases or attacks of what he called malarial hematuria with hot water, and yet no one would place hot water on the list of anti-malarials, nor should the hyposulphite of soda be so placed.

The history of this family would seem to sustain the claim of Tomaselli for hereditary idiosyncrasy as a causative factor in producing this condition. It is the only instance I have seen, and I believe that the facts that the members of the same family breathe the same poison-laden atmosphere, drink the same water and labor under similar conditions, are more accountable than heredity for the apparent idiosyncrasy.

DYSTOCIA FROM BIFID UTERUS.

By ROBERT LAYTON, M. D., Monroe, La.

Mrs. D. G., age 31, Jewess; general appearance good, but of very short stature, not exceeding five feet, and apparent distance from chin to pubis less in proportion than usual. Good health until marriage at nineteen years of age. Became pregnant soon after, and was delivered of a seven months' fœtus

after a twelve hours' labor, during the latter half of which she suffered from puerperal eclampsia, according to statement of her husband. Has not been pregnant since that time, twelve years since, and menses have been very irregular; from time to time they missed for several months, and she had been treated in several cities for this condition. She also suffered from occasional attacks of *petit mal* from the date of last confinement, the spells coming on at regular intervals. During a period of time, embracing last pregnancy, menses have been absent for about two years. Five months ago was called to see patient on account of a supposed abdominal tumor, pregnancy not being expected, as she had none of the usual symptoms, and menses were habitually irregular.

On examination, which was rendered very difficult on account of the thick deposit of adipose tissue in abdominal wall, found a four to four and a half months' pregnancy, but did not detect any fœtal heart, though "choc" and placental souffle were both *en presence*. Os uteri appeared normal on digital examination. The relative position of uterus and contents seemed a little abnormal, and, as I afterward remarked to Dr. Aby, the uterus appeared to me to resemble nothing so much as an old-fashioned wallet slung transversely across the lumbar vertebræ.

On account, however, of the extreme fleshiness of the woman, an accurate bi-manual mapping out of the uterus could not be made. Pregnancy advanced as usual, with few, if any, of the usual unpleasant symptoms, except obstinate constipation, until October 31, on the morning of which day pains set in, together with a slight vaginal discharge of blood of not sufficient quantity to be taken into account. Was called at 1 o'clock, and found the os dilated to the size of a silver dollar, with uterus presenting; os soft and dilatable, but head entirely above reach of index finger. At 4 P. M. I returned to the house and found that dilatation had been completed and diagnosed a left occipito-posterior position.

At 6 o'clock, the liquor amnii, of which there was an unusual quantity, escaped and the head engaged in the brim. Pains now became strong and frequent, but of a peculiar rhythm, and the fœtus was lying directed obliquely to the me-

dian line on the right side. The position of fœtus was rectified, and the nurse directed to retain it in median line, but after two or three pains it slipped completely over, and occupied a position exactly the reverse, on the opposite side.

The pains were of a rhythmical nature; first a pain and contraction of the right lateral half of the uterus would take place, then a short interval, during which the right half of uterus became flaccid, and then the left half contracted and relaxed in turn, with the usual interval of time for rest between.

Pains continued of this character, and notwithstanding all our efforts the fœtus would slip from right to left and *vice versa*, and always obliquely to median line, and though pains seemed sufficiently sustained, no descent of the head could be observed.

This condition of affairs continued during the whole of the night of the 31st without the real cause of their phenomena being suspected. But I concluded to apply forceps as soon as morning came, though I could see no reason for the delay in delivery other than above mentioned, as the pelvis was ample and head not of unsual size. At 7 o'clock in the morning I called Dr. Aby, who arrived at 8.

After an examination and short discussion the Doctor coincided in the opinion that forceps had better be applied, though he could see no other reason than myself why labor should not be completed naturally.

Patient was put under chloroform at 8 o'clock and forceps applied without difficulty by Dr. Aby. Traction was then made with each succeeding pain, but all to no effect, the head descending slightly only to recede within the pelvis as soon as traction was suspended. Finally, after many efforts and much force, the forceps slipped, leaving things in their original conditon. Another pair was applied, and with a like result, except that in slipping the bones of the cranium were fractured and the vaginal wall slightly torn. Again another pair was aplied without difficulty and considerable force applied without reference to pains. This had the effect of bringing the head well down against the perineum, but when it had reached that point, the head being now broken and the bones friable, the

forceps again unfortunately slipped and the head receded to its original position within the pelvis.

This condition of affairs was decidedly provoking and puzzling, and after a short consultation it was decided to make a craniotomy. The perforator was easily applied, and an attempt made to use the forceps to drag down the head, but the cranial bones were so very friable and brittle that only the portion within the grasp of the jaws came away each time it was attempted.

Again and again were the forceps applied with a like result until we gave up the job in despair. The situation was now decidedly interesting; the patient had been under chloroform for over two hours, pulse was weak, respiration shallow and yet the actual condition not changed.

It was evident that something had to be done, and that rapidly, to effect delivery. We decided to make podalic version, and with this purpose in view Dr. Aby essayed for some time to discover and bring down the feet, but to no vail. Each in turn made the same effort, until after a considerable lapse of time Dr. Aby reached a knee and withdrew it; the rest was then easy and the body was delivered. The head, however, required the exercise of all our muscular strength, until finally after a smart struggle it was in turn delivered, to the great bodily and mental relief of two perspiring and exhausted disciples of Æsculapius. Introducing the hand immediately to discover the cause of the difficulty, as nothing about the child suggested the least thought of deformity, and remove the placenta, my hand passed through a sufficiently capacious brim and inferior tract into an *empty uterus*.

Here was a puzzle. The placenta was not yet expelled and was not in the vagina.

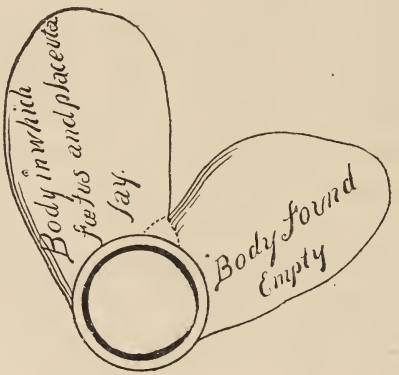
Upon withdrawing the hand to search the cord it came into contact, just within what had been the external os, with a thin, rigid septum extending from superior to inferior margin of what had been the internal os and dividing it into two nearly equal parts.

The cord was now discovered leading up to the operator's left of this septum, and the placenta easily found lying on the

floor of the left—operator's—horn of a now evidently bifid uterus and easily removed.

The bodies of the two uteri were now explored as carefully as circumstances would admit, and it was found that their junction was about what ought to be the internal os—in normal non-pregnant uteri—but that above that portion their bodies were distinct.

The one body, the smaller, lying in the left vaginal region and extending above to a line two inches above umbilicus at right angle to axis of body, while the other, in which the fœtus was evidently developed, and occupied a corresponding situation on the right, but was larger and extended to seemingly, the inferior surface of liver.



The uteri were now emptied of clots, and injections of hot water and vinegar—as delivery was followed by some hemorrhage, made into both with a double current syringe. Things now began to assume a decidedly bluish hue. The patient had been under chloroform over three hours and there had been a second hemorrhage. Pulse weak and exceedingly rapid and respiration shallow.

Injections of brandy, ether, atropia and morphia were administered hypodermically, but to no purpose, as patient succumbed three hours after delivery, as we supposed from the combined effects of chloroform shock and hemorrhage.

A *post mortem* was earnestly solicited, but was refused by the husband.

This case is one that both Dr. Aby and myself thought worthy of record, as the recognition of the true state of affairs was only made after delivery, and we could by no means account for the tremendous difficulty encountered in delivery. Even after the bifid condition of the uterus had been ascertained, it was hard, and is still, to conceive what were the causes which led to the retrocession of the head after it had been brought well down against the perineum, and the extraordinary difficulty which was experienced in its extraction after version.

The obliquity of the long diameter of the fœtus in relation to the line of traction does not alone explain it, as the head and body of the child were not abnormally large, and the pelvis quite roomy. The resistance was simply tremendous, and we are of opinion that this cause alone could not have been operative. Consequently we are lead to believe that the real cause lay in the existence of a double os uteri, the dilatation of one of which was directly opposed to that of the other.

I add a diagram of the uterus and two horns as accurately as we can sketch.

A CASE OF OTITIS PARASITICA—OTORRHEA—DEAFNESS—ARTIFICIAL DRUM-MEMBRANE.*

BY JAMES L. MINOR, M. D., MEMPHIS, TENN.

I have selected this case of multiplicity of diseases, not on account of its novelty alone, but because in relating it several important points in ear disease are emphasized; and, too, the case presents some features of special interest. A synopsis of the case is as follows: *Disease of external ear from vegetable fungus (aspergillus)—cure; chronic inflammation of middle ear, with persistent discharge (otorrhea)—cure; deafness of eighteen years' duration, relieved by artificial drum-membrane.*

Mr.——— consulted me about his ears, January 13, 1888, and gave the following history: Aged 55 years. Never heard

*Read before Tri-State Medical Associaton of Tennessee, Arkansas and Mississippi, 20th November, 1891.

well. In 1849 earaches, and following these discharge from each ear, which continued until 1870, when it yielded to treatment, but left deafness so great that only loudest tones of voice could be heard, and pencil and tablet had to be resorted to. This condition continued until 1880, when the hearing became worse and the discharge reappeared, and so remained until I saw him. I found absolute deafness in the right ear, the drum being retracted, thickened and scarred. In the left ear only the loudest sounds could be heard; the auditory canal was inflamed and covered with a membranous material of a blackish color; there was a perforation about the size of a pin head near the center of the drum, from which pus, from a suppurating middle ear, escaped. My treatment was confined to this ear. The ear was cleansed by syringing with a bichloride of mercury solution (1.5000), then dried with absorbent cotton, and tamponed with boric acid powder.

This procedure was repeated daily, at first, and then at longer intervals, over a period of about a month, at the end of which time all inflammatory symptoms subsided. The hole in the drum remained, however, and the hearing was as bad as ever; hence I decided to try an artificial drum. I first used the little rubber disc, so often tried, and so rarely beneficial, and got no help from it. I then extemporized an artificial drum, by taking a bit of absorbent cotton and moulding it into a thin disc the size of the drum-membrane. This was moistened with equal parts of glycerine and water, and applied to the drum of the ear. As soon as it was properly placed, there was an instant change in the facial expression of the patient, and he joyfully exclaimed that he could hear; that the noises from the street sounded again after a silence of eighteen years, and I was asked to speak, that the human voice might be heard naturally again. I did speak and found that he could hear and understand, when I spoke in an ordinary tone a few feet from him, but that elevation of voice was necessary when I was further removed.

This patient has been under observation for nearly four years. He is still, to all intents and purposes, absolutely deaf, except when an artificial drum is worn, but with it in place he hears well enough for all practical needs. The drum has to

be changed every month or so. Occasionally the middle ear becomes inflamed, and the drum has to be removed while treatment for that affection is practised.

The dark membranous material which came from the ear when treatment was begun, I examined microscopically, and found that it contained a certain form of vegetable mould (*aspergillus flavescens*), which sometimes gives rise to a very obstinate form of inflammation of the external auditory canal. In this instance it yielded to the treatment first instituted, and has not returned.

ANGINA PECTORIS—ITS PATHOLOGY AND TREATMENT.*

T. C. TOWNES, PH. D., M. D.

Professor of Chemistry and Toxicology, Chattanooga Medical College.

The subject of our paper is one which has of late attracted as much attention almost as tuberculosis. Allow me to introduce my subject by citing a case which is now under observation.

Miss Clio E., æt. 11, suffered in 1884 from measles. Some time after that had an attack of malarial fever, when she noticed a palpitation of the heart accompanied by pain in the cardiac region and difficulty in breathing, and was forced to assume the erect posture in order to breathe. Since then there has been a frequent recurrence of attacks.

This patient presents valvular disease, insufficiency of the mitral and aortic valves, with the disturbance of compensation —symptoms of a definite character which do not depend upon a valvular defect.

These symptoms are what may be termed angina pectoris, or stenocardiac paroxysms.

In many cases of heart trouble the patients have no subjective difficulties, or they manifest themselves in the form of dyspnœa, or a sense of oppression, which occur after severe exertion or in connection with disturbance of compensation.

*Read before the Tri-State Medical Association, October 29, 1891.

Here enters the feature—pain in the symptomatology of heart disease, and it presents a definite character.

The classical picture of these paroxysms is that of one of the most dreadful of human experiences. Its characteristic feature is the sensation of impending death—he who never experienced such sensations can not form of them an approximate conception. The dread of death in full consciousness must be a most thrilling sensation. To this sense of destruction are added the pains in the cardiac region, rendering the position more tormenting and unbearable. There is a clawing and grasping pain and a feeling as though the heart were standing still and life ebbing away. But the pain is not confined to the cardiac region alone, but radiates thence to the thorax, even to the arm and the finger-tips. Both arms may be attacked, accompanied by a condition of paresis of one or both extremittes. The phenomena are of varying degree and different duration.

The objective process is also varying and does not always accord with the patient's statements. The victim may be suddenly attacked on the street, he looks for a support, leans against some object and always finds that rest gives the greatest relief. The countenance is unchanged or becomes anxious. Respiration is calm in most cases, though in others may be irregular and deep. Pulse may be in one calm and even, in another arhythmic and presents those peculiarities which are evidence of a definite heart lesion; the heart beat may sometimes be subjectively felt by the patient. The loss of consciousness may sometimes occur, and when it does, it is the result of several factors, as depressed heart action, pain and the feeling of impending death. Certain reflex symptoms may likewise show themselves, such as nausea, vomiting, pain in abdominal organs, etc.

Now in answer to the question which you may ask, under what conditions does this disease develop and what is the explanation ? I will say there are three causal groups to be discussed. First, we have pseudo anginose difficulties, because the pain is not caused by any heart affection; second, those which may be diagnosed as sclerosis of the coronary arteries;

this is the severest and most ominous form; third, those arising from valvular defects.

Many investigations have at times proven that in the hearts of patients suffering from stenocardiac spasms, no modification was formed, but the angina pectoris depended upon vascular convulsions proceeding from the aorta to the vessels of the extremities, and many post mortem examinations show that the condition is based upon sclerosis, especially of the coronary arteries, and it is reasonable to conclude that these arteries may be the seat of this affection like other peripheral vessels.

An endarteric degeneration develops in them, and as a result, further modification of the vascular walls and myocardium. Anatomical investigations have shown that this modification or myocarditis has its origin in sclerotic changes of individual coronary arteries which are particularly end arteries. This condition of the arteries has been experimentally produced by Cohnheim in dogs and the result applies to man also.

In accordance with the stated anatomical condition of the heart, it is probable that the angina pectoris is caused by sclerosis of the coronary arteries. But this is not always the case, for on the other hand "anginous symptoms are more frequent in valvular defects, that is in distinct valvular defects, especially of the aorta." (Note case cited in the beginning of this paper.)

The symptoms of angina pectoris strongly recall neuralgia, and we must confess that we have not progressed much further in the recognition of the disease; that the seat of the pain is in the cardiac plexus, or whether this plexus is alone involved or other places are centers of the affection, we do not yet know. If the affection of the sympathetic is considered in connection with the sense of expiring, with the anxiety and oppression which the patients have, we must assume an affection in the bronchial plexus in order to explain the anæmia and radiating pains in the arms. Whether this radiation takes place in the central nervous system or follows in the peripheral courses, we certainly do not know; that it does take place, though, we conclude from analogous processes in other nerve regions.

The treatment of angina pectoris depends in the main upon the cause. One who smokes a great deal you will certainly forbid to smoke, otherwise all treatment will be baffled. And one suffering from stomach trouble must be freed from this stomach affection. In cases in which the stenocardiac attacks result from endocarditis, with symptoms of valvular disease of aorta or sclerosis or the coronary arteries, first of all regulate the diet and give alkaline waters and employ medicinally the nitrites—nitro-glycerine, nitrite of sodium and amyl.

The amyl-nitrite is given in the condition of angeio-spasm. It is very volatile and is easily administered by putting a few drops on a handkerchief or in the form of glass beads containing five drops, these being crushed in a handkerchief and inhaled. The effect generally shows itself in two minutes or more, the patient experiences a peculiar sensation, a feeling in the head of heat and dizziness.

The nitro-glycerine produces symptoms similar to the amyl, but being a crystalline solid the effects are not so fugacious. It is best administered in solution or in tablet form, increasing the dose, which is from 1-100 to 1-500 of a grain, to the point of toleration; then stop its ingestion and repeat, beginning with the original dose.

The iodide of potassium and arsenic from their general tonic effects, may also be given.

IN WHAT RESPECTS ARE THE THERAPEUTIC INDICATIONS IN ACUTE DIFFUSE PERITONITIS MODIFIED BY THE ETIOLOGICAL FACTORS?*

By THOMAS H. MANLEY, M. D., Visiting Surgeon in Harlem Hospital, New York.

To this question one might at once give a definite and epitomized answer, that in diffuse peritonitis the same therapeutic indications exist, according to causative conditions, as in the general inflammation of any other serous membrane in the body.

Regardless of the causation, the objective treatment

*Read before the State Medical Association in New York, October 28, 1891.

must be identical in all cases of diffuse peritonitis during its acute stages. This will be directed with a view of relieving pain, securing rest, sustaining the patient, moderating the violence of the disease, or aborting it in its early stages.

The fundamental principles which should guide us in the therapy of the malady under consideration, notwithstanding the extensive experimental work of the laboratory and studies of a biological and bacterial character, have undergone no material change in our time.

It was supposed that the antiseptic theory and the discovery that the great lymph sac of the abdomen might be invaded with impunity, would revolutionize the treatment of peritoneal inflammation. But it required only a brief period incontestibly to demonstrate that chemical solutions when introduced into serous cavities, by their irritating action were so frequently followed by direful results, that they seldom or never can be safely employed for flushing the peritonæum. The claim that exposure and manipulation of the peritonæum, is a harmless procedure, is another modern delusion; for we have no evidence to-day, of any description whatever, that the peritonæum is any less vulnerable to violence than it was in a past decade or century.

I.—GENERAL IDIOPATHIC PERITONITIS.

Independent of an infective inflammation arising from a diseased organ or structure and thence propagated to the entire serous membrane, we will meet with peritonitis, in association with those constitutional maladies, in which one or more fibro-serous membranes is the seat of inflammatory changes.

That general peritonitis may develop *de novo*, I believe is beyond question; arising from sudden atmospheric changes, exposure and depressed health.

Malaria, syphilis, tuberculosis, malignant and benign tumors; renal, hepatic and cardiac diseases, with many other maladies, in which the depuration of the blood is defective, the peritonæum is often the seat of a low, insidous form of inflam ation, attended with a large serous effusion.

The causative factors, underlying all those varieties of in-

flammation in every instance, is irritation, the irritant being conveyed through the circulation to the seat of action. A clinical peculiarity marks the different varieties of peritoneal inflammation. They are all *painful* or *painless*. In some of these cases, however, in which the peritoneal inflammation is secondary, is pain generally of a less aggravated description. Indeed, not infrequently, congestion, effusion and absorption, may pass through these various stages without any serious inconvenience, except from the pressure of accumulated fluid, against adjacent viscera.

In all these cases of general peritonitis, arising in connection with certain constitutional maladies, treatment must be directed rather toward the several conditions than to local manifestations.

For that phase of the malady dependent on specific infection, the mercurials will be administered with a free hand; for the malarial, arsenic and quinine; for tubercular, such remedies as modify or arrest the course of that pathological process.

Certainly, when ensuing as a consequence of toxic elements in the blood, which have been derived from an infectious disease, the efforts of the medical attendant must be mainly directed toward neutralizing the poison in the circulation and stimulating the emunctories, to hasten its elimination.

II.—APPARENT IDIOPATHIC PERITONITIS; NOT DEPENDENT PRIMARILY ON CONSTITUTIONAL IMPLICATION.

Of late years it has been maintained by many distinguished authorities, that it is a question whether acute, diffuse peritonitis ever develops, except as a secondary consequence of pathological changes in parts adjacent to the peritonæum; as infection from perforation of the intestine, or propagation of inflammatory changes in structures, over which a reflexion of the peritonæum may lie.

If this position were tenable, one would reason that the whole therapy of acute peritonitis must be revolutionized; for instead of treating the case on empirical lines, as is the practice which generally obtains, we should commence in every

instance by first endeavoring to ascertain the precise etiological factors in operation in each case.

If, for instance, if there were perforation of the intestine, gall or urinary bladder, rupture of an abscess, or extension of an ulcerative process, we would open through the abdominal walls, seek out the source of the original trouble, remove whatever effete or septic material may lie in the way, repair the lesion and close in the parts.

This is the only logical conclusion to which we can arrive in these premises; hence, our therapeutical resort should be rather mechanical and chemical than empirical or vital.

Acting on this assumption, of late years, so extensive and frequent are becoming sections into the peritonæum that a new specialty has arisen, known as "abdominal surgery." And, instead of the ancient cautious, conservative methods, which were characteristic of a past generation of practicioners in dealing with diffuse peritonitis, latterly the scalpel has been boldly taken in hand, the abdomen opened, its contents freely and leisurely manipulated, the peritoneal cavity drenched with chemical solutions employed to destroy infective agencies and prevent the further advance of inflammatory changes. Besides, a tube was left in the gaping wound to carry away the residue remaining of effete products.

Very often when the abdomen was opened, in conformity with this line of practice, no well defined local lesion could be discovered, but rather a yellow plastic, flocculent material, in places partly organized and adhesive, and again, more or less of it undergoing disintegration.

When the belly was opened under these circumstances, the consequences were usually mortal, few surviving twenty-four hours after the operation.

While the theory which has been advanced, that general acute peritoneal inflammation always arises from local morbid changes, is not wanting in pathological support, as revealed by post-mortem examination in the majority of cases, yet, when we have a correct knowledge of the wonderful and peculiar property of the peritonæum in walling off and confining suppurative accumulations, sealing up perforations, absorbing secretions, and often providing a vent for them through the ex-

cretory ducts, we can the better comprehend the processes of nature, called into active operation when the integrity of this serous membrane is threatened.

The present general reaction, both in America and Europe, against the employment of antiseptics, chemical solutions of every description, in the surgery of the serous cavities; the conceded imminent danger to life always attendant on incisions which entail exposure of the abdominal organs; the additional risk connected with pulmonary anæsthesia, in the presence of a high temperature and active inflammatory processes, have each and all served as warning, which none but the rash and reckless will ignore, and which, after all, in the treatment of general diffuse peritonitis, have left us about where we were when opium was regarded as our sheet-anchor.

Admitting, then,in part at least, that general, acute peritonitis is most frequently a secondary process; still, when measures are instituted which contemplate the exploration of the peritoneal cavity, and dealing directly with diseased foci or the primary lesions, such intervention is attended with so much danger to life and the prospects of recovery so much lessened, that our reliance must be rather on tentative than radical methods; on internal, epidermic and hypodermic medication; on sound hygiene and such measures as will sustain the strength, until the violence of the disease is spent.

III.—TREATMENT OF PERITONITIS AS BASED ON CLEARLY DEFINED ETIOLOGICAL FACTORS.

Owing to the periodical activity of the female generative organs within the pelvis; to their abuse, their frequent pollution by infection through contaminated wounds along the genital tract; and to the demands of modern life in women, peritonitis, local and general, is a very common disease. But with them it usually pursues a subacute or chronic course, except in the puerperal variety, and is, comparatively, seldom fatal.

I never saw but one case of non-traumatic peritonitis, in the female, end fatally.

On the contrary, with the male, diffuse acute peritonitis is a comparatively rare disease. It runs a short acute course and is attended with a great mortality.

This notable contrast in the sexes; the clear and unmistakable etiological factors in the one, and the greater gravity in the other, have a distinct and important bearing on the question of treatment.

The pain of peritonitis, in women, not being so violent, is better borne; we may deal with her case in security, with milder measures. But with the male, our intervention must be prompt and energetic; for peritoneal pain, if not subdued, is quickly mortal with him.

Now, the physician, in the presence of a typical case of general acute peritonitis, devoid of complications, must not stop to concern himself about the original, etiological factors, but proceed at once rather to deal with *a condition*. This brings us to the question of treatment, and the fundamental principles by which we shall be guided in dealing with acute general peritonitis of the type under consideration.

Let us see what our patient's condition precisely is at the onset of his malady, that we may the better learn what the therapeutic indications are:

First. He is suffering from bodily weakness; he sleeps little and has lost his appetite. The heart's action is feeble and accelerated. The temperature is elevated. He is in constant pain, of varying intensity. He is in a melancholy state of mind. There may be more or less thirst. He lies on his back with his knees raised. Coughing, sneezing, sighing, or bodily movement increases his distress; hence his abdominal and thoracic muscles are more or less fixed, and he respires with short, shallow gasps. The belly is hard and flat, though in cases of great gravity it may be tympanitic. The bowels are closed and urination may be difficult or impossible.

The integument and subcutaneous tissues, over the ventral regions, anteriorly, especially, are extremely sensitive to pressure; and the cellular membrane, immediately beneath the skin, along the muscular planes, is the seat of a free inflammatory exudate.

Clearly, our first move will be to place our patient in such a condition as to best resist the violence of the disease and prevent it from making further progress. Here we will find that to a large extent, nature has anticipated us. The body is

in a state of rest; secretion is in abeyance. The inflamed muscular coat of the intestine is paretic, and hence peristalsis has mostly ceased. Digestion for the time is impossible, and we are warned not to force it, by the persistent loathing for food, which is always present.

The system craves liquids, but the stomach will not tolerate them in large quantities.

The first indication in the acute stages of peritonitis, will be to relieve pain.

It is my conviction that it is of no consequence what the agency be which we employ for this purpose, provided, its use will not seriously jeopardize life. Hence, why, not infrequently, free leeching of the abdominal parietes, the application of moist heat, sinapisms, or blisters, often act in a prompt and salutary manner. And, if not alone, they will in conjunction with other remedies, serve a most useful purpose.

When, however, the pain is of an aggravated character, we must employ a drug which will quickly ameliorate or wholly control it.

For this purpose there is nothing in the pharmacopœia that will equal opium; for it serves in a marvelous manner, many important purposes: (1) as an analgesic; (2) as a narcotic; (3) as a mental exhilarant. Authors have been said to employ it to "lock up the bowels" and to "splint the intestines." This is "far-fetched" and without any foundation in fact; for, from the onset of the malady, the intestine is crippled, and constipation is the rule. So continuous and protracted is this, that of late, since the abdominal incision is regarded as so trivial a matter, there are cases reported where the inexperienced have mistaken this paretic state of the intestine for internal obstruction and opened the abdomen, to find nothing.

Nor is any splinting necessary, but rather relaxation; for the inflamed and infiltrated abdominal walls, in a state of spasmodic contraction, hold the visceral contents in a tight grip.

Opium is the ideal remedy here, for it buoys up the spirits and relieves pain; secures to the patient ample sleep. What it accomplishes toward the full restoration to health beyond this is in an indirect manner.

Unhappily, however, the free administration of opium and its alkaloids is full of danger in the hands of the incautious, or inexperienced. Idiosyncrasies must be watched for and the cumulative action of the drug guarded against. It should be always administered hypodermically, commencing with small doses. For its full therapeutic effect, the drug must be given freely and frequently. This necessitates a large sacrifice of time on the part of the medical attendant. And if he is not ready to make it, then his patient's chances of recovery will be better by the employment of some other remedy, attended with less risk to life.

Opium, though without a rival in peritoneal inflammation, yet after all in itself serves but a subordinate purpose; for the relief of symptoms only. It makes no impression on the underlying pathological process, but may, through masking symptoms, give rise to delusive hopes, so that the patient may imagine himself out of immediate danger, while mortal changes, only too manifest to the medical attendant, declare the approaching end.

Mercury, since time immemorial, has been known to exert a specific action on inflammation.

In the inflammation of serous membranes, if administered with energy and intelligence at the onset of the attack, it stands unrivaled, serving the double purpose of arresting the plastic exudate and hastening its absorption. In conjunction with opium, it constitutes a sovereign remedy. Simultaneously with opium its administration must be commenced. Nor should we be deterred because, when excessively or injudiciously employed, salivation or its toxic action may occasionally occur. Used with proper discrimination and judgment, this painful complication should seldom or never arise. As the stomach is extremely sensitive in peritoneal inflammation, the most effectual manner of administering the mercurial salts will be either by hypodermic injection or by inunction. It must be unsparingly employed, in all cases, until one of three things is distinctly manifest: 1st, that its therapeutic effect has been partly attained; 2d, that symptoms of ptyalism are present, with no abatement of the disease; and 3d, when signs of approaching dissolution are evident.

In diffuse, acute peritonitis, then, opium to secure comfort and mercury as an antiseptic, if you like, or antagonistic to those toxic, lethal elements in the blood, which in high fever always paralyze cardiac impulse.

Proceedings of Societies.

NEW YORK ACADEMY OF MEDICINE—SECTION ON ORTHOPEDIC SURGERY.

STATED MEETING OCTOBER 16, 1891.

Dr. Royal Whitman presented a patient, illustrating the application of a brace for the more perfect fixation of the spine in disease of the middle dorsal region. The appliance consisted of two saucer-shaped pads covering the prominence of the shoulders, connected by an unyielding steel bar, passing across the chest; and two triangular hard rubber pads covering the lower two-thirds of the scapulæ, connected by a steel bar. The Taylor back brace was applied as usual, and the back bar attached to its upper portion. The shoulders were then pressed back to their full limit, the front pads placed in position, and firmly attached to the brace of straps passing above to the neck bar, and through the axillæ to the back pads which held the scapulæ against the thoracic wall. Motion of the spine was thus confined entirely to the neck. Although the necessary movements of the arms were not restricted, forward reaching movements, which were always accompanied by flexion of the dorsal spine, were entirely prevented. This principle, the restraint of certain movements of the arms which tended to increase the existing deformity, was the point to which he wished to call the attention of the society, as he was not aware that its importance had before been insisted on.

Dr. R. H. Sayre fully agreed with Dr. Whitman as to the necessity of keeping the shoulders back in this class of cases, but the difficulty hitherto had been to maintain such apparatus in proper position. In a paper which he had read at the re-

cent meeting in Washington, he had called attention to the fact that then the disease was situated high up in the dorsal region, the plaster of paris jacket did not give proper support, because it fai ed to hold the shoulders back, and that in such cases he was in the habit of employing pressure backward on the tips of the shoulders.

Dr. Newton M. Shaffer thought that the apparatus exhibited acted admirably in fixing the shoulders, but it was open to the grave objection that by exerting pressure on the scapular plates in this way, the uprights are prevented from exerting the proper amount of pressure at the seat of the disease, and so the apparatus was not able to arrest the traumatism of respiration. He thought this was a defect inherent in the apparatus, and not, as Dr. Whitman believed, simply an accident, due to improper fitting of the brace to the patient's spine.

Dr. Whitman replied that he thought the apparatus exerted all the pressure that the skin would bear, and that by slightly modifying the curve of the uprights, the defect noticed by Dr. Shaffer would disappear. His object in presenting the apparatus was to elicit a discussion on the question, whether or not it was desirable in this particular class of cases to attempt to control the forward movement of the shoulders.

BOND'S OPERATION FOR TALIPES VALGUS.

Dr. A. M. Phelps presented a young man whom he had been treating for a number of years for a very severe case of Talipes Valgus. Almost all methods had failed to give more than temporary relief, although in one instance there was no relapse in the case for a whole year. The patient constantly wore a support for the arches during the time.

The patient sought relief not so much on account of the deformity, as because of the severe pain which he suffered, and which prevented him from standing on his feet; without shoes, he could hardly walk. His occupation was printing.

In conversation with Dr. Bond of Westminster Hospital, London, England, Dr. Phelps had learned of the operation which, in its author's hands, had been successful.

The operation performed by Dr. Bond was for the purpose of relieving the pain, which it certainly does. He alluded to the operation, as "firing," the same as is done for the relief of spavin in a horse.

The operation consists in making transverse incisions with a Paquelin cautery, beginning at the inner malleolus, and extending one-third of the distance across the sole of the foot, cutting through the cellular tissue down to the muscles. About four of these incisions suffice. Two semi-circular in-

cisions are made, crossing the transverse ones. It seemed to Dr. Phelps that if the arch of the foot, before the operation is performed, were well shoved up in place, and held with plaster of paris for a few weeks, that the shortening of the tissues in the sole of the foot by cicatricial contraction would be more effectual, and would hold the arch in the normal position.

The operation when applied in this manner for the purpose of shortening the girders of the arch of the foot is identical in principle with an operation which Dr. Phelps performed and reported to the American Orthopedic Association in 1889.

The objection which has been urged against the open incision methods for talipes equinus is that the scar is quite likely to be sensitive, and it is interesting to note that in this case, the amount of the scarring being considerable, the patient walks upon the scarred tissues without any pain, and is able to work at his trade. The only support to the foot needed is an ordinary shoe, slightly thickened on the inner side.

Dr. R. H. Sayre said that the amount of pain experienced in these cases of flat foot bears no relation to the amount of deformity. This patient's foot is still turned outward, and as in many other cases when the foot is brought into the normal position, there is a very noticeable involuntary twitching of the peroneal muscles. The patient had been made comfortable once before for a period of a year, so that it was entirely too soon to say that the case would not relapse. As the arch of the foot is in large part maintained by the deeper structures, it seemed doubtful whether the scar tissue, which did not go beneath the muscles, would be sufficient to hold up the arch, although at present it did this very well.

Dr. A. B. Judson said that in view of the well known fact that cicatrices after burns contract persistently and with great force, the operation was not only ingenious, but quite likely to prove successful.

Dr. Whitman thought the operation absurd and extremely unscientific. No case of flat foot is cured until the important movement of abduction is perfectly free to its utmost limit. In the present instance abduction is not possible, and the case is only relieved, not cured. The only way to cure flat foot is by increasing the power of the muscles which support the weak portion of the foot.

Dr. Halsted Myers said that as the pain in flat foot is largely due to periostitis about the attachments of the ligaments involved and in the joint structures themselves, this operation with the Paquelin cautery might act beneficially by counter-irritation, just as it does in many cases of joint disease else-

where. Relief from pressure during the healing of the wound was also an important factor in the cure.

The president stated that if this procedure of Mr. Bond gave permanent relief from pain, it would constitute a valuable accessory to our methods of relieving this troublesome symptom. In working people, in whom this deformity occurred most frequently, the question of a perfectly formed or imperfectly acting foot was secondary. What patients wanted was first, relief from pain, and secondly, feet that would give them an opportunity to earn a livelihood.

Dr. Phelps, in closing, said that the case was not presented as a cure for the deformity of hallux valgus, but that the flat feet seemed to be cured.

He had never observed periostitis in cases of flat foot, but he had frequently seen inflamed medio-tarsal joints, the result of pressure, and even the growth of new bone about the joints precisely as is seen in severe forms of lateral curvature.

The scaphoid bone is really the key-stone of the arch, and when it is dislocated downward by the lengthening of the tissues in the sole of the foot, it causes great pressure. The patient will experience pain. This pressure, long continued, results in inflammation and growth of bone about the joint.

He thought it more scientific to shorten the girders of the sole of the foot than to do an osteotomy.

A CASE OF MULTIPLE JOINT DISEASE.

Dr. R. H. Sayre presented a little boy who had had a strange combination of diseased joints, without any rheumatic history.

When about two years old the boy had a severe attack of scarlet fever, which was followed by an ischio-rectal abscess and double otitis media, which still continues. About ten months after the attack of scarlet fever he fell, and shortly afterward the left knee became swollen and tender. A splint was applied and the knee soon appeared well. Shortly after this the right knee and the right hip joint became successively inflamed. He was then treated for about a year by traction, first in bed and afterward with a long traction hip-splint. After this, the left knee, the right knee and the left shoulder became successively inflamed, and so severe was the inflammation in the shoulder that at one time it was almost completely anchylosed. In 1888, after an injury, the right knee and right hip became swollen and tender, and it was at this time that the case first came under his observation. After the flexion had been overcome, a splint was applied, which produced traction on both the knee and hip joint. Photographs were exhibited

showing the case with the splint applied. Last July it was considered safe to remove the splint. At present he has no pain, extension is good, and flexion can be made to a right angle. There is almost perfect motion at the hip joint. He had looked upon the joint lesions as probably tubercular, but it was possible they were metastatic.

Dr. H. L. Taylor did not believe the joint lesions were tubercular.

The President also thought the whole clinical history pointed away from tubercular disease, and that the scarlet fever had probably given rise to a rheumatoid condition.

Dr. A. M. Phelps said the trouble was either rheumatic or metastatic, and as the joints did not suppurate, the former was the more probable origin. While the application of the splint probably assisted in bringing the case to so favorable a termination, it was quite likely that constitutional treatment alone would have been sufficient. He had been misquoted with reference to the occurrence of flexion at the hip joint. Where the *whole* number of case have been reported, he believed the statistics would show that not 5 per cent have recovered without angular deformity, yet he believed that not one single case of hip joint disease need recover with angular deformity.

Dr. Sayre said that it was not material to this discussion whether the joints were tubercular or septic. The point he desired to bring out was, that no matter what the nature of a long-continued inflammation of a joint, protection of that joint is necessary. He agreed with Dr. Phelps that no case of hip joint disease ought to have angular deformity.

AN UNUSUALLY SEVERE CASE OF CONGENITAL LATERAL CURVATURE.

Dr. R. H. Sayre presented such a case. The patient is now fourteen years of age, but her mother says that at birth the deformity was nearly as great as now. It was one of the most severe congenital cases he had ever seen, and she first came to him one week ago. Examination at that time showed that between the lower and upper ribs was a large V-shaped gap through which the liver could be felt. At the age of six years, she had pneumomia, and shortly after this an abscess, which was probably connected with the pleura, opened through the right thoracic wall. Her breathing is puerile; there is no cardiac lesion. At the time of her birth the child presented transversely, and the labor was difficult, so that it was possible that this may have had something to do with the deformity. He thought all the ribs were present. When first seen, her height was four feet six and three-quarter inches, but after

being suspended there was a gain of five-eighths of an inch. He desired to call particular attention to this increase in the height as the result of the suspension. In another case, between September 5 and October 15, there had been a gain of three-fourths of an inch; in another, there was also a gain during a month of treatment of three-fourths of an inch, and in still another, which measured before treatment four feet nine and seven-eighths inches, the measurement after about a month was five feet one and one-eighth inches.

Dr. H. W. Berg said that the mere fact that the patient had such excellent use of her limbs would show that the curvature was not due to a lesion of the brain or spinal cord. If the ribs were congenitally absent, there would be sufficient cause for the curvature without supposing any injury during labor.

Dr. Judson remarked that the case was an illustration of the fact that in lateral curvature, the kyphosis is sometimes very considerable, and may be as serious as in Pott's disease.

The President said that some years ago he had called attention to the frequency of lateral curvature in very young children, most of which he believed to be of congenital origin. He had repeatedly urged the necessity of the careful examination of infants' spines, as a matter of routine, and thus, were deformity present, an early opportunity for treatment. He believed that were this done, we should not see such distressing deformity as Dr. Sayre had presented. Quite recently, Dr. F. Beely, of Berlin, had pointed out that in these early cases of scoliosis the bones of the head were not symmetrical. The case just presented was instructive as showing how great may be the deformity in cases which have not had the benefit of early and judicious treatment. Notwithstanding the deformity develops very slowly, so many cases apply for treatment with the deformity well marked, that he was inclined to believe that a large proportion of all cases of scoliosis in children are congenital.

Dr. V. P. Gibney presented a case of hip disease showing

A REMARKABLE RECOVERY BY NATURE'S METHODS.

A boy of eight years was admitted to the hospital in 1882 with disease of right hip in second stage. Family history, tuberculous. Disease dated back to the previous April. On admission, he was fairly nourished, hip flexed to 100 deg., and held in this position, *Practical* shortening of three and three-fourths inches. On July 7, 1883, flexion had increased to 135 deg., and an abscess filled the whole gluteal region. On October 12 the abscess opened. November 18 he had become

greatly emaciated, pale and waxy, the thigh acutely flexed on the abdomen and abducted, the head being apparently dislocated on the dorsum, while the whole thigh from the junction of the lower and middle thirds to the trochanter major was undermined, and large quantities of pus were discharging from two sinuses. Could only sleep with the aid of two drachms of the U. S. solution of morphia, and his condition was so bad, that it was thought there was no chance of his recovery, and he was advised to be taken home. On the 27th of November he was visited by a member of the house-staff, who found him suffering from diarrhœa and night sweats, with poor appetite, a pulse of 130, and a temperature of 101 deg. On the 7th of December his condition was about the same, except that a bed-sore, as large as a half dollar, had formed over the trochanter on the sound side. Not seen again until October 14 of the present year, when he returned, looking hale and hearty. He said that, after leaving the hospital, he had been confined to bed for one year and a half, and had then begun to go about on crutches. For the past four years he had been wearing a five-inch high shoe. The site of the old abscesses and of the bed-sores are marked by very large cicatrices; the angle of greatest extension is 100 deg., and that of greatest flexion, 90 deg.; the abductors are very tense. His measurements are as follows: R. A., 27½; R. U., 30; R. T., 6 inches down, 13½; R. K., 12; R. C., 10¼; L. A., 29; L. J., 36; L. T., 6 inches down, 17¼; L. K., 13; L. C., 11¾.

THE NECESSITY FOR EARLY MECHANICAL TREATMENT IN INFANTILE PARALYSIS.

Dr. W. R. Townsend read a paper with this title, calling attention to the various stages, the methods of making a prognosis as to return of power and as to deformities resulting, and demonstrating the value of mechanical treatment in all stages, but especially in that before the appearance of deformity as a method of prevention.

Dr. H. W. Berg called attention to the importance of avoiding heavy apparatus, which often seriously interferes with the paralyzed muscles. In addition to this, all such apparatus should be applied from a *healthy* fixed point of support. One of the most troublesome symptoms in long standing cases of infantile paralysis is the low surface temperature. He had given relief in two recent cases by wrapping the limbs at night in cloths wrung out of ice water, and covering these with warm bed-clothes.

Dr. Whitman said that the author spoke of equinus and equino-varus as the most common deformities in untreated

cases. Equino-valgus he thought to be the most common deformity in treated cases, and it was very difficult to prevent.

Dr. Shaffer said that in the fourth stage, where contractures occur, and paralyses are very pronounced, he had met with a very surprising series of cases. He had records of four cases of equinus in adolescents and adults, where the anterior tibial muscles and the quadriceps extensor femoris were involved, and the patient sought relief on account of the deformity of the feet. He had, by means of his antero-posterior traction shoe, restored considerable power to the muscles. Another important point was the improvement in the nutrition of the feet resulting from this traction. One patient used to come periodically, as she expressed it, to "get her feet warm." Not only would the feet get warm during the application of the traction, but they would remain so for the rest of the day. He had never seen such results follow the use of electricity and massage, and similar methods of treatment, with or without tenotomy. Of course, in calcareous cases, this traction can not be applied, and hence these desirable results can not be obtained. The cause of the improvement seemed to be the peripheral nerve irritation occasioned by the traction, exerted principally upon the gastrocnemius and all the other resisting tissues. He had known the calf circumference to increase half an inch by actual measurement during a month of this treatment.

Dr. R. H. Sayre thought that one explanation of the increased power of the quadriceps extensor could be found in the fact that the feet were placed in a position where they can be used more advantageously.

Dr. Judson considered the paper worthy of much attention, and it was a matter of congratulation that the profession at large already recognized the importance of sending these cases to orthopedic surgeons.

Dr. H. L. Taylor thought that we might go even further than the author, and state that a very large majority of the deformities of the lower extremities are preventable by proper orthopedic treatment. A very badly deformed foot from slight paralysis will often prevent the use of many muscles, and even where muscular power can not be restored, proper mechanical treatment will often secure to the patient very respectable locomotion. Mechanical treatment, by enabling the patient to go around more naturally, will often increase the warmth of the limbs, but for very bad cases he had for a long time made use of hot, dry air, or of two woollen stockings, one underneath and the other over the brace, to keep up the proper temperature over the parts.

The President said that it was a popular idea that braces tend to bring an increased weakness of limbs and various dis-

orders, and until recently the great obstacle to beginning mechanical treatment in the early stages has been the opposition of parents and of the attending physician. Within the last year he had seen two or three cases quite early, and had noticed a stage of tenderness, which might possibly prove a temporary contra-indication to mechanical treatment. He did not think this condition had been mentioned very generally by orthopedic writers.

Dr. Whitman said that he had many times met with this condition.

Dr. Townsend, in closing the discussion, said that he thought much of the opposition to braces arose from the fact that orthopedic surgeons were not agreed among themselves as to what kind of apparatus was most suitable for the treatment of the different classes of cases. He desired to emphasize the importance of that part of the paper which refers to the experiments of Mr. Young on electrical examinations of muscles. If by such an examination, one could ascertain that in a given case contractures and deformity would result, the task of persuading parents to allow their children to receive early orthopedic treatment would be a much easier one than now.

ADAMS COUNTY MEDICAL SOCIETY.

NATCHEZ, Miss., Nov. 13, 1891.

Editor New Orleans Medical and Surgical Journal:

The Adams County Medical Society met at the office of Dr. N. L. Guice on Tuesday, Nov. 3, 1891.

The committee appointed at the last meeting to draft a fee bill, made report through Dr. L. H. Lamkin.

The entire session was given up to the consideration and revision of same.

Below are given the fees for the ordinary work:

Day visits within limits of City of Natchez, $2.50.

Night visits within limits of City of Natchez, $4.00.

Office consultation and examination, $2.00 to $10.00.

Visits to country, $2.00 for first mile and $1.00 for each succeeding mile or fraction thereof.

The secretary was authorized to have a sufficient number of printed copies made and forwarded to each member of the society and physician of Adams County.

The reading of Dr. Hall's paper was deferred until the December meeting.

Dr. L. H. Lamkin was appointed as assayist for the January meeting.

The meeting then adjourned.

P. BEEKMAN. M. D., *Secretary.*

The Mississippi Valley Medical Association held its Seventeenth Annual Session at St. Louis October 14, 15 and 16, 1891, President Dr. C. H. Hughes, of St. Louis, in the chair. The attendance was large, the papers numerous and valuable. Dr. I. N. Love, the incomparable chairman of the committee of arrangements, and his able assistants, deserve unstinted praise for their provision of receptions, rides, dinners, suppers, banquets, fine weather and full moon. Dr. C. A. L. Reed, of Cincinnati, was elected president; Dr. E. S. McLee, Cincinnati, re-elected secretary; Dr. C. S. Bond, Richmond, Ind., first vice president; Dr. J. H. Stucky, Louisville, second vice president; Dr. Joseph Ransohoff, Cincinnati, chairman committee of arrangements. Place of meeting, Cincinnati, October, 1892.

The next annual meeting of the American Health Association will be held in the City of Mexico, commencing Nov. 30, 1892. It is expected that arrangements will be made whereby especially low transportation rates will be secured, so that the expense incurred by members residing in the United States and Canada in attending the meeting, notwithstanding the greater distance, will not greatly exceed that of former meetings. The great interest and activity exhibited in public health matters by the delegates from Mexico indicate that this meeting will be made one of unusual interest and prominence. Papers will be received, under the by-laws, upon any subject relating to the public health, but the executive committee have voted to invite, and give preference to, papers on the most dangerous communicable diseases. The association will hold its meeting in 1893 in the city of Chicago, and, so far as possible, the occasion will be made an international congress of hygiene and public health.

THE CHATTANOOGA MEDICAL COLLEGE,

a school requiring three years' study, has now entered upon its third year of good work and earnest efforts on the part of both faculty and students. Their number is now 102, good and faithful men.

A Crematory in Troy.—The new crematory to be erected in Oakwood Cemetery, Troy, the gift of Mr. Wm. S. Earl, will probably cost $150,000. It is to be of granite, 136 feet long and seventy feet wide, and will be a mortuary chapel and retort.

Correspondence.

Dr. A. McShane, Editor of the New Orleans Medical and Surgical Journal: Dear Sir—Permit me to answer the editor of the *Medical Standard* of Chicago, through your columns, in regard to his comments upon the report of the monster, that I have purposely worded the sentence in such a manner as to show that the monster was not altogether dead in spite of all abnormal conditions, and, besides, to create a discussion upon the subject of children born alive; but, as that gentleman's conscience seems to be materially disturbed, I will state for his benefit that said monster never uttered a sound; that it made two or three convulsive movements with its *left leg* only. About turning it over and away from me, it was in consequence of that horror which I felt, and which I shall never forget, when I received the subject in question into my hands. Being born alive and being viable are two widely different states of affairs.

Ask that gentleman to please read that article and cut *carefully;* then he will find that life in this instance was out of the question; that all conditions were abnormal; that there was dropsy of the amnion-fluid; that the fœtus was born before maturity; that the cerebrum attached to the base of the skull was about as large as half of a hen's egg; that there was no cerebellum at all, but, instead of it, only some bloody serum. The monster, as I said in my report, was rigid, such that you find in a body in which rigor mortis had fairly set in; and, if that gentleman wishes, I will send him the photographs, upon which he can see *lock jaw* plainly pictured, although he could not do so upon the cut.

Si tacuisses.....

Respectfully yours,
H. J. Gabert, M. D.

We learn with great pleasure that the Minister of Public Instruction has selected our distinguished friend, Dr. E. J. Moure, founder and editor of the "*Revue de Laryngologie, d' Otologie et de Rhinologie,*" to deliver an official course of lectures on diseases of the ear, nose and throat at the Faculty of Medicine of Bordeaux.

This appointment will certainly meet with general approval in France, where the newly elected professor is considered as one of the ablest representatives of his specialty. His numerous friends and admirers abroad will also recognize this official reward as a deserved compliment.

Dr. E. J. Moure is the founder in Bordeaux of the first special clinic (outside of Paris) for the treatment of diseases of the ear, nose and throat. Several of his chiefs of clinic have already acquired in Bordeaux, Boulogne, Paris and Marseilles an enviable reputation, which they owe to the teachings of their professor.

His works on diseases of the nasal fossæ and naso-pharyngeal cavity; his lectures on diseases of the larynx; his study on laryngeal cysts; his translation of Morell Mackenzie's book, and numerous other scientific memoirs, have rendered his name familiar to all interested in the study of this specialty.

All fair-minded physicians, and those interested in medical education, will gladly welcome this appointment, from the fact that it is the first official recognition by the Faculty, and by the Government, of the importance of otology, rhinology and laryngology, as special branches of medicine.

Unlike Germany, Austria, and most other countries, France has been very slow in establishing special chairs in her Faculties. But now that, in Paris, men like Fournier, Guyon, Ball and Panas have successfully removed the narrow-minded opposition of the official Faculty and have led to the creation of chairs on their specialties, let us hope that the appointment of Dr. Moure, in Bordeaux, is but the entering wedge which will induce the Faculties of Paris, Lyons, etc., to create similar chairs. France will have then no cause to envy her neighbors, and will be fully able to retain a large number of foreign students, who, ignorant of the great private facilities of Paris, flock every year to Vienna and Berlin on account of the official recognition given in their Faculties to these special branches of medicine.

A. W. deR.

N. O. Medical and Surgical Journal,

Established in 1844.

PUBLISHED MONTHLY, $2.00 A YEAR.

Articles from physicians are respectfully solicited. All articles, news and exchanges, and books for review, should be sent to the Editor, New Orleans Medical and Surgical Journal. Business communications should be addressed to the Business Manager, New Orleans Medical and Surgical Journal.

Edited and Published by

AUGUSTUS McSHANE, M. D.

Collaborators:

DR. F. W. PARHAM. DR. H. W. BLANC. DR. A. W. De ROALDES.
DR. R. MATAS. DR. JOHN DELL'ORTO.

Editorial Articles.

"LYSÆMIA," THE LATEST ADDITION TO MEDICAL NOSOLOGY.

It has been well said, that he who finds a suitable name for a complex of symptoms renders a service upon the human race. The latest member of the medical world to deserve this distinction is Dr. E. H. Martin, of Green Grove, Mississippi.

The Southwestern States have been the scene for some years of a form of malarial fever that is remarkable for its most prominent symptoms—hæmaturia—and also for the great mortality attending it. The medical journals of these States contain many articles upon the subject, but until recently it can hardly be said that they threw much light on the disease, or helped to lower the mortality. The literature of malarial hæmaturia is colossal—one indication that the malady was not well understood. During the past few months, the Journal has contributed its share to the general fund of knowledge, and it feels that the modes of treatment advocated by the writers are all based upon sound logic. Modern medicine demands a rational treatment—a treatment based upon a clear

comprehension of the pathological conditions to be corrected. Where these are clearly made, remedies of known powers can be applied to restore the system to the normal.

The latest of the articles on this subject that the JOURNAL presents to its readers (published in this number) is evidently the outcome of careful thought and wide experience. It is a paper which should be carefully read by all physicians practising in localities infested with malaria. Dr. Martin has quite clearly made out the pathological condition, and has rationally applied his remedies to correct it.

The derivation of Dr. Martin's appellation (lysæmia) for the old-time "malarial hæmaturia," is given in his paper. "What's in a name?" A great deal. A well-selected name for a disease will indicate the dominant pathological condition, and may serve as a guide to the plan of treatment to be followed. Dr. Martin's term very aptly indicates the debased condition of the blood, which is the chief factor in "malarial hæmaturia;" and it futher emphasizes the importance of purifying and *reconstructing* the circulating fluid. That the therapeutic indications thus outlined are fully met is amply shown by the results of Dr. Martin's plan of treatment.

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* *

"Lysæmia," however, is not confined to the Southwestern States. Italy has been the scene of many deaths from this formidable disease. In THE NEW ORLEANS MEDICAL AND SURGICAL JOURNAL, February, 1889, there appeared a translation of an article by Dr. Tomasselli, of Catania, on a condition which he labeled "Ictero-hematuric Fever from Quinine" (quinine intoxication). Tomasselli's article is well thought out. The pathology is exhaustively considered, but the details of his plan of treatment are lacking. Dr. Martin's paper admirably supplements Tomasselli's in this respect.

Dr. J. W. McLaughlin, of Austin, Texas, has also in the same volume of THE JOURNAL (March, 1889) a paper on "Hæmorrhagic Malarial Fever." The doctor briefly sketches the history of the disease, the first case of which was observed in 1794. The disease has prevailed largely in the Southern States since the civil war, and, as Dr. McLaughlin remarks, "the most valuable literature upon the symptoms and treat-

ment of hæmorrhagic malarial fever that has been published since 1865 is to be found in our Southern medical journals." Dr. McLaughlin entertains some original views upon the pathology of the disease. The reader is referred to his article, which is in keeping with the other productions of his scholarly pen.

ELECTION OF RESIDENT SURGEONS AT THE EYE, EAR, NOSE AND THROAT HOSPITAL.

At the meeting on the first Wednesday in January, 1892, the executive committee of the Eye, Ear, Nose and Throat Hospital will elect two resident surgeons for the ensuing year, the appointees to enter upon their duties immediately after their election. Physicians desirous of availing themselves of the unusual facilities offered by this institution should send in their applications at once to the secretary, Mr. Jos. A. Hincks, 23 South Rampart street.

Abstracts, Extracts and Annotations.

SURGERY.

SURGICAL TREATMENT OF PILES.

On the basis of 200 cases of operation on hemorrhoids, Allingham (*Medical Press and Circular*, 1891, No. 2724) discusses the surgical treatment of this disease.

He divides hemorrhoids into two groups: the first including those which come down at stool, and those which are almost always in a state of prolapse and bleed profusely at each act of the bowel. In this class of cases the quickest operation is the best, since as a result of long-continued hemorrhage there is always considerable anæmia, and therefore it is of prime importance that as little blood as possible should be lost from the operation, and that there should be a minimum of risk of secondary hemorrhage. These requirements are ful-

filled by the ligature, which can be applied in a very few minutes, and is practically free from any danger of after-hemorrhage.

The second group comprises those piles which are chiefly troublesome because of the inconvenience they occasion, since they are prone to come down and prevent the patient taking any active exercise. These piles rarely bleed, and do not otherwise interfere with the enjoyment of good health. Here the great point is to select the least painful operation. The best modes are crushing or simply cutting off the piles and picking up any vessels that may bleed.

In the operation of ligation with incision the pile is drawn down by a vulsellum and separated from the muscular and submucous tissues upon which it rests. The incision is made upon the skin at the junction of the mucous membrane, and is carried up the bowel, so that the pile is left connected by vessels and mucous membrane only. A strong silk ligature is then tied as tightly as possible, and the ligatured pile is returned within the sphincter.

This method is very well suited to piles which are large and vascular, and are inclined to be sessile rather than pedunculated. It should be applied to patients who have any tendency to cardiac or kidney disease, or where there is a thrombosed condition of the vessels. It is the best to use when patients are feeble. Ligature is, in fact, the safest operation. Its drawbacks are that the wound takes some time to heal, there is more pain after operation, and on the first motion of the bowels, than after crushing or simple excision. There is more sloughing or suppuration until the ligatures have separated, and hence there is greater liability to some contraction.

The crushing operation consists in drawing the pile by means of a hook into a powerful screw-crusher, which is tightly screwed up, and distal end of pile cut off. The crusher should be applied on the longitudinal aspect of the bowel, and should be left on the pile for about two minutes. This operation should be used when the piles are medium-sized and rather pedunculated, and the patients are in good health; but in bad cases it is not so safe as the ligature. In ordinary cases its advantages are that there is freedom from pain after operation; retention of urine is of rare occurrence; suppuration is not likely; there is little or no pain on the first action of the bowels, and recovery is usually rapid; after-contraction is not common. The clamp and cautery are not favored by Allingham. He states that statistics show that it is quite six times as fatal as ligature or crushing; and burning gives more pain after operation, as is the case with all burns. Hem-

orrhage is more likely to occur; there is greater sloughing of the rectal tissue. More time is required for healing, and greater contraction is common, as is also the case with all burns. The excision of piles is best applied to one prolapsed pile, to the single perineal pile, so common in women, or to one pile which is complicated with fistula, ulcer, fissure, etc. As a rule, one or two vessels require clipping. It is, therefore, inexpedient to excise many piles, for there may be trouble in picking up the divided arteries.

Allingham believes that Whitehead's excision method—that is, removal of the entire pile area and stitching of the healthy bowel above to the sphincter—is rarely necessary. It is a slow and bloody operation, and is at times followed by contraction. Few cases are really well under three weeks after operation, and premature resumption of the ordinary ways of life may cause a greater tendency to contraction, or, what is worse, troublesome and tedious ulceration may supervene and take months to heal.—*Am. Jour. Med. Sciences.*

THE TREATMENT OF COMPLETE PROLAPSE OF THE RECTUM

Harrison Cripps* believes that while it may be necessary for the cure of complete prolapse of the rectum, occasionally to resort to complete excision, that, as a rule, the use of lineal cautery is founded upon sound physiological principles attended with very slight risks.

"Since prolapse is due to the slipping of one coat of the bowel on the other, together with want of sufficient rigidity in its walls to prevent invagination, the binding the muscular and mucous coats together, and at the same time stiffening the walls by inflammatory deposit, would seem to be plainly indicated. An exudation artifically produced in the submucous tissue meets this indication by cementing the coats firmly together, thus effectually preventing slipping, and at the same time giving the bowel sufficient rigidity. The actual cautery is admirably fitted to produce an abundant inflammatory exudate. Before performing the operation the bowels should be thoroughly emptied. The patient should be anæsthetized and placed in lithotomy position. If possible, the prolapse should be made to protrude; four lines of cautery are then drawn along the bowel in its long axis. These lines should begin well within the canal of the bowel at the apex of the protrusion and terminate at the anal margin; they should be about one-

*Lancet, vol. 11, No. 15, 1890; American Journal of the Medical Sciences, vol. ci, No. 5, May, 1891, p. 516.

quarter of an inch in width, and deep enough to thoroughly sear but not actually destroy the mucous coat. Where the cautery lines cross large veins these should be tied on each side by passing a threaded needle beneath and knotting. If much time is spent in the operation swelling will take place and the reduction will be difficult.

"In case the prolapse cannot be made to protrude, the bowel may be cauterized *in situ* by using the duck-bill speculum, which may be shifted when necessary. The actual cautery is most satisfactory, since Paquelin's instrument is too hot when first applied and loses heat too readily. After operation a thick india-rubber tube one-third of an inch in calibre and seven inches in length is passed into the bowel for five inches. Strips of oiled lint are then packed around the tube, extending as far as possible into the bowel. Cotton-wool well dusted with iodoform is finally packed into the tube and in and about the anus; thus firm support is given and at the same time the escape of flatus is not prevented.

"Special care must be taken to prevent the descent of the bowel during the early stages of healing. In forty-eight hours the first dressing is removed, the parts are washed, and a clean dressing is applied.

After the first few days the dressing can be dispensed with, but the tube is retained for ten days. During this time the bowels should be kept locked by small doses of opium. Evacuation is finally accomplished by means of castor oil and enemata. The patient must not be allowed to strain, and must empty the bowel while lying on his side with the anus drawn a little from the middle line. This should be enforced for at least six weeks, during which time the consolidation is taking place."—*Boston Medical and Surgical Journal.*

MILLIKEN (S. E.) ON THE TREATMENT OF HYDROCELE BY CARBOLIC INJECTION VERSUS THE RADICAL OPERATION.

The cutting operation of Volkmann, and its various modifications, he said, while usually successful in relieving the hydrocele, requires the use of an anæsthetic, and necessitates confinement to bed for a week or more if suppuration occurred. The method of Levis, by carbolic injection, was practically painless, confinement to bed was in no sense essential, and unless an inordinate amount of carbolic acid, more than thirty minims, was used, sloughing ought never to occur. The simplest and most efficient apparatus for the purpose was a small trocar and a hypodermic syringe. After thorough evacuation,

the syringe was screwed on to the canula, and the injection could thus be made without a single drop of the acid coming in contact with the skin of the scrotum. When from 5 to 25 minims of pure carbolic acid was distributed over the whole serous surface (two or three minims in each place), nothing more than a sense of warmth was experienced by the patient. After removal of the canula slight kneeding of the sac might be made to insure coating of its walls with the irritant.

Of 54 cases thus treated by Dr. Milliken at the Hospital for Ruptured and Crippled, nine were never seen after the injection, five paid one visit within the first week only, and four are at present under observation. All the remaining 36 cases could be set down as completely cured; and of these, 27 had one injection; four, two injections, and five, three injections. In no case had sloughing occurred, and not one of the patients lost more than 24 hours from business. From two to six weeks were necessary for absorption of the exudation to take place, and thickening of the sac might remain much longer than this.

The conclusions reached by the author were as follows:

(1) Carbolic injection is a safe method for the cure of hydrocele.

(2) It is practically painless.

(3) The patient can attend to business without more than one day's delay.

(4) The disagreeable effects of an anæsthetic are avoided. —*Boston Medical and Surgical Journal*, September 10, 1891.

A PIN SWALLOWED PASSES PER URETHRAM.

K. D., aged five years, while playing with a bent pin in her mouth, suddenly caught her breath and drew the pin into her throat. It lodged in the fauces, but, upon her mother attempting to remove it, was dislodged and swallowed. This occurred on December 12. Fearing too great peristaltic action with a sharp-pointed foreign body in the alimentary canal, I gave no cathartics, but had the patient fed on food containing a large proportion of excrementitious matter and the stools constantly examined to find the pin if it should pass. Ten days elapsed, and, nothing having been seen of it, I had about concluded it had imbedded itself in some of the intestinal folds, or been overlooked in the dejections, when the father called to tell me that the child had passed the pin upon urinating that morning. She complained of sharp pain upon making her water, and, looking in the vessel, found the pin, somewhat corroded but otherwise just as when she swallowed it.

The passage of the pin through the intestinal wall is not so remarkable as its passage from the bladder after it had once fairly entered that organ. Of course, it is possible the pin may have passed from the rectum through the vagina and not entered the bladder at all, but the child's symptoms indicated irritation of the latter organ.—Dr. J. P. Tuttle in *New York Medical Journal.—Physician and Surgeon.*

FAIDHERBE (A.) ON CANCEROUS ULCERATIONS OF THE NOSE HEALED BY APPLICATIONS OF THE CHLORATE OF POTASH.

The patient was a woman of seventy, who had been well up to her sixty-second year, at which time a reddish tubercle, which later broke down and caused a spreading ulcer, appeared on the dorsum of the nose. When first seen, there existed an ulcer two centimeters by five, which was the seat of lancinating pain, and bled at the slightest touch.

Compresses wet with a saturated solution of the chlorate of potassium were ordered, and fourteen days later, cicatrization having commenced, applications of the chlorate in powder were added.

The sore speedily healed and remained so almost a year, when it broke out again slightly, yielding again promptly to the same treatment.—*Jour. des Sci. Méd. de Lille*, Aug. 28, 1891.—*Epitome.*

[Applications of an ointment containing ichthyol or aristol have produced the same effect, which is only transitory. Curetting or destruction by caustics or the actual cautery is the only method of curing it permanently.—EDITOR.]

MEDICINE.

NEW YORK PASTEUR INSTITUTE.

SECOND YEAR—FIRST SEMI-ANNUAL REPORT.

Dr. Paul Gibier, Director of the New York Pasteur Institute, reports October 26, 1891, the results of the preventive inoculations against hydrophobia performed at this institute during the first six months of the second year of its existence (February 18, 1891, to August 18, 1891). During this time 415 persons, having been bitten by dogs, cats and other animals,

applied for treatment. These patients may be divided in two categories:

1. In the case of 345 of these persons it was demonstrated that the animals attacking them were not mad. Consequently the patients were sent back after having had their wounds attended to during the proper length of time.

2. In 70 cases the anti-hydrophobic treatment was applied, hydrophobia of the animals inflicting bites having been evidenced clinically, or by inoculation at the laboratory, and in many cases by the death of some other persons or animals bitten by the same dogs.

Indigents have been treated free of charge.

The persons treated were: 17 from New York, 16 from New Jersey, 11 from Massachusetts, 5 from South Carolina, 5 from Texas, 3 from Connecticut, 2 from Maryland, 2 from Missouri, 1 from Ohio, 1 from North Carolina, 1 from Michigan, 1 from Pennsylvania, 1 from Rhode Island, 1 from Arkansas, 1 from Virginia, 1 from Mexico, 1 from West Indies (Curaçao).

DEATH BY HYDROPHOBIA AFTER TREATMENT.

Miram L. Adams, five years old, of South Framingham, Mass. Badly bitten July 14 last in nineteen places by a dog recognized to be mad. Treated from July 15 to August 1. Symptoms of hydrophobia appeared six days later (August 6). Died August 9.

Three other persons (two sisters of the patient and a man bitten by the same dog) who received the same course of treatment are now enjoying good health.

This, so far, is the only death by hydrophobia out of the 255 cases treated at this Institute to date.

THE ADMINISTRATION OF GUAIACOL IODIDE BY THE INTESTINES.

By William H. Gregg, M. D., New York.

The use of antiseptic remedies in the treatment of consumption seems to offer the only hope of cure or abeyance in this intractable disease. When we speak of cure we mean that about twenty-five or thirty per cent. of the cases are curable; the other seventy or seventy–five per cent. are so amenable to treatment by this class of remedies as to enable the patients to follow their ordinary business pursuits with comparative com fort for a number of years. There is no universal panacea for this disease, and invalids who are induced by sophistical theo-

ries to abandon scientific methods lose valuable time and a possible chance of recovery. Guaiacol is certainly the most active therapeutic agent we possess at the present time for the treatment of pulmonary tuberculosis, but it has to be taken in large quantities. Physicians who are satisfied with a daily dosage of a few grains—a quantity too small to produce any marked effect—need not hesitate to give by this method thirty to fifty grains without fear of overdosing, since guaiacol does not become poisonous for man until a hundred grains have been absorbed.

This method of administering guaiacol offers the greatest encouragement, for under its use the patient soon recovers weight and strength. He assumes a healthier aspect and experiences sensations of returning vigor and comfort. The cough lessens, the expectoration becomes gradually less, the pulse diminishes in frequency, and a general amelioration of the symptoms is to be observed. Perseverance in treatment is the only sure course to pursue, and offers the only hope of permanent success. The stomach is remarkably intolerant to this class of remedies, and revolts even after a few grains have been taken. Hypodermic injections enable us to introduce larger quantities into the system, but only with the greatest precaution and by fulfilling the most difficult practical conditions. The remedies must be distilled to the required degree and the instrument absolutely aseptic, and to inject the necessary quantity usually occupies two hours.

With a view of overcoming these obstacles it was decided to administer guaiacol by the intestines. In those cases where it has been carried out it has been proved that this method has no drawbacks. The signs that the drug has been absorbed rapidly make their appearance, and in the most characteristic manner. The patient tastes the guaiacol almost at once; the urine changes color and becomes greenish black or blackish. The administration of guaiacol in an enema is a simple and practical method and one to which consumptives themselves do not object, and, in a word, gives such remarkable results that the therapeutical effect of the drug is carried to its highest power. One dose in twenty-four hours is sufficient. The injection should be given at bed-time, an ordinary one-ounce hard rubber syringe being used.—*New York Medical Journal.*

LYMPHATISM.

Dr. F. H. Bosworth, of New York, read a paper on the subject of "Lymphatism," a name which he could confine to

that constitutional condition under the influence of which the lymphatic glands in the neighborhood of the faucial ring become the seat of hypertrophic changes, excluding from the definition those graver cases of the lympathic glands which constitute Hodgkin's disease and like affections, as well as those extensive lymphatic enlargements in the neck which tend to undergo supperative changes. Manifestations of lymphatism are: enlarged faucial tonsils, adenoid disease in the vault of the pharynx, and hypertrophy of the lingual tonsil.

The object of the paper was mainly to emphasize the fact that the existence of the enlarged lymphatics in these various regions should be accepted as evidence of a constitutional taint, rather than as constituting simple obstructing hypertrophies in the throat. He furthermore insisted that, especially in the earlier years of life, before these masses have become fully and firmly organized, they were amenable to internal treatment, preference being given to the iodide of iron. He argued that this drug was almost a specific in controlling these growths, but that the mistake usually made was in giving it in too small doses. For a child 5 years old the dose should be at least 2½ grains, given three times daily, or half a teaspoonful of the officinal syrup. Its effects should be watched carefully, and the amount increased to 5 grains, or even more. This not only reduces the lymphatic hypertrophies, but also corrects the anæmia which so frequently attends the disease.

After the affection has lasted a few years, of course, the hypertrophies become so thoroughly organized that no internal medication serves to reduce them. In these cases, of course, the masses should be treated in the same manner as other tumors, and subjected to surgical measures; but even in the older cases, the constitutional treatment of the lymphatism, which causes the local disease, should not be neglected.—*Transactions American Laryngological Association*, September 23, 1891.—*Satellite.*

SYDNEY-TURNER (A. M.) ON PARAFFIN IN DIPHTHERIA.

I have treated thirty cases (children and adults) with paraffin, and have had the satisfaction of seeing every one recover. My plan is to ask for the ordinary paraffin used in lamps, and, having scraped off the diphtheritic patch, to apply the paraffin every hour to the throat (internally) with a large camel's-hair brush. As a rule, the throat gets well in from twenty-four to forty-eight hours, and with improvement in the throat the paraffin is applied less frequently; but I continue its use for two or three days after the complete disappearance of the patches.

In three very severe cases I found that, as the diphtheria gradually disappeared, tonsilitas supervened, which I treated in the ordinary way. I find from experience that it does not do to allow the paraffin to stand in an open vessel; it seems not to have the same curative effect if exposed long to the air. It should be poured out from the can each time it is used. I can speak definitely as to the therapeutic effects, but am unable to state what the chemical action of paraffin on the diphtheritic membrane is; I can only suppose that the hydrocarbons in the liquid exert some powerful influence on the membrane. I can not see why, as the local action of paraffin is so beneficial in these cases, it should not exert an antiseptic influence if vaporized and mingled with the air in a room occupied by a diphtheria patient.

In conclusion, I would say that I have ordered a generous diet for the patient and a mixture containing tinct. ferri perchlor. and potass. chlor., to be taken every three or four hours, and that in some cases where, owing to the lateness of the hour, there was a difficulty in obtaining the medicine, the throat having been brushed diligently with paraffin, there was a decided improvement in the morning before any of the mixture had been taken, showing that the improvement was due solely to the paraffin treatment.—*Lancet*, August 29. 1891.—*Epitome.*

TRICHINOSIS TREATED WITH ARSENIC.

Dr. Merrill reports the case of an Italian, aged 25, whose illness dated from soon after eating Bologna sausage, about three weeks before he came under observation. Vomiting, acute pain in the stomach, and diarrhœa were the first symptoms; these were followed by a cough and a peculiar hoarseness. He seemed very ill on admission. His mouth and throat were red and dry, his tongue thickly coated, his voice husky. Physical examination of the chest and abdomen revealed nothing of importance. The urine was free from albumen and sugar. There was some diarrhœa and a little fever, but no vomiting. His arms could be but half extended, owing to the rigidity of the biceps, the fibres of which could be felt hard and tense throughout the length of the muscle; the elbow joints were swollen; and pressure on or movement of the arms caused pain. The knee joints were swollen; the legs œdematous. The muscular strength of his legs was good. The diagnosis of trichinosis was made, and confirmed a few days later by microscopical examination of pieces removed from his biceps. About this time, too, his jaw became stiff from

involvement of the masseters. Ten days after admission he was ordered Fowler's solution in five-minim doses three times a day, an additional drop to be added to the dose each day. For two or three days after this he did not improve, and seemed fatally ill, but then a change occurred. His jaw became less rigid, the œdema and pains in his limbs diminished, and he began to regain strength; and during the next fortnight he rapidly improved. The maximum dose of arsenic reached was twelve drops three times a day, but constitutional symptoms had shown themselves on more than one occasion before this dose was attained. Twenty-four days after the arsenic was ordered he left the hospital well.—*New York Med. Journ., September 19, 1891.—Practitioner.*

HUNTER McGUIRE ON THE CATAPHORETIC TREATMENT OF GOITRE BY IODINE.

About six months ago he demonstrated that by means of cup-shaped electrode attached to a galvanic battery it was possible for a solution of the muriate of cocaine to be driven into the skin and complete local anæsthesia produced. A small piece of absorbent cotton, or piece of blotting paper, saturated with the solution of cocaine, was put into the shallow cup of the instrument, and the electrode attached to the positive pole of the battery. The electrode was then placed upon the skin where the insensibility of anæsthesia was desired, and the sponge on the wire joined to the negative pole was placed on some convenient neighboring part.

It required a current of four or five milliampères to drive the cocaine through the skin and make the anæsthesia complete, the insensibility extending for some distance below the surface of the skin.

A day or two after the above demonstration was made (about January 10 of this year), a case of enlargement of the thyroid gland came into his hospital (St. Luke's). The goitre was bilateral, old, very large, hard, and seriously interfered with respiration. It had resisted for years the ordinary treatment of such growths. Internally, the iodide of potash, iron, and mercury had been faithfully tried; and externally, at different times, iodine and biniodide of mercury frequently used. The goitre steadily grew; and, lately, its increase was so rapid that the lady, in great alarm, came to the doctor to ask for some surgical operation. She had spasmodic attacks of palpitation of the heart, frequent spells of giddiness or vertigo, but no ocular protrusion.

Instead of attempting the removal of the gland he determined to use iodine in the cup–shaped electrode and see what effect it would have on the growth. The doctor put in the cup of the electrode some absorbent cotton, first dipped in water and squeezed as dry as possible; and on the cotton he poured ten or fifteen drops of the tincture of iodine. The electrode, thus prepared, was placed on the most prominent part of the goitre, the negative pole on the back of her neck. The galvanic current was then turned on until the milliampère–meter showed the strength of six or eight. This current was kept up for ten minutes. While using it she said that she tasted the iodine, and afterward that this metallic taste in her throat lasted four hours.

When the electrode was removed the cotton was found simply stained with the iodine, but most of the iodine had disappeared.

This application of electricity and iodine was repeated every day for three weeks. Not always, but nearly every time she said that she tasted the iodine, and said that this was the most disagreable part of the treatment. The tumor gradually grew smaller, at first quite rapidly, but afterward more slowly, getting more and more indurated as it contracted. The cardiac and cerebral symptoms disappeared completely.

This patient, after three weeks, was called home by the illness of her child, and did not come back for a month. The goitre, however, continued to decrease while she was absent. When she returned the applications were again made daily for three weeks. The gland was reduced to about one–fifth of the size it was when the treatment was begun, and in spite of all further use of the remedy remained stationary. But all of the subjective symptoms were gone, and the lady left in excellent health.

Two other cases of chronic goitre were treated in the same way, and with the same results, the hypertrophy diminishing rapidly at first, then more slowly, then reaching a point were it became stationary.

In four cases of recent hypertrophy of the thyroid gland in young women the enlargement rapidly disappeared under the use of these measures.

Iodine and electricity have of course been long used for goitre. As to how much of the good obtained above is due to one or the other of these agents, the speaker does not know.

Lately, in a case of pronounced ex-ophthalmic goitre, he used this treatment with quite rapid diminution of the enlarged thyroid gland and a decided amelioration of the other symptoms. The tendency to syncope and dizziness was lessened

and pulsation of the arteries diminished, but no perceptible change in the ocular protrusion resulted. The case is too recent, however, to report.—*Am. Pract. and News*, Aug. 29, 1891.—*Epitome.*

PENTAL: A NEW ANÆSTHETIC.

Pental is a new name applied by Prof. J. V. Mering to *Trimethylæthylen*, a product of amylenhydrate heated with acids, and recommended by the distinguised clinician as a safe and effective anæsthetic. Pental is described, chemically, physically, and as to its possible utility, in the *Pharmac. Zeitung*, Oct. 7, 1891, and in the *Pharmac. Centralhalle*, Oct. 15, 1891; both journals conservatively withhold endorsement of the product, basing apparent skepticism on the fact that chemically the body has long been known, and that analogous amylens (for instance, *iso-amylen*) were employed as anæsthetics almost forty years ago, but quickly discarded because found to be unsatisfactory and offensive, owing to their unpleasant odor.

So was cocaine well-known; yet who will deny that the discovery of its wonderful anæsthetic properties was a revelation to the medical world, and worked a revolution in treatment and practice which will forever distinguish the name of the discoverer, Dr. Koller, whose publication in August, 1884, was responsible for the present universal application of cocaine?

While pental will probably not excite the same degree of interest as did cocaine, it is safe to assume—reckoning on the high character and recognized conservative authority of Prof. v. Mering—that this product will find valuable application. From reports already furnished, notably that of Prof. Hollaender, of Halle a. S. (*Therap. Monatshefte*, Oct. 1891), which was read before the Dental Section at the Convention of German Naturalists and Physicians, at Halle, this year, the new anæsthetic is shown to be suitable and efficient for minor surgical operations, and particularly in dentistry.

Pental ($C_5 H_{10}$) occurs as a colorless liquid, of low specific gravity; its boiling point is 38 deg. C.; it burns with an illuminating flame, and is readily inhaled without affecting the membranes of throat or passages. It is insoluble in water, but miscible in all proportions with alcohol, chloroform or ether, and being inflammable like the latter, must be protected from possible ignition. It is exceedingly volatile, but does not decompose on exposure to air or light.

The inhalations are simply conducted, 10 to 25 c. c. of the fluid sufficing, and narcosis ensues within 50 to 90 seconds (Dr. Hollaender), without influence on respiration or the action

of the heart, and causing no unpleasant side or after-effects. From a careful consideration of Dr. Hollaender's report, a most favorable impression of the pental is gathered, and we hope to supplement and confirm this by early additional original reports.—*Bulletin of Pharmacy.*

METHYLEN BLUE FOR MALARIA.

A most important announcement of the specific curative effect of methylen blue in treating malaria is made by Guttmann and Ehrlich in the *Berliner Klinische Wochenschrift*, No. 39, Sept. 28, 1891. The authors state that they were prompted to investigate the full action of methylen blue in malaria because of the coloring effect the product exerted on the *plasmodium malariæ*, and the observation that by its infusion into the blood the red corpuscles were colored. Their expectations were fully realized, and they state that they can prove that methylen blue exerts a pronounced curative effect in malaria, and that under this treatment the fever disappears during the first day and the plasmodia are eradicated from the blood within eight days at the latest.

Only the chemically pure methylen blue (a special product for medicinal use) was employed, the dose of 0.1 gramme (1½ grains) administered five times daily in capsules, and continued at least ten days after disappearance of the fever. Whether or not the dose may be largely increased is not yet decided, experiments so far not having exceeded 0.7 gramme.

The remedy induces no serious side-effects; the only unpleasant effect was a temporary irritation of the bladder, with increased desire to urinate. These symptoms were readily ameliorated by giving to the patient several doses of powdered nutmegs, a teaspoonful at a time. An increase in the amount of urine passed was also noted, but presence of albumen could not be substantiated, and the authors recommend that this be carefully looked for in the subsequent trials. After the administration of the methylen blue, the urine is colored an intense blue; the intestinal evacuations contain the coloring matter in reduced form, but on exposure to the air also quickly turn blue.

Unquestionably this paper is an important one, and the suggestion of the authors (who lack sufficient clinical material for thoroughly pursuing the investigation) that practitioners who have many malarial patients take up the subject and report results, is a good one and should be generally followed.

Care must be taken to employ only C. P. methylen blue for medical use—not to be confused with methyl blue or other similarly named anilin colors.—*Bulletin of Pharmacy.*

WHOOPING-COUGH TREATED BY ATOMIZATION.

Dr. H. Ernest Schmid states that he now relies entirely upon atomization for the treatment of whooping-cough in all stages of the disease. The spray which he uses is made up as follows:

℞.—Carbolic acid..... grs. vj.
Menthol, 4 per cent. solution..... ʒiv.
Cocaine, 3 per cent. solution..... ʒiij.
Glycerin..... ʒj.
Cherry-laurel water.....q. s. ad ʒj.—M.

This solution should be thoroughly used, brutally if necessary, by an atomizer every three hours; force may be employed if necessary, and disregarding any apparant strangling upon the part of the little one during vigorous atomization, the nozzle of the instrument should be directed as far into the mouth of the patient as possible. During the struggling and sputtering and strangling some deep respirations will before long be made, and the object is accomplished. At first, in most cases, a violent paroxysm of coughing may result from the spraying, especially if much force has to be used with the child, but these soon cease and palpable effects are soon noticed by the parents. The point is to be able to impress the importance of perseverance. Dr. Schmid has seen whooping-cough arrested by this means after one thorough spraying, the cough continuing without the whoop for a while, and perfect recovery has followed in one or two weeks. From his success, he feels justified in claiming that the method promises to be more efficient than other means of treating the disease.—*Medical Record, June 13, 1891.*

FATHER MOLLINGER.

Father Mollinger, of Troy Hill, Pittsburg, who has been long posing as priest, thaumaturgist, prophet, and medicine-man, and who is said to have accumulated $300,000 from his miraculous cures, is somewhat in disgrace. The inevitable nemesis which awaits chicanery has come. The blow comes from the source which more than any other sustained the reverend father's sensational pretensions,—the lay press. The so-called cures have not been found. In excuse for Mollinger's practices it is pleaded that he is a regularly graduated practicing physician, and that he not only "lays on hands" but gives medicines. This, however, scarcely excuses the ceremonies of St. Anthony's day, when numberless poor and ignorant people were induced to sacrifice their property, and travel hundreds of miles for the relief of imaginary or incura-

ble ailments. That the moral tone of the proceeding is discordant with modern ideas of just dealing is the only optimistic reflection the circumstances arouse.—*Physician and Surgeon.*

DIMINUTION OF THE VIRILE POWER THROUGH THE INTERNAL USE OF ANTISEPTICS, ESPECIALLY OF SALICYLIC ACID.

Dr. Vanden Corput (*Revue de thérap. méd. et Chir.*, 1891), of Brussels, calls attention to the diminution of the virile power which he has observed in patients for whom he has prescribed antiseptics, such as salicylic acid, quinine, menthol and carbolic acid. The author believes that these antiseptics act upon the pigmented elements of the blood, and upon the seminal cells in the same way as upon the lower organisms. The spermatozoa became, in short, completely motionless under the microscope, just like the leucocytes, which lose their amboid movements and cannot effect their migrations. Acid salicylic has a similar effect on the ovary, and prolongs the menstrual period.—*L'Union Medical.—Satellite.*

BACTERIAL PRODUCT OF TYPHOID GERMS.

Dr. V. C. Vaughan announced to the American Physiological Society at its recent meeting in Washington, that he had obtained from typhoid fevers a bacterial product, which had something of a definite chemical composition. It dissolves in water and forms an acid solution and contains no sulphur. It is highly noxious. Injected into animals it causes a rise of temperature and death. It is not yet decided whether the substance is an actual product of the germs, or whether it is not a part of the cell. Dr. Vaughan's future investigations, in this direction, will be followed with interest.—*Physician and Surgeon*

NAPHTHALINE AS A NEW TAPEWORM REMEDY.

According to the observations of Mirovitch (*Mercredi Medical*), naphthaline is a powerful tæniacide, being superior to other anthelmintics both in the certainty of its action and in the absence of any toxic effect. For children, the author employs the following formula:

℞. Naphthaline.....4½ to 7 grains.
Castor oil..... ½ ounce.
Essence of bergamot.....2 drops.

—*Indiana Medical Journal.*

COFFEE AS A CAUSE OF PRURITUS ANI.

A correspondent thus relates a personal experience: "For many years I suffered from the most aggravated form of pruritus ani, which refused to yield to any one of the many remedies applied for its relief—nothing seemed to have the slightest effect in ameliorating the torture to which the intense itching subjected me. After exhausting the pharmacopœia I began to abstain from certain articles of food; one after another was dropped from my dietary for several weeks, but without effect until coffee was reached. An abstinence for a period of two or three weeks resulted in complete relief from the distressing symptom. As a matter of experiment the use of coffee was resumed for several days, with the effect of reproducing the pruritus; the experiment was tried several times with the same result. A year without coffee has been a year without pruritus."—*N. Y. Medical Journal*, Sept. 12, 1891.—*Epitome.*

PIPERAZIN.

This substance is said to have the property of dissolving a large proportion of uric acid. One part of the urate of this substance is soluble in about fifty parts of water. Urate of lithia requires three hundred and sixty-eight parts of water to dissolve it; the piperazin salt is, therefore, seven times more soluble than the lithia salt. Piperazin is not toxic and not caustic, and it appears to have advantages over other substances which may be used to act as solvents for uric acid.—*Berliner klinische Wochenschrift.*

Book Reviews and Notices.

Regional Anatomy in its Relation to Medicine and Surgery. By George McClellan, M. D., Lecturer on Descriptive and Regional Anatomy at the Pennsylvania School of Anatomy, Professor of Anatomy at the Pennsylvania Academy of the Fine Arts, Member of the Association of American Anatomists, Academy of Natural Sciences, Academy of Surgery, College of Physicians, etc., of

Philadelphia. Illustrated from photographs taken by the author of his own dissections, expressly designed and prepared for this work, and colored by him after Nature. In two volumes. Volume 1. Philadelphia: J. B. Lippincott Company, 1891. Pp. xxii, 435, 4to.

The quotations from Bichat, "*L'Anatomie n'est pas telle qu'on l'enseigne dans les écoles*," which the author adopts in the title page of the work, suggests its *raison d'être*. In the present instance, anatomy is presented to us from a special standpoint—Regional Anatomy, or "the anatomy of the different regions of the body individually considered, in the relations of the parts to one another, as they are naturally found," which the author regards as the most direct method of studying the subjects. The author correctly admits that there can not be any means of illustration equal to the real thing in teaching, and the best substitute is that which aims at producing the most realistic impressions. The special mission of this work is to offer this substitute "by reproducing nature as accurately as possible by means of plates which have been expressly prepared to illustrate and verify the descriptions, and are as faithful representations of actual dissections as photography could make them." There are in this first volume fifty-three plates, embracing about one hundred and four figures, and covering the regions of the head, neck, thorax and upper extremities, with special reference to their medical and surgical applications. The plates are fac-simile lithographic reproductions of the photographs of the author's dissections, and in this respect constitute an unique and very interesting addition to pictorial anatomical literature.

The work is an ambitious effort in a new and modern direction. It has been conceived in the right spirit and conscientiously carried out. The author has been very painstaking, and the number and excellence of his dissections are a monument to his industry, enthusiasm and skill. We can certainly state that in many, and even the majority, of the *larger* plates, the natural appearances and effects have been strikingly reproduced. In the smaller figures, representing complex regions, better work could have been done. Throughout the series it is noticeable that the author has been compelled to resort to artificial devices, such as retouching the outlines and contours of vessels, nerves and organs, in order to bring them into relief, and thus save them from the indefiniteness and general mistiness of the photographs. Plates 38, 39 and 40, which show the posterior mediastinum and thorax after removal of the posterior chest wall, are, if correct in some respects, very inartistic, blurred and confusing, and could hardly be attributed

to the same process that has furnished plates 15, 16, 17, 18, 19, 20 and 21, which are positively brilliant successes.

Without attempting to criticise in detail, we would call attention to the glaring defects of fig. 2, plate 10; plate 12; and the inadequacy of plate 7, figs. 1, 2; and plate 8, figs. 1, 2, to instruct in that most important topic, cerebral localization.

There is no doubt, however, that notwithstanding many imperfections we can safely affirm the author's success in realizing his intention, but this admission does not satisfy the question as to whether the photographs of dissections are superior for didactic purposes to the more artificial and diagrammatic representations of the classical texts. In comparing the illustrations of work with the types of the higher and most artistic counterfeits of anatomical regions, such as exhibited by the monumental masterpieces of Jacob and Bourgery, or in the less ponderous works of Leveille, Tillaux, or the still incomplete Merkel (*Topographische Anatomie*), the reviewer must acknowledge his decided preference from all standpoints, but especially from that of the teacher, for the latter. Photographic anatomy, like photographic histology, has its very useful applications, but these are, as a rule, restricted to studies of *ensemble* or of the whole, but are exceedingly unsatisfactory in clearing up the details—details which constitute the very essence of that most analytic study—anatomy.

The author himself fully appreciates these difficulties when he says "that it should be borne in mind that no true picture of the actual subjects will have the distinct demarcation and clearness of a diagram any more than the representation of a natural landscape indicates mountains, rivers, boundary lines, with the exactness of a map. Diagrams will, therefore, always be useful to the student in showing him what he ought to see, but such illustrations as are here attempted should be valuable in enabling him to recognize things as they actually are." We could only go a step further, and borrowing the author's simile, would insist that in the study of human topography the photograph of the landscape, while very interesting, is not as essential to the professional surveyor as the analytical and detailed study of the ground, such as is furnished by the systematic anatomists. The synthetic presentation of the subjects should be subsequent and complementary to its analytical study, and, for this reason, we believe that this work can only be of real service to those who are already initiated and familiar with anatomical work.

In regard to the text we can only say that every paragraph reveals the hand of the experienced teacher. It is a model of

synoptical lucidity; nothing superfluous; everything that is essential is here presented in the briefest and most acceptable form. The section on cranio-cerebral topography reveals an intuitive appreciation of all that which is broadly called "practical" and which is the outcome of a keen and cultivated appreciation of the more urgent needs of the clinician.

We certainly congratulate the author on the successful completion of this first volume of his *Regional Anatomy*. Work of this kind deserves encouragement, not only because of its unique character, but also because it displays an amount of patient, original and conscientious effort in the pursuit of a meritorious idea, which is remarkably uncommon among the authors of this plethoric era of cheap, easy and parasitic authorship. R. M.

A Text Book of Physiology. By M. Foster, M. A., M. D., LL. D., F. R. S., Professor of Physiology in the University of Cambridge and Fellow of Trinity College, Cambridge. Fourth American, from the Fifth English Edition, thoroughly revised, with notes, additions and two hundred and eighty-two illustrations. Philadelphia: Lea Brothers & Co., 1891.

The deep learning and thorough comprehension of his subject which is displayed by the author of this work commends it to any one who seeks to become thoroughly posted on physiology. The work, issued in England in instalments, is complete in the American edition before us—that is to say, it is as complete as the author intended it to be, for he has intentionally omitted giving the physiological anatomy of many of the organs, and the illustrations that usually accompany descriptions of them.

Although it is fair to presuppose in the practitioner of medicine a general acquaintance with topographical anatomy, it is also fair to presuppose that he may be somewhat rusty, and in a condition to be reminded of subjects half remembered and half forgotten. The American editor does not apologize for these omissions, but he evidently recognizes them, for in some places there has been a feeble attempt at supplying them. The chapter treating on "The Brain" is quite up to date, and is, perhaps, the best we have seen. In a book of 1060 pages, 156 are given to the study of the brain alone.

The philosophic vein pervading the work makes it very agreeable reading, but the peculiar arrangement of the subject makes it one more adapted to graduates than students of medicine striving for a diploma. H. W. B.

A text book of Practical Therapeutics, with especial reference to the application of remedial measures to disease, and their employment upon a rational basis. By Hobart Amory Hare, M. D., B. Sc. Second edition, enlarged and thoroughly revised. 1891. (Lea Bros. & Co., Philadelphia; Armand Hawkins, 194 Canal street, New Orleans.) Cloth, $3.75; sheep, $4.75.

The fact that the first edition of this work was exhausted within six months after its publication, and that it has been adopted as a text book in several of the leading schools, is ample proof that the profession have approved the author's work. The present edition is well up to date. Several new drugs have been added, and the author has an article on the method of employing the rest cure, and the use of suspension in the treatment of locomotor ataxia. Part I is devoted to general therapeutic considerations. In part II drugs are discussed, including from what they are derived, their physiological actions and the therapeutical indications for their use.

In part III is an excellent article on foods for the sick, and in part IV diseases and the drugs indicated in them are discussed. The drugs are discussed alphabetically in section II. While this arrangement has many advantages we think that students could remember them much better if they were classed according to their physiological actions. On the whole, we can recommend this book as one of the best on this subject, and congratulate Dr. Hare on the success of it.

W. E. P.

A Practical Treatise on the Diseases of Women. By T. Galliard Thomas, M. D., LL. D., Professor Emeritus of Diseases of Women in the College of Physicians and Surgeons, New York; Consulting Surgeon to the New York State Woman's Hospital; Honorary Fellow of the Obstetrical Society of London; Corresponding Fellow of the Obstetrical Society of Berlin, etc. Sixth Edition: Enlarged and thoroughly revised by Paul F. Mundé, M. D., Professor of Gynecology at the New York Polyclinic and at Dartmouth College; Gynecologist to Mount Sinai Hospital; Consulting Gynecologist to St. Elizabeth and the Italian Hospital, etc. Containing 347 engravings on wood. Philadelphia: Lea Bros. & Co., 1891.

It is now ten years since the classical work of Gailliard Thomas appeared in its fifth edition, and now the many progessive changes noted in gynecology during this time have been added

to the book by the pen of a surgeon amply qualified to perform the work which Dr. Thomas' extensive practice has prevented him from doing. It is announced that Dr. Mundé's revision meets with the approval of Dr. Thomas, and where these two authorities differ in the work the reader is made aware of it by bracketed initials appended to the opinions given.

Large portions of the fifth edition have been left out to make way for the new matter of the sixth; the latter containing for the first time chapters on *Electricity*, *Hermaphrodism*, *Diseases of the Urethra and Bladder*, and the *Diseases of the Female Breast*.

An interesting addition appearing in the last edition is the following paragraph:

"Recently, a supposed infallible diagnostic sign of gonorrhœal infection has been discovered by Neisser, who under the microscope detected a peculiar bacterium, which he called the gonococcus, and which he claims exists only in this disease. There may fairly be said to be still some doubt on this subject. A positive differentiation between a severe case of acute or subacute simple vaginitis, and one caused by gonorrhœal infection can, in our opinion, seldom if ever be made."

In the chapter on Laparotomy Dr. Mundé says: "Before concluding this chapter I wish to state my conviction that the pathological influence of fibroid tumors as a whole is overestimated by the profession at large, and that many women are made unhappy by the knowledge, incautiously imparted to them by their medical attendant, that they have a tumor of this kind."

He has observed 123 cases, which are 4.14 per cent. of all the gynecological cases seen by him between 1886 and 1889, and only sixty-two of those cases required treatment of any kind whatsoever. "The remaining sixty-one—that is, about one-half—afforded their owners so little inconvenience, or gave so little prospect of becoming troublesome, that not even a medical treatment was thought necessary."

In the fifth edition several pages are devoted to the subject of extirpation of the uterus, although Thomas does not advocate it, declaring the operation of Professor Frend as *ad hoc sub judice*.

The sixth edition disposes of hysterectomy as being "practically abandoned in favor of the very much safer and equally efficient vaginal method." The vaginal method is fully described.

Finally, we would congratulate Dr. Mundé on his successful efforts in improving a book which was previously so deserving of praise and study. H. W. B.

The Medical News Visiting List for 1892.

Messrs. Lea Bros. & Co. have issued their Visiting List for 1892. It is unnecessary to dilate upon the necessity of such an aid to the practitioner. Visiting lists have improved with time, and each edition discloses some improvement upon its predecessors. *The Medical News Visiting List* not only contains pages for recording work done, but it also contains tables of weights, doses, etc.; notes on the examination of urine; what to do in emergencies, etc. A therapeutic table, compiled by Dr. H. A. Hare from his *Text-Book on Practical Therapeutics*, fills ten pages, and furnishes the busy doctor with a ready reference index when he needs a little information in a hurry.

A. McS.

State News and Medical Items.

Communications from Physicians of Louisiana are solicited for this Department. News of personal interest is especially desired.]

CHARITY HOSPITAL.

The board of administrators of the Charity Hospital met November 2d, with Dr. C. J. Bickham in the chair, Secretary Marks and these gentlemen present: Messrs. McManus, Sentell, Joubert, Keller and Geo. Seeman.

The business was opened by the secretary reading the appointment of Mr. Leon Joubert to fill the vacancy occasioned by the death of Mr. Devereux.

House Surgeon Miles reported that he had returned from his vacation since the last meeting of the board. While in New York he bought a number of surgical instruments to be used in the operating rooms. The doctor said, that before he left, he was in doubts if the rooms of the new clinic building would be large enough for the purpose. Since he has returned and inspected them, all doubt has been dispelled, and he has begun preparations for furnishing them. He thought that both buildings should be opened on January 1, so that the outdoor statistics could be satisfactorily completed.

The following financial report was then read:

From ordinary sources	$14,139 36
Cash balance October 1, 1891	42,118 70
	$56,258 06

DISBURSEMENTS.

On account of improvements	$1,331 27
Ordinary expenses	5,698 99
	$7,030 26
Cash balance October 31, 1881	49,227 80

The finance committee reported that an account had been opened with the Canal Bank. Secretary Marks then read the following reports of the clerk of the hospital:

Number of patients remaining in hospital October 1, 1891, 591; number of patients admitted, 639, as follows: Foreigners 276, United States 427—males 528, under 10 years 11, total 539; females 143, under 10 years 11, total 154. Number of patients discharged 564—males 438, under 10 years 5, total 443; females 112, under 10 years 9, total 121. Number of patients died 91—males 61, under 10 years 3, total 64; females 25, under 10 years 2, total 27. Number of patients remaining in hospital November 1, 599—males 400, females 199. Daily average of patients during the month, 590.

Ambulance Report.—Total calls 130, average time 34 minutes, surgical calls 66, medical 13, dressed 29, conveyed home 3, obstetrical 2, died 5, false 2, not needed 8, transfer calls 2.

Architect Carter announced that the woman's and children's outdoor clinic was completed and ready to turn over to the board, and that the men and boys' clinic building had progressed so far that the roof was about to be put on.

Five thousand dollars were transferred from the general fund to the building fund. After discussing some minor affairs the meeting then adjourned.—*Picayune*.

THE EYE, EAR, NOSE AND THROAT HOSPITAL.

The usual monthly meeting of the trustees of the Eye, Ear, Nose and Throat Hospital was held on November 4, with the following gentlemen in attendance:

President W. B. Schmidt, Secretary Jos. A. Hincks, Messrs. James T. Hayden, Jules Aldige, Chas. K. Hall and Dr. A. W. de Roaldes.

Secretary Hincks' report of patients treated during the month was in substance as follows:

Refused admittance, 13; admissions 332, as follows: eye

department, 161; ear, nose and throat, 171; consultations, eye department, 1513; special cases, 28; ear, nose and throat department, 1392; total, 2933; operations in eye department, 28; in ear, nose and throat department, 27; total, 55.

The report of Dr. A. McShane, the pathologist, was read. It represents the work done by his department since its inauguration: Number of specimens examined, sputum, 71; urine, 63; tumors, 4. Number of specimens mounted for examination, 114.

Dr. de Roaldes reported that he was happy to have returned from his vacation abroad and resumed his duties. Owing to sickness of more than two months' duration, during which he had several operations performed, he was not able to devote as much attention to the interests of the institution as on former occasions. However, he visited most of the English and French institutions of note devoted to the treatment of ear, eye, nose and throat diseases, and purchased a number of medical works and instruments to be used in the hospital here.

The doctor recommended that in the future reports of the secretary, the number of the patients from the city and country be classified, so that if application ever be made to the State or city for assistance the hospital may have statistics upon which to base its claims. The recommendation was adopted.

The tardiness of some of the visiting physicians was criticised, and it was decided to return to the former method of keeping a daily record of the time at which the visiting staff reported. This will diminish some of the vexatious delays to which patients have been subjected.

Again the question of securing a permanent home was discussed. There is a lease of eleven months on the present building, but the trustees are looking around for a more roomy building. A committee was appointed to examine and consider property that may be offered for the purpose.

Dr. O. S. Pothier tendered his resignation a sear, nose and throat clinical assistant, and was appointed assistant pathologist. Dr. L. Hanneman was appointed to the vacancy caused by the resignation of Dr. Pothier.

A letter was read from the manager of the Ovide Musin Concert Company, stating that the company would be here during the spring, and proposing that arrangements be made for giving the hospital a benefit.

Up to the present time there have been no life members of the institution, notwithstanding a number of applications have been received from persons to become such. It had been the intention of the trustees to discuss the question at the next annual meeting this winter, but in consideration of

another application, the question was brought up last night, and $500 decided as the fee. In explanation of this sum the trustees say, as there are not so many millionaires in New Orleans as in New York and other large cities, it would be unjust to make the life membership fee as costly as in Northern charitable institutions. To all persons who can afford it, however, the trustees extend an invitation to contribute to the permanent building fund.

Dr. J. W. Day has moved to Homer, La., from Dykesville.

Dr. Geo. W. Lewis has returned to the city from the North.

Dr. and Mrs. T. G. Richardson have returned from a visit North.

Dr. A. Maguire has returned to his home in Jeanerette, after a visit to Canada.

Dr. R. T. Worley lost two daughters by the burning of the steamboat *Oliver Bierne*.

Married.—On November 2, 1891, Dr. Harry Hayward to Miss Lila More, both of New Orleans. Dr. and Mrs. Hayward made a bridal trip to Washington, D. C., and have returned and are at home to their friends at 297 Coliseum street, on Fridays.

Dr. Moore, lately of Hico, is now a resident of Ruston. He has bought a home, and will practice there.

Dr. Wm. S. Harvey, of Chicago, was married to Miss Alice E. Flash, of this city, on November 25, in New Orleans.

Died.—At Vanceville, La., on Thursday evening, November 12, Susie, infant daughter of Dr. G. A. Wise, aged ten months.

Dr. Jackson, of Montgomery, La., and his daughter, Miss Mildred, late pupil of the Conservatory of Music, are in the city for a few days.

Married.—Dr. W. J. Scaife, of Homer, La., and Miss Blandel Griffin, of Ruston, were married last Tuesday evening at the home of the bride in Ruston.

Dr. Richard H. Westerfield, age seventy-one, died at Buras, parish of Plaquemine, La., October 29, of malarial fever. He had resided there thirty-six years.

A $6000 fire occurred in Mansfield on November 17. The offices of Dr. Sutherlin were destroyed. We extend our sympathy to the doctor.

Married.—At the residence of the bride's father, Mr. S. S. Pearce, at Evergreen La., on Wednesday evening, November 14, 1891, Miss Jennie Pearce to Dr. Herbert Kilpatrick, of Mooreland, La.

Dr. J. A. Watson, a representative of the American Public Health Association, and Dr. Edward French, assistant superintendent of the New Hampshire Insane Asylum, were in New Orleans recently, en route to Mexico and South America. Our quarantine system was thoroughly inspected by the gentlemen during their stay.

The little daughter of Dr. A. G. Bowman, of Monroe, La., was burned to death on October 19. Her clothing ignited while standing in front of the fire. Mrs. Bowman was badly burned in attempting to rescue her daughter from the flames.

The Ouachita Drug Company is a new and important enterprise for Monroe. The capital stock is fixed at $100,000, and $30,000 has already been paid in. Dr. M. A. McHenry, of Arkansas, is president of the company; Dr. T. O. Brewer, vice president; E. F. Buckingham, secretary and treasurer; and Dr. T. O. Brewer, R. B. Blanks, D. B. Pugh, Dr. M. A. McHenry and Dr. R. Layton, directors.

Dr. Felix Formento, who represented the Board of Health of this State at the meeting of the American Public Health Association, held last week at Kansas City, Mo., was elected president of that body. Dr. Formento, upon graduation, served with distinction in the medical corps of the Franco-Italian army in the campaign against Austria, and soon after his return to this country, at the breaking out of the war of secession, was appointed a surgeon in the Confederate service and placed in charge of the Louisiana Hospital at Richmond, Va. At the close of the war he returned to this his native city and resumed the practice of his profession, taking the high rank

that his distinguished services and abilities so justly entitled him to hold The Doctor has won him the warm friendship and esteem of a wide circle of his fellow-citizens, who will be delighted to hear oft his notable recognition of his merit. Among these are his comrades of the Assocation of the Army of Northern Virginia, Camp No. 1, United Confederate Veterans, of which he has been for years a surgeon and member.

Married.—Surghnor-Fontaine.—At Vicksburg, Miss., Wednesday, November 18, 1891, Dr. Graham Surghnor, of this city, and Miss May Fontaine, of Vicksburg, Miss.

Dr. F. B. Shuford died at Holly Springs, Miss., at 5:30, November 25. He leaves a wife and four children, two sons and two daughters. He was an old resident of that city, having located there in 1847, and continued his practice until 1861, when he retired to engage in banking, and held the position in the Holly Springs Bank as cashier until 1881, when he retired on account of his health.

A nice point of law has lately been debated before a French court. The question was whether an operation on a dead body by an unqualified person came within the meaning of the enactment forbidding the illegal practice of medicine. It appears that a pregnant woman had just died, the cause of death not being stated. The curé of the village, who had been with her in her last moments, induced a neighbor who was in the room to perform cæsarean section on the corpse with a view of saving the child. The operation was successful, but the operator was brought before the magistrate and fined 15 francs for having been guilty of illegal practice of medicine.—*British Medical Journal.*

A Chinese Recipe for Long Life.—A sample of a "Fairy Recipe for Long Life," cited by a writer in the *Cornhill*, is heralded by the statement that the nostrum "has come down to us from a physician of the Ming Dynasty." A certain official was journeying in the hill country when he saw a woman passing southward over the mountain as if flying. In her hand she held a stick, and she was pursuing an old fellow of a hundred years. The mandarin asked the woman, saying:

"Why do you beat that old man?" "He is my grandson," she answered, "for I am 500 years old and he is 111; he will not purify himself or take his medicine, and so I am beating him." The mandarin alighted from his horse and knelt down and did obeisance to her, saying: "Give me, I pray you, this drug, that I may hand it down to posterity for the salvation of mankind." Hence it got its name. Take it, says the Chinese advertisement, for five days, and the body will feel light; take it for ten days, and your spirits will become brisk; for twenty days, and the voice will be strong and clear, and the hands and feet supple; for one year, and white hairs become black again, and you move as though flying. Take it constantly and all troubles will vanish; and you will pass a long life without growing old. All this for three and sixpence the bottle.—*Pacific Record.*

Periods of Gestation are the same in the horse and ass, 10 months each; camel, 12 months; elephant, 2 years; lion, 5 months; buffalo, 12 months; cow, 9 months; sheep, 5 months; reindeer, 8 months; monkey, 7 months; bear, 6 months; sow, 4 months; dog, 9 weeks; cat, 8 weeks; rabbit, 4 weeks; guinea pig, 4 weeks; wolf, 90 to 95 days. Goose sets 30 days; swans, 42 days; hens, 21 days; ducks, 28 days; pea hens and turkeys, 28 days; canaries, 14 days; pigeons, 14 days; parrots, 40 days.—*Western Medical Journal.*

A correspondent of the Washington *Star*, who has been studying the subject of getting rid of fleas, gives this as the result of his investigations: If those who are troubled with this insect will place the common adhesive fly-paper on the floors of the rooms infested, with a small piece of fresh meat in the center of each sheet, they will find that the fleas will jump toward the meat and adhere to the paper. I completely rid a badly infested house in two nights by this means.

A New Source of Quinine.—It is announced as one of the most important discoveries of the present year that Messrs. Grimaux and Arnaud, of Paris, have succeeded in producing quinine from a Brazilian syrup. The result is quinine, absolutely identical with the substance that has become so familiar to us all, and so indispensable to medicine.

Aristol in Poisoning.—In a case of poisoning of the hands from Rhus toxicodendron—poison oak—recently under my care, which had reached the vesicular stage, and was attended with much swelling and burning, the happiest results followed the free dusting of the powder of aristol on the affected parts. The change was almost magical, so sudden and so prompt was the relief afforded. Might not this powder, applied in the early stage of the disease, do much toward preventing the ulceration and pitting of variola?—*Med. News.*

The natives of the New Hebrides smear the points of their arrows with a swamp earth, the poisonous agent in which, according to Dr. Ledantec, is the septic vibrio of the tetanus bacillus.—*Medical Drug Reporter.*

The Superintendent of the Census makes public a bulletin in which are given statistics upon the subject of asylums for the insane in the United States. The bulletin shows that the total number of insane persons treated in both public and private institutions during the year 1889 was 97,535, while during the year 1881 there were 56,205 treated, showing an increase in the nine years of 41,330 or 73.53 per cent.

As a curiosity of diagnostication, the Chinese method of determining the state of the fœtus is worthy of attention. "When the face of the mother is red and the tongue green, the fœtus is dead. If the face is green and the tongue red, the infant is living, but the mother will die. When the face and the tongue of the mother are both green, the child and mother will both die at the same time." This is rather puzzling to obstetricians of the white race; perhaps the chromatogenetic effect of pregnancy on the skin of the Chinese woman is different from that of her white sisters.—*Exchange.*

Brazil has a law for the medical examination of persons about to marry to determine their fitness. It is a sanitary measure that is found to be necessary to stop the transmission of scrofula, which at one time threatened to destroy the strength of the people.

Patient (at Christian scientist's office)—Is the healer in?

Attendant—Yes, sir; but she is sick to-day and can't do any business.

A hospital for women has been opened at Sitka, Alaska, by Dr. Clarence Thwing. It is the first in that country.

The sale of tuberculin is forbidden in Munich.

Indiana has an infant prodigy, a boy six years of age, who gives lectures on anatomy. Our supposition is that he is not yet weaned and is still pulling on his subject.

The Other Man Laid On.—Minister—"Who is the deceased?"

Attendant—"Oh, he was a faith healer. He used to go about the country laying on of hands, but one day he laid hands on the wrong man; there was a reaction, and the result was fatal to the healer."—*Pharmaceutical Era.*

"What did the doctor pronounce your ailment?" inquired she with a tremor of anxiety in her tone as she came into her husband's sick room.

"He pronounced it as if it was spelled bronkeetus," exclaimed the indignant Bostonian, straightening himself up in bed, "and I requested him at once to make out his bill and go."—*Chicago Tribune.*

Doctor—I believe you have some sort of poison in your system.

Patient—Shouldn't wonder. What was that last stuff you gave me?—*New York Weekly.*

A Law for the Prevention of Blindness.—Following the example of the State of New York, where a similar law was passed in 1890, the State of Maine has passed the following law, which was approved by the Governor on March 28: "Section 1. Should one or both eyes of an infant become reddened or inflamed at any time within four weeks after its birth, it shall be the duty of the midwife, nurse or person having charge of said infant, to report the condition of the eyes at once to some legally qualified practitioner of medicine of the city, town or district in which the parents of the child reside. Sec. 2. Any failure to comply with the provisions of this act shall be punishable by a fine not to exceed $100, or imprisonment not to exceed six months, or both. Sec. 3. This act shall take effect on the first day of June, eighteen hundred and ninety-one."

"Died of gravel" was the verdict of a coroner's jury in Oil City, in case of laborers buried under an embankment.

Medical Examination.—On Tuesday, September 22, there was an examination at the City Hospital, of Natchez, Miss., of the five resident students, who have been receiving instructions for some time under the efficient surgeon, Dr. B. D. Watkins. It was a written examination, the questions being prepared by Drs. A. J. Hall and N. L. Guice. The examination was held for the purpose of awarding a set of valuable medical books, given as a prize by Dr. Watkins.

The following is said to have happened in a certain Bible class at a very noted female college in Virginia:

Lady Teacher—Miss Annie, what do you understand by the word "circumcision" used in to-day's lesson?

Miss A.—It is taking the scalp off a male baby when eight days old.—*So. Medical Journal.*

The oldest medical work—an Egyptian papyrus dating from 1500 years or more before Christ, and containing prescriptions then old—has been translated by Ebers, the German novelist.

Venereal diseases are said to be almost unknown among the laboring men of Paris. Out of 3240 men in the prime of life, Dr. Fiaux found but five suffering from gonorrhœa and chancroid, and not one from syphilis. These men were applicants for work on a railroad.

Nothing so quickly restores tone to exhausted nerves and strength to a weary body as a bath containing an ounce of aqua ammonia to each pail of water. It makes the flesh firm and smooth as marble, and renders the body pure and free from odor.—*Annals of Hygiene.*

"Aunt Sallie, what's the matter with Aby?"

"The doctors say he got two-buckles on his lungs. Dat's what went with my two shoe buckles I los' last month. Cain't leave nuffin' around de house now on account dat boy."

The Number of Tubercle Bacilli in Phthisical Sputum.—Dr. E. H. F. Nuttall, of John Hopkins University, has shown that phthisical patients expectorate from 250,000 to 4,000,000,000 bacilli in twenty-four hours. Taking the aver-

age of, we will say, 100,000,000 per day, the patient would expectorate 365,000,000,000 bacilli a year, and if he lives three years, the total number of microörganisms expectorated during his illness would be 1,095,000,000,000. Or multiply the years' annual out-put of 365,000,000,000 by 75,000, the number of cases of phthisis in this country, and we are confronted with the sanitary problem of destroying 75,000 times 365,000,000,000 microbes every year. These are rather discouraging figures, but it may be supposed that the vast majority of tubercle bacilli in the sputum die as the result of intercurrent disease or a pitiless environment.—*Medical Record.—Medical Age.*

In Corea, physicians are only allowed to examine the patient in the following manner: A thread is tied around the patient's wrist and passed out by a hole in the wall to the doctor outside, who by inspecting the thread, is supposed to arrive at a diagnosis. Corean doctors are evidently gifted with what may be termed the "*tactus eruditis.*"

Dr. Concepcion Aleixandre has recently been appointed upon the staff of the Hospital de la Princesa in Madrid. This is said to be the first appointment of a woman to any official position in Spain.—*Med. Record.*

Female Pharmacists in Russia.—The State Council of Russia has decided to admit females to the study of pharmacy at all Russian universities; they must not be less than 16, nor more than 40 years of age, and after three years' study may present themselves for the final examinations, the same as the male candidates.

Deeply Concerned.—"Your uncle, sir," said the physician who had been hastily called in, "is threatened with softened of the brain."

"Any symptoms of that kind about his heart?" inquired the poor relation anxiously.

The committee of the British Medical Association on legislation for the inebriate, has reported in favor of endowing proper authorities with power to compel inebriates to be placed in retreats where they will be treated by physicians employing the most approved methods.

Citizen—"Did the amputation do the man any good?"

Doctor—"Oh, no! but it was a beautiful operation."—*Puck.*

A Quaint Epitaph.—The following quaint epitaph on husband and wife—the husband having died first—is to be seen in one of the Parisian cemeteries: "I am anxiously awaiting you.—A. D. 1827." "Here I am.—A. D. 1867." The good lady had taken her time about it.—*Ex.*

Medical Bureau of the World's Columbian Exposition.—The Bureau was organized June 1, 1891. The staff consists of John E. Owens, M. D., Medical Director; W. H. Allport, N. R. Yeager, S. C. Plummer, Assistant Surgeons. The Bureau took charge of the medical, surgical and sanitary inspection work on the grounds July 1, 1891, and is now in active operation. The present Bureau, operating during the construction period, will be the nucleus of the medical service of the World's Fair. It is the intention of the Medical Director to make the records of the Bureau as complete as possible from a statistical and historical standpoint, and to furnish at the close of the service a report, which will be valuable in the organization of the medical bureaus of future expositions.—*Univ. Med. Mag.*

The Treatment of Stammering.—According to returns founded upon German statistics collected during the last sixteen years, the average number of stammering school children in Berlin and elsewhere amounts to about 1¼ per cent. of the total number in attendance. The causes of this defect, and the method of dealing with it, are discussed by Mr. E. J. Seltman, in Phisique. He observes it is needless to seek for etiological conditions in the organs of speech themselves, or even in the nerves associated with them. The stammerer, if his mind is at ease, does not stammer. It is in the presence of circumstances, varying in different cases, which to him suggest some imaginary difficulty, that his impediment becomes apparent. Concurrently with thiscomes a feeling that he must speak. Intelligence and will together urge him to do so; the purpose is met by his conscious unreadiness, and the consequence is the marred result with

which he himself and his companions are painfully familiar. His impediment, therefore, is imaginary. The remedies appropriate to his condition, if somewhat slow in operation, are not far to seek. They consist essentially in a change, in a disentanglement of his perverted mental energies. All mental shock is to be strictly excluded. The habit cannot be cured by order. He must be approached with tact, and habitually addressed in a quiet, slow and deliberative manner. His imitative instinct will copy the method, and fluency will usually succeed the faculty of correct utterance thus engendered. When we reflect upon the frequently high intelligence of stammering children, the drawback imposed upon their education by this unfortunate habit, and its equally hurtful influence upon their usefulness as adults, we cannot too strongly impress the necessity of its early and methodical treatment. A course of three months will often suffice to attain the desired results.—*Lancet.—Medical Bulletin.*

A MINISTERING ANGEL.

O woman, in our hours of ease,
Uncertain, coy and hard to please;
When pain and anguish wring the brow,
Then none so cheaply pleased as thou!
We've only to submit to take
Hot rhubarb tea and anti-ache,
And gizzard oil and ipecac,
And porous plasters on the back,
A flax-seed poultice, catnip tea,
And Quackem's new discovery.
Hot-water bags and sweats beside,
And camphor nasally applied,
And castor oil and vaselin,
And coals with feathers burnt between,
And soothing syrup, paregoric,
Cold-water cloths and drinks caloric,
And all the housewife's category.
'Tis then we see her in her glory,
Needing to make her bliss complete,
But mustard plasters on our feet.

—*Harper's Bazar.*

MORTUARY REPORT OF NEW ORLEANS.

For October, 1891.

CAUSE.	White	Colored	Male	Female	Adults	Children.	Total
Fever, Yellow							
" Malarial (unclassified)	11	6	12	5	11	6	17
" Intermittent	1		1		1		1
" Remittent	6	1	7		7		7
" Congestive		1	1		1		1
" Typho-Malarial	6	2	4	4	6	2	8
" Typhoid or Enteric	2		2		2		2
" Puerperal							
Scarlatina							
Small-pox							
Measles							
Diphtheria	16	1	6	11		17	17
Whooping Cough							
Meningitis	8	1		9	3	6	9
Pneumonia	6	7	10	3	8	5	13
Bronchitis	7	2	5	4	6	3	9
Consumption	40	40	28	52	77	3	80
Cancer	13	7	6	14	20		20
Congestion of Brain	3	2	2	3	2	3	5
Bright's Disease (Nephritis)	13	9	11	11	20	2	22
Diarrhœa (Enteritis)	7	7	11	3	11	3	14
Cholera Infantum	3	2	3	2		5	5
Dysentery	7	4	6	5	11		11
Debility, General	2	1		3	3		3
" Senile	14	12	11	15	26		26
" Infantile	6	6	8	4		12	12
All other causes	153	79	129	103	153	79	232
TOTAL	324	190	263	251	368	146	514

Still-born Children—White, 20; colored, 19; total, 39.

Population of City—White, 184,500; colored, 69,500; total, 254,000.

Death Rate per 1000 per annum for City—White, 21.07; colored, 32.81. total, 24.25.

F. W. PARHAM, M. D.,
Chief Sanitary Inspector.

METEOROLOGICAL SUMMARY—OCTOBER.

STATION—NEW ORLEANS.

Date.....	TEMPERATURE. Mean	Max...	Min...	Precipt. in inches and hund'ths...
1	80	85	74	0
2	78	83	72	.22
3	78	84	73	1.58
4	78	85	70	.63
5	76	81	72	T
6	70	77	64	0
7	71	78	64	0
8	60	70	50	0
9	64	71	58	0
10	62	70	54	0
11	65	73	57	0
12	66	75	57	0
13	66	74	58	0
14	68	78	59	0
15	69	78	60	0
16	68	77	58	0
17	68	77	58	0
18	70	80	59	0
19	62	68	56	0
20	60	69	52	0
21	65	76	54	0
22	66	76	57	0
23	61	71	51	0
24	66	78	55	0
25	68	78	59	0
26	70	79	60	0
27	70	80	60	0
28	58	65	51	0
29	62	72	52	0
30	67	75	59	T
31	70	78	63	0

SUMMARY.

Mean barometer, 30.153.
Highest barometer, 30.36, 29th.
Lowest barometer, 29.58, 4th.
Mean temperature, 67.8.
Highest temp., 85, 1st; lowest, 50, 8th.
Greatest daily range of temperature, 23, 24th.
Least daily range of temperature, 9, 5th.

MEAN TEMPERATURE FOR THIS MONTH IN—

1871.....70.7	1876.....67.4	1881.....75.2	1886.....69.5
1872.....68.2	1877.....69.9	1882.....73.3	1887.....68.1
1873.....67.9	1878.....70.9	1883.....75.4	1888.....68.0
1874.....70.2	1879.....72.2	1884.....74.4	1889.....70.4
1875.....66.9	1880.....67.9	1885.....65.7	1890.....69.0
			1891.....67.8

Total deficiency in temp'ture during month, 90.
Total deficiency in temp'ture since Jan. 1, 194.
Prevailing direction of wind, N. E.
Total movement of wind, 6101 miles.
Extreme velocity of wind, direction, and date, 25 miles, from North, 8th.
Total precipitation, 2.38 inches.
Number of days on which .01 inch or more of precipitation fell, 3.

TOTAL PRECIPITATION (IN INCHES AND HUNDREDTHS) FOR THIS MONTH IN—

1871..... 9.09	1876..... 0.24	1881..... 4.84	1886..... 0.22
1872..... 3.18	1877..... 9.15	1882..... 2.16	1887 ... 4.79
1873..... 1.39	1878..... 5.07	1883 .... 3.43	1888..... 7.36
1874..... 0 00	1879..... 1.36	1884..... 5.60	1889..... 0.26
1875..... 2.09	1880..... 1.88	1885..... 0.56	1890..... 5.24
			1891..... 2.33

Total deficiency in precip'n during month, 1.04.
Total deficiency in precip'n since Jan. 1, 22.44.
Number of clear days, 24; partly cloudy days, 6; cloudy days, 1.
Dates of Frost, ...
Mean maximum temperature, 76.2.
Mean minimum temperature, 59.5.

NOTE.—Barometer reduced to sea level. The T indicates trace of precipitation.

G. E. HUNT, *Local Forecast Official.*

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XX. JANUARY 1892. No. 7.

Clinical Lecture.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the first day of the month preceding that in which they are expected to appear. A complimentary edition of twenty-five reprints of his article will be furnished each contributor should he so desire. Any number of reprints may be had at reasonable rates if a *written* order for the same accompany the paper.]

TWO CASES OF REMOVAL OF THE UTERINE APPENDAGES. LABIAL ABSCESS.

Clinical lecture delivered October 28, 1891, at Philadelphia Hospital.

By E. E. MONTGOMERY, M. D., Professor of Obstetrics and Gynecology, Medico-Chirurgical Hospital.

GENTLEMEN: As I told you last week, I will show you a patient upon whom I operated two weeks ago. Her temperature sheet shows that she has been having, for several days, a normal temperature. She has been feeling exceedingly well until within the last forty-eight hours, when she has been complaining of pain in the left leg, more particularly in the calf, which is associated also with tenderness along the veins from the saphenous opening down. It is possible this is the beginning of the development of phlebitis.

We have had the leg well rubbed with the tincture of belladonna, and bandaged, and it is this morning very much better. In pressing over the femoral vein, I do not find that she complains of any tenderness and distress, and she shows no other indication of trouble. I will remove the dressing and show you the wound. Now, as the body is turned toward you, you see the result of the incision. The line shows complete union, with the exception of a point at the lower angle, where the skin has lost its vitality from the pressure of the drainage tube, and a superficial slough has been produced. In order to

completely close the wound, when the drainage-tube was removed, the skin was drawn tightly, and has consequently led to this result. Otherwise than this, we could not have had a more satisfactory result, as the skin has evidently been accurately approximated. You will remember that in this patient there had been a rupture of the dilated Fallopian tube, the sac was subjected to microscopical examination, without disclosing any evidence of fœtal envelopes, consequently it was a pathological rather than a physiological process which was set up in this abnormal position. In dressing the wound, you will remember that I made an application of protective over the line of the incision, for the purpose of keeping the dressing from adhering to the surface. The protective had been kept in a solution of acid sublimate, and the wound itself was carefully washed in the same solution. After it was applied, the surface of the protective and parts about it were dusted with boracic acid, and the dressing completed by the application of a pad of salycylated cotton held in place by adhesive strips and bandage. We will again use the boracic acid and the same pad. As soon as the slough clears off, the wound can be washed with a solution of peroxide of hydrogen and sealed up with a solution of iodoform in colodion. As there is still a slight portion of sloughing tissue that has not come away, it would not be prudent at present to apply it.

The next patient I bring before you is a woman upon whom we operated last Friday, removing the appendages, in which considerable difficulty was experienced. The woman was confined some two months ago, and this was followed by inflammatory trouble in the pelvis, which probably originated from previous tubal disease. Since her confinement she has been suffering from weight, pain in the pelvis, has been anaemic, feeble in strength and unable to take care of her children or herself. Her progress has been exceedingly slow, and she is one of those cases usually spoken of as having a slow getting up, or tedious convalescence. Upon examination the uterus was found to be firmly fixed in the pelvis, with masses posterior to it, which were adherent, tender to pressure, and indicated disease of the tubes and ovaries. She was first subjected to the use of douches of hot water, together with tonics

and administration of alterant remedies, with the hope of being able to avoid a sacrificial operation. Under this treatment the patient has lost, instead of gained, in strength and health, and consented to a radical procedure, which was resorted to on Friday last. In removing the dressing, you will notice I cut through the plaster on either side of the dressing, instead of annoying the patient by dragging it off. To a nervous, feeble patient, the removal of the plaster is a serious operation, one attended with considerable dread and anxiety, and it is better, in her feeble state, to spare her this distress. In the redressing, strips of plaster can be placed over these, and finally all the plaster taken off at once. When I opened the abdomen in this patient, the tubes, ovaries and uterus were found bound down, rendering it exceedingly difficult at first to outline or determine their relation. The fundus of the uterus was taken as a guide, and, passing from it on either side, the ligaments and ovaries were finally discovered, and separated from the firm adhesions. On the left side there was a large mass in the pelvis, the relation of which was exceedingly difficult to determine, and even after it had been torn up and raised up from the wound, I was uncertain which was tube and which was intestine. This mass was cut off from the knuckle of intestine, and the intestine itself was found to be greatly indurated, with a portion of its peritoneun lost. After the removal of the ovaries and tubes, this was covered by stretching the peritoneun over it; but from the amount of induration in the wall and the pressure thus engendered, I almost feared that the patient might suffer from intestinal obstruction to such a degree as to necessitate re-opening the wound. You can appreciate, then, with how much pleasure I received notice that the patient had had a free evacuation of the bowels, and no symptoms of obstruction and discomfort had at any time been present. In raising up the right tube there was found quite a marked peri-salpingitis, leading to a thickening of the tube to the size of a finger. A ligature was applied close to the side of the fundus of the uterus, and in tying it the tissue cut through as clean as if a knife had been used. In this way the entire side of the upper part of the uterus was left raw, and bleeding from this was

very free; in order to arrest it, the broad ligament was raised up, a ligature applied through it in such a way as to control the circulation in the uterine and ovarian arteries. The peritoneum was then carefully stripped over the side of the uterus, and before closing the abdomen a drainage-tube was inserted. This was used, of course, to evacute the blood that might be effused into the peritoneal cavity and to give us warning if hemorrhage should take place. The tube was emptied frequently, and in less than twelve hours it had almost ceased. Where the drainage-tube is used, it should be emptied frequently. If blood is permitted to remain, it clots, and, retaining the heat, acts as a poultice, causing relaxation of the muscular fibres of the capillaries, thus promoting the continuance of the hemorrhage. On the other hand, if the parts are kept dry, the vessels soon recover their contractile power and the orifices are closed. I bring the patient before you to-day with the intention of showing you the wound, and will remove the dressing, as I have not yet seen it myself. Before touching the sutures we will wash out the discharge that is present, as the surface is moist under the protective. In washing it we use the peroxide of hydrogen. In the lower part of the wound you notice a piece of gauze, which is inserted after the removal of the drainage tube in order to keep it open and afford vent for any secretion that might still remain in the cavity. We will not remove all the sutures, as the operation was done on Friday last. The wound, as you see, looks well; the parts are united and without the slightest appearance of suppuration. I am glad to show you these cases, one of which has been done in the class room, and the other in the private ward. The consideration of this subject is a very important question to determine as to when an abdominal operation should be done, and when other methods of treatment should be practiced. In this patient it is of interest to show you these specimens which are removed; you see the tubes have attained a large size, and I show you the portion that is cut through by the ligature. As to the question when to operate, I think no one who has had experience in this line of work would hesitate to say it should absolutely be performed whenever the patient shows symptoms of severe in-

flammation and the physical signs indicate the presence of pus or other accumulation within the tubes. In such cases the function of the tubes has been destroyed, their abdominal ends are sealed, and they are filled with a fluid which is dangerous to the patient. In such cases no one should hesitate to sacrifice useless organs—organs which are worse than useless, in that they are liable to give rise to symptoms which, if unrestrained, may be fatal, and even where controlled lead to distress, discomfort, and to crippling of the individual, making her subsequently an invalid. Now, in this last patient, we had to deal with organs that were destroyed; they were the source of continual danger, and would have made her an invalid as long as she retained them. In such cases there is no plan of treatment by which we can hope to restore the organs to their functions. In such a patient I think no one with experience in this line of work would hesitate to perform an abdominal operation, as the symptoms indicated that the organs had undergone destructive processes; that is, that the tube had become largely inflamed, was dilated by accumulation of pus or fluid, had its ends sealed up, and, consequently, its function was destroyed—not only destroyed, but a condition developed which was dangerous to the patient from the accumulations which had taken place within these organs. Now, this last patient had conditions developed which had led to the destruction of these organs, and no plan of treatment which we could possibly institute would afford a hope of their restoration. The trouble usually begins in the uterus and extends to the tubes. In the majority of cases this extension is due to the fact that the inflammation of the uterine mucous membrane leads to an obstruction of the cervical canal, which prevents the escape of discharges from the uterus, and consequently results in the development of retained secretions from the defective drainage. The uterus, becoming distended, contracts upon its contents, and leads to their being forced out of the cavity through whatever channel they can most readily escape. This is frequently into the Fallopian tubes, and the presence of such an accumulation in the tube is almost certain to result in the development of tubal trouble. The thickening from the tubal inflammation results in the ob-

struction of the uterine end of the tube, and the contact of the irritating fluid with the abdominal end results in exudation from the peritoneal surface and a thorough damming up of the tube end. In this way an accumulation results in a tube which may be either a hydro-salpinx, a pyo-salpinx, or, where vessels rupture and blood escapes, hemato-salpinx. In the discussion of operative procedures I should have no hesitancy in advising an operation in cases which had reached this degree of involvement. In the more simple cases, however, the better plan of procedure would be the dilatation of the uterus, the use of drainage so that a channel is afforded for the escape of material from the uterine cavity; and even should the inflammation have become one of peri-salpingitis, a sacrificial operation should not be done until it was evident that no other means would be successful in relieving the patient. It is true that the ultra men who are inclined to believe that abdominal operations should be resorted to early, will decry the practice of any intra-uterine treatment, and will direct your attention to the frequency of tubal trouble following intra-uterine measures. They will assure you that the uterus by no means must be dilated, that such operations are very frequently followed by exaggerated tubal disease. The truth of this, however, depends much upon the manner of procedure in dilatation of the uterus. If proper precautions are observed in this practice there is no reason why it should be followed with unpleasant results, any more than where the peritoneal cavity has been the subject of the treatment. Every step of the procedure must be done under proper aseptic or antiseptic precautions. The vagina must be not only irrigated but swabbed out with cotton saturated with a disinfectant solution, such as the acid sublimate solution or peroxide of hydrogen. With the introduction of the speculum, the cervix should be carefully washed with the same solution, and where a plug of mucous fills up its canal, this should be displaced by the use of the blunt curette, and the canal swabbed with a disinfectant agent. In the dilatation of the uterus I prefer to accomplish it by the use of graduate bougies rather than with the parallel bar dilators, for the reason that the latter, making the pressure entirely upon

either side, increases the tendency of laceration of the tissue, or by the undue pressure increases the danger of causing the loss of its vitality and subsequent sloughing and infection of the canal. After the thorough dilatation of the uterus, the uterine cavity should be again washed out with the solution, and a drainage tube inserted. This may be held in place by the tampon of iodoform gauze. I believe the reason why the dilatation of the uterus has been at times attended with unfavorable results has been want of thorough and effective drainage. The uterine walls, with the dilatation made laterally, fall together, and the uterus does not retain sufficient peristaltic force to drive the secretion between the surfaces. Even in those cases in which it is necessary to open the abdomen, such opening does not necessarily demand a sacrifice of the uterine appendages. These organs should be separated from their adhesions, brought up, examined, and, if not markedly diseased, should be permitted to remain, proper percautions being taken to secure them in a more favorable location.

Dr. Polk, of New York, has done quite a number of successful conservative abdominal operations, the patients subsequently enjoying good health and giving birth to children. Skutch has recommended that even where the tube may contain fluid or pus, that it should be opened, and with the latter contents should be fastened to the wound so the tubes could be thoroughly drained, and in this way the abscess cavity obliterated. This operation seems to us a risky one, both at the time and subsequently. Where extensive adhesions are broken up, or where the pus was contained within the pelvis, the drainage tube should be a necessary part of the operative procedure. In the after treatment of such patients, the drainage should be carefully looked after, and the tube should be emptied every hour. In oozing or bleeding, this is particularly important, as the more quickly the blood is removed the more quickly will the vessels contract and arrest bleeding. If the blood is permitted to remain, it forms a clot which acts as a poultice and promotes continued bleeding, while its removal leads to the rapid contracting of the blood vessels and relief. In an operation in my private hospital two days ago, there was considerable bleeding, and an ounce and a half of blood was

removed within the first half hour, but it ceased with the emptying of the tube. The patient rapidly recovered from the effects of the shock, the tube was removed at the end of thirty hours, and all the fluid that was removed at that time was a few drops of serum. If, however, this patient had been permitted to go for quite a number of hours without emptying the tube, the presence of the clot might have added greatly to her danger.

The patient whom I brought before you a week ago, a colored woman who suffered from recto-vaginal fistula, and in whom was found a stricture above this, was subjected to a careful investigation in the hospital two days later under the influence of an anæsthetic, when I was able to pass through the stricture a very small bougie, and followed this by my finger, dilating the canal. The stricture, instead of being malignant, as I feared, proved to be a tubercular stricture, which had given rise to the difficulty. The day following the examination she suffered some distress, and the second day after, the nurse, upon going to her, found her dead. No autopsy was secured, so we are at a loss to know the cause of the rapid demise; whether from heart trouble or other cause, we are unable to say. I have no reason to believe that the dilatation of the rectum, especially as there were no symptoms indicating peritonitis, could have been the cause. If there had been a rupture, so that the finger passed out into the peritoneal cavity, it would have been possibly the cause of the fatal trouble. We could readily understand peritonitis arising from a rupture of this kind, but there was no peritoneal inflammation, so far as we could determine, and her death was very unexpected.

The third case was a woman 19 years of age, married, who has had one child and one miscarriage. She entered the house a few days ago suffering from inflammation about the vulva. This gave rise to severe pain of a throbbing character, which has continued, more or less, since. There is no history of any injury as a cause. As the patient lies upon the back you will see that the vulva is very much inflamed, that the enlargement affects the left labium, and more particularly its posterior surface. We have to consider the possibility of various conditions as an explanation for this appearance. Thus,

the abscess may have formed in Bartholin's gland, a knuckle of gut may have travelled down the inguinal canal into the vulva, forming a hernia. A hydrocele may exist in the female as well as in the male. Varicose veins of the labium may rupture, producing what is known as vulva-vaginal thrombus. These conditions, however, are more likely to occur, as the result of injury, or during the process of parturition. The examination of the canal above demonstrates that the swelling is not hernia. The inflamed appearance in the course of its development indicates that it is not a hydrocele. The absence of any history of injury, and that this woman is not at present pregnant, would contraindicate the possibility of a thrombus, so that, by the process of elimination, we arrive at the conclusion that this must be an abscess. This is rendered still more probable by the sensation of fluctuation in the swelling, and we will proceed to open it, evacuate its contents, and as an incision is made in its posterior surface, you see quite a profuse discharge escaping. With its evacuation the entire swelling disappears. We will wash out the cavity with equal parts of peroxide of hydrogen and water, in this way thoroughly sterilizing it, then introduce a gauze drain and apply a dressing of iodoform gauze. Under this course of treatment we shall expect the abscess to heal up promptly.

Original Articles.

REMARKS ON PROCRASTINATION IN MAJOR PELVIC DISEASES.

By DR. F. R. COSTON, Kelso, Tenn.

I had almost headed this article "A Death from Procrastination," the which case to be detailed and discussed really is:

Mrs. R., æt. 27, married at 15, has four living children

and four miscariages; has suffered from pelvic trouble since her monthlies first appeared at 18. The convalescences from her labors were usually rather tedious. Her last child is two years old. For the past year she has been practically bedridden. At times there has been such tenderness in her bowels that she could not bear the weight of the bed covers. At times the appetite was ravenous, eating anything and everything that was allowed her. She was pronounced to have "ulceration of the mouth of the womb," "consumption," "scrofula of the bowels," etc.

Her husband was more than once informed that she could not live more than two or three days; that at best she could only live a few months, etc. Of course, as is always the case with such patients, she had consulted a number of physicians, and got as many different opinions, with the same gloomy prognosis from each. She came under my observation July 25, when I received the foregoing history. I found her with a pulse of 110; temperature 102.5 Fahrenheit; vomiting two or three times daily; bowels moving from eight to fifteen times daily; great tenderness over lower portion of bowels; examination of lungs and heart, negative; pupils large; urine very free, and upon chemical examination presented nothing abnormal. Has cold feet and hands sometimes. Skin sometimes dry, sometimes moist.

Pelvic examination—per vaginam: The womb found healthy, but a little pushed out of position by a growth which causes a sensation, to the examining hand, of fullness and crowding of the organs together. Per rectum, one feels a growth the size of a small cocoanut rather behind and to the right of the womb, but which is not so tender as a small growth in the left side, which is recognized as the left ovary enlarged and inflamed. Patient had not menstruated for about a year. Parents died at an advanced age. I told the patient that she had pelvic trouble that could not be reached with medicine, but that it would be very difficult to say just what it was until one could see it, but that I felt satisfied that there was pus in the pelvis, on account of which she had irregular fevers, etc. Told the patient that her stomach and bowel troubles were produced by the pelvic disease, but that

I would first direct my attention to her digestive organs, and afterward would do a laparotomy with the hope of relieving her entirely, under a pill of:

℞.

Argenti nit	gr. i.
Zinci sulph	gr. iv.
Quiniae sulph	gr. xvi.

M. Ft. pil. No. xvi.

Sig: One pill, half hour before each meal.

Pepsin and hydrochloric acid were taken after meals.

The bowels and stomach got into better condition than they had been for more than a year, and continued so until four or five days before the operation, when the medicine seemed to lose its efficicacy and she began retrograding. Her temperature did not rise above 101 F. during the time of apparent improvement, but for a few days before the operation the temperature had reached 102 and 102.5, pulse 100. The patient was prepared carefully for several days by baths and douches, and it becoming apparent that if anything was done it must be done quickly, and efficient help being present, on August 27, I placed her on the table and did a careful section, the temperature at the time being 102.5; the right ovary was readily recognized, the size of a man's fist, adherent to the bowel and to the iliacus and psoas muscles.

In freeing these adhesions with my hand, I ruptured the sac and found it to be purulent, as I had suspected. A small rent was discovered in the bowel, at the point of adhesion, and immediately closed by Lembert sutures. The pedicle was securely tied with heavy silk, and the tumor cut away. The left ovary was enlarged and bound down, but was quickly and easily freed from its adhesions and removed. The patient was under the anæsthetic only about one hour. She reacted nicely, and only vomited once from the effects of the ether. Three hours after the operation she told me she thought she would get well now, but six hours after the operation she began vomiting and gradually sank, and died, sixteen hours after the operation was completed, from heart failure.

Now, let us examine this case and see why the woman died. Some may be ready to say: "You killed her with your knife." On the contrary, I did no such thing. Let

us look at it. The woman had a disease that all the medicine in the universe could not reach, yet she had been given calomel and quinine, and almost half the rest of the pharmacopœa, beside having the os uteri cauterized with strong caustics, astringent injections, etc., and all the while her health was declining and life slowly but surely ebbing away under the treatment, while the right ovary, transformed into a pus sac, kept secreting and filling itself with pus and producing a localized peritonitis, which was at any time liable to burst forth into full flame of a general peritonitis and destroy the patient. The system was becoming more profoundly affected each day, and the patient, with her family and friends, were fully convinced that it was only a short time until she would find a permanent resting place under the sod.

What effect would cauterizing the os uteri have upon the disease? Only add fuel to the flame by increasing the congestion of the parts. What is the effect of your purgatives and most other medicines given per orem? Generally to weaken the patient by irritating the stomach and bowels. I would not deprecate the use of tonics, but do say when there is a disease in the body upon which medicine can have no effect, that it is folly to pour it into the patient by the handful, for until the disease is removed the equilibrium of the system is so destroyed that it can not appropriate to its use even the mildest of tonics for any length of time. Gentlemen, if any of you have a patient come to you with a felon, you would not say to him, "Your finger must be split open." Much more, gentlemen, may you say to your patients with pelvic disease, especially of a suppurative nature, that they must have it cut out, because their troubles are essentially progressive, and because the whitlow will, after a short time, discharge itself, but the suppurative pelvic disease can not. With these facts before us shall we allow our patients to die without the chance of life which an operation offers, more especially since the mortality, if the operation is performed before the patient is already moribund, is not above 3 per centum?

When physicians have these facts sufficiently impressed upon them, together with the great responsibility they incur by

temporizing in such cases, there will be fewer women to go without an operation until they are on the brink of the grave, but there will be more early operations and more recoveries. It is a fearful responsibility for a physician to give a woman a mixture of iron, quinine, strychnine, etc., astringent injections, in short, ring all changes possible before telling her that she has a disease which can never be cured without a radical operation. It is poor comfort to the poor woman, after you have carried her to the brink of the grave upon palliative treatment, to tell her that you can do nothing more; that she must be operated on or die, and that she has waited so long that she will probably die under the operation. Who is responsible for the death of the patient under such treatment?

Hospital Reports and Clinical Notes.

A CASE OF CEREBRAL ABSCESS.

By Wm. Elliott Parker, M. D., Visiting Surgeon to Charity Hospital.

J. D., a white man, age 23, carpenter by occupation, was admitted to Ward 7, July 27, 1891. From his father, we learned that until his present illness he had always been a healthy man. About two months before admission, he was struck in the right frontal region by a brick, thrown by a fellow workman. There was but a small wound, and he continued his work. In six or seven days he was suffering from frequent attacks of vertigo, and on the tenth day stopped work and went home. He then commenced having fever daily, and suffered with constant frontal headache and commenced to become stupid. These symptoms increasing, he was brought to the hospital. When admitted, he presented the following symptoms: lateral decubitus (usually right), ptosis of right lid, dilatation of both pupils, slow and full pulse, intense localized frontal headache, was aroused with difficulty, and answers were very brief, no elevation of temperature, and it was thought that there was a slight depression under the

cicatrix. Drs. Miles and Souchon kindly consulted with me, and we decided to trephine and explore.

July 26—Patient was chloroformed, and, assisted by Dr. Souchon and Messrs. Thigpen, Horton and Bloch, of the resident staff, I made a semi lunar incision through the cicatrix and trephined. When the button was removed the dura bulged through the opening. A hypodermic syringe was introduced and became filled with fetid green pus. A bistoury was pushed through the dura, and about an ounce of pus escaped. A small-sized rubber drainage tube was introduced, and the cavity cleaned with a 5 per cent. boric solution.

The wound was closed with the drainage tube at the most dependent part. The patient took the anæsthetic well, and recovered without nausea. Before the operation his pulse was 54. Evening July 26, pulse 84, temperature normal. The cavity was irrigated twice daily with the 5 per cent. boric solution, and a variable amount of pus was found. His pulse remained good and temperature ranged between 98⅗ and 99⅗ until the 8th of August, during which time his mental faculties were very good. Morning Aug. 8 he had headache, temperature 101, and there was some pus beneath the flap. This was partly opened, and the pus evacuated. Evening temperature, 99 , pulse 72. August 9th and 10th no fever, but slight headache. August 11th headache and fever were increased. The drainage tube did not seem to be draining the abscess very well, and was stopped up, so a larger tube was introduced; and for his restlessness he was given 7½ grains chloral and 15 grains potass. bromid. every four hours. For a day or two this seemed to relieve him, but on the 16th he developed an obstinate diarrhœa, and said that he could not move his right arm or leg, but could do so. On the 20th the drainage tube was felt beneath the flap, and a small cerebral hernia with it. The wound was reopened, and a hernia about the size of a small hickory nut was found. It was not pulsating, and looked as if it would slough. I packed the wound with antiseptic gauze, expecting to meet Dr. Souchon the following morning, when we proposed shaving off the hernia, and trying to re-introduce the drainage tube. His pulse at this time was 84, temperature 100. That evening, about 6 p. m., he suddenly went into a comatose condition, with slow stertorous respiration and a slow and full pulse. He died about 6:30, from what seemed to be respiratory failure.

Autopsy by Mr. H. F. Thigpen. No fracture of inner table of skull, but outer table slightly depressed at one point. No meningitis. An abscess cavity, about as large as an egg, was found extending back from the inferior portion of the right

frontal lobe of the cerebrum. This cavity communicated by a small opening with the right lateral ventricle. Pus had gone through this opening, and the ventricles, specially the fourth, contained a good deal of pus. I am under special obligations to Mr. H. F. Thigpen (R. S.) for assistance in the treatment of this case, and for these notes.

Proceedings of Societies.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON ORTHOPÆDIC SURGERY.

Stated meeting November 20, 1891. Samuel Ketch, M.D., Chairman.

A CONVENIENT DRESSING FOR CASES OF TORTICOLLIS AFTER OPERATION.

Dr. R. H. Sayre presented a boy upon whom he had operated twelve days before, for the relief of torticollis. The case illustrated the form of dressing which he had found very useful after such operations. It consists of a plaster of Paris jacket and a jury-mast, the upper part of which has a fan-shaped expansion fitting the occiput. After a thorough subcutaneous sub-division of the sternal and clavicular attachments of the muscle, the boy was allowed to come out of the ether, and then a tightly fitting foot-ball cap was pulled down over the ears and covered with a plaster bandage, which also included the expanded portion of the jury-mast. In applying this dressing, care was taken to place the head in the normal position. The mechanical appliances usually employed for the after-treatment of these cases is difficult and tedious to make, and must be made for each patient, and even then are hard to keep in position.

Dr. A. M. Phelps considered this the most efficient dressing of its kind which he had seen.

Dr. A. M. Shaffer did not share the opinion that the mechanical appliances ordinarily employed were complex and difficult of application; on the contrary, he thought they pos-

sessed a distinct advantage over this fixed plaster dressing, as they allowed of frequent but slight changes of position, and a gradual restoration to the normal position. The case just presented did not show a complete correction of the deformity. In two recent cases of club-foot, in which he had endeavored to fully correct the deformity at once, too long a tendon was the result.

Dr. L. A. Sayre said that he had employed this dressing for the last ten years, to the exclusion of all others, and had found it more efficient than any he had previously tried. The principle of practice laid down by the previous speaker, he considered erroneous; immediate and full correction of the deformity was much better than tormenting the patient at short intervals by frequent stretchings of partly adherent tendons. If proper judgment were exercised, the tendon should not be too long.

Dr. Phelps said he wished to heartily endorse the principle laid down by Dr. Sayre. The English method of gradually reducing the deformity by stretching, was, in his opinion, a fruitful source of non-union of tendons, and of their adhering to their sheaths. He had never had a single case of non–union of tendons, and he always divided them thoroughly and super-corrected the deformity at once.

Dr. R. H. Sayre, in closing the discussion, said that in certain cases of wry-neck, where stretching was preferable to tenotomy, the Archimedean screw and other mechanical appliances usually employed were very effective; but if the tissue be contractured, and hence required tenotomy, he thought the dressing he had just shown would be found to give more perfect fixation of the head. Immediately after the tenotomy, a certain amount of material is poured out between the ends of the divided tendon, and a large gap can be filled up as easily as a small one. As the amount of this exudation neither increases nor diminishes after the first effusion, it follows that if the position were not fully corrected at the time of the operation, subsequent stretching can only produce elongation of the tendon at the expense of its diameter.

Dr. Halsted Myers presented a case of Lumbar Pott's disease, with a very large abscess occupying the right side of the abdomen from the ribs to the pelvic brim, extending nearly to the median line in front.

The boy's general health was excellent. He was fat and ruddy. His bowels were regular. There was no albumen or casts in his urine. There was no enlargement of the liver. His temperature varied between 98 and 99 deg. F.

The patient was presented to illustrate a not small class of

cases, and to prove that very large cold abscesses can and do exist without causing any disturbance of the general health.

Dr. Thomas H. Manley thought the lesson to be learned from such a case, was that extreme conservatism should be exercised in the treatment of abscesses where they do not give rise to pronounced constitutional symptoms.

The chairman was of the opinion that one of the most important lessons which the orthopedic surgeons had impressed upon the general surgeons, was that many cases of abscess disappear under proper mechanical and constitutional treatment. He would even go further, and say that many abscesses were prevented by such treatment, and that as these methods more nearly approached perfection, abscesses would be less frequent complications of Pott's disease. While admitting that at times it was very difficult to decide as to the advisability of operative interference, he was personally of the opinion that in cases of joint or spinal disease, there was less risk from the non-operative treatment, for the reason that pus in a closed cavity is much less dangerous than after the cavity has been exposed to the air.

Dr. Phelps said that in the case just presented, the abscess was probably really a cavity filled with tubercular material, and free from the germs of suppuration; but while such "cold abscesses" might remain for a long time without doing any harm, they were liable sooner or later to become infected with pyogenic germs, and when this occurred, "burrowing" would begin, and the patient would exhibit all the usual symptoms of sepsis. As there was no means of telling when such infection would occur, he thought it wiser to operate on all these cases. He felt perfectly confident that he could operate on all such cases without any danger from sepsis, and he had never seen any deaths attributable to such operations in his hands.

Dr. Shaffer said that this theory sounded very nicely, but a large hospital experience extending over a period of twenty-eight years, during which time he had tried various methods of treating these abscesses, had taught him to regard them as of no great importance, and he would not consent to opening these abscesses unless there were severe or prolonged constitutional symptoms due to the abscess. If we were wise enough to let these abscesses alone, the patients would usually do better than if they were opened.

Dr. R. H. Sayre said that his experience with these abscesses had been quite different from that of the previous speaker, and he looked upon them as representing a serious phase of the disease. Where the abscess cavity did not admit of safe and thorough evacuation of its contents, so that healing

might proceed uninterruptedly, it was better not to operate, unless there was serious constitutional disturbance. Letting all cases of abscess alone was as harmful a practice as opening every abscess which presented itself.

A CASE OF TALIPES EQUINO-VARUS, SHOWING THE IMPROVED LATERAL TRACTION APPARATUS.

Dr. N. M. Shaffer said that the development of this traction apparatus had been attended by much experimentation and annoyance, and during this period, there has been naturally a number of failures. A large number of cases of pure equinus, which would ordinarily be condemned to tenotomy, could undoubtedly be cured in this way, but in the more complex deformity, kown as equino-varus, the mechanical conditions were much more intricate. The first two cases which he presented were intended to show the good results which had been obtained without the latest improvement, and the third one to show the improved apparatus applied to the patient, as well as to exhibit the result of three months' treatment. In the older instrument there were three movements, viz.: (1) One which put the foot in any position as regards the equinus; (2) one which threw the foot outward as far as desired and locked it there; and (3) one which drew the foot around into a valgus position. It has been found in cases which have been treated by this apparatus, and apparently cured, that there was an inward rotation of the whole foot on a vertical axis, and the object of this latest improvement was to correct this defect. It consists in extending the apparatus up to a pelvic band and introducing a fourth movement, by which the whole foot is turned on the vertical axis.

The girl whom he exhibited with this apparatus had been admitted to the Orthopedic Hospital on August 27, with such a severe type of double equino-varus that he thought many would have advised operation. The four movements which he had described had been made "up to the point of toleration," and repeated many times a day. They were executed in the following order: (1) Bringing the foot up while the heel is held down; (2) throwing the foot outward and keeping it there; (3) turning the whole foot on a vertical axis; and (4) throwing the foot into a valgus position. While the third movement is being made, it is noticeable that the patella does not move. The results he had obtained with this new apparatus were remarkably quick and satisfactory.

Discussion postponed.

A STUDY OF ONE OF THE ETIOLOGICAL FACTORS OF LATERAL CURVATURE OF THE SPINE.

Dr. Charles L. Scudder, of Boston, presented the results of an investigation into the seating of 3500 school girls, with especial reference to the effect of poor seating upon spinal deformity.

Lateral curvature of the spine is in all probability due to several factors: (1) the superincumbent weight of the body falling upon (2) a spine weakened either in bone, muscle, or ligament, and (3) held persistently out of the median antero-posterior plane of the body.

Dr. Scudder made a careful examination of the seating in schools, and found that faulty positions, one of the elements of the third etiological factor, are certainly induced because of the lack of adaptation of seat to pupil and pupil to seat. How much of a factor in causing lateral curvature poor seating is it is impossible to say, but that it plays an important part there can no longer be any doubt.

The author suggested that the present seating arrangements of schools be used to better purpose than hitherto by arranging scholars more carefully in the room and having careful supervision exercised by those in charge.

He then described the development of the adoption in the Boston public schools of the Swedish gymnastic system, and regarded it as of the highest importance as a measure likely to be somewhat preventive of spinal curvature induced by poor attitudes in sitting. This is to be brought about by no specialized gymnastics, but by general central movements, which shall tend to develop the whole child along the lines of his natural muscular development.

Dr. L. A. Sayre said that if proper attention were paid to the physical training of girls, there would be few cases of lateral curvature.

Dr. V. P. Gibney said that the paper reminded him of some observations he had made at one time in our public schools. In passing through the schools he had been struck with the frequent changes of position of the pupils, and he had concluded that faulty attitudes were not so potent a factor in this condition as he had previously imagined. He was, however, willing to admit that it was quite possible that weak children having once assumed a comfortable attitude, would be likely to maintain it long enough to be injured thereby.

Dr. Ramon Guiteras agreed with the author as to the great importance of the Swedish gymnastics in the training of the bodies of young children. As to the matter of desks, he was happy to say that school desks and chairs had recently been in-

vented by E. E. Hicks, a student of the university, which could readily be adapted to any height.

Dr. H. L. Taylor said that the author had shown indisputably the necessity for competent medical supervision of our public schools. As lateral curvature occurs rather more frequently among the children of the well-to-do class, who, as a rule, attend private schools, where the seating of the children usually receives more careful consideration than in the public schools, and as this deformity also sometimes develops among children who have been entirely educated at home, he was not willing to admit that faulty school attitudes were very potent in producing the deformity in question. They undoubtedly do children harm, but it is still an open question as to how much they have to do with the production of lateral curvature. The instinct of young children is to keep in motion, and one of the great faults in our system of education is the absence of frequent short recesses. A recess of five minutes between each recitation, especially if utilized for gymnastic exercises, would prove very beneficial, and he hoped the paper would receive that wide and thoughtful attention which would lead to the introduction of rational physical culture into our school life.

The chairman said that his own impression was that no habit in itself, no matter how long continued, could produce an idiopathic rotary lateral curvature of the spine. Some years ago, he had written upon the etiology of this condition, especially in young children, and had called attention then to these faulty positions, or, in other words, that the position was the result of the curvature, and not the cause. He was willing to admit, however, that a *curve* of the spine could be produced by a long continued bad position.

Dr. Scudder, in closing the discussion, said that he recognized that among the many factors which entered into the causation of lateral curvature, three important ones were, (1) the superincumbent weight of the body upon the spine, weakened by a diseased condition of the bone, e. g., rickets; (2) weakness of the muscles (not yet demonstrated); and (3) weakness of the ligaments. Although it was not yet known whether one or all are present in any given case, it was known that the superincumbent weight of the body falling upon a spine which is kept in the median plain of the body, causes only an antero-posterior curve. This was known both by demonstrations on the cadaver and by observations on the living subject. But when the spine deviates from this median plane, a certain amount of lateral curvature results. His paper embodied a study of the effect of faulty positions on the body, and did not assert that faulty positions in themselves caused lateral curvature.

THE ANATOMY AND MECHANISM OF THE FOOT, WITH SPECIAL REFERENCE TO TALIPES, AND THE EXHIBITION OF A SHOE FOR CLUB-FOOT.

A paper with this title was read by Dr. James E. Kelly. He indicated the relation of the progression of terrestrial animals to cyclical motion, likening that of bipeds to a unicycle in rapid motion, and a lateral bicycle, such as the "Otto," in slow motion, while a quadruped resembled an ordinary bicycle in rapid, and a quadricycle in slow motion. He indicated the relation of the pelvis to the "hub" or nave of a wheel, the thighs and legs to the spokes, and the feet to the rim or tire. Great economy was claimed in weight, space, labor and nutrition by the substitution, for the entire wheel, of two spokes, and the corresponding tire segments, or feet, which alternately assumed the functions of the numerous portions, each oscillating as a complex pendulum, and describing the brachistochrone, or curve, of the most rapid descent. He exhibited a model which reproduced the movements very accurately.

Dr. Kelly controverted the accepted description of the foot as consisting of antero-posterior and transverse arches, and demonstrated the fact that the two feet placed together constitute a dome or cupola, the entire margins of which rested on the ground, and, consequently, one foot might be more properly termed a semi-dome. He proposed an original explanation of the advantages we derive from the outer toes being the shorter, in the fact that when the semi-dome revolved on its margin from the posterior to the inner anterior portion corresponding to the great toe, while the body moved forward, the consequence was that the ankle was bent outwards and placed in the most favorable position for clearing the inner side of the opposite foot when swinging forward to assume its anterior position. He dwelt on the nomenclature of talipes, and suggested the term "talipes anchylosis" for that form described by Dr. Schaffer as "non-deforming talipes." He entered into the mechanism of talipes more especially with regard to the type than the particular form, and reduced the factors of deformity to extension, laxation and torsion, and indicated their participation and isolation in various deformities. He also spoke of the influences which produced the deformities, as modelling pressure and adaptive growth, and indicated that mechanical treatment was limited by the extent to which the same factor could be utilized in rectification. The question of operation was to be decided by the same standard. He exhibited some diagrams which demonstrated the theoretical advantages of the removal of the wedge-shaped pieces of bone,

with the careful avoidance of the articular surfaces, from the calcaneum, the internal cuneiform, and the tibia in talipes valgus, and the comparatively great rectification which could be obtained by the excision of very limited wedges. The author dwelt upon the ease and safety with which all portions of the tarsus could be approached through incisions along the margins of the foot, owing to the stratification of the structures forming the sole, and advocated the section of the plantar ligaments by an oblique incision parallel to the tendon of the peroneus longus from the outer side, and the freeing of the cuboid bone by a curved incision from the inner margin of the foot.

Dr. Kelly also exhibited an apparatus which he had invented in 1881, and first demonstrated before the Massachusetts Medical Society in 1884 or 1885, in a discussion on a paper read by Dr. Edward H. Bradford on "New and Original Methods of Treatment of Club-Foot." The appliance consists of a boot with a metal sole-plate, a pair of strong drawers with "box knee-cap," and a number of slight elastic bands. The plate resembled a segment of a saucer from which the steadying rim had been removed. The boot was placed on the flat central portion, and had a number of holes along the elevated margin, from which the elastic bands passed to the lower band of the box knee-cap. The apparatus utilized the weight of the patient's body as the rectifying force, as at each step a part of the curved portion of the plate, coming in contact with the ground, rolled it over until it reached the only part that afforded stability, namely, that upon which the foot rested, and consequently the member was forced into the most advantageous position. The elastic bands were added for the two fold object of maintaining, during repose, the benefits derived from locomotion, and of exercising lateral torsion on the foot by an easy arrangement of the bands with regard to the plate and the knee-cap. He expressed the belief that the shoe in its present shape would be useful in the less aggravated forms of talipes equinus and varus, and as an adjunct in the treatment of the more severe examples.

Discussion postponed until the next meeting.

CLINICAL SOCIETY OF MARYLAND.

WM. T. WATSON, M. D., *Secretary*.

BALTIMORE, December 4, 1891.—The 258th regular meeting was called to order by the president, Dr. Robert Johnson.

Dr. Thomas Opie read a paper on

THIRTY-TWO UNSELECTED ABDOMINAL SECTIONS.

These cases were operated upon by Dr. Opie at the Baltimore City Hospital, in the twelve months ending October 31, 1891. The conditions for which the operations were performed were as follows: Ovarian tumors, 6; chronic ovaritis, 7; fibroid tumors, 4; pyo-salpinx, 5; petroflections, with adhesions and dysmenorrhœa, 3; exploratory incisions, 3; extra-uterine pregnancy, 1; cyst of broad ligament, 1; cystic degeneration of ovary, 1. The number of deaths was 4, as follows: Oöphorectomy for double pyo-salpinx, 1; shock from ovariotomy, 1; oöphorectomy for acute mania, 1; abdominal hysterectomy for fibro-cystic tumor, 1.

Stitch abscesses occurred nine times—most frequently in cases where the drainage-tube has been used. Early opening of the abdominal dressings favor their occurrence. When the dressings remained intact for seven days there seemed to be greatest immunity from the stitch abscess. Dr. Welch says that the staphylococcus pyogenes albus is the most common cause of stitch abscesses in wounds treated aseptically and antiseptically.

Drainage-tubes were inserted in these cases.

In one case it retarded convalescence; in another, it seemingly did no good, and a small superficial abscess at the entrance of the tube followed its withdrawal; in the third case an abscess also occurred at the site of entrance. A plentiful supply of fine, properly prepared elephant ear sponges will do away with the necessity for flushings in most cases and remove the need for drainage. They are efficient helps in keeping the abdomen free from infection. They can be utilized in keeping back the intestines, in occupying the cul-de-sac, in positions below the pedicle, in taking up blood or secretions, in staunching hemorrhages, in separating adhesions, in protecting the intestines while closing the abdomen.

Drainage is doing more harm than good, and ought to be abandoned by the abdominal surgeon. The oft-repeated removal of dressings of the patulous drainage tube must of necessity be a very great danger; surely it favors decomposition and invites germs. After an anæsthetic, restlessness and jactitations are not wholly restrainable, and it is easy to see how physical injury may accrue to the patient during this time from these smooth but not at all innocent glass tubes. When the laboratory physician says that bruised tissue is a paragon field for the cultivation of germs, let us heed the warning and cast aside the drainage tube.

Dr. Parkes says, as to the drainage: "Views and practices concerning drainage have materially changed, even since the antiseptic era began. Our predecessors drained to permit the escape of pus, which they knew would form. Until lately, we have drained in order to prevent its formation. We seem now to be on the eve of an era when we need to drain but little, or not at all. We resort to drainage now only of necessity in septic or infected cases. In other cases, we drain mostly from habit, or from fear. Indeed, when we start afresh, as it were, without previous infection, the practice of drainage is a confession of fear, or of weakness, both of which are alike unscientific and unfortunate. It even seems to me that in many cases where all other aseptic requirements have been met, we do much more harm than good by the use of drains."

METHYLENE BLUE IN MALARIA..

Dr. W. S. Thayer spoke of the treatment of five cases of malarial fever at the Johns Hopkins Hospital with methylene blue.

Immediately after the appearing of the article in *The Berliner Klinische Wochenschrift*, for September, 1891, in which Gutmann and Ehrlich described the successful treatment of two cases of malarial fever with methylene blue, this treatment was begun with the cases of malarial fever entering the hospital. So far, only five cases have been treated.

One case of tertian ague yielded immediately to methylene blue, 0,1 (1⅔ grains) five times a day. No rise of temperature after beginning of treatment. No organisms in the blood after the third day.

A severe case of quotidian ague had one chill twenty-six hours after the beginning of the treatment (methylene blue 0.1 every four hours) and a lesser rise of temperature without chill on the two successive days. After this the temperature was normal. No plasmodia seen after ninth day.

In a case of chronic malaria, with pigmented crescents and small intracellular hyaline bodies in the blood, no organisms were seen after the ninth day under methyline blue 0, 2 four times a day. In two cases of severe chronic malarial remittent, the temperature fell to normal in a few days, but there were occasional returns of slight fever, and the organisms—hyaline bodies and pigmented crescents—had not entirely disappeared in 41 and 23 days respectively. (In the former case, after 11 days treatment with quinine, a moderate number of organisms was still present.)

In all the cases, the drug was given as a powder in capsules. Slight burning sensations with micturition were usually

present after taking the drug, and were relieved by small quantities (one-fifth of a teaspoonful) of powdered nutmeg several times a day. The urine, under treatment, was of a deep blue color. The fæces when passed, were not colored, but, on exposure to air, turned rapidly blue. The sweat and saliva were not colored.

The number of cases yet treated is of course too small to give a sufficient basis for any definite opinion as to the relative value of this drug and quinine. The experience is sufficient to show that methylene blue has a definite curative influence on malarial fever, and to warrant its further trial.

Dr. I. E. Atkinson said that the discouragement which one nearly always finds in treating malarial diseases with other remedies than the derivatives of cinchona bark is due to the extreme usefulness of cinchona bark itself, for it is so promptly antidotal in its effects on these disorders that we are apt to be discouraged, and not persist in the treatment by other agents. The testimony given to us by Dr. Thayer seems to show that in methylene blue we have another agent in the treatment of these disorders.

The effects of the use of quite dissimilar drugs in these diseases is remarkable. Of course we all know the value of arsenic as an anti-malarial remedy, and we know that iodine possesses properties in this direction, inferior to quinine, but still pronounced. Some years ago, prompted by some papers published by a physician connected with the English army in India, who claimed that iodine had properties equal to cinchona bark, Drs. Atkinson and Hiram Woods made some observations on the treatment of malarial intoxication with iodine.

The results of these investigations showed that while iodine has undoubtedly anti-malarial properties, yet in a large proportion of cases it will fail absolutely. There is a wide range of remedies that possess this anti-malarial property, and which would be valuable if we did not have cinchona bark to use. The investigation reported by Dr. Thayer is most interesting and important, and further progress will be awaited with interest.

Dr. Harry Friedenwald read a paper on

CHOLESTEATOMA OR PEARL TUMOR OF THE EAR.

Cholesteatoma is a bright white growth of pearly lustre and smooth surface, made up of distinct layers placed concentrically over each other; has no blood vessels, and when examined microscopically is seen to be made up of layers of large, flat, non-nucleated polyhedral cells, stratified in layers.

These cells are in every respect similar to the cells of the outer layer of the epidermis. Between them are found cholesterine crystals. The growths occur in the middle ear and in the mastoid cells; here they lie in cavities which they frequently enlarge to very great size. The cavities have a very smooth surface, and are lined by a very fine membrane, which consists of a layer of periosteum, upon which lies a rete Malpighi. This is the capsule which surrounds and produces the growth. These growths are often found in cases of chronic suppurative inflammation of the middle ear with perforation or destruction of the drumhead, and frequently with polypi. But these growths have also been found without any other or any previous disease of the middle ear and with a perfectly normal drumhead. It has likewise been found in other cranial bones and in the pia mater.

Three cases of cholesteatoma, one small one with a minute perforation in Shrapnell's membrane, a second, larger, in which the outer bony wall of the middle ear had been completely destroyed, and a third, very large, and occupying a great part of the mastoid cells, which had perforated both externally and internally into the cranial fossa, were described.

The various views regarding the origin of cholesteatoma were then discussed. Virchow regards it as a heteroplastic tumor, whether found in the pia mater or in the bones of the skull, and analogous to epithelial carcinoma. Other observers find its origin, in accordance with this view, in the embryonic development of the labyrinth from an involution of the epiblast or in an involution of the epidermis in the first bronchial cleft whose destiny it is to develop into the eustachian tube and middle ear. A view distinctly different from the above, is that cholesteatoma is a desquamative process of the membrane lining the middle ear; that it is an inflammatory product which is retained in the spaces of the middle ear, and by gradual accumulation forms a tumor. This is the theory of Von Trœltsch. The difficulty encountered here lies in explaining how a cavity normally lined by a mucous membrane can cast off cells of an epidermoid form, and, even more, can take on all the characteristics of epidemis with a well-defined rete Malpighi. Von Trœltsch believed that the products of inflammation, by irritating and pressing upon the mucous membrane, caused the desquamation. This view has many adherents, who believe that the same process converts the mucous membrane into epidermis; and recently it is claimed that analogous changes are found in simple ozœna, the ciliated mucous membrane of the nasal cavity being changed into epidermis. Another manner of explaining the

change of mucous membrane into epidermis has been advocated by Wendt, Habermann and Bezold. It is claimed that when large perforations exist, and especially when the drumhead becomes adherent at the edges of the perforation with the inner wall of the middle ear, that the epidermis of the drum-membrane "gains ascendency over the mucous membrane and extends with much greater rapidity over the entire district." Bezold goes further, and claims that a simple tubal catarrh is frequently a cause of retraction and perforation of Shrapnell's membrane; that the edges of the perforation adhere to the walls of the space within; that extension of the epidermis over the walls of these spaces will follow, the cavity be filled by desquamation and the nucleus of a cholesteatoma formed. Thus Bezold explains the fact that the upper part of the middle ear is often the seat of cholesteatoma, and that cholesteatomous matter was found in all his cases of chronic suppuration with perforation of Shrapnell's membrane.

In conclusion, if we bear in mind that cases of cholesteatoma have been reported without any history of previous inflammation, while on the other hand it is certain that many owe their origin to inflammatory affections of the middle ear, we will hesitate to accept any one explanation as the only one. As is frequently the case in other matters, so here it is probable that the various theories do not conflict, but each serves as the true explanation for different cases, or, as Kuhn puts it: "Cholesteatoma of the temporal bone is either a true hetero plastic tumor, as Virchow believes it to be in all cases, or it may also develope, and, in perhaps many cases, in the course of chronic suppuration of the middle ear from epidermis, which has grown into the tympanic space from the perforated drum or the external auditory canal, and which has slowly and continually kept shedding its horny layer, and thus forming the stratified cholesteatomatous mass."

Dr. Hiram Woods, Jr., said there was very little written about this subject in any of the books published in the English language. Of all the books to which he has access, Roosa is the only one in this country who makes mention of it under the name of cholesteatoma. Another name which has been given to these tumors suggests a possible origin of them in some cases. They have been called adipoceriform tumors. They usually occur in cases of chronic suppuration of the ear, and in that particular variety where drainage is exceedingly difficult, as in the perforation in Shrapnell's membrane, when it is almost impossible to keep up good drainage. It is a well known fact that where inflammatory products can not be removed on account of difficulty of drainage, poor vascular

supply or other causes, these products gradually undergo fatty degeneration, and caseation may take place in them. Cholesterine is one of the characteristics of the process of caseation, according to Green, and it would seem that the ordinary degeneration of pent-up inflammatory products might account for at least a certain class of these cases. They can not all be accounted for on any one theory.

Dr. W. H. Welch agreed with Dr. Friedenwald in believing that there are various causes. It is not an anomalous occurrence to have cylindrical epithelium transformed into flat epithelium, as takes place in some of these cases in the ear. We have analogous changes in mucous membranes in other parts of the body. Virchow has described a condition of pachydermia laryngis in which the epithelium of the larynx becomes transformed into laminated flat epithelium. Another illustration is in prolapsus of the rectum, in which cylindrical epithelium becomes transformed into epidermis. The same is true of the mucous membrane of the prolapsed uterus. Virchow has also described the transformation of ordinary epithelium into ciliated epithelium. There is sometimes found on the peritoneum ciliated epithelium where we should have ordinary epithelium. There is nothing unique or particularly unusual in the mere transformation of the epithelium of the tympanic membrane into epidermis. Other cases present too much of the character of destructive tumors to suppose this to be the only explanation. Many of these are doubtless real tumors, which probably rests upon an abnormality of embryonic development; epiblastic structures become displaced and grow where they ought not to be. One severe case of pearl tumor, seen by Dr. Welch, was reported by Dr. Loring.

Dr. Friedenwald replying to Dr. Woods, said that such processes of degeneration and disintegration of the products of inflammation are very common in all sorts of chronic inflammation of the middle ear; but the products of such disintegration are quite different from products found in the cases described. There we have broken down pus cells and disintegrated matter, but no flattened epithelium.

Dr. Welch was asked by Dr. Friedenwald if in cases of prolapsus rectum the epithelium is changed into real epidermis, with a rete Malpighi, formed and flat cells losing their nuclei, as on the skin, and replied that he had examined several such cases, and in them there is hardly a rete formed, but we have from below upwards the cells gradually becoming flat, the topmost layer composed of real horny cells, as in the skin.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.

NOVEMBER MEETING.

The president, Dr. William E. Mosely, in the chair.

Dr. John Morris gave an address entitled A PARTING WORD UPON OBSTETRICS.

I began the practice of obstetrics forty-six years ago, and for the first four years kept a record of my cases. The first year I attended 35 cases. I was associated with Dr. Hintze, who, at that time, had a very extensive general practice, and who was very often called to assist midwives in their troublesome cases. I kept a careful record of my first 200 cases, but after that I abandoned the record, a fact which I have since very much regretted.

My first case was a very unfortunate one. I attended the patient in my student days. This woman was in the country, and was in labor three days. At the end of that time I sent for Dr. Hintze, who delivered her with the crochet. On account of the long impaction of the head, the whole of the anterior wall of the vagina sloughed away. The woman is still living, but so much tissue was destroyed that it was quite impossible to close up the opening, and all these years the urine has been passing from her as rapidly as secreted.

My second case was a black woman, who had a prolonged labor. I had never seen the forceps used, but tried to put them on, and failed. After awhile the child was born without any artificial assistance.

One of my great difficulties in my first cases was to find the cervix. I had never had any practical instruction in obstetrics, and did not know that in the first stage, before much dilitation, that the os is usually found far back against the sacrum. Among other things that I think I have learned is how to shorten labor. One of the best means of accomplishing this is by external pressure. I learned that from my master, Dr. Hintze. Another was to pass the cervix around the occiput; and I found that these, too, shortened labor very considerably. I think I acquired the art of preserving the perineum. I believed in keeping the head unter control and not allowing it to be delivered too rapidly. In Ireland I learned how to preserve the perineum, when using forceps. The secret is simply to change the axis of traction as the head comes to the perineum first upwards, perpendicular to the bed, and then carrying the handles far over on to the abdomen of the mother.

I have found that midwifery is underrated in the profession; but I am convinced that in no branch is there greater oppor-

tunity to display skill and judgment. This branch is esteemed much more highly now than formerly.

Formerly in conditions of rigid cervix it was the practice to bleed. I have done it many times, but it would not be tolerated now.

I am convinced that hot water injections will assist in relaxation.

I have no faith in belladonna.

I have been fortunate in not seeing any cases of hemorrhage. I believe external pressure used during labor will prevent post partum hemorrhage. For the first ten years I used ergot in nearly every case during the second stage; but have not used it now for fifteen years. In cases of delayed labor I now prefer the forceps to ergot.

The crochet has gone out of use, but formerly it was used frequently. Often the woman was injured, and not infrequently the doctor's fingers suffered. Dr. Hintze had a glove to protect his fingers. We had that time no chloroform, and often in transverse positions the woman would die undelivered, because it was not possible to turn and deliver. I have not habitually used anæsthetics, except in forceps cases. I have thought that they prolonged the labor, but I always use chloroform when any force is to be resorted to.

I have never used the binder, because I could never see the philosophy of it. It will not stay in position, and it is absurd to think it controls hemorrhage. The only good that I could ever see that it accomplished, was to please the woman.

When to use forceps.—Always use forceps when labor is delayed in the second stage. The old forceps were a much weaker instrument than the ones constructed on the Tarnier principle. I think the Tarnier forcep the greatest advance in obstetrics in my time.

In placenta privia and in abortion we formerly used a tampon made of a handkerchief, rags, cotton, or anything that could be had. These tampons were dirty and dangerous. Later I had used only the colpeurynter. It assists to dilate the os, as well as being the most efficient tampon. It is clean and harmless.

Opium is the best thing to relieve pain in labor. It does not arrest the labor. When the os is dilated, it increases the contractions

Dr. F. E. Chatard exhibited to the society the obstetrical instruments used by his grandfather, 1810-1840, and also those used by his father, 1835–1875.

He stated that he had used external pressure with apparent good effect.

Dr. Wilmer Brinton stated that external pressure was used by primitive people. He thought that in rigid, as he had gotten good results from the administration of chloral in fifteen grain doses every fifteen minutes, with three doses when given, as recommended by Playfair. But the number of cases in which he had given chloral was small.

Dr. G. Lane Taneyhill had used chloral per anum with great satisfaction in three cases. In less than an hour the os had been considerably dilated, and delivery was effected in each case within three hours, other remedies having failed. He had learned this treatment from our learned fellow member, Dr. Williams—he used thirty grains chloral in milk.

Dr. P. C. Williams thought it was very important to consider agents to relax the parts. Chloral in 40 to 60 gr. doses per anum had given good results, but sometimes it, as well as chloroform, fails to completely relax the cervix.

In his earlier experience he had encountered many cases of post partum hemorrhage, but since he had made use of a practice that is condemned by most obstetricians, that of giving ergot before chloroform, he had not had a single case of hemorrhage. He had seen no harm result from this practice, but thought he had in this way shortened the labor.

The objection to morphine to relieve pain is that it nauseates badly afterwards. Chloral must be pushed to get good effects. The objection to it is that sometimes it leaves the patient more or less delirious, and may seriously depress the heart if given too frequently.

Dr. William S. Gardner had used chloral in fifteen grain doses, repeated every fifteen minutes, in a series of cases, and found that while the patients had very little relief from pain, that a large percentage of them would be made sick at the stomach, and the discomfort caused by the disagreeable taste of the drug and by the vomiting following its use, more than counterbalanced the little good it did, and its use in this way was abandoned.

He gives it frequently for the relief of false labor pains; a dose of 30 grains will almost invariably relieve the pains and put the woman to sleep.

Dr. Wm. P. Chunn had used chloral a number of times, but could give no positive evidence of its value, but it does not seem to obtund the pain. If opium will do this, it might be advisable to use it.

Dr. L. E. Neale was surprised that a discussion as to the value of chloral should be brought up. He thought that the time for discussion of that subject had passed.

Whether it would act more efficiently by the rectum or by

the stomach he did not know; but he thought 60 grains too large a dose, and would be afraid to use that much as an ordinary dose by the mouth.

The remarks were entirely too general to admit of special discussion.

WILLIAM S. GARDNER, M. D., *Secretary.*
712 N. Howard street.

ATTAKAPAS MEDICAL SOCIETY.

Next to the Orleans Parish Medical Society, the Attakapas Medical Society is the strongest local medical organization in the State. We take pleasure in publishing its roll of membership, which contains some of the best known names in Louisiana. The meetings of the Attakapas society are held semi-annually; the next meeting will be held in May, 1892. THE JOURNAL will endeavor to present to its readers complete reports of the proceedings of that and subsequent meetings:

LIST OF MEMBERS:

Drs. C. D. Owen, Eola; D. N. Foster, Franklin; H. A. King, New Iberia; R. M. Littell, Opelousas; W. D. Roussel, Patersonville; A. C. Denis, Arnaudville; W. W. Lesley, Church Point; J. T. Rand, Burke's Station; F. R. Tolson, LaFayette; F. J. Meyer, Scott; M. R. Cushman, Youngsville; G. A. Shaw; G. J. Sabatier, New Iberia; W. D. White, Abbeville; W. M. Thompson, O. P. Daily, L. Daily, W. R. Lastiapes, J. P. Saizan, Opelousas; G. E. Brooks, Point Bane; J. O. Ray, Opelousas; J. F. Abshin, J. A. Villean, Abbeville; T. J. Wolf, New Iberia; C. M. Smith, A. S. Gates, Franklin; G. P. Minvielle, Jeanerette; T. Hebert, New Iberia; E. S. Barry, Grand Cotean; J. H. P. Wise, Morgan City; C. E. Allen, Centreville, St. Mary's parish; A. Guilbeaux, Breaux Bridge, St. Martin's parish; G. W. Martin, Arnaudville; F. N. Courtney, J. P. Francez, Carencro; T. T. Tarlton, Grand Coteau; F. S. Mudd, Lafayette; M. V. Richard, Franklin; L. A. Burgess, New Iberia; F. R. Martin, Arnaudville; N. P. Moss, Lafayette; W. Prijean, Carencro, Lafayette; F. Gouaux, New Iberia; F. L. Jewell, St. Martinville; J. W. K. Shaw, Loreauville; M. B. Tarlton, Jeanerette; B. A. Littell, Opelousas; H. Walet, Belle Place, New Iberia parish; L. Pearce, Evergreen; J. A. Haas, Ville Platte, St. Landry parish; Hollingshed, Evergreen.

Honorary members—Drs. McGuire, Jeanerette; A. Duperier, New Iberia.

HARVARD MEDICAL SCHOOL ASSOCIATION.

This association has just issued its first bulletin. The secretary, Dr. Robt. W. Lovett, requests that all graduates of Harvard who have not received a copy of the bulletin send their names and addresses to the secretary, who will take pleasure in sending copies to them.

TENTH INTERNATIONAL MEDICAL CONGRESS.

(From our own Correspondent.)

SECTION OF OBSTETRICS AND GYNÆCOLOGY.

Dr. L. Landau, of Berlin, read a communication on his experiences, referring to tubal sacs. He said that tubal sacs had formerly also been diagnosed *in vivo* only very rarely. The reason for this was the defective knowledge on objective and subjective diagnostic signs of the disease under consideration and the imperfect methods of examination. Even when the tubal sacs were diagnosed, they were a "*noli me tangere*," owing to the dangerous method of operations in former times. Then came the period in which abdominal tumors were removed, and thus also tubal sacs. Owing to later and better methods of operation, the tubal sacs has gained much, but it must be emphasized that the diagnosis of a tubal sac was not yet a reason for performing salpingystomy and castration, as if we had to deal with an ovarian tumor or carcinoma. Owing to the disadvantages of every unsuccessful operation, a quite exact indication for undertaking such an operation was necessary.

The lecturer then gave some important details as to his experiences with hydrosalpinx and pyosalpinx.

With reference to hydrosalpinx, Dr. Landau said that it could heal spontaneously, and the way of the spontaneous healing was illustrated by intermittent hydrosalpinx. The methods of treatment, when the diagnosis had been ascertained, were:

1. The orthopœdic or mechanical method; and,
2. The surgical method.

As to the orthopœdic method, the following points are to be taken into account:

(*a*) The rectification of a false position of the uterus, for the purpose of improving the position of the oviducts. In this way the discharge of the contents was rendered possible, just as in the case of intermittent hydronephrosis.

(*b*) Massage, which, moreover, rendered it possible to press out the contents of the oviducts mechanically; and,

besides this, it permitted, by the detachment of adhesions of various parts of the oviducts among each other and the neighboring organs, to compensate the curvatures and the torsions of the oviduct and to produce contractions of the same. The massage cure is very much helped by baths, irrigations with lukewarm water, cataplasms, etc. When this method is skillfully carried out, it is of very great use, and no inconvenience occurred.

As to the following two methods, Dr. L. Landau detested them, viz.:

(*c*) Sounding the oviducts.—This method, Dr. Landau pointed out, was dangerous. It was already owing to the direction of the canal to be sounded towards the uterus axis that a solid sound was inconvenient; an elastic sound, however, did not penetrate into the closed ostium of the oviduct.

(*d*) Dilatation of the uterus is neither free from danger, and is uncertain. The manipulations necessary in this case may cause a pyosalpinx to burst, and produce suppuration of a hydrosalpinx.

SURGICAL INTERFERENCE.

Surgical interference becomes necessary when the orthopœdical endeavors prove ineffectual. The surgical manipulations had to be undertaken for the purpose of preserving the oviduct and the ovaries, and of avoiding salpingysterocyesis and castration, the disastrous consequences of which could not even be foreseen. The author, in these cases, first thought to reach the oviducts through the vagina, and used the method which was only wrongly condemned, viz., puncture through the vagina. This procedure he carried out methodically.

Strict antisepsis is necessary. The tumor is pushed towards the fornix of the vagina, and an incision of the tumor is made by means of a simple trocar without the help of the speculum and without the fixation of the uterus.

Care should be taken to let no air pass through, and aspiration had never to be resorted to. When the measures of precaution recommended by the lecturer were observed, the neighboring organs and the blood vessels were not hurt, and could close together only with difficulty sustain any damage. The exploratory puncture is of the greatest importance. As to the puncturing, the partial one was occasionally sufficient, obviously for the reason that the extended muscles are freed of the strain exerted on them formerly, and could now contract. The effect of the punctures was similar to the influence of the incision into the bladder on the pregnant uterus. In full functions the results were different. In most of cases healing occurred in simple as well as in multiple sacs of the oviducts,

and the healing was not invaribly in the pathological sense, but in the clinical. A flabby sac, viz., the dilated oviducts, sometimes remained behind. The fluid, however, usually did not gather again, and if the contrary was the case, we had to deal with the second result of the operation, viz., with the relapse after puncturing. This relapse usually occurred after a long interval of time. When the relapse occurred repeatedly, but after two punctures, the following two procedures came into consideration:

1. Full puncturing with washing of the cavity with a 3-per cent. solution of carbolic acid.

2. Injections with tincture of iodine into the evacuated sac.

3. Puncture and introducing of a canula to produce pus. This method, however, is not a favorite one.

If the oviducts, however, did not lie close to the posterior wall of the vagina, but if they have developed and proceeded as far as the anterior wall of the pelvis, puncture from the vagina did not at all come into account, but neither that from the abdominal layers could be resorted to, because the non-adherent sacs were retracting. In these cases of hydrosalpinx, as well as in those cases in which puncture was without success, incision had to be resorted to. The objection which could be made to this simple puncture from the vagina, which he had practiced in hundreds of cases, was that he had, by error, opened cysts, echinococci and pregnant oviducts. In the first mentioned cases no harm was done; in the last ones even healing was thus obtained.

PYOSALPINX.

Spontaneous healing of pyosalpinx sometims occurs. Not all the forms of pyosalpinx require a radical treatment. Many cases run their course without any symptoms. In the case of pyosalpinx, mechanical methods of treatment do not come into account. A puncture of a pyosalpinx for curative purposes was equally inadmissible, just as in the case of purulent pleurisy; laparotomy alone is successful.

Hence, only incision and excision come into consideration. Incision had to be resorted to in simple sacs of the ovaries, and excision in multiple sacs.

The incision could be made from the vagina or from the abdominal walls, or from both the parts simultaneously.

The incision from the vagina is practiced after careful disinfection, in a similar way as in the case of puncture, without using a speculum and without drawing the uterus down-

wards. If the pyosalpinx, as is usually the case, be adherent to the bottom of the vagina, it is natural that the peritoneum must not be opened during the incision.

In other cases the tumor is fixed with the hands, which rest on the abdominal walls. By means of the finger, which is passed into the opening of the incision, the wall of the sac is pushed towards the wound, and fixed by means of the Pease's forceps which are permitted to lie there for twenty-four hours. The peritoneal cavity thus becomes closed and remains so. This operation is called the single operation or operation at one sitting. The operation at two sittings is too complicated and dangerous.

If severe hemorrhage should occur, the forceps should be used to control it. A lesion of the neighboring organs could not occur when some skill is used.

The after-treatment is very simple. A drainage-tube of the form of a "T" is introduced, and when there is hemorrhage of the sac, iodoform gauze is introduced for twenty-four hours, which is equally replaced by a drainage-tube of the form of a "T" after this time. The drainage-tubes are allowed to remain for from eight to fourteen days. Dr. Landau ignored washings, except one washing with common salt-water during the operation, for the purpose of mechanically removing the pus, and only practised washings of the vaginia.

Dr. Landau recommended not to permit the patient to get up before eight days after the date of operation, in order to accelerate the discharge from the pus sac.

The wound of incision, though it may be large, has a great tendency towards healing, but it invariably yielded to the dilatation in the case of retention. The immediate results of this simple operation were very suprising for the welfare of the patient. The later results were equally good.

As to the choice of incision in this operation: if it be large, Landau preferred the incision in the "linea alba," and if not, an incision parallel to Poupart's ligament just the same as that made while seeking for the iliac artery. The after treatment is a very conservative one. In the beginning Dr. Landau usually makes a counter-opening in the direction of the vagina, and inserts drainage-tubes upwards and downwards. In small sacs, however, this counter-incision soon proved to be superfluous, and for this reason, he only used his in large sacs.

In such exceptional cases in which it was impossible to suture the oviduct to the abdominal layers, owing to their being covered by intestines, and in which an incision from the vagina was not possible, owing to the development of the tumors forwards, Dr. Landau made an incision after the

laparotomy, starting from the vagina, so that, if he introduced in such a case the hand in Douglas's pouch, he could touch the free spot of the sac without damaging the neighboring organs, and thus practise the incision; he inserted drainage tubes into the vagina, and closed the abdominal wound without opening the sac from this place.

As to washings, he equally ignored them in the case of incisions of the abdominal layers.

In those cases in which the lecturer had to deal with multiform pyosalpinx, in which the above-mentioned treatment proved to be without success, and in the case of sacs of the oviducts in which the purulent contents came less into consideration than the perisalpingitic and salpingitic changes, in which large adhesions together with the ovary in a state of inflammation, which was not seldom changed into a tubo-ovarian abscess, formed the essential features of the disease, only the excision could be resorted to.

If it be possible, the ovaries are allowed to remain in the abdominal cavity, which is often the case in hydrosalpinx.

Usually, however, öopherectomy, together with salpingotomy was indicated owing to the changes of the ovaries, as also resection of the ovary. The method of operation is very difficult. The method was much facilitated, and sometimes even rendered possible only by the procedure recommended by Landau, viz., the bimanual removal of the sacs of the oviducts. The method of Trendlenburg was equally a very good means of assistance. Among 52 laparotomies for pyo- and hydrosalpinx which Dr. Landau had performed he had only one case of death occurring from ileus 8 days after operation.

The discharge of the contents of the pyosalpinx into the abdominal cavity is not a rare occurrence when the sacs of the oviducts are torn off in laparatomy. The contents are to be absorbed by means of sponges, or to remove it by aspiration after abdominal section, if possible, before the removal of the sacs.

The results after salpingotomy are surprisingly favorable. In some of the castrated women, however, severe phenomena occur. Setting apart from abdominal hernia, nervous, physical and trophic changes supervened so that the patients would rather exchange their ancient affliction for their present condition.

KOCH'S METHOD AGAINST TUBERCULOSIS.

At the last meeting of the Imperial Royal Society of Physicians, of Vienna, Docens Dr. Riehl reported upon the fol-

lowing case. A woman, aged 53 years, was suffering from tuberculosis of knee joint five years since, and amputation had to be performed; over the skin of the stump which remained behind there develeped nodules which were confluing and formed ulcers. In this case he used Koch's remedy. The ulcer was in a state of irregular decomposition, presented a rather solid inpiltiation and gray iniliarp tubercles were seen over the fleshy places. The injections with Koch's remedy produced, besides the general reaction, a local one just as in the case of lupus. The microscopical examination of a part of them which had been removed revealed a considerable augmentation of the number of round cells, and not only of the granlatton-cells but also the leucocytes. Between the tissue, particularly at the margin, fibrine was to be found, In the blood vessels there were also lencocytes.

Occasionally, also, a solid net of fibres was to be found, which proved that they had to deal with an exudation, and not, as was stated by some authors, with a transudation.

Prof. Kaposi said that he was much satisfied to hear of the histological investigations of Dr. Riehl, as this was an instructive step towards the knowledge of the internal process in the tissues which became affected with Koch's remedy, and asked his predecessor as to whether he was able to communicate anything of true tuberculosis cutis taking into account the behavior of the tubercle bacilli. Does Dr. Riehl uphold that, before the use of Koch's remedy, some bacilli and giant cells had been seen? Proof of the presence of bacilli in the necrosed tissue could not be hitherto furnished owing to the shortness of the time.

Prof. Kaposi said that he wished to direct the attention of the audience to the two principal points of the effect of the injections, viz., the general and the local reaction in the tissue. With reference to the general action, the question already asked arose as to whether the occurrence of such a general reaction alone would entitle to a diagnosis of *tuberculosis*. As to the dermatologists this matter was of no importance as these made their diagnoses directly; but in the case of internal and surgical diseases this question was, of course, of importance.

Now, Prof. Kaposi had already directed attention to cases (such as epitheliasma, in a healthy physician) in which the average dose, .01 gramme, was attended with severe general reaction. Among the cases which he had treated hitherto with Koch's injections and which were not lupus, a quite typical general reaction was observed in one case of syphilis papulosa, one case of lepra, one case of sarcoma pharyngis, and one case of lupus erythematosus acutus

disseminatus; the case of lupus erythematosus presented the most intense of all reactions; the temperature amounted to 40 deg. C. for three days, (the dose was 0.005 gramme), and there were also equally severe concomitant symptoms. As to the local reaction he had also met it in a case of lepra maculosa et anæsthetica, as the flat "plaques" over the cheeks and the front swelled up to reddish brown, solid tumor-like infiltrations; this was the case after the first as well as after the second injection. The local reaction was also found in a case of sarcoma pharyngis, in which, after two injections, also fever and redness and swelling of the tumors, and serous secretion; after the dis-appearance of the reaction, the neoplasm had also diminished.

3. In a case of syphilitis gummatosas ulcers were without general reaction, redness and swelling of the margins of the ulcers and its bare, and copious serous secretion came out.

4. In the case of lupus erythemtosus, already referred to above, in which the local swelling and redness of the whole face, and the serous infeltration of the epidermis quite correspond to the cases of lupus vulgaris of the face, the punctiform primary efflorescences in the territory of the back, and the hands were swollen to the size of acne—like nodules and pustules—lupus erythemtosus, however was not lupus; but only an inflammatory process which happened to bear the name lupus.

(5) For a man affected with a maculopopulous syphilide of recent date, there was no general reaction, but there was local reaction over the tonsils in the form of acute redness, swelling and serous secretion. Moreover, after inflammatory changes of the tissue, such as acne folliculosa and eczema of the lupous patients were considerably increased.

A second case of lepra tuberosa was treated with only *0.005* grammes and *0.01* gramme, and only showed slight general reaction.

Finally the lecturer wished to emphasize the fact that his lupus patients, who after complete defervescence and a two days pause, were injected with the same dose on the fifth day, now presented intense and dangerous general symptoms and slight local reactions. The symptoms were intense desire to cough, bloody coughing, unconsciousness, increased skin and tendon reflexes, collapse of long duration, sensation of oppression, pains of the stomach and the intestines, severe and continual vomiting, on one occasion also peptonuria came on; all the patients suffered from severe weakness and emaciation so that Prof. Kaposi was now determined to practice the injections after several days intervals, and to direct a still greater

attention to single individuals. Prof. Kaposi was of the opinion that perhaps a cumulative effect of the medicament has taken place in these cases.

Prof. Neumann (syphilographer) said that the following cases were under observation in his clinic at the general hospital: 2 cases of lupus of long standing; 2 cases of lupus tuberculosus of the cheek and the nose; one of these presented the combination with pulmonary tuberculosis, and the other one that of lupus maculosus et tuberculosus of the cheek, the neck and the forearm in combination with an old syphilis, from which an orchitis suffusa had resulted; moreover, there was tuberculous epididymitis in an individual who had frequently suffered from hæmoptysis. (4) Gumma of the nose; (5) psoriasis vulgaris; (6) tubercular syphilis; (9) a case of lepra tuberosa (outside the hospital); altogether nine patients. In one of these, lupus was simultaneously combined with "lichen scrofulosus." Though it was said that Koch's method of treatment had no influence on the syphilitic process, these cases must nevertheless be taken into account when they were combined with scrofulosis and tuberculosis, when "strumous buboes" and "lichen syphiliticus" was frequently influenced by the above mentioned processes. In the same way, also, other affections, such as "lichen scrofulosus," "lichen tuberculosus," and tumors of the skin and the mucous membrane are comprised in this class.

Prof. Neumann also wished to emphasize the specific effect of Koch's lymph on the lupous tissue, especially the particular changes which occurred without any exception. Such appearances, indeed, also occurred in the case of syphilitic gummas, but these symptoms of irritation had the same importance as the examthems of the skin, etc. Though reaction was also observed in other cutaneus affections, the reaction, however, never attained that degree and that regularity which were observed in lupus.

N. O. Medical and Surgical Journal,

ESTABLISHED IN 1844.

PUBLISHED MONTHLY, $2.00 A YEAR.

Articles from physicians are respectfully solicited. All articles, news and exchanges, and books for review, should be sent to the EDITOR, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL. Business communications should be addressed to the BUSINESS MANAGER, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

EDITED AND PUBLISHED BY

AUGUSTUS McSHANE, M. D.

COLLABORATORS:

DR. F. W. PARHAM. DR. H. W. BLANC. DR. A. W. De ROALDES.
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Editorial Articles.

THE LOCALIZATION OF PHTHISIS IN THE UPPER LOBES.

Tuberculosis is at once the commonest and deadliest foe to humanity, and, until 1882, one of those least understood. In the year mentioned, Koch shed a flood of light on the subject by his discovery of the bacillus of tuberculosis. This discovery was a great stride, and yet it has not fulfilled the hopes of those who expected that, the cause of the disease being known, a remedy must soon be forthcoming.

The manifest failure of therapeusis to keep pace with pathology has led some of our prominent men to question the all-important part attributed to the bacillus. The most prominent of these doubters are Drs. Shurley and Gibbes. In a former number of the JOURNAL we gave an abstract of Gibbes's views upon the etiology of phthisis. The vast experience of Dr. Gibbes in dealing with tuberculosis entitles him to a careful hearing from the medical world. Now comes another investigator, who tries to disturb our serene and settled belief in the infection of the lungs by breathing in bacilli with the air.

Dr. J. West Roosevelt, of New York, read a very interesting paper on "The Frequency of the Localization of Phthisis Pulmonalis in the Upper Lobes" at the last meeting (September, 1891) of the Association of American Physicians.

He starts with the assumption that there is no tuberculosis without the tubercle-bacillus (an assumption, however, which Gibbes does not fully admit); he does not claim that there is no phthisis without the bacillus, though he is inclined to think that way. Granting the importance of the bacillus, he asks: "Why does the bacillus lodge in the apices of the lungs in human beings in a very great majority of cases before it invades other portions?"

It is easy to understand why the lungs should be affected more frequently than other organs, since they are filters of the blood, and also of the lymph after it becomes incorporated with the blood; and any inhaled bacilli must certainly affect the lungs before they can do harm elsewhere. But why should the apices be selected as the starting point for the lesion? Several explanations have been offered, but none of them can stand the careful analysis to which Dr. Roosevelt subjects them. In speaking of the inhalation of bacilli Dr. Roosevelt says that they must follow the course of any finely divided particles that may be inhaled. He finds it difficult to believe that the bacilli can be carried directly to the air-vesicles with the inspired air. If they are inspired, why do they not lodge on the walls of the bronchial tubes instead of passing on to their terminations? The bronchi do not become affected until the air-vesicles have long been diseased. There is nothing to prove that inhaled dust is ever carried as far as the smallest bronchi. Roosevelt made a number of experiments upon suitably prepared lungs, and in no instance was he able to force beyond the bronchi powder of a size sufficiently large to be visible to the naked eye.

The tubercular lesion is at first situated far from the larger bronchi. According to Rindfleisch, it begins where the bronchiole joins the lobules. Roosevelt agrees with him as to the position of the initial lesion, though doubting the accuracy of his diagram of a lobule. He says: "The younger tubercles, so far as my observation goes, are usually found near the en-

trance of the bronchiole into the lobule. *This is precisely where the pulmonary artery, which accompanies the bronchiole, abruptly divides into capillaries. The terminal branch of the artery is quite large; the capillary network, although abundant, is composed of vessels of small calibre. It is here, where the younger tubercles are found, that one would expect a small embolus to be arrested....*" "It is improbable that the bacilli are ever drawn into the vesicles anywhere in the lung with the inspired air, and inconceivable that the direct action of the air-currents should determine in such a majority of cases the primary infection of the upper lobes."

How does Dr. Roosevelt explain this last phenomenon?

The pulmonary artery, soon after its origin, divides into two large trunks which curve outwards to the lungs. The convexity of the curve is *directed upwards;* the first branches given off from the main trunk supply the *upper lobes of the lungs*, and these arise from the convexity of the vessels. These first branches give off others, which pursue a straight course to the surface of the lungs. No other large vessel in the body gives off so many small branches. Again, the larger arterioles abruptly break up into capillaries where they enter the lobules.

Any substance introduced into the systemic veins must enter the pulmonary if not stayed in its course; and, if too large to pass through the pulmonary capillaries, they will be arrested at the first capillaries that they encounter. Owing to the large diameter of the pulmonary arterioles, emboli of considerable size can pass through the whole length of the artery, to be arrested at the point where it abruptly breaks up into capillaries.

This point seems, to Dr. Roosevelt's mind, to offer an explanation of the frequency of tuberculosis of the apices.

The bacilli, according to him, are not inhaled; they enter the systemic circulation from the skin, mucous membrane and wounds. The masses containing the bacilli are usually heavier than blood-serum. When the tubercular emboli float in the blood, they follow the same laws as all other suspended particles moving with a current of liquid having a lower specific gravity than themselves. Being heavier than the blood, the

emboli seek the peripheral (convex) side of the pulmonary artery and that is precisely the part of the artery that gives off the branches to the upper lobes. The emboli rush out of the main vessel at the first opportunity, and they pass into the branches that supply the apices. When the emboli arrive at the broncho-lobular junction, they are arrested by the capillaries arising in a bunch from the terminal pulmonary arteriole. Being planted at this point, the bacilli begin to fight for a living; and, if the condition of the patient's tissues and fluid be good, the bacilli are destroyed, and no harm results; but if, on the other hand, the bacilli hold their own, they germinate and produce a tubercle.

Dr. Roosevelt examines all the factors which enter into the problem. If, he says, the conditions that he mentions were to exist as supposed, then the theory of infection through the pulmonary arteries is so plausible that it may almost be said to be proved. He admits, however, that the "proof in regard to two factors" is lacking; first, it can not be positively stated, although it is perfectly conceivable and quite probable, that small masses containing tubercle-bacilli ever enter the blood, through the thoracic duct; second, supposing that such masses do enter the blood, in the manner stated, it is not proved that their specific gravity is greater than that of the blood. Cheesy matter obtained from scrofulous glands is of higher specific gravity than the blood-serum. As is well known, such matter contains numerous bacilli."

In the discussion on Dr. Roosevelt's paper, Drs. Welch, Ord, Vaughn, and Jacobi differed from the essayist on certain points, but their remarks are too extensive for notice here, and we earnestly call the attention of our readers to the most interesting of recent contributions to the literature of tuberculosis.

A CURIOUS SKIN DISEASE.

In the October (1891) number of the *International Clinics* is an article entitled *Erythema Exfoliativum Recurrens*, from the pen of Dr. H. W. Blanc, formerly of New Orleans. This

name is suggested for a disease which was observed in England as far back as 1769, and which has been described more recently by French writers under the more ponderous title of "Erythéme desquamatif scarlatiniforme récidivant." It consists in a peeling of the cuticle consequent upon a general erythematous reddening of the surface resembling scarlet fever. A peculiarity of the affection is that it has a strong tendency to recur at certain regular intervals, and to continue this process year after year for an indefinite period of time. Dr. Blanc has observed two cases of this disease, and he quotes notes made upon a third case by Dr. C. L. Seeman. The eruption closely resembles that of scarlet fever, but the febrile attacks are briefer, the throat manifestations less severe, and the danger to the patient not as great. An important symptom for differentiation is the slowness of the pulse in this disease, contrasting with the pulse of scarlet fever, which is always rapid and "out of proportion to the intensity of the eruption." The illustrations accompanying the article are excellent, and are used as the frontispiece of the volume. They consist of photographic representations of the skin of the hands and feet of a young man twenty-three years old, who had been subject to recurrences of the disease during a period of thirteen years. The epidermis had been shed like the skin of a snake, and shows all the natural lines and furrows. That which has peeled from the feet has been broken, but that from the hands, with the exception of the rupture necessitated by the removal, is quite perfect.

Now comes, side by side, with Dr. Blanc's cases, one observed by Dr. Frank, of Chicago. This gentleman in February, 1891, published in the *Western Medical Reporter*, a description of "A Remarkable Case of Skin Shedding." This publication is recognized and referred to in Dr. Blanc's article, and is quoted as confirming his observations on the slowness of the pulse. But, without giving credit to the above-mentioned journal for having first published Dr. Frank's case, the *American Journal of the Medical Sciences* republishes it in its August number, embellished this time with two good illustrations.

Dr. Frank's case is remarkable "not alone in the fact that

the shedding of the cuticle and nails of the hands and feet was complete, but in repetition for thirty-three consecutive years, on the *same day of the month, and within a few hours of the same time of the day.*"

Commenting upon this peculiarity, Dr. Blanc, after calling attention to the fact that simple flushing of the face, which we call blushing (erythema pudoris), can become pathological and absolutely beyond control, declares it his belief that in his case "there must have been some psychical influences added to the pathological cause in order to produce an annual relapse at the same day and hour, regardless of leap years and the changes of seasons."

It seems, then, that in Erythema exfoliativum recurrens, we have a disease *sui generis*, belonging to the same group, clinically, as scarlatina, measles, erysipelas, and other allied affections in which erythema is a prominent symptom; and if common experience in similar matters be a just guide, we will venture to predict that the report of these carefully studied cases will cause, at an early date, a number of others to be added to the list.

Abstracts, Extracts and Annotations.

SURGERY.

TUBERCULAR LYMPHADENOMA—HEMORRHOIDS—TUBERCULAR OSTITIS OF THE KNEE JOINT.

By W. T. Bull, M.D., Professor of Surgery at the College of Physicians and Surgeons, New York, Visiting Surgeon to the New York Hospital.

Gentlemen: Most of you remember the case which was presented here at our last clinic, in which we had some doubt as to the nature of a small tumor of the neck. The case was particularly of interest, because it was a question whether it was a fluid or solid tumor. A great many of you thought at

that time that it was a solid growth, and I confess my own impression was to the contrary.

The results of the operation, under cocaine anæsthesia, proved that the tumor was a solid one, but it would very likely have undergone suppuration, because it belonged to that class of chronically inflamed lymphatic glands which we call tubercular lymphadenoma. I now pass around for your inspection the gland which was removed. The wound has healed, as you see, by primary union, and the result in this case bids fair to be satisfactory.

The next patient that I show you is a man thirty years of age, whose occupation is that of a worker in woolen goods. His family history is negative, and he has no renal, tubercular or cardiac difficulty. His present trouble dates back to two years ago, when a small tumor protruded from the rectum during defecation. This he was able to replace by means of his finger, and it gave him no pain whatever, though it had a tendency to come down at each movement of the bowels, and occasionally to bleed. It now, he states, remains down all the time. He has never been constipated and his bowels are regular.

In examining the patient, you observe a tumor about the size of a small olive occupying one side of the anal orifice, and covered with mucous membrane which is abraded at one or two points. The tumor is soft—not tender—and is easily replaced within the anus, that is, above the sphincter muscle. We have in this case what is known as an internal hemorrhoid, which is prolapsed most of the time.

When hemorrhoids have existed for some time, we find them to consist of dilated veins, arteries and capillaries, with a framework of connective tissue holding them together. The longer they exist, the more vascular and, at the same time, the more firm they become.

This man has had hemorrhoids for a number of years and has not been constipated. So to relieve him from constipation, or any tendency thereto, would not be the proper course to pursue in this case. We may resort to merely palliative treatment, or we may cure the trouble by operation. Palliative treatment may effect a cure. It consists in the use of an astringent ointment, such as one made of equal parts of unguentum gallæ and ungentum belladonnæ; and further in the use of cold water after defecation and the regulation of the bowels by proper food and laxatives.

Another palliative method is the injection of carbolic acid —not the pure acid—but a mixture of carbolie acid and olive oil or glycerine (of a strength of 33 per cent.). The quality

to be injected varies from two to five drops, according to the size of the hemorrhoid.

One injection is sufficient for each "pile" as a rule, but it is not wise to inject more than one tumor at a time; and piles which are prolapsed below the sphincter should not be treated in this way. In this case I would not therefore advise it. I have had some experience with this method which is much employed by irregular practitioners, and I know of other surgeons who have used it extensively. A friend of mine in a neighboring city told me a few years ago that he had treated more than two hundred cases in this way. He used the olive oil mixture, as most of his patients were not willing to "lay up" for treatment, and by this method they were spared any interference with their pursuits. He had had no accidents. I have myself several times injected too large a quantity and caused an inflammation, which kept the patient longer in bed than any operation would have done. There have been reported instances of phlebitis, pyæmia and death from its use. Hence, the method is to be employed with caution. A number of relapses have occurred and I am disposed, therefore, to place the method among the palliative remedies. I do not advise its use except in cases of very small hemorrhoids, and of not long duration. If the piles are large and firm from the growth of much connective tissue, this method is unsuitable and likely to be followed by severe reaction.

As to the operative methods, the clamp and cautery, and the ligature are equally good. The ligature is most frequently employed in this country, and if you learn this method from seeing the operation performed, you will have no use for the other. I will mention only one point, in connection with ligation of hemorrhoids, and that is, always dilate, or, better, overdistend the sphincter before ligating and cutting off the piles. It is the most effective way of preventing pain after the operation, and it affords ready access to the tumors. The other details you will learn in the operating room.

The next patient is a man, twenty-three years of age. He had an abscess sixteen years ago, at the inner aspect of the right knee-joint, which was opened and healed completely. Six months ago he got wet and pain developed about the joint, continuing ever since. The joint is now swollen, hot to the touch and painful on manipulation. He has a temperature of 99.8, and a pulse of 116, with loss of appetite. There is about an inch difference in the measurement of the two legs around the thigh and calf. Extension and flexion are both somewhat limited. This then is plainly a case of tubercular ostitis with synovitis of the knee-joint.

What can be done in the way of treatment for this man? Has the disease advanced so far as to require operative interference? One class of surgeons who treat everything by operation, would say it has, while others who are less fond of the knife would think it had not. A safe course in this case would be to put this man in bed, and permit him to remain quiet for a few days or weeks, when the acuteness of the symptoms will probably have subsided. He may then have an apparatus applied, which will protect the part, fix it, and keep it absolutely at rest. This should be supplemented by constitutional treatment, such as good food, tonics and the like. If after two or three weeks, constitutional disturbances still manifest themselves, and there are decided evidences of abscess formation, or bone softening, then excision of the joint would be the proper course to adopt.--*International Journal of Surgery.*

THE TREATMENT OF ABSCESSES OF POTT'S DISEASE.

By W. R. Townsend, A. M., M. D.

The proper treatment of the various complications of any disease is a matter of fully as great importance as the treatment of the disease itself, and while opinions vary but little as to how to treat Pott's disease, such is not the case with respect to the abscesses that are such a frequent complication. Some recommend that every abscess be let alone, others that every abscess be opened. To follow blindly either extreme is certainly not good surgery, and with an endeavor to throw some little light upon the subject, I have studied during the past summer the histories of 380 consecutive cases of Pott's disease seen at the Hospital for the Ruptured and Crippled, New York, and in the private practice of Dr. Gibney and myself. In speaking of the cases, no distinction is made between hospital cases and those in private practice, as the conditions varied so little. I have purposely omitted complicated cases, as those of Pott's disease with hip, or knee, or ankle lesions.

Of the 380 cases, 75 were complicated by abscesses, and as the cases represented all stages of the disease, from the incipient case in which a positive diagnosis was scarcely possible to those that were convalescent and cured, we may say that about one case in five, at some time during the disease, develops an abscess. These figures vary somewhat from those given by Mohr, quoted by Bradford and Lovett, according to which, in 61 autopsies, there were 30 with abscesses, and in life, of 72 cases, 9 with abscesses. The abscesses were found connected with disease in the cervical region in 8 per cent. of the cases, in the dorsal region in 20 per cent., and

in the lumbar region in 72 per cent. of the cases, which figures very closely correspond with those given by Michael and Parker.

We see by the foregoing, that the problem most frequently presented to us is the treatment of abscesses connected with the lumbar region, and fully two-thirds of these are either in the pelvis above Poupart's ligament, or pass below the ligament and point in the thigh through Scarpa's triangle —the psoas abscesses.

Of late years the study of bacteriology has largely increased our knowledge of diseased processes, and shown that true inflammation is always caused by the presence of one or more kinds of pathogenic microbes. In other words, in acute abscess, we find pus-microbes; in a cold abscess, however, such is not the case, and I will quote briefly from Senn, *Principles of Surgery*, page 450. Speaking of tuberculous abscesses, he says: "The effect of the bacillus of tuberculosis on the tissue is to produce a chronic inflammation, which invariably results in the production of granulation-tissue. The embryonic cells furnish, as it were, a wall of protection for the surrounding healthy tissue. The characteristic pathological feature of every tuberculous product consists in the tendency of the cells of which it is composed to undergo early degenerative changes, which are caused by local anemia and the specific chemical action of the ptomaïnes of the tubercle-bacilli, and consists in coagulation-necrosis, caseation, and liquefaction of the cheesy material into an emulsion, which has always been regarded as pus, until recent investigations have shown that it is simply the product of retrograde tissue-metamorphosis, and not true pus. I believe that it can now be considered as a settled fact that the bacillus of tuberculosis is not a pyogenic microbe, and that in the absence of other microbes it produces a specific form of inflammation which invariably terminates in the production of granulation tissue, and that when true suppuration takes place in the tuberculosis product it occurs in consequence of secondary infection with pus-microbes."

Accepting the pathology as given, the treatment of the abscesses of Pott's disease seems to be more simple than some would have us believe. If the abscesses could be opened, thoroughly cleansed, all tuberculous material removed, any bone-detritus washed away, with no infection of the external tissues, and with perfect asepis, then those who advocate opening every abscess would clearly have established their point; on the other hand, could it be shown that no trouble followed from extreme conservatism, then there would be no

necessity for operative procedures. But whilst some cases do well, and the abscess seems in no way to influence the final result, others do badly, and the abscess is undoubtedly the cause of the patient's death. The explanation of these various conditions seems to me to be largely due to the question of infection by the pus-microbes. As long as the tuberculous or cold abscess remains purely such, but little inconvenience may result to the patient, and the symptoms are insignificant; but let a mixed or a secondary infection occur, and all is changed; a condition of sepsis is added to one of tuberculosis. If the abscess has never been opened, it is noticed that the child is doing poorly, septic symptoms appear, the temperature is characteristic, or at least suggestive, more severe symptoms may follow, and, if nothing is done, death ensues; but let such a case be treated scientifically; remove or do away with the source of infection, secure proper drainage, and improvement will at once be noted. The secondary infection may not occur until some time after the abscess has been opened, or it may occur at the time of opening, and it is the danger and the great frequency of this occurrence that deters us from opening these cold abscesses. We know that despite all possible precautions, and with every endeavor to be strictly and surgically aseptic, the cases become infected, and may die as a result of this infection. If the septic trouble be mild in character, it is usually recovered from; but we must remember that the patient is already suffering trom tuberculosis, and the conditions are not as favorable as they would otherwise be.

Caseation and absorption of the liquid contents of the abscess are a more frequent result, I believe, than is generally supposed, and this may often be aided by means of aspiration, which, of course, is done with every antiseptic precaution. The operation is often very disappointing, owing to the fact that the needle soon becomes clogged and the abscess is but very imperfectly evacuated. This difficulty can be partly overcome by using a large-sized needle, through which, if the suction-force is good, large pieces of cheesy material may be removed; and a simple expedient that I have found of value, when such clogging does occur, is to force through your aspiratory needle a small amount of a weak carbolic solution, thus washing back into the cavity the obstructing plug; then, changing the position of the needle, to begin aspirating again. Introduce the needle at some little distance from the abscess, so that considerable tissue intervenes between the opening and the external air. It is advisable to make the openings also at dependent points, so that if the abscess should eventually

open along the track of the needle the drainage will be of the best. If possible, after the evacuation of the abscess, whether or not any fluids, such as iodoform and glycerine, or hydrogen peroxide, etc., have been injected, make pressure either by a pad and bandage, or by straps of adhesive plaster. This prevents hemorrhage from the sac-walls, and promotes absorption. Very little has been done with the injection of fluids into the abscess-cavity after evacuation in the cases here analyzed, as the results by the other method were so good. The iodoform–emulsions suggested by Bruns and Krause, seem, however, worthy of trial.

In all cases, no matter at what stage of the disease, efficient protection should be given the spine, either by plaster, paper, wooden or wire jackets, or corsets, or by some of the numerous forms of braces. This protection, combined with proper general care of the patient, will, in many cases, cause a disappearance of the abscess, and all that remains is a small nodule, without fluctuation, and causing no symptoms. If the abscess is increasing rapidly in size, or is producing pressure-symptoms, aspirate, and this should be continued at intervals if the patient is doing well. If the patient is doing poorly, and symptoms indicate that this is due to the abscess, endeavor to remove the cause; open, clean out thoroughly, scrape the abscess-cavity, and, if possible, the sinus leading to the diseased bone, and also the diseased bone itself. Secure good drainage, and keep your wound aseptic, if possible. Of the many cases of abscess in the pelvis, but few can be properly drained by one opening, and I believe it best to open through and through, so that, standing or lying down, the drainage is always good.

Whether the cheesy mass left behind, after non-operative treatment or after aspiration, may cause future trouble, is a matter that is not clearly established, although we might reasonably suppose that in some cases it does.

There are also a certain number of cases in which aspiration or incision might be indicated to prevent the abscess bursting into some viscus, but none have occurred among those analyzed in this paper. The most frequent indications for opening the abscess in non-infected cases that are doing well, are that they interfere with the proper application of a brace, or, by their size, are impediments to locomotion. The psoas abscesses, if accompanied by much contraction of psoas and iliacus muscles, cause marked lameness, which disappears when the abscess is removed. Another reason for aspiration or incision is that, by burrowing, the abscess may enter another joint and cause further trouble.

ANALYSIS OF 75 CASES OF ABSCESSES OF POTT'S DISEASE.

No treatment but brace; abscess disappeared	3	
" " " abscess *in statu quo*	8	
" " " abscess increasing, child doing well	8	
" " " child not doing well	2	
		21

Aspirations.

Abscess disappeared	11	
Abscess opened spontaneously after aspiration failed.	3	
Abscess incised after aspiration failed	4	
Abscess *in statu quo* after aspiration failed	1	
		19

Number of aspirations in each case from 2 to 6; average, 3.

Incisions—Scraping Sac.

With use of iodoform-emulsion or peroxide of hydrogen		14
Results—Good	11	
Bad	3	
Infected at time of operation or at subsequent dressings	11	
Not infected	3	

Opened Spontaneously.

Results—Good	15	
Bad	6	
		21
		75

Deaths.

Tuberculous meningitis	2
Amyloid liver	2
Suppression of urine	1
	5

A study of the preceding analysis will show us that the cases that have been treated on the expectant plan and by aspiration have done remarkably well, and we believe this plan should be followed whenever possible. The two deaths from meningitis occurred in cases that had been aspirated; the two from amyloid liver, in cases that had opened spontaneously; and the death from suppression of urine occurred in a child

thirty-six hours after opening a psoas-abscess in front and behind and inserting a drainage-tube. These results are immediate rather than final, and it must be clearly understood that they do not represent the true death-rate of Pott's disease complicated by abscesses. The death-rate after incision is also larger in adults than in children.—*Medical News.*

STERILITY OF PUS IN ABSCESS OF THE LIVER.

An unfortunate accident, which, however, was unattended with any bad consequences, happened to a surgeon a short time ago, who was operating for the relief of a large hepatic abscess, about which there were no adhesions. The surgeon, M. Peyrot, had just withdrawn about two litres of pus from the abscess, and was proceeding to wash the cavity out, when the hepatic incision disappeared from the field of operation, and it was only after much difficulty, and the expenditure of twenty minutes in manœuvering, that it was again discovered. A certain quantity of pus had evidently escaped into the peritoneal cavity; nothing, however, followed this accident. No untoward symptoms occurred, and the patient made an excellent recovery. In order to explain the fact of the harmlessness of the pus, it is essential to recollect that Saveran and Neltee have shown that pus obtained from abscesses of the liver consecutive to dysentery is usually sterile.—*Med. Press and Cir.*

MEDICINE.

THE BACILLUS COLI COMMUNIS: THE CONDITIONS OF ITS INVASION OF THE HUMAN BODY, AND ITS PATHOGENIC PROPERTIES.

By William H. Welch, M. D., Professor of Pathology in the Johns Hopkins University, Baltimore, Md.

We owe especially to Escherich the knowledge that certain species of bacteria are regularly found in the healthy intestinal canal. Of the bacteria present in the normal feces the most abundant is the bacillus coli communis, first described by Escherich in 1885, under the name bacterium coli commune.

This bacillus presents so many points of resemblance to the typhoid bacillus that Rodet and G. Roux contend that the latter is simply a variety or modified form of the colon bacillus.

There are, however, so many points of difference between these two bacilli that they must be regarded as distinct species. The typhoid bacillus is actively motile, the colon bacillus only feebly motile; the typhoid bacillus never coagulates milk, the colon bacillus coagulates in two to seven days; the typhoid bacillus does not cause fermentation of lactose, or if at all, only in very feeble degree, while the colon bacillus actively ferments lactose. There are also differences in the appearances of the growth of the two bacilli on gelatin, agar and potato, but these are less precise and constant than the points mentioned.

Escherich demonstrated that injections of bouillon cultures of the colon bacillus into the circulation of guinea-pigs and rabbits are capable of killing the animals by acute intoxication, if sufficient quantity is injected. Smaller quantities he believed to be devoid of pathogenic power. Dr. Blachstein has published the results of a series of experiments made in my laboratory, showing that injections of one c. c., or even less, of bouillion cultures of the colon bacillus into the ear-veins of rabbits may cause the death of the animals as late as six weeks after the inoculation. These rabbits were much wasted, and presented peculiar changes in the liver and bile. The bile contained the colon bacilli in large number, at a time when they had disappeared from the blood and organs. It was thin and pale, devoid of the normal green color, and presented particles of bile pigment, necrotic epithelium, and masses of bacilli. The liver often contained necrotic foci; the spleen was atrophied.

The first observation of the colon bacillus in the tissues of the human body outside of the intestinal canal was made in 1889 by Tavel, who found this organism in the wound resulting from removal of a tumor of the thyroid gland. Since then there have been several observations of this bacillus associated with peritonitis, angio-cholitis, and some other affections. Observations of this invasion of the colon bacillus have been made by Wyss, Laruelle, Gilbert and Girode, Charrin and Roger, Naunyn, A. Fräkel, and Malvoz. Bönnecken has found the colon bacillus in the fluid of strangulated hernial sacs.

No systematic observations, however, have been published as to the frequency and conditions of invasion of this bacillus into the tissues of the human body. I have for about a year and a half been interested in observations of this character, and take this opportunity to present the most important of the results.

My first observation was in April, 1890. The case was one of acute hemorrhagic pancreatitis, with multiple fat-necroses

in the meso-colon and omentum. The bile was nearly colorless, and presented a sediment containing yellow, granular bile pigment, cylindrical epithelium, and zoöglea of bacilli, reminding one of the changes in the bile observed in rabbits dying a long time after intra-venous inoculation with the colon bacilli. There existed a very acute diphtheritic colitis with superficial ulceration. In this case pure cultures of the colon bacillus were obtained from the foci of fat-necrosis, the mesenteric glands, the liver, the bile, the lungs, the spleen, and the kidneys. In this, as in all the cases, roll agar and gelatin cultures were made after thoroughly burning with a hot knife the surface of the organ at the point where the sterilized needle was inserted. The autopsy was made within one hour after death, and in general the autopsies were made in less than twelve hours after death. The colon bacillus, moreover, is not one of the bacilli that invades organs after death in the process of post-mortem decomposition.

As in this case diphtheritic and ulcerative colitis existed, it seemed probable that it was the lesion of the intestinal mucosa that permitted the invasion of the colon bacillus. From this time we have made bacteriological examinations in the manner described in most of our autopsies.

We have now found the colon bacillus in one or more of the organs of the body in thirty-three autopsies out of about two hundred. (There followed in the address a brief description of these cases. Here only a summary of the principal results is given.)

The suspicion at first entertained has been abundantly confirmed, namely, that the lesions of the mucous membrane of the intestine open the way for the invasion of the colon bacillus into the blood and lymphatic vessels, and thence into various organs and parts of the body. The lesion consisted in different cases of hemorrhage, ulceration, perforation, catarrhal and diphtheritic inflammation, strangulation, cancer, traumatic injury, and intestinal suture.

The bacilli were found in the blood, lungs, spleen, kidneys, peritoneum bile-ducts, gall-bladder, liver, lymphatic glands, testicle, tonsil, brain and wounds, varying in their distribution and number in different cases. They were found with special frequency in the lungs and kidneys, but often also in the liver, mesenteric glands and spleen. The number of colonies in an original tube varied from one or two to a countless number. The diagnosis of colon bacillus was never made without applying all necessary tests, and especially never without demonstrating the power of coagulating milk.

It is not to be inferred that ulceration or other lesion of the

intestinal mucous membrane is necessarily associated with the invasion of the colon bacilli in sufficient number to be demonstrable by ordinary culture methods, but only that such invasion is a frequent result of the lesion.

In a number of cases colon bacilli were demonstrated by culture methods in various organs of the body without any noteworthy lesions of the organs containing them or any lesion that could reasonably be referred to their presence. This was true, for instance, in several cases of amebic dysentery. On microscopical examination the bacilli, often in clumps, readily staining with aniline dyes and even hematoxylin, could be demonstrated inside of small blood vessels without any alteration in the surrounding tissues. There is, therefore, no evidence that in these cases the bacilli do any harm, although it cannot be positively stated that their presence is innocuous. It is well known that human blood-serum outside of the body exerts a powerful germicidal influence upon the colon bacillus.

This class of cases, therefore, in which this bacillus appears to be a harmless invader, should make one cautious in attributing pathogenic powers to the colon bacillus, even when it is associated with definite lesions, unless it can be shown that other causes can be excluded. In the case of fat-necrosis, for instance, I do not believe that the colon bacillus was the cause of the necrosis, although both cultures and cover-slip preparations showed its presence in large number. I have subsequently made bacteriological examination of three cases of multiple fat-necrosis without finding any microörganisms in the necrotic foci.

I have suspected that colon bacillus may be the cause of lobular pneumonia, as in several cases this organism has been found in large number and in pure culture in congested, edematous, and inflamed areas in the lungs. It has also been frequently associated with fatty degeneration of the kidneys, but neither in this nor in the pulmonary affection is there any conclusive evidence that the presence of the bacilli has done the harm.

The view that the changes in the bile noted in the case of pancreatitis already cited are referable to the colon bacillus, rests upon experimental evidence. In two cases of angio-cholitis and cholecystitis with gall-stones, the colon bacillus was very abundant, and in pure culture, in the bile. Naunyn has recently called attention to the possible relation between the formation of gall-stones in some cases and the growth of this bacillus in the biliary passages. Gilbert and Girode, as well as Charrin and Roger, refer cases of suppurative inflammation of the bile-ducts and gall-bladder to the peneration into these parts of the colon bacillus.

In cases of peritonitis due to perforation of the intestine the colon bacillus is usually found, but not always, in large number in the exudate, sometimes in pure culture. In three cases of peritonitis due to intestinal ulceration without perforation I found the colon bacillus in large number and in pure culture. The exudate was sero-fibrinous, not distinctly purulent. In these cases it seems warrantable to attribute the peritonitis to the invasion of the colon bacillus into the peritoneal cavity. In a case of rupture tubal pregnancy the bloody fluid withdrawn by a sterilized hypodermatic syringe from the peritoneal cavity before laparotomy was performed, yielded a pure culture of the colon bacillus. There was found a perforative appendicitis. In the pus of circumscribed abscesses due to perforation of the vermiform appendix I have found the colon bacillus in nearly pure culture. It is a mistake, however, to say, as Malvoz has recently done, that all cases of peritonitis due to intestinal lesion are referable to the colon bacillus. Often enough in this class of cases the staphylococcus pyogenes aureus or the streptococcus pyogenes is present—it may be predominantly so—in the peritoneum. In a case of perforative appendicitis recently examined the streptococcus pyogenes seemed to be the only organism present.

In a case of ovarian abscess adherent to an ulcerated cancer of the rectum the colon bacillus was found in pure culture in the abscess.

To the occasional presence of the colon bacillus in laparotomy wounds for the extirpation of diseased Fallopian tubes and ovaries, I have already called attention on another occasion.

It is especially important to know that typhoid ulceration of the intestine opens the way for the invasion of the colon bacillus, which may be found in the mesenteric glands, lungs, liver, kidneys, and elsewhere, mixed with the typhoid bacillus. On account of the resemblance between these two species of bacilli a mistake might easily be made in identifying the colon with the typhoid bacillus, and there is reason to believe that this mistake has been made by some writers. The preservation of all its properties in these cases shows that the colon bacillus is not changed into the typhoid bacillus when it invades the organs in typhoid fever; and this is a further argument against the unwarrantable assumption of Rodet and G. Roux already mentioned.

Only in two cases have I found the colon bacillus in organs outside of the intestine without any demonstrated lesion of the alimentary canal. Although careful search was made, it is not improbable that some lesion was present, so small or of such a

character as to escape observation with the naked eye.—*Med. News.*

A NEW METHOD FOR THE ADMINISTRATION OF THE IODIDE OF POTASSIUM.

The irritating effects of iodide of potassium upon the stomach, and the difficulty of administering it in large doses in many cases in which it is necessary to bring the system rapidly under its influence, are well known, and have been the occasion of numerous efforts to correct these disadvantages.

The ends to be gained in giving the iodide are, (*a*) thoroughness and rapidity of assimilation, (*b*) administering it in such a manner as to render it unirritating, and (*c*) sustaining the patient's nutrition during the period of its administration.

To meet these requirements it has been suggested that the dose for twenty-four hours be subdivided into a number of small portions, to be given six, eight, or even twelve times per diem, instead of in the usual triple dose. In order to aid its assimilation it has been given in solution with wine of pepsin as a menstruum, and, for the above purpose also, and to render it unirritating, as well as to secure to the patient a certain amount of nutriment, the excellent device has been practised of giving it in milk. It has also been given hypodermically, and by the rectum, and is often prescribed to be taken in Vichy water. Of the above methods, those in which wine of pepsin and milk are employed are the best; indeed, the latter marked a distinct advance in the use of the drug, and has proved to be exceedingly valuable, disguising to some extent the taste of the iodide, causing it to be less irritating, and affording with each dose a small but desirable amount of food.

The writer has had opportunities of studying many cases of active tertiary disease of the thorax, and has experimented with various methods for the purpose of overcoming in such subjects the following common difficulties, namely, pain and difficulty in swallowing, gastric irritation, faulty assimilation of the iodide, loss of appetite, and distaste for food, and finally, general depression from lack of nourishment; and has found that all of the desired indications may be most satisfactorily met by an exceedingly simple device.

If pepsin be added to warmed milk the result is the well known article "junket," "rennet custard," or "rennet curd," the pepsin acting upon the milk as a digestive, and causing it to curdle and to form a delicate, jelly-like mass, which is attractive to the eye, palatable to the taste, more easily swallowed

than anything, perhaps, but an oyster, and remarkably easy of digestion and assimilation. This curd forms an admirable vehicle for the administration of the iodide, and in the proportion of ten grains of the iodide to four ounces of milk effectually disguises the taste of the salt. If a stimulant be required, a little sherry wine may be added. The iodide should be used in a saturated solution with water, one drop of which equals one grain of the drug. Any good pepsin may be employed; that which the writer has found most effective in its prompt and thorough action upon the milk, and most agreeable to the taste, is the so-called "Fairchild's essence of pepsin."

To administer a five-grain dose of the iodide, place five drops of the saturated solution of the iodide in the bottom of a small tumbler, with fifteen drops of essence of pepsin, and, if desired, a teaspoonful of sherry; upon this pour two ounces of warm milk, and set away in a cool place. The milk must not be too hot, as otherwise the digestive properties of the pepsin will be destroyed. Coagulation soon takes place, and the mixture is then ready for use.

For the general convenience of the patient the following formula may be dispensed:

℞ Potass. iodid. (sat. sol.) ..... grs. 160
Essence of pepsin ..... ℥i.
Sherry wine ..... ℥iv.
M. Sig.: ℥ j. in four tablespoonfuls of milk, according to directions.

While this method may not be necessary in many simple cases, there is, nevertheless, a very considerable number in which it may be employed, and in which it will be found to fill the required conditions better than any other now in use.—By D. Bryson Delavan, M. D., in *N. Y. Med. Rec.*

INHALATIONS OF HYDROGEN DIOXIDE IN DISEASES OF THE RESPIRATORY ORGANS.

Dr. Gabrilovicz has employed inhalations of peroxide of hydrogen in cases of phthisis. The patients presented all the symptoms of the disease (infiltration at the apices, bronchial breathing, rales, loss of flesh, night-sweats, occasional hæmoptysis, etc.). A solution of peroxide of hydrogen in water, in the proportion of one to ten parts per hundred, was employed, the weak solution at the beginning. The inhalations were continued for several months. Six patients treated in this manner were greatly improved, the pulmonary symptoms being greatly ameliorated. The cough was relieved, the expectoration diminished, and in some cases the consolidation was re-

duced. Although the author's observations are limited, the results are certainly encouraging. Dr. Gabrilovicz thinks that inhalation of peroxide of hydrogen will prove very serviceable in the various forms of laryngitis, tracheitis, bronchitis, and also in the early stages of laryngeal and pulmonary phthisis. He also advises this treatment in laryngisums stridulus, whooping-cough, asthma. In tubercular laryngitis it is best to commence with a five per cent. solution of the peroxide; in other diseases it is advisable to employ at first a one per cent. solution, gradually increasing the strength until the proper dose is reached.—*Gaz. Med. de Liège.*

WHOOPING-COUGH TREATED WITH OUABAINE.

By I. Lindsay Porteous, M. D., F. R. C. S. Ed., Yonkers, N. Y.

All medical men have felt at times how utterly helpless they were in cases of whooping-cough. Every now and then a so-called specific is introduced, which in its turn is put aside for a newer and equally as useless a remedy. Nevertheless, it seems the duty of every physician to give his experience regarding a treatment of an intractable disease where it has proved successful in his hands. Over a year ago I noticed an article in the *British Medical Journal*, by Dr. Gemmell, of Glasgow, giving an account of a plant the alkaloid of which is ouabaine. I tried to obtain it in New York, but failed. Through the courtesy of a friend, I got some from London, and have been very fortunate in its results.

This alkaloid has a formula of $C_{30}H_{46}O_{12}$, and is obtained by crystallization from a watery extract of the roots of the ouabaïo, a plant nearly related to the *Carissa Schimperi*. Like strophanthus, the juice of the plant is used as an arrow poison by the Somalis, of East Africa.

Prior to Dr. Gemmell's paper, Dr. Percy Wild had recommended a trial of it in asthma and whooping-cough, probably from having read of the experiments of two Paris physicians, Professor Gley and Professor Arnoud.

Those gentlemen found that the $\frac{1}{2000}$ grain caused death to a frog, by arresting the heart's action. In a dog, $\frac{1}{975}$ grain markedly slowed the respiration without much cardiac disturbance; $\frac{1}{2600}$ grain first stimulated, then slowed respiration, till it ultimately ceased completely.

Hypodermically it is more powerful than when given by the stomach; $\frac{}{65}$ grain introduced is fatal to a man. From the experiments of Dr. Gemmell, the standard dose for a child under five years is $\frac{1}{1000}$ grain every three hours in solution. This

dose usually lessened the number of coughs and whoops. In two cases, however, where the children were much prostrated by the violence of the cough, $\frac{1}{500}$ grain and latterly $\frac{1}{250}$ grain was given every three hours. This is equal to about $\frac{1}{32}$ grain daily, which is nearly double the strength of the dose advocated by Professor Gley, who estimates the maximum daily dose for an adult as one milligramme ($\frac{1}{65}$ grain).

Dr. Gemmell, up to the time of writing this article, had treated forty-nine cases; twenty-five patients had been dismissed cured, and four had died (one from diphtheria, one from tubercular meningitis, one from capillary bronchitis, and one from gradual progressive emaciation). The remainder were still under treatment when he wrote. In no case did he notice any ill effects of the drug.

From accurate observation, Dr. Gemmell concludes that ouabaine is of marked benefit in all stages of the disease. In the first stage it cuts short the attack; in the second stage it reduces the violence and frequency of the cough and diminishes the number of whoops, and in the third stage it hastens convalescence.

It is interesting to note how little of the alkaloid in each case was required. In one case the whoops ceased after ^{7} grain had been given. The time during which this was given was six days.

In another case, which was accompanied by severe vomiting and bleeding, $\frac{3}{10}$ grain was required, given at intervals of four hours for fifteen days.

I give the results of treatment of three of the cases which have come under my observation, as they are typical of the different varieties met with:

Case I.—S. M., aged fifteen months. After having a cough for several days, this little patient had a decided "whoop." On the following day she had at least four whoops. I was sent for, and gave her $\frac{1}{4000}$ grain in solution every three hours. On the following day she had only two whoops and less coughing, and from that day she had no more whoops, and the cough, at the end of a week, had entirely left her.

Case II.—A. C., aged four years. The patient had suffered severely for three weeks, and was much emaciated. The attacks of coughing and vomiting were very frequent, and what has been called the "back-draught" threatened to suffocate the patient. I ordered $\frac{1}{2000}$ grain every four hours, and was very gratified to see, at the end of a week, an almost total cessation, not only of the whoops and vomiting, but of the cough.

Case III.—C. M., aged forty-five, domestic servant, con-

tracted the disease from children in the house where she lived. She was so bad that she had to leave her place, and, of course, no one would have her. She had been treated by several physicians, and, from the number of empty bottles she had, had evidently partaken of most so-called specifics. She averaged six whoops an hour when I was called to see her, and also had an almost incessant cough. I ordered her $\frac{1}{500}$ grain every three hours. At the end of twenty-four hours the whoop had come down to one an hour; at the end of forty-eight hours, one every two or three hours; and at the end of a week from first commencing the alkaloid the whoops had ceased and the cough was less severe and less frequent.

My experience of the drug is much the same as Dr. Gemmell's. The action of ouabaine is evidently not cumulative. During the administration the pulse, temperature, and respiration are slightly lower.

It promotes the action of the skin after three or four days' treatment. The bowels act regularly, and the usual accompanying diarrhœa of whooping-cough is not, as a rule, present during the treatment.

It, like strophanthus, increases the flow of urine.

The appetite in all the cases in which I have used it was increased. Dr. Gemmell likewise noticed this. The toxic effects are considerable slowing of the pulse and respiration, and I think the latter is the one to be particularly on guard against.—*N. Y. Med. Journal.*

A STUDY RELATIVE TO THE FUNCTIONS OF THE REPRODUCTIVE APPARATUS IN AMERICAN INDIAN WOMEN.

Dr. Andrew F. Courier, of New York, read a paper with this title. A careful examination of the *Indian question* as it was presented to the people of the United States must lead, he said, to the conclusion that the Indians must submit either to civilization or to extermination. Civilization and savagery could not coexist at close contact; savagery always had to yield. The lines were fast closing around savages and savage institutions in this country, and *they* would have to yield. To break up tribal distinctions, give the Indians land in severalty, educate them, abolish polygamy, barbarous costumes, heathenish practices, and keep whisky away from them, was the present policy of the Indian Bureau, and it was wise, just and hopeful.

The author's investigation had been made with the approval and co-operation of the Hon. Thomas J. Morgan,

Indian Commissioner, the late Surgeon-General Dr. J. H. Baxter, and the present Surgeon-General Dr. Charles Sutherland, to whom he wished publicly to express his gratitude. He also desired to publicly thank the Indian agents, physicians employed at Indian agencies, and army surgeons who had co-operated with him and advised him, and without whose generous assistance the investigation could not have been made. The data had been obtained in the face of the greatest obstacles, for Indians were ignorant, superstitious, prejudiced, and suspicious, and the time required in many instances was considerable—perhaps more than was warranted by the results to be obtained.

From twenty-eight Indian agencies and army posts interesting facts had been gathered, all the correspondents being in immediate communication with the Indians, some of them for many years, and all being entirely reliable sources of information. The report of the Indian Commissioner for 1890 was also freely consulted and was the source of much valuable information.

The subjects upon which information was sought included menstruation, conception, gestation, parturition, the puerperal period, the menopause, sexual appetite, pelvic disease, including venereal and malignant, and a variety of others of kindred nature. In children the great frequency of glandual disease, including the venereal, was noted, and the great mortality among infants.

Puberty was reached in the southern tribes—the Apaches, Mojaves and others—quite early, the average in a given number of Apaches being 12·86 years. In the northern tribes it was reached later, the average in a given number of Cheyennes and Arapahoes being 17 years. In a large number of Sioux the average age was 15·11 years. In most of the other tribes the average age was under 15, and it was believed that savage life *per se* neither hastened nor retarded puberty, but that climate, occupation and hereditary tendency were the factors of greatest importance. With very many Indian women, especially the more degraded, the coming, course and going of menstruation were alike matters of indifference. They neither knew nor cared as to its duration. At four agencies the duration had been observed, and the limits given were two and six days. Seldom was there any pain with menstruation; in some of the tribes it was said to be present at the first menstruation, but rarely afterward. Among the Indians who had become civilized painful menstruation was not infrequent. The quantity of blood lost was almost invariably a matter of indifference. Only a single case of amenorrhœa was reported.

The advent of puberty was celebrated by barbarous dances in some of the tribes. At the Quapaw Agency (Ind. Ter.) the "stamp dance" was thus celebrated. At Round Valley Agency (Cal.) the menstruating girl joined in a furious dance with older women, keeping it up until thoroughly exhausted. At the Neah Bay Agency (Wash.) the menstruating girl fasted three days, then was stripped naked and washed in a stream, in the presence of her friends and relatives. After this her parents gave a "pil potlach" (giving away of blood), which was very disgusting and said to be analogous to a birthday party.

The menopause seldom caused any trouble. The age at which it came showed as wide a diversity as it did among civilized women, and there was also the same variety as to duration—it might come abruptly, or it might require several years.

Marriage was said to be mainly a matter of convenience or inclination in most of the tribes, with nothing especially serious or binding about it, either party leaving the other as the notion prompted. Polygamy was still common in some of the tribes, though the Government was endeavoring to break it up. Virtue and chastity were ignored altogether, or but lightly esteemed, in all but few of the tribes. A change for the better in such matters was most marked and most gratifying in some of the localities which had been under educational and religious influences. Among the Klamaths (Oreg.) young men were not infrequently married to old women. Among the Crows and Assiniboines marriage arrangements were between a girl's parents and her suitor. The latter paid a horse for her, or some other object of value; the girl then measured the man for a pair of moccasins as a sign of acceptance, went to his lodge, and was henceforth his wife. The marriage and divorce customs among the civilized Cherokees were much the same as among intelligent whites. The ceremony might be either a simple agreement between the man and the woman, or the more formal one of the church or state. Cherokees were said to be more virtuous and stricter in regard to the marriage relation than whites.

Marriage in most tribes was consummated very early in life—at seventeen or under; in many cases almost as soon as puberty was reached.

Conception and gestation were favored in the majority of the tribes by an ardent sexual appetite and an out-of-door life, and large families of children were of frequent occurrence. Abortion seldom occurred as the result of the severe labor and other trials to which Indian women were all subject, but was common enough as the result of syphilis and criminal interfer-

ence. Among the more degraded and physically inferior tribes the families of children were small. In almost all the tribes the infantile mortality was very great. The struggle for existence on the part of an Indian baby was a severe one. Some of the women drank decoctions of certain herbs to prevent conception. The Crows and Assiniboines used the most violent means for producing abortion. One of them consisted in thrusting a sharp stick into the vagina and womb and rupturing the ovum. Another consisted in causing the patient to rest her belly against the top of a stake which was driven into the ground about two feet high, and whirl around upon this until the fœtus was expelled. In yet another, the patient lay on her back on the ground, a large board was laid across her belly, and upon this two or three of her female friends, in turn, stood or jumped until the blood gushed from the vagina, or the belly was kneaded or tramped upon until the fœtus was expelled.

Among these Indians last mentioned when the baby was born the umbilical cord was cut with a new butcher knife, the stump was well greased and the infant was then thrust into a laced sack of blue cloth containing pulverized bull's manure or the inner bark of the cottonwood tree. This lining, with the child's discharges, was changed three or four times daily. When the stump of the cord dropped off it was preserved in a beaded pouch and worn around the neck or waist as long as the person lived. Parturition was usually a natural and easy process with Indian women. One of the author's correspondents graphically said it was about as easy as for a cow to have a calf. With many women no assistance during that process was required or tolerated. With others midwives were employed, and these manifested varying degrees of superstition and ignorance.

Occasionally an herb doctor would be called to attend a woman in confinement, but, as a rule, no man, whether a physician or not, was expected or allowed near a woman at such a time. Where the Indians are becoming educated and civilized they are gaining more and more confidence in white physicians, and occasionally one would be called to attend a confinement, especially if any complication had arisen. The favorite posture during labor was the kneeling one, the arms, chest, and head resting upon a support of some character; but by many the squatting posture was preferred. The ease with which delivery was accomplished in these postures, and the simplicity of the whole procedure, were not without suggestiveness to those of us who were endeavoring to carry out the multitudinous details of modern antiseptic midwifery.

The lying-in chamber and the lying-in bed for the tribes which had little contact with civilization did not exist. Delivery took place in the open air, in the bushes, by the side of a stream, perhaps when the tribe was on a march. The regular duties of the squaw were not long interrupted by parturition, and if her party was on the march, she hurried on to overtake them after the birth of her baby.

In some tribes it was the custom to facilitate the expulsion of the placenta by tickling the parturient's nose with a feather, thus provoking sneezing.

Among the Sacs and Foxes the placenta was wrapped in the blanket on which delivery took place, and secured to a tree to keep it from wild animals. Should a wolf or coyote get it and eat it, the child would resemble such an animal and eventually be devoured by it. It must not be thrown into the river lest the child should resemble a fish or be drowned and eaten by fish.

The accidents of parturition were few, occurring, perhaps, as frequently as in the lower animals. The agency physicians had reported cases of faulty presentation, retention of the placenta, and rupture and procidentia of the uterus. The Indians were just beginning to appreciate the value of skilled assistance for such emergencies. Puerperal diseases were said to be unknown among Indians.

Malignant disease was of rare occurrence, especially among the full-bloods. Cancer of the breast was reported, but not of the uterus. Of course it was possible that the latter might exist and its existence never be known by any but the patients, owing to their extreme reticence concerning disease of the genital organs. For the same reason it was impossible to say to what extent pelvic disease in general existed among Indian women. Cases were reported in which there were deformity of the uterus, ovarian pain, abdominal dropsy, leucorrhœa, and gonorrhœa, so that it could not be said that pelvic disease was unknown among them. It was probable that they were less susceptible as well as less sensitive to such disease than civilized women. Those who were becoming civilized or were already civilized suffered from pelvic disease to about the same extent as the whites. Venereal disease was said to be very prevalent, and doubtless it had much to do with the feebleness of the children and the high rate of mortality among the infants.

Conclusions.—1. Puberty: The mere fact of living in a savage state had not much to do with the early or late appearance of puberty. The Apaches and Mojaves, of the hot and desert regions of Arizona, matured young, but so did the

females of southern Europe and the tropics generally. The law was general that both animals and plants should mature early under a tropical sun. The females in the northern tribes —the Cheyennes, Arapahoes, Crows, Assiniboines and Sioux —developed more slowly, as was the case with the women in northern Europe.

2. Phenomena of Menstruation: Savage life, with its vicissitudes and hardships, did not usually interfere with the regular recurrence of the monthly flow. Influences which would disturb or check it, and possibly produce permanent injury to a woman in civilized life, seemed to have no such effect upon Indian women. Excessive menstruation was practically unknown. On the other hand, there were occasional instances of dysmenorrhœa or amenorrhœa in connection with disease or deformity of the pelvic organs, so that savage life did not necessarily furnish immunity from such experience.

3. The menopause: Indian women were exceptionally free from the nervous and vascular disturbances which so commonly accompanied the menopause in civilized life. The duration of the menopause varied greatly as it did in civilized life. It usually came between the fortieth and fiftieth year. Many gestations occurring in rapid succession, continuous hard work, and the exposure and physical suffering incidental to savage life, did not tend to shorten the menstrual and child-bearing period.

4. Marriage and sexual appetite: The social condition of Indian women was an anomalous one for this age and country. They must bear the burdens, do the drudgery, bring forth and rear the children, and then perhaps be cast aside at the merest whim of their husbands. Marriage among American Indians meant, as a rule, communism, polygamy, unrestrained lust, according to circumstances, all of which must be abandoned as they emerged into civilization, for they were incompatibles. Sexual appetite in Indians was the uncontrolled and uncontrollable desire of the wild beast, or it was an indifference in women of the degraded and debilitated tribes, except as it was associated with the idea of gain.

5. Conception and gestation: The habits and manner of life in the more vigorous and well-developed Indian women were favorable to fruitfulness in child-bearing. But the facts that so many children died in infancy, and that the restraints of civilized life were fatal to so many more, showed that the race was not a hardy one. The unhygienic condition of the homes in many tribes, with their filth and degradation, and the frightful abuses of the abortionists in others, were further tending to weaken the race and impair its future.

6. Parturition: The ease with which parturition was accomplished among Indians was an interesting fact. It must

not be overlooked that the squatting or kneeling posture which they assumed during labor was more favorable to muscular effort than the postures with which we were familiar in the lying-in-chamber. This was a suggestive fact. So also was the apparently total absence of puerperal diseases among Indians. This was the result of pure air and plenty of exercise and not of antiseptics, or even ordinary hygiene. The quick recovery and return to their usual duties of Indian parturients also suggested the possibility that we sometimes made invalids of our obstetric patients unnecessarily. Accidents occasionally occurred among Indian parturients just as they did among animals. Nature's work was sometimes far from perfect. This meant death to the mother or child or both, unless an intelligence beyond that of the savage could be summoned to avert it.

7. Pelvic disease: That pelvic disease had not been treated among Indians did not prove that it did not exist. Those diseases which resulted from infection, deformity, maldevelopment, and faults of circulation, probably existed, but they went untreated, and more or less unheeded, until the suffering caused by them became keener and confidence in educated physicians stronger. The malignant diseases of the reproductive organs were almost unknown among Indians. This showed that neither privation, nor hard work, nor exposure, nor giving birth to many children, necessarily resulted in the neoplasms which so afflicted civilized women.

8. Venereal disease: Both local and constitutional forms of venereal disease abounded among Indian women. The frequency of syphilis, coupled with the great mortality among infants and the great prevalence of glandular and pulmonary disease among many of those who survived infancy, were evidences of the inroads which venereal disease had made upon Indian vitality.

Finally: Indian women in the savage state underwent less physical suffering in connection with the reproductive apparatus than civilized women. They menstruated, bore children, and passed the menopause with the minimum of discomfort as a rule. This was due to three causes: (1) natural or racial insensitiveness compared with the far more sensitive Caucasian; (2) abundance of exercise; (3) life in the open air.

Civilized life, with its complex conditions, would always present obstacles to the performance of the functions peculiar to women with the same ease with which they were performed by savages, and when Indian women exchanged the savage for the civilized state they must necessarily adopt also some of the ills inseparable from the other.—*N. Y. Med. Journal.*

PAINFUL SENSATIONS IN HEART DISEASE.

Prof. Nothnagel discusses this subject in a short paper, containing in a tabulated form the results of his investigations as recorded in his hospital case-books. He says it is not uncommon to meet with patients complaining of painful and various unpleasant sensations in the region of the heart. If the thoracic organs are found healthy, these symptoms are usually looked upon as due to dry pleurisy, rheumatism, or intercostal neuralgia. Increased experience suggests the question, however, Why, if such is their nature, should these symptoms be limited to the left side, and not localized in the right half of the chest and back as well? A close relationship to the heart is indeed indicated. In some patients, markedly neurotic, subjective sensations are referred to the region of the heart when this organ is perfectly normal Professor Nothnagel tabulates 483 cases of valvular disease observed in six years. Here the freqency of cardiac pain differs very much with the valve affected. In disease of the aortic orifice it is much more frequent than in mitral affections, being met with most often in aortic regurgitation with stenosis of the same valve, most seldom in insufficiency of the mitral. Thus, in aortic insufficiency, painful sensations were recorded in 68 per cent. out of a total of 114 cases; in insufficiency and stenosis of the same valve, 68 per cent. On the other hand, only 7⅔ per cent. of a total of 183 with regurgitation at the mitral valve had these sensations. It is interesting to observe that a combination of aortic and mitral leakage produced the symptoms in only 18 per cent. This result confirms those of other authors, who have generally limited themselves to recording the so-called steno-cardial (anginose) attacks with pain usually radiating down the left arm. These statistics include, besides, less definite painful disturbances. Most authors mention the steno-cardial attack only in aortic disease, and Germain Sée states they are limited to this form of valve affection. This Nothnagel confirms generally; but he gives a case, on account of the rarity of such attacks, where the lesion was pronounced stenosis of the mitral orifice. Other forms of painful sensation complained of are sticking, tearing, burning, boring pain in the præcordia, which is almost continuous. Sometimes the feeling is as if the heart would be plucked out. Or paroxysms of violent pain, together with sudden and severe palpitation, may occur. In both cases the pain may radiate into the left side or back. Still further, there may be a feeling of a foreign body in the left chest. It is noteworthy that objective alterations of sensation may frequently be present on the skin, and not only with steno-cardial attacks, but likewise in the other forms. The skin over the

præcordia may be more sensitive than that of the right side, or there may be a feeling of pins and needles, and this may extend to the left side of the thorax and back, close to the vertebral column. Firm pressure against the intercostal spaces in the cardiac region produces tenderness there, or even actual pain, and this tenderness may often be observed in the whole region of the third to the seventh intercostal nerve.—*Montreal Medical Journal.—New York Medical Record.*

Book Reviews and Notices.

A Treatise on Practical Anatomy: For Students of Anatomy and Surgery. By Hy. C. Bœnning, M.D. Illustrated with 198 wood engravings. Philadelphia and London: F. A. Davis. 1891.

Dr. Bœnning holds several positions as a teacher of anatomy, and he states in his preface that his book is not a mere compilation, but is the result of years of practical work and a large experience in teaching. From so many advantages we naturally expect much; but Dr. Bœnning's book does not realize great expectations. As a dissecting manual it is very good; as a complete work on anatomy it is not good. The book has merits which entitle it to a place in a medical student's collection, but it is not such a work as one would look for from a man with Dr. Bœnning's experience and opportunities.

The plates illustrating the bones are reduced from Gray's plates. In the section on the nervous system a few plates have been borrowed from Edinger's valuable work. These plates are marked with German names, which are given with English equivalents in the original work, but this has been overlooked in Bœnning's work. This and other imperfections, however, are not greater than may usually be found in the first edition of any work. A. McS.

BOOK ANNOUNCEMENTS.

E. B. Treat, publisher, New York, has in press for early publication the 1892 "International Medical Annual," being the tenth yearly issue of this deservedly popular work.

Its corps of thirty-five editors are specialists in their respective departments, and have been carefully selected from the brightest and best American, English and French authors.

It is the embodiment of what is worth preserving of the current medical journals of the world for the year, and will contain over 6,000 references to diseases and their remedies.

The service rendered the profession by this Annual cannot be overestimated, and it is an absolute necessity to every physician who would keep abreast with the continuous progress of practical medical knowledge.

This index of new remedies and dictionary of new treatment, epitomized in one ready reference volume, at the low price of $2.75, make it a desirable investment for the busy practitioner, student and chemist.

Mr. W. B. Saunders, publisher, of Philadelphia, annouces a new work on surgery, under the title of "An American Text-Book of Surgery," by Professors Keen, White, Burnett, Conner, Dennis, Park, Nancrede, Pilcher, Senn, Shepherd Stimson, Thomson and Warren. He will also publish "An American Text-Book of the Theory and Practice of Medicine, According to American Teachers," to be edited by William Pepper, M. D. These books will form two octave volumes, and will be ready for delivery about June 1, 1892.

PUBLICATIONS RECEIVED.

System of Practical Therapeutics. By Hobart Amory Hare, M. D. Vol. I. Lea Bros. & Co., 1891.

Addresses, Papers and Discussions in the Section of Surgery and Anatomy, at the Forty-second Annual Meeting of the American Medical Association.

Transactions of the Section on Laryngology, Rhinology and Otology, American Medical Association, Forty-second Annual Meeting.

Transactions of the Opthalmological Section of the American Medical Association, Forty-second Annual Meeting.

Dermatologische Studien, Beitrag zur Würdigung der medikamentösen Seifen unter Zugrundelegung von Seifen in flüssiger und weicher Form. Von Dr. F. Buzzi.

Bulletin of the Harvard Medical School Association. Number 1.

The Physician as a Business Man. By J. J. Taylor, M. D.

The hydriatic treatment of typhoid fever, according to Brand, Tripier, and Pouveret, and Vogl. By Chr. Sihler, M. D., Ph. D.

The supreme passions of man. By Paul Paquin, M. D.

A B C of the Swedish system of educational gymnastics. A practical handbook for school teachers and the home. By Hartvig Missen, with 77 illustrations. F. A. Davis, Philadelphia, 1891.

A vegetable plate; also a new technique in intestinal anastomosis. By Robt. H. M. Dawbarn, M. D. *Reprint.*

Lessons in the diagonis and treatment of eye diseases. By Casey A. Wood, M. D. Detroit: Geo. S. Davis.

Addresses and Essays. By G. Frank Lydston, M. D.

Electricity, its application in medicine. By Wellington Adams, M. D. Detroit: Geo. S. Davis.

Practical notes on urinary analysis. By W. B. Canfield, M. D. Detroit: Geo. S. Davis.

Proceedings of the ninth annual meeting of the Louisiana State Pharmaceutical Association, held at New Orleans April 29, 30, and May 1, 1891.

Report of the Secretary of the Interior for the fiscal year ending June 30, 1891.

State News and Medical Items.

Communications from Physicians of Louisiana are solicited for this Department. News of personal interest is especially desired.]

CHARITY HOSPITAL.

The regular monthly meeting of the Board of Administrators of the Charity Hospital was held on December 7, 1891, at 7:30 o'clock. The meeting convened in the board room at the hospital, with Dr. Bickham as chairman. The following members were present: Drs. Weindahl, Keller, Secretary Marks, Colonel Vincent, Joubert, McManus, Sentell and Dr. Miles. The meeting was a long one, and the routine business was heavy. Secretary Marks presented the treasurer's statement as follows:

Receipts	$57,364 29
Disbursements	19,437 55
Balance on hand	31,926 74

Dr. A. B. Miles, house surgeon, presented a verbal report. He strongly recommended the adoption of a new set of governing rules. After considerable discussion, the following rules were adopted:

The outdoor clinics, constituting a part of the medical department, shall be conducted under the general rules governing the hospital.

These clinics were established for the gratuitous treatment of the outdoor poor. They are free consultation clinics, not free medical dispensaries.

The clinics shall comprise such clinical divisions as the

Board of Administrators may determine, and these divisions shall be designated only by numbers.

Each division shall be in charge of one principal, or not exceeding two, who shall attend alternately.

The outdoor visiting staff shall be elected semi-annually. The clinical assistants shall be appointed by a committee composed of the medical members of the board, the house surgeon and the assistant house surgeon. In cases of immediate necessity, the house surgeon shall have the power of temporary appointment.

The resident students shall bear the same official relations with all members of the visiting staff; and during the visit shall act always by authority of the principal or his substitute. The duties of the principal shall not be delegated to the resident students without the concurrence of the house surgeon or the assistant house surgeon.

In the absence of the principal, the house surgeon or the assistant surgeon may appoint a substitute to serve until the next regular meeting of the Board of Administrators.

It shall be the duty of the outdoor staff to refer to the clerk of the hospital any patient who may have been assigned by error, and no patient shall be retained for treatment in any division without proper assignment.

Members of outdoor staff, at regularly appointed hours, may give instruction in their respective divisions, subject to such regulations as the board may determine. Persons receiving instruction must be physicians or bona fide students of medicine.

The outdoor staff and their assistants shall treat gratuitously all patients assigned to their divisions, and shall not treat their private patients in these clinics. They shall report in writing to the clerk any imposition on this charity, and this officer, after conference with the house surgeon or the assistant, shall determine whether or not patients are eligible for treatment.

The visiting staff shall be required to sign the daily register.

At the close of each six months' term the principal in charge of each clinical division, or any part thereof, shall present through the house surgeon to the Board of Administrators an official report of the number of cases treated in his service.

The clerk shall, as heretofore, assign the outdoor patients and admit as inmates such as may be properly recommended and eligible under the general rules of the hospital. The clerk's official action shall be subject to the authority of the house surgeon or the assistant surgeon.

All stationery, cards, prescription blanks, books of record, etc., used in the clinics shall be furnished by the hospital, approved by the house surgeon.

The records shall be kept by the resident students, who shall note daily the number of visitors, and report monthly the number of new cases to the house surgeon.

The clinics shall be open every day in the week from 8 A. M. to 12 M. Cases of emergency will be attended in the amphitheatre of the main building any hour as heretofore.

The special rules for the government of the clinics, printed and exhibited in this building and elsewhere, are hereby authorized and shall be rigidly enforced.

The enforcement of these rules and all matters relating to discipline and dereliction of duty shall be included within the province of the house committee.

The annual report of the hospital will be presented in February next.

The building committee reported that the female clinic ward was ready for acceptance. The male clinic ward they also report as progressing satisfactorily.

The secretary announces the receipt of papers and accounts of the Ingram legacy. The accounts showed that proving the will and settling up matters with the estate left a balance of $57 for the hospital. The bequest, however, is rented property, and next year will prove of more value. Mr. J. M. Kennedy, of Lake Providence, was continued in charge of the estate.

The secretary was instructed to acknowledge the gift of a roof from the Fletcher Sanitary Roofing Company.

The leave of absence of John Johnson, druggist to the hospital, who has been absent for two months, was further extended until after Christmas on account of sickness.

On the recommendation of the house surgeon the appointment of a registrar to the hospital was considered. The duties of the new officer will be to preserve the medical records, tabulate them and keep them as medical archives of the hospital. It was thought advisable to appoint some member of the medical press to the position.

A committee was appointed to consider the matter and report at the next meeting.

The case of a mule run over and injured by the ambulance was referred to a commttee of two, to report at the next meeting.

The following reports were presented by the secretary:

HOSPITAL REPORT FOR NOVEMBER.

Number patients remaining in hospital Nov. 1, 599.

Number of patients admitted 643; foreigners 225, United States 428; males 522, females 131. Number of patients discharged 516; males 428, females 88. Number of patients died 90; males 57, females 38.

Number of patients remaining in hospital December 1, 646; males, 437, females, 209.

Daily average during the month, 609.

REPORT OF AMBULANCE SERVICE.

Number of calls, 115. Surgical 65, medical 10, dressed 16, conveyed home 2, died 2, false 6, refused 1, not needed 7, transfer calls 6. Three pay calls, $30 paid. Average time, 40½ minutes.

FINANCIAL REPORT FOR NOVEMBER.

Received from pay patients	$363 00
Returned to pay patients	40 00
Received from gate fees	382 10
Received from burial certificates	11 50
Received from legal certificates	4 00
Amount paid over to Sister Agnes	$720 60

There are at present 8 pay patients in Ward 14.—*Picayune.*

Dr. James H. Poston, of Rapides, died recently.

Dr. N. P. Moss, of Lafayette, La., paid a flying visit to the city last month.

Dr. T. W. Espy, of Alexandria, was married at a recent date to Miss Kate L. Owen, of New Orleans.

Dr. J. T. Keator, formerly of Pineville, but now a resident of Baldwin, La., is home for the holidays.

Married.—Dr. R. U. Brode to Miss Amélie Aldigé, on December 11, 1891, at St. Augustin's Church, Archbishop Janssens officiating.

Dr. Jos. Holt has returned to New Orleans and resumed practice. The doctor is heartily welcome among his old friends and associates.

Dr. Robert Layton's infirmary at Monroe, La., is completed, and as soon as furnished will be ready for patients. The enterprise displayed by Dr. Layton in this matter is commendable in the highest degree, and he should receive substantial encouragement.

East Feliciana.—Dr. J. W. Lea, a recent graduate of Tulane University, has been elected an assistant physician at the Insane Asylum.

Dr. Eugene Clark, of Lockhart, Tex., stopped in New Orleans on his way to New York. We are sorry to learn that our old friend encountered the grippe.

Mrs. J. L. Newcomb, of New York, has contributed $500 to the Ear, Eye, Nose and Throat Hospital for life membership. The trustees accepted the donation with a warm resolution of thanks.

ANNOUNCEMENT.

NON-RESIDENT COURSE OF STUDY.

The Illinois State Board of Health has provided that a year of study with a preceptor may be accepted as one year on a four-year course. This year is usually taken preliminary to study in a medical college. The care of a student by a busy practitioner of medicine has not always been equal to the requirements of the case. Therefore, this college has undertaken to coöperate with preceptors in laying out a course of reading and a course of study of accessible animals. This course must, during the present year, be largely a matter of experiment. Criticisms and suggestions will be gladly received.

NON-RESIDENT COURSE.

1. Non-residents may matriculate with the College of Physicians and Surgeons to take the first year's course in the same manner and under the same conditions as if they proposed to take a resident course. (*V.* Catalogue.)

2. Non-resident students will be required to select a preceptor satisfactory to the secretary, (Dr. Bayard Holmes,) and one who is willing to coöperate with the faculty in conducting the year's work, and give his certificate for the same at the end of the year.

3. Non-resident students must do the prescribed work and make satisfactoly weekly reports of progress in the manner provided by the faculty.

4. The course covers thirty weeks, and not more than five weekly reports may prove unsatisfactory without debarring the student from the credit of the course.

5. When a student can furnish evidence of having already taken the work in the prescribed non-resident course, he will be assigned an equivalent from a special course.

6. Students who have taken the non-resident course in a

satisfactory manner, and have shown by the weekly examinations that they have done the work thoroughly and intelligently, will receive certificates from the secretary, which, with the certificate of their preceptor, will be taken at this college in lieu of one year's study on a four years' course.

COURSE OF STUDY.

The study of biology and physics is looked upon by the faculty as the most desirable foundation for the study of medicine and surgery. It has not been thought advisable to duplicate the resident course, but rather to supplement it. The following outline will give an idea of the plan of study as prepared by the faculty:

A. Biology.

(*a*) Invertebrate Anatomy and Physiology.

The lessons during the first month comprise the study of the fresh and salt water clam and the crawfish or lobster. Dissections, drawings and four written examinations.

(*b*) Vertebrate Anatomy and Physiology.

The next three months will be occupied in the study of the frog, the hen and the rat or the rabbit and other accessible vertebrates. Dissections, preparations, drawings and twelve written examinations.

(*c*) Anatomy of Plants and Methods of Historical Study.

The remainder of the year will be occupied in the study of the physiology of unicellular plants, germination, methods of historical study and such other subjects as will be suggested in the progress of the initial course.

B. Physics.

(*a*) The reading of a suitable text book on physics, weekly examinations during the whole course.

(*b*) Experimental week, which can be carried out at home with the material accessible in any village and with little expense.

C. Latin.

It is recommended and expected that every student undertake at the same time the study of Latin under a competent teacher. No examinations will be made in Latin in the spring of 1892.

Students wishing to take this course will do the secretary a favor by matriculating early, in order that he may know how large a class to provide for. It will be found greatly to the advantage of the student to do the work with some other student or with the teacher in one of the public schools.

MORTUARY REPORT OF NEW ORLEANS.

For November, 1891.

CAUSE.	*White*	*Colored*	*Male*	*Female*	*Adults*	*Children.*	*Total*
Fever, Yellow							
" Malarial (unclassified)	1	4	2	3	4	1	5
" Intermittent		1	1			1	1
" Remittent	1	1	2		2		2
" Congestive	5	3	4	4	5	3	8
" Typho-Malarial	4	4	4	4	6	2	8
" Typhoid or Enteric	3	1	2	2	3	1	4
" Puerperal							
Scarlatina							
Small-pox							
Measles	2			2		2	2
Diphtheria	5		3	2		5	5
Whooping Cough							
Meningitis	2	1	1	2	1	2	3
Pneumonia	22	16	23	15	24	14	38
Bronchitis	5	6	5	6	3	8	11
Consumption	33	34	41	26	66	1	67
Cancer	13	3	4	12	16		16
Congestion of Brain	11	3	6	8	7	7	14
Bright's Disease (Nephritis)	19	7	16	10	26		26
Diarrhœa (Enteritis)	20	6	18	8	12	14	26
Cholera Infantum	19	2	10	11		21	21
Dysentery	8	1	4	5	7	2	9
Debility, General	3	3		6	6		6
" Senile	23	19	11	31	42		42
" Infantile	10	7	8	9		17	17
All other causes	146	82	136	92	153	75	228
TOTAL	355	204	301	258	383	176	559

Still-born Children—White, 30; colored, 15; total, 45.

Population of City—White, 184,500; colored, 69,500; total, 254,000.

Death Rate per 1000 per annum for City—White, 23.09; colored, 33.22; total, 26.41.

F. W. PARHAM, M. D.,
Chief Sanitary Inspector.

METEOROLOGICAL SUMMARY—NOVEMBER.

STATION—NEW ORLEANS.

Date.....	TEMPERATURE. Mean	Max...	Min...	Precipn. in inches and hund'ths ..
1	68	79	58	0
2	68	75	62	0
3	65	73	57	0
4	68	77	58	0
5	70	80	59	0
6	70	78	62	0
7	69	78	60	T
8	70	79	60	0
9	66	75	58	.96
10	56	64	48	.06
11	61	73	49	0
12	67	77	57	.16
13	61	66	56	T
14	66	75	56	0
15	68	76	59	.01
16	72	79	64	0
17	50	54	46	.51
18	40	48	32	0
19	46	57	36	T
20	58	62	53	T
21	68	77	58	.02
22	68	77	58	1.45
23	47	54	40	0
24	51	58	44	0
25	52	57	47	.04
26	54	60	47	T
27	57	68	46	T
28	66	78	55	.09
29	41	44	38	.01
30	38	46	30	0
31	—	—	—	—

SUMMARY.

Mean barometer, 30.15.
Highest barometer, 30.63, 18th.
Lowest barometer, 29.77, 9th.
Mean temperature, 60.
Highest temp., 80, 5th; lowest, 30, 30th.
Greatest daily range of temperature, 24, 11th.
Least daily range of temperature, 6, 29th.

MEAN TEMPERATURE FOR THIS MONTH IN—

1871.....60.0	1876.....59.0	1881.....61.0	1886.....59.0
1872.....57.0	1877.....58.0	1882.....63.0	1887.....61.0
1873.....61.0	1878.....61.0	1883.....64.0	1888.....59.0
1874.....63.0	1879.....65.0	1884.....60.0	1889.....59.0
1875.....66.0	1880.....56.0	1885.....60.0	1890.....64.0
			1891.....60.0

Total excess in temp'ture during month, 50.
Total excess in temp'ture since Jan. 1, 245.
Prevailing direction of wind, S. E.
Total movement of wind, 7124 miles.
Extreme velocity of wind, direction, and date, 32 miles, from N. W., 23d.
Total precipitation, 3.31 inches.
Number of days on which .01 inch or more of precipitation fell, 10.

TOTAL PRECIPITATION (IN INCHES AND HUNDREDTHS) FOR THIS MONTH IN—

1871..... 7.14	1876..... 4.35	1881..... 7.24	1886..... 5.33
1872..... 7.43	1877..... 6.58	1882..... 1.98	1887 ... 0.52
1873.... 5.95	1878..... 7.78	1883 .... 6.36	1888..... 1.50
1874..... 1 12	1879.... 3.79	1884..... 3.13	1889..... 2.18
1875..... 6.79	1880..... 6.04	1885..... 3 47	1890..... 0.42
			1891..... 0.00

Total excess in precip'n during month, 1.15.
Total excess in precip'n since Jan. 1, 23.59.
Number of clear days, 15; partly cloudy days, 3; cloudy days, 12.
Dates of frost, 24th and 30th.
Mean maximum temperature, 68.
Mean minimum temperature, 52.

NOTE.—Barometer reduced to sea level. The T indicates trace of precipitation.

G. E. HUNT, *Local Forecast Official.*

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XIX. FEBRUARY, 1892. NO. 8.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the first day of the month preceding that in which they are expected to appear. A complimentary edition of twenty-five reprints of his article will be furnished each contributor should he so desire. Any number of reprints may be had at reasonable rates if a *written* order for the same accompany the paper.]

A CASE OF ATRESIA LARYNGIS FROM CATARRHAL LARYNGITIS, WITH PRESENTATION OF THE PATIENT, FOLLOWED BY INTUBATION.

BY DR. A. W. DE ROALDES, Surgeon in charge of Eye, Ear, Nose and Throat Hospital.*

Gentlemen of the Parish Medical Society: It is almost without preparation that I appear before you this evening, as I was approached by your worthy secretary only three days ago with the pressing request that I should take the place of the designated essayist. Previous engagements and the short limit of time induced me to resort to an exhibition of an interesting case which is now under my treatment, rather than to write an essay.

The clinical history of this patient, whom I have to-night brought before you, is such as, I hope, will compensate to some extent for the regrettable change in your programme.

I now refer to a case of almost complete synechia of the rima glottidis, the result of chronic catarrhal ulcerations. Her observation, as taken by Dr. C. J. Landfried, was as follows: About eleven years ago, during high water in the suburbs of the city, Mrs. G., a native of New Orleans, aged 41 years, was accidently thrown from a skiff, getting her head and body soaking wet. That same day she noticed a little huskiness of

* Read before the Orleans Parish Medical Society, December 26, 1891.

the voice, which gradually became worse, until finally she was so hoarse that she could not be understood (the voice not amounting to more than a mere whisper). The patient has had a marked aphonia from that time to this, due, however, for nine years to, presumably, a catarrhal laryngitis, and for the last two years to a synechia or adhesion between the vocal cords, causing at first slight dyspnœa, but which became so aggravated in the short space of three months as to require a tracheotomy. The dyspnœa was continual, *i. e.*, night and day, and not paroxysmal; during rest as well as upon slight exertion, patient always experienced a sense of suffocation.

The dyspnœa was aggravated by the least exertion, such as sweeping, going up steps, etc., and showed no tendency to ameliorate, but, on the contrary, became gradually worse. A few months after the accident (falling from skiff) above mentioned, patient had recourse to a medical gentleman for her hoarseness. He treated her for several years with electricity applied to the neck in the region of the larynx and by sprays, inhalations, etc. At the end of that time (five years), her hoarseness not being any better, she concluded to go to the Charity Hospital, where she was examined by a physician of the visiting staff, who made an application to the pharynx (she says of something black) and ordered her to put one teaspoonful of turpentine in a pint of steaming water, to be used by inhalation, and also to go to the piney woods or a place not near water. She followed those instructions, and came to the city every third or fourth week, for the purpose of reporting. After one year of such treatment, she was just about the same; no better nor no worse. She next went to another public institution.

The surgeon in charge there ordered a mixture to be taken internally, and inhalations, which she followed for about nine months, but with no result. At the end of that time the breathing commenced to become embarrassed, dyspnœa increased, and the disease pursued the course outlined above. In this condition she applied to the Eye,Ear, Nose and Throat Hospital on the 29th of December, 1889, just two years ago.

Before the accident, which occurred eleven years ago, from which she dates her trouble, patient was perfectly well. She had no cough, and her general health was good. Father

died of apoplexy eighteen years ago, at the age of 68. He was a stout, robust man. Mother is living, 72 years of age, and, for her age, very active. Patient had four children; one died at the age of 9 days, and the other three, living, are perfectly healthy. Has three sisters living, who are robust and remarkably healthy. Two brothers, also living, and well. No history of any skin eruption, no alopecia, no sore throat that could be suspected as specific, no sore eyes, and, in fact, nothing that would lead to a suspicion of syphilis.

Upon examination of the larynx I found a marked stenosis of the glottis, with appoximation and almost complete immobility of the arytenoid cartilages. The respiration was carried through a small aperture of the size of a goose quill, and located near the posterior commissure.

The right arytenoid cartilage seemed to be on a more anterior plane than the left one. A shallow groove could be seen extending from the above mentioned aperture to anterior thyroid angle. When the laryngeal sound was used this groove was found to be lined not by a depressible membrane, but by a resisting tissue, the opposing edges of the rima glottidis being, as it were, firmly glued together. The line of union was imperfectly straight. No granulation tissue could be found to allow of removal for microscopical examination. The patient's general appearance was miserable. She was pale, weak and very much emaciated. The physical examination of the chest gave negative results. Her expectoration was difficult and generally frothy, occasionally spotted with thick secretion; no bacilli were found. After reporting a few times, the patient was advised to enter the hospital in order to be tracheotomized. The operation though was hurried on by an alarming attack of dyspnœa. During 1890 numerous attempts were made with Whistler's instrument to dilate the opening in the larynx, which had contracted still more after the introduction of the cannula.

Whilst in Berlin I ordered a special set of laryngeal knives, hoping, on my return home, to incise the synechia; I could then scarcely introduce a very slender laryngeal probe. In 1891 I was forced for several months to abandon all attempts, by reason of a deep phlegmon of the neck, the result of lymphangitis caused by the introduction of the sound, which determined

probably a traumatic infection. Upon my return from Europe this year I found the larynx air-tight, the opening being closed by a large granuloma. After removing it with the laryngeal forceps, I succeeded in introducing *this* very slender sound through the tracheal wound, from below upward. After pushing it up into the pharynx I managed to throw around the end a knot of ligature thread, which I drew down through the tracheal wound, the extremities being tied over the chin. The next day, by means of this thread, I pulled through the stricture a double thread, then four, six, eight, etc., until I had to stop on accountof an ulceration of the epiglottis and inner surface of arytenoids, caused by continuous pressure and friction during deglutition. Still I had managed, by that time, to have an opening sufficiently large to admit the No. 1 of Schrötter's hard rubber tubes. This, on the first day, remained in the larynx for about half an hour.

The next day the same number was again introduced, and remained about the same length of time. On the third day No. 3 was introduced without difficulty, and remained in place a little longer than the preceding numbers, say about one hour. The same number was introduced on the two succeeding days, and remained about the same length of time. Then No. 4 was introduced, and allowed to remain one hour. This number was reintroduced each day for about eight days, when I commenced introducing O'Dwyer's tubes for infants, first the size next to the largest and to-day the largest size. As soon as I receive a box of O'Dwyer's tubes for adults I will incise the stenosed parts if necessary and proceed to use much larger tubes, and hope to be able, in the course of a few months, to dispense with the tracheotomy tube when the canula wound can be closed, and the patient considered as cured.

Now, gentlemen, I wish to call your attention to a point in the etiology of the case which is certainly a most interesting one, and might be the subject of a spirited controversy. The fact is that, leaving aside the different forms of acute stenosis of the larynx, such as acute œdema of the glottis, erysipelatous inflammation, laryngeal diphtheria, perichondritis, etc., most cases of chronic stenosis of this organ can be classified under the head of tuberculosis or syphilis. Of course, this statement does

not apply to those cases in which the stenosis is the result of neoplasm or of the cicatrical adhesions which follow some of the acute infectious diseases, such as variola, typhoid fever, glanders; nor does it include cases of rhinoscleroma, of lupus, or of paralysis of the abductor muscles.

In a general way, it is true that most cases of chronic stenosis of the larynx are of a tubercular or syphilitic origin. A careful study of the present case makes it evident that it cannot be classified under either one of these two headings. The absence of any specific infection, the duration of the disease, the negative result of the examination of the sputa at the time, the absence of cough or of expectoration, compels me to abandon all idea of tuberculosis or of syphilis. I must, therefore, considert his as a case of laryngitis *a frigore*, which led to an ulcerative process, and finally to an almost complete synechia of the glottis.

I am aware that the existence of catarrhal ulcerations, and especially leading to such a result, has been contested by most specialists. Schnitzler, of Vienna, and Heryng, of Warsaw, with a few others, are the only ones who admit their existence. In fact, I have failed in my researches (hurried, it is true,) on that subject to find a case of chronic cicatrical stenosis of the larynx which was ascribed to purely catarrhal ulceration.

The case of Schrötter is the only one which presents such points of great similarity with the one I bring before you this evening, and I will ask your permission to read to you a synopsis of the observation. I refer to the one published by his assistant, Dr. George Juffinger, in which hoarseness, without known cause, had existed two years and a half in a man 25 years of age. This was followed by dyspnœa, eventually requiring tracheotomy. Six weeks after the operation all communication was shut off between air passage and pharynx—attempts at dilatation failed—division of the larynx and removal of the obstructing tissues were only temporarily serviceable. Schrötter found complete occlusion of the larynx. The arytenoid cartilages were closely adherent, and the ventricular bands were thickened and in contact. After repeated failures to find a passage by way of the mouth or by way of the

trachea, Schrötter passed a harpoon lance between the ventricular bands and through the cicatrical tissue into the trachea. A thin thread was then thrown around this instrument in the tracheal wound and drawn up through the mouth, when its two extremities were tied together. The next day a thicker thread was tied to the tracheal end of the first one and drawn through in its turn. Subsequently larger threads, then catgut, and eventually a leaden wire of considerable size were drawn through. This was followed by the graduated dilating prisms, until on the fortieth day Schrötter's No. 20 could be introduced. At this time a small granulation tumor was detected in the glottis, and was removed with the electrocaustic snare. Dilatation was continued as before, and eventually confided to the patient, who became enabled to work and to sleep with his canula closed. It was hoped that eventually the canula could be removed.

Leaving this very interesting question of etiology, I will proceed, gentlemen, to say a few words in regard to the practical point of treatment in cases of chronic stenosis of the larynx, my remarks now applying to the chronic forms of this trouble.

I must tell you that this question of treatment of chronic laryngeal stenosis has been in the past few years the subject of numerous publications, and has led to the invention of numerous instruments. In time not far removed a medical interference amounted to little less than the apperance of the physician as a *Deus ex machina*, when he arrived in time to perform the operation of tracheotomy. Asphyxia was for the time being remedied, but the physician, as well as the patient, had to face the awful prospect of a canula which had to be worn generally for a life time.

To-day, thanks to the treatment advocated in 1876 by Dr. Schrötter, and also to the procedure of intubation, as perfected by O'Dwyer, this painful necessity is becoming rarer and rarer.

Not that these gentlemen have an exclusive right to the honor of this great progress, for it is proper to remember in this connection the pioneers, like Desault, Chaussier, Currey, Bouchut, Trendelenburg, Weinlechner, and others.

In looking over the literature of this subject, I find in the

Index Catalogue of the Surgeon General's Library the title of an observation published in 1828 by Liston, which reads as follows: "Notes of a case in which the canal of the larynx after being nearly obliterated, was re-established."

Now when we come to synthetize the very numerous operative procedures instituted to remedy laryngeal obstruction, they can all be ranged under the head of three general methods:

1. The endolaryngeal method, by itself.
2. Dilatation, with preliminary tracheotomy.
3. Laryngotomy.

A complete study of these three methods and their numerous modifications would tire your patience, as they have taxed the minds of specialists, and more than justify what an expert like O'Dwyer has expressed in the following lines: "To insure success in management of chronic stenosis of the larynx, some ingenuity and a great deal of patience and perseverance are necessary in order to overcome the many difficulties encountered."

1. The first method is the one which naturally absorbs from the start the attention of the surgeon. It consists, as you can very well understand, in dilatation of the parts by means of bougies, with or without the adjunct of liberative incisions, or even of excisions. We can divide the instruments used for this purpose in two general classes:

(*a*) Those which are calculated to remain in place *only a limited time, a few hours at most*, such as ordinary bougies; Mackenzie's three-bladed parallel dilator, Whistler's cutting conical dilator, Navratil's ingenious but complicated four-bladed dilator, and Moure's instrument, which has the advantage of allowing one to work it with one hand, whilst with mirror in the other hand, the operator can direct his manipulation. We have next, in this same class, Schrötter's hard-rubber hollow tubes, which are prismatic, and, therefore, better adapted to the shape of the larynx.

(*b*) The second class of instruments comprise those which are destined to remain *in situ* a longer period than a few hours. They can be placed and retained by the patients, for

days, weeks and months. The intubation tubes of O'Dwyer represent the most perfect type of these instruments.

In regard to these tubes, as used in connection with chronic cases of stenosis, I can not express my view of their utility better than by quoting the author himself, who said at the International Congress in 1887: "Had intubation of the larynx proved a complete failure in the treatment of croup, I should still feel amply repaid for the time and expense consumed in developing it, for I believe it offers the most practical and rational method yet devised for the dilatation of chronic stricture of the glottis." He supports this view by the record of five cases treated by intubation.

Since these cases were published, many other contributions to this subject have appeared. Among them I will call your attention to the article of Dr. Lefferts, of New York, on the treatment of syphilitic stenosis by intubation, which proved to be one of the most interesting papers read before the Laryngological Section of the International Congress of Berlin. To bear out the correctness of his views, he cites ten observations, in which intubation proved to be the simplest and speediest method of remedying alarming dyspnœa, and thereby avoided the inconvenience and danger of tracheotomy, one of which certainly lays in the temporary or permanent use of tracheal canulæ.

In these chronic cases, the tube is often worn for very prolonged periods without harm or inconvenience. In one of O'Dwyer's cases, owing to the patient being lost sight of for a length of time, the tube was worn continuously for ten months. Experience has shown, as might have been anticipated, that when the larynx is affected with chronic inflammatory thickening and cicatrical narrowing, considerable pressure can be tolerated from tightly fitting tubes without injurious consequences. In introducing the tube, also, in these cases, more or less force may have to be employed, and can be employed without injury.

In cases requiring the retention of a tube for several months, it is important, says O'Dwyer, to change the points of pressure in the vestibule of the larynx about once in two weeks, in order to prevent erosion of the mucous membrane, with consequent

sprouting of fungous granulation, which is liable to occur from the compression exerted by the constrictor muscles during every act of swallowing.

A hard rubber tube may be allowed to remain in the larynx for a much longer time than one constructed of metal, because, owing to its lightness, it does not occupy a fixed position, but moves upward by coughing, and is again pressed downward by the act of swallowing. Another objection to the long retention of a metallic tube, is the fact that the gold plating soon disappears in places, followed by erosion of the metal and the deposit of calcareous matter, which produces a good deal of irritation.

The difficulty of deglutition, which sometimes is present, after the introduction of an intubation tube is not a source of trouble in chronic cases, for deglutition has invariably been found to be carried on quite easily after the first few days, both in children and adults. In the stenosis which sometimes follows tracheotomy, and which renders it impossible to dispense with the tube, intubation has been found a valuable method of treatment. Ranke, in discussing this subject, gives as the principal cause of difficulty in dispensing with the tracheotomy tube:

a. Granulations growing up in the region of the tracheotomy wound, especially at its upper end.

b. Cicatricial stenosis, either at the site of the incision or at some point in the trachea where the canula presses.

c. Swelling and thickening of mucous membrane of the larynx, between the under surface of the cords and the lower margin of the cricoid (chorditis inferior hypertrophica).

d. Bilateral paralysis of the abductors.

e. Paresis of the cords from disease.

f. Dread of having the canula removed, producing laryngeal spasms.

In all these forms of difficult decanulement Ranke advocates intubation, although his own experience is confined to its employment in the first two forms.

If time permitted, I could prolong this dissertation by entering into the minute details of intubation in children, as compared to the same procedure in adults, by speaking of the

use that can be made of cocaine in facilitating the manipulation, also of the use of laryngeal mirrors in adults. I will limit myself, before discarding the subject, to call your attention to the fact, as demonstrated in the case I present to you, that in the treatment of chronic stenosis in the adult the set of croup tubes (as this one) used for children will do to begin with, but the calibre, shape, length and material of the tube, as also the strength of the handles, have to be modified in order to complete the treatment. No set of instruments, however complete, will be sufficient for all cases, no two of which are alike, says O'Dwyer, and the construction of tubes adapted to special peculiarities will sometimes be required.

2. I now come to the second general method of treatment in these troublesome cases—I mean to dilatation with preliminary tracheotomy—a method which is not to be resorted to until all the possibilities of the endolaryngeal method have been thoroughly exhausted. It is true that it is the one that I have pursued in this case; but let me tell you candidly, had the sum of evidence produced to-day in favor of intubation been displayed two years ago, and especiallly had the dyspnœa been less alarming, I sincerely think I could have managed my case better and avoided a great deal of trouble and annoyance. To this method belongs the improved Schrötter's plan of treatment. I soon found that the Trendelenburg hollow tube, as perfected by him, could only be used for very temporary dilatation, occasioning at times serious irritation and very great loss of saliva (as evidenced in my patient's case, who was certainly weakened by a daily loss of over one pint of saliva). He subsequently advised preliminary tracheotomy, and devised his method of dilatation of chronic stenosis by introducing through the mouth small prismatic bougies. Through each prism a rod, having an eye at the top for affixing a thread, and a knob below, or a perforation, by which the bougie can be secured by a pincette or by a bolt passed through the fenstrated canula in the artificial opening. The bougie is inserted by means of a canulated directorfitted to a perforation surrounding the eyed rod at top, thethread attached to which has previously been drawn through the director by a special wire hook and is then united at the distal end.

As soon as the bougie has been secured at the lower end the thread is loosened from the director and that instrument is withdrawn, leaving the bougie in position and the thread hanging from the mouth. The thread being secured, the bougie remains in position day and night until it becomes necessary to clean it or desirable to replace it with a larger one, when it is released below and withdrawn by traction on the thread. This method has produced remarkable results in the hands of Schrötter and was universally acknowledged to be the most effective until intubation, as shown you in the present case, was proved to be more than a serious competitor. In connection with this general method I will simply mention the numerous attempts made by Stoerk, McHenry, Czermack, Renich, Burow, Bruns, and many others to dilate the stenosis from below upwards. Whilst some of them have proved effective in isolated cases, as in Liston's observation, still these procedures have generally been abandoned in favor of the above mentioned one.

3. The third general method of treatment of chronic stenosis of the larynx, and to which I will simply make a rapid allusion, is laryngotomy, or laryngo fissure. This method, formerly recommended by French surgeons, is, and especially has been, enjoying quite a reputation in Germany. The larynx is open on the median line, and the causes of obstruction are either incised, or excised, by means of the bistouri, scissors, or thermo-cautery, and to avoid ulterior cicatrical retraction the larynx is subsequently cauterized. Whilst I admit that there are cases in which this method is perfectly justifiable, and, indeed, has given good results, still they are so few that I think it can be discarded. It should be limited to those cases of chronic stenosis, the result of obstructive neoplasm, or for extraction of foreign bodies, and intended as much for their permanent removal as for the relief of the stenosis.

INDICATIONS FOR TAIT'S OPERATION.*

By. DR. WATKINS.

The very large number of contributions on this subject to our medical literature in the past few years produces a sense of timidity with any one who attempts to add still another. While it is true that our medical journals are filled with many papers, some extolling the virtue of abdominal surgery, others condemning it in the most positive manner, we are left in the dark without a light to show us out of many difficulties that confront us in our gynecological work. It is desirable that we have some definite rules to guide us in doing abdominal work, as the surgeon has in amputating or in opening abscess. If the artery has been destroyed the surgeon knows at once what to do; if pus is found, that he has but one source to look for relief. The analogy is not for some reasons a fair one, since the greater difficulty attending the one will of necessity make difficult the establishing of definite rules for guidance of the abdominal surgeon. Though we never may be able to say just when a pelvic abscess may open in the peritoneal cavity, or when a tubal pregnancy may rupture, yet there are many conditions which, when recognized, will be of service to us in making up our minds what to do in a given case. The object in bringing this subject before this intelligent body is not to formulate a set of rules myself, but to elicit some expression from the members of this society which I trust may be beneficial.

Those who see no good in oöphorosalpingotomy are not unlike the Israelites of old, lying on their faces, weeping not at the death of Moses, but over the destruction of ovaries and tubes, mutilating and unsexing women. To such I have this to say: The application of Tait's operation has, like all other novelties in medicine, been much abused. It is not unlike Defenbrode's brilliant operation for tenotomy, when every oblique eye was made more oblique on a different axis, and innumerable club-feet destroyed forever. Emmett's trachelorrhaphy was for many years resorted to whenever a cervix showed the slightest rent, yet to-day it has an incontestable place in gynecology.

*Read before the Montgomery Medical and Surgical Society, November 7, 1891.

These inventions are not comparable to the operation I am proposing for discussion to-night. It was through the general surgeon that we were encouraged to enter the peritoneal cavity and remove therefrom diseased appendages; but the increased knowledge of the pathology of the pelvic viscera have long since paid the debt for us many times over. We are no longer feeling our way with numb fingers, and using such expressions as *cellulitas*, *pelvic peritonitis* and *metritis*, and innumerable varieties and degrees of displacements which were regarded as responsible for the most annoying symptons. We have by means of this advance in gynecology, been put face to face with what really exists. Conditions hitherto regarded as neuralgia are now known to be the result of inflammatory deposits and adhesions interfering with normal circulation of the pelvic organs. Facts observed clinically, and at the *post-mortem* table, are incontrovertibly proven to require operative measures for their relief. Exploratory incisions are constantly revealing errors in diagnosis. Many cases of ectopic pregnancy were regarded as ovarian cyst and fibroid tumors. Many a woman has been snatched from the verge of the grave by removal of what was thought to be tubal dropsy, but was found to be tubal pregnancy. The electrician has deprecated the sacrificing of diseased ovaries and tube, and not unlike the veritable nostrum manufacturer, claims for his caged lightning the power to cure all female troubles. I am glad to say that its votaries are daily diminishing.

Other questions aside from pathological conditions have an important bearing when we are to determine between removal of the appendages or palliative treatment. When life is not endangered and circumstances are such that the patient is able to live without work, she may retire to a life of invalidism for a few years; when nature will do just what the surgeon would accomplish in a much shorter time—retire the organs to a state of inactivity and quietude—liable at any time to set up a new inflammation. The question is to be viewed entirely from a different attitude, when the woman has to live by her own exertion. A very slight peritoneal adhesion may be brought about by the rupture of a single ovarian vesicle, which may render her incapable of earning a livelihood for herself, and,

it may be, others dependent on her. Some writers have attempted to lay down the rule, that when you find an abnormal growth on the side of the uterus that it was a good plan to remove it. This is reckless advice, and should not be followed. Condition of either ovaries or tube may present this objective symptom by manual examination, without any inconvenience to the bearer.

Disease of the tubes commonly met with requiring the operation are hydro, hæmato and pyosalpinx, beside a large number of malignant and non-malignant neoplasms; catarrhal salpingitis, with adhesion, is not infrequently a cause of symptoms which are not relieved by any other remedy. The effort to classify these different conditions by a symptomatology has, for the most part, been futile. These are not absolutely characteristic symptoms of the several changes, though to the experienced examiner it is possible frequently to make an accurate diagnosis.

The frequency of tubal disease is much greater than the casual observer would have us believe. Winkle found that the tubes had undergone pathological changes in over three hundred out of five hundred cadavers of women. Certainly many of finer conditions found by Winkle would not be recognized by most of us as important. Still, the fact remains that a large number of women suffer with diseased tubes. I am quite sure that, when the cause of most of these troubles is recognized, that the various caustics now in general use, sponge-tents, dilators and sounds, will be less frequently used in gynecology.

The operation for uterine myoma is less popular than formerly, due to the comparative safety of myomectomy—a more radical management of these new growths. In the small-size interstitial tumor, when the size is not objectionable, Tait's operation is less dangerous, and has been very useful in relieving the annoying symptoms. A few cases have been reported where hysterectomy was necessary after the operation for removal of the tubes. The inventor says nothing else more brilliant can be claimed in surgery, and in a patient under the age of 35 it should be done without waiting, as they will certainly grow. After this age it is fair to watch them, and unless the disturbance is too great during menstruation, rest

in bed, with frequent doses of ergot, with the salts of potash in large doses, should be given a trial. Should these remedies fail, and the loss of vital forces, with rapid increase in size of tumor, occur, the operation should be resorted to at once. Prompted by a spirit of conservatism, and encouraged by the flattering reports of the electrician, I supplied myself a few years ago with an outfit of electrical instruments (at no small cost of time and money) for the purpose of treating uterine myomata, but soon found by a sad experience that it was a worthless and dangerous treatment.

It has been the custom to regard the existence of uterine myoma where no distressing symptoms were present, as an unimportant complication of pregnancy; but the termination of a case that came under my observation and reported elsewhere, convinces me that it is a very serious complication. In this case the uterus ruptured through a degenerated thickened wall, and the woman died in a very short time from shock. This is an additional reason for removing the appendages of a myomatous uterus when pregnancy is likely to occur.

Salpingitis for convenience may be classed under two divisions, namely: catarrhal or the so called *salpingitis catarrhalis*, and septic salpingitis following abortion or normal labor.

The catarrhal form is usually the result of endometritis, extending into the tubes. It destroys the epithelium of the lining membrane, and very frequently results in hydrosalpinx or a sacculated condition of the tubes. Many cases of this form of inflammation frequently get well without an operation, or give so little annoyance that women who can take reasonable care of themselves are not seriously inconvenienced by them. The only symptoms noticeable in this condition is very great tenderness in the vaginal vault, with enlargement of the tubes. These patients are frequently relieved by local treatment; when not, the amount of disturbance produced will determine whether or not we shall operate. Septic salpingitis following an abortion or normal labor presents some very vexed questions. It is usually the result of sepsis from imperfect drainage of the uterus, or some specific exciter of inflammation, which is conveyed to the tubes. Under the influence of these the

walls may melt away, even to the extent of perforation, thus allowing its contents into the peritoneal cavity. It is this condition that we were formerly taught to treat as pelvic peritonitis or cellulitis. The diagnosis of acute salpingitis under these circumstances is always difficult; the subjective symptoms are variable; the pain complained of may be due to an endometritis; a peculiar burning pain over the seat of the tubes is perhaps more characteristic than any other symptom; pain in back and hips, extending down the leg, with the usual constitutional disturbance.

More or less swelling and tenderness is about all that can be detected by an examination. Thickening of the broad ligaments with fixation of the uterus is usually observed. I am aware that the leaders in this discussion are ready with a long list of such cases, which have made perfect recoveries, and have continued to bear children without the slightest trouble.

Of such, I would respectfully ask, that they make a distinction between pyosalpingitis and venous congestion, or enlargement of the pampimform plexus, and pelvic adenitis. The termination of such cases, without operation, is quite variable. When the uterine end of the tube is left patulous, the tube may discharge into the uterus.

I have seen one such case, where pus could be pressed out of the tube through the uterus into the vagina. Where it is confined to one side, subsequent pregnancies may follow, and a life of fair comfort may be enjoyed. The most serious termination is when the tube ruptures and pours its contents into the peritoneal cavity.

Certainly, if such condition could be foreseen, no one would question the propriety of operating; but, unfortunately, this is impossible. As a rule, these cases reach the specialist after they have been subjected to the continual treatment of poulticing and hot water injections. Congestion in the neighboring tissues is relieved, and there remains behind a clearly defined mass, or cavity, formed by adhesion of a coil of intestines, tube, ovary or the broad ligament.

With this condition we are frequently prohibited from operating, either by anxious friends or some objecting counsel. The question usually asked is, What will be the

result? Where death does not interfere, I have seen women, under the influence of rest and tonic treatment, return to their usual weight, with rosy cheeks and cheerful spirits; but this condition of things for good reasons does not last. When she returns to her labors or the embrace of her husband, she has a recurrence of her old pains, though it may be in less degree.

One such case in a stout healthy negress, whom I was prevented from operating on nearly two years ago, and who had recovered sufficiently to be on the street, now presents an emaciated condition and looks ten years older.

Many conditions of the ovaries, which time will not allow me to discuss here, require this operation for their relief.

Cystic degeneration of the ovarian stroma, which serves to maintain a chronic salpingitis on pelvic peritonitis, requires salpingotomy for its relief. Many of the leading laparotomists assert their opinion that an operation for a cystic ovary is unjustifiable, but I have very often observed cystic ovaries that were responsible for the most violent symptoms, which were relieved by no other than operative measures.

I have presented to this society ovarian cysts filled with hardened blood clots, and serum which would have produced alarming symptoms had they not have been removed before rupture.

Clinical Lecture.

ACUTE RHEUMATISM.*

W. C. TOWNES, PH. B., M. D.,
Professor Chemistry and Toxicology in Chattanooga Medical College.

Gentlemen—This case that I will present to you to-day is a woman aged 46, who is suffering with acute rheumatism. She is a mother, from the laboring class, and her work necessarily

* A clinical lecture delivered at Chattanooga Medical College.

exposes her to various changes of temperature, and cold accompanied by moisture is a frequent factor in the ætiology of this disease.

You know that I am a firm believer in the germ theory of disease, and the light of modern knowledge demands that acute rheumatism be classed among the infectious diseases, though no pathogenic organism has been demonstrated in the blood of those affected. With this condition you can appreciate how the lowered vitality of the cells, due to insufficient food, grief, fatigue, may be classed as predisposing causes.

Acute rheumatism is a disease frequently simulated by other affections that are called rheumatism. Thus scarlet fever, accompanied by an inflamed joint, due to the specific cause of that disease, or the so-called gonorrhœal rheumatism is not rheumatism, but a gonorrhœal synovitis.

Many cases of this disease experience a feeling of general malaise, or have an aching in the joints for two or three days, while others have so much pain to develop in a single day that locomotion is almost impossible.

The larger joints are those ordinarily affected. Most cases are multiple; for instance, the knee, ankle, elbow, wrist, shoulder, hip, though none are exempt. More rarely are joints of the hands and feet implicated, but you observe that the metatarsal joints are in this patient involved. While the joint-affection always includes a synovitis, the process is by no means confined to the synovial membrane; all of the fibrous structures about the joint, the tendons and their sheaths, and even muscles, add to the swelling and to the pain by the exudation of fluid which pervades them.

The joint inflammation shows a tendency to fly from one joint to another, now in the elbow, then in the wrist, knee or ankle, on one side or the other, with some reduction of inflammation. The pain is almost always severe, even the slighest motion causing great pain, while jarring the floor from walking may cause the patient to cry out.

The patient lies perfectly quiet, with limbs semi-flexed, in order to relieve the tension which aggravates the pain. Pressure of the bed clothes often increases the pain.

From the beginning of the attack there is fever, though it

is not high. Later, as the joints becomes involved, the fever goes higher, ranging from 102 degs. to 106 or 110 degs. F., when there are produced various cerebral symptoms, as headache, delirium, and unconsciousness. At this stage death may supervene.

Sweating is a very distinctive feature in acute rheumatism, being often copious and intensely acid, and emitting an odor that is quite disgusting. Sudamina frequently follow the sweating. You will remember their appearance from the case of typhoid fever shown you some days ago.

The majority of cases have scanty, high-colored acid urine of a high specific gravity, which deposits, on cooling, a copious sediment of mixed urates, which stain the bottom of the commode.

One special point, gentlemen, that I wish to fix upon your mind is the frequent involvement in inflammation of the membranes lined by endothelium other than the syrovial sacs of the joints. For example, the pleura and the peritoneum, the endocardium and the pericardium. The interior of the heart is oftenest involved, especially the left side. This heart complication is of such a grave character (on account of its present and future results), arising from the mildest, as well as from the severest, attacks, that I beseech you to study daily the cardiac conditions.

The recurrence of attacks of rheumatism on account of the activity of the poison produces an endocarditis, the beginning of a chronic valvular defect usually known as the warty or verrucose variety. Ulceration, perforation, or laceration of the valve-flaps is quite rare. Disposition to recurrence is a characteristic feature in acute rheumatism. Rarely does a person who has had one attack escape another, and the intervals between successive attacks vary from a few months to a year or several years; and the younger the subject the more liable are they to recur.

The diagnosis of acute rheumatism is seldom difficult, the painful involvement of the joints, fever, and the sweating seldom mean anything else; but you will recall that I mentioned early in the hour scarlatinal and gonorrhœal arthritis as possible events. Prognosis depends upon the individual characteristics

of the case and upon your treatment. The case is liable to develop into a condition of subacute or chronic rheumatism, with your patient suffering more or less pain with every atmospheric change.

TREATMENT.—In regard to this point, which is of the greatest importance to the patient, I suggest for your use salicylic acid and sodium salicylate. This latter is less irritating to the stomach, and is more easily administered because it is freely soluble in water. The dose of the acid is 6 to 10 grains every two hours in tablet form. The sodium salt 10 to 15 grains in solution every two hours, according to the pain and the relief obtained.

In those who can not bear these drugs, you may employ the oil of wintergreen 10 to 15 drops in capsules every two hours. This oil contains a large percentage of salicylic acid. Morphia may have to be given when the pain is intense.

As the hour is now closed, I will at some future time explain the alkaline treatment which was formerly so much employed, also the treatment of high fever in this disease by means of cold water or ice, a measure as you know I am fond of using, especially in typhoid fever.

Hospital Reports and Clinical Notes.

A CASE OF ACCIDENTAL HÆMORRHAGE.

Reported by E. DENEGRE MARTIN, M. D., Resident Physician of the Women and Children's Hospital.

Mrs. K., æt. 30, white, was admitted to the Women and Children's Hospital at 3 p. m., January 16, 1892, and gave the following history: Had been married ten years; had had two miscarriages; with the last had been quite sick. About one hour before coming to the hospital, while walking along the street, she was startled by seeing a man thrown from a coal

cart, and the load turned over on him. Although this caused her quite a shock, she felt nothing at the time. Half an hour later, while visiting a friend, she felt a sudden flow from the uterus, and, thinking the membranes had ruptured, came at once to the hospital. She was put to bed, and an examination revealed an exceedingly rigid os, cervix elongated, a vertex presentation, but a mass of soft substance intervening between the head and uterine wall. On removing the hand it was found to be covered with blood, and the case was mistaken for one of placenta prævia.

This conclusion was soon proven erroneous, for on forcing the finger through the internal os, which was exceedingly rigid, it came directly in contact with the head of the fœtus. This examination was followed by more hæmorrhage.

A drachm of the fluid extract of ergot was administered, fifteen grains of chloral ordered to be given every three hours, and the vagina tamponed. As the pulse was but 90, it was decided to await further developments. Some hæmorrhage continued through the day, but finally ceased altogether. Up to this time the uterine contractions had not been very strong. For the next thirty-six hours the patient was carefully watched, and digital examinations made at intervals of about three hours, but no change was perceptible. Two hours later, however, the contractions suddenly became rapid and strong, and on examination the os was found fully dilated, the membranes protruding and head presenting. The membranes were at once ruptured, and in a very few minutes the mother was delivered of what looked to be an eight months' fœtus, thoroughly exsanguinated. The delivery of the fœtus was followed by the expulsion of a quantity of coagulated blood, resembling in appearance the placenta; and in fact such it was thought to be. The placenta was now expanded, one drachm of fluid extract of ergot administered, a hot carbolated douche given, and the binder applied. A critical examination of the placenta made the diagnosis clear at once; about one-third of it had been detached, resulting in hæmorrhage and the death of the child. Had the patient's history been obtained before delivery, it would have been of material benefit to herself and a help to the physician. The woman was very reticent, and it was only through her husband that the above facts were subsequently obtained.

The history of previous abortions would no doubt account for stenosis of the os, and the shock from the accident, for the separation of the placenta. The patient has done remarkably well ever since. Her pulse, though 140 at time of delivery, is now 100, and the highest point of temperature reached

100⅘ deg. F. This was a case that undoubtedly called for immediate interference, with the possibility of saving the child, for fœtal movements were felt by the mother after admission to the hospital; the obscurity of the diagnosis alone prevented it. Fortunately for the patient, the hæmorrhage was not sufficient to cause collapse, yet it is probable this would have been prevented, as she was carefully watched by a trained nurse, with a physician in calling distance.

Proceedings of Societies.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON ORTHOPÆDIC SURGERY.

Stated meeting Dec. 18, 1891. Samuel Ketch, M. D., chairman.

CONGENITAL ABSENCE OF A PORTION OF BOTH LOWER EXTREMITIES.

Dr. John Ridlon presented a boy, 10 years old, who had been brought by Dr. Manning to the last meeting of the Hospital Graduates' Club. There was an entire absence of all the parts below the condyles of the femur, and just posterior to the extremity of each of these stumps was a fleshy mass, which probably represented the undeveloped digits. The boy could walk quite well on these stumps, and at present was wearing artificial limbs, but, as these caused pain, he had presented the boy with the hope that some suggestions might be offered as to the best way of treating the case. It was questionable whether an artificial leg with a joint at the knee could be applied to limbs of this length, and hence the question of amputation might properly be considered. Personally he was in favor of applying artificial legs, without any knee joint, directly to the stumps, without operative procedures.

Dr. W. R. Townsend thought that the fleshy masses would interfere with the proper application of these artificial limbs, and hence favored removing them.

Dr. J. E. Kelly thought the fleshy masses were undoubtedly the remains of the undeveloped lower portions of the limb. He thought their position the normal one in utero. He had seen within the last twelve months a somewhat similar amputation in the upper extremity, with rudimentary digits which were capable of movement.

Dr. Halsted Myers, on examination, found a slightly movable bony mass between the condyles of the left femur, probably a poorly developed patella. He thought the case one of non-development, not amputation.

Dr. Meyers presented a case of

CONGENITAL DEFORMITIES OF THE UPPER AND LOWER EXTREMITIES,

and asked the opinion of the Section as to the value of operative procedures for the relief of the constrictions caused by amniotic bands.

Dr. Kelly thought the phalanges of the great toes were perfect in this case, but that the digits had been suppressed, and development had taken place beneath the skin. There had evidently been an attempt at amputation in utero. There was a deep constriction above each ankle, more marked, however, on one side.

The chairman referred to a child he had seen in which both legs were cut off. The mother of this child, quite early in pregnancy, was tripped by a cord which some boys had tied across the street, and it was thought that this maternal impression was responsible for the deformity. The child was able to walk with the aid of ordinary ankle supports.

Dr. Townsend did not favor operating upon these constricting bands, for the resulting cicatrix would cause further contraction.

Postponed discussion on Dr. J. E. Kelly's paper on

"THE ANATOMY OF THE FOOT, WITH EXHIBITION OF A NEW CLUB-FOOT SHOE."

Dr. Royal Whitman said that the author had spoken of removing a wedge-shaped piece from the cuneiform bones, but as these bones were quite small, their dimensions varying from one-half to one inch, it was evident that a cuneiform osteotomy on such bones would be impracticable. The calcaneus could, of course, be treated in this manner by cutting to a considerable depth, but such an operation was totally unnecessary. When one recalls the fact that the astragalus is poised on the os calcis in unstable equilibrium, there seems to be no reason for increasing this instability. Such operations might be allowable, if it were true, as had been stated before

in the Section, that the radical cure of flat-foot was impossible, and that all that could be hoped for was relief. He had seen more than 300 cases of flat-foot, and he believed that a radical cure without operation was not only possible, but easy.

Dr. A. B. Judson said that the mechanical toy constructed by Dr. Kelly admirably illustrates the fact that human locomotion resembles the action of a wheel in motion, in which the legs are the spokes and the feet are the felloes, as pointed out by Dr. Holmes. That ordinary locomotion is a continual falling and a continual recovery, is seen in the gait of a child learning to walk and in the titubation of a drunken man whose body inclines in a given direction, and would fall if the legs and feet failed to make a timely movement forward to prevent a fall.

Dr. Judson said that Dr. Kelly's apparatus takes advantage of the weight of the body for the correction of the varus. It is well known that varus corrected to a certain point, and held there, is further corrected by the weight of the body applied in successive blows, as the child runs about. On the other hand, if the varus is reduced only to a point on the wrong side of the line between deformity and symmetry, each foot-fall is a blow increasing the varus. Dr. Cook, of Hartford, had shown a varus shoe at Washington last summer, which had attached to the sole a flat piece of steel extending outward a few inches, to enable the weight of the body to act in a favorable manner on the deformity. He had seen a horse treated for some affection which made it desirable to prevent extension of the foot, by the application of a horse-shoe having a long posterior elongation. The veterinary surgeon can attach his apparatus with absolute firmness to the foot, but in our patients the foot is liable to turn over inside of the shoe. As a rule the weight of the body can be made more effective by the use of an apparatus having an upright extending up the leg, and a steel foot-piece in which the foot is prevented from rolling by a strip of adhesive plaster.

Dr. H. Sayre said that this succession of falls during the act of locomotion was well shown in instantaneous photographs of athletes running. The shoe exhibited by the author was doubtless intended for the treatment of club-foot in the later stages, when it was possible for the foot to be placed flat on the ground in a fairly good position. Before this stage, the shoe could not be easily adapted to the crooked foot. The usefulness of this "snow-shoe" was not so much on account of its shape, as to the fact that there was a long lever on the outer portion of the foot which prevented the child from standing on this outer portion.

In connection with this shoe, he had intended to exhibit a shoe which one of his patients devised for his own use. His shoe was made with the sole sloping outwards for some distance, thus answering the same purpose as the snow shoe. This patient had adhesions and contracted tendons following infantile paralysis, so that the weight of the body was unable to do more than prevent an increase of the deformity. The foot was only brought straight by sub-cutaneous tenotomy and the use of very strong force applied by means of Bradford's instrument.

The chairman said that many instances were recorded in which this principle of utilizing the weight of the body had been embodied in various kinds of apparatus. In some cases of equinus, the patients have been allowed to walk without apparatus with the idea of utilizing this factor.

"A CONSIDERATION OF SOME OF THE AFFECTIONS OF TENDON SHEATHS AND BURSÆ, AND THEIR RELATIONS TO INJURIES AND DISEASES OF THE JOINTS."

Dr. Royal Whitman read a paper with the above title. He briefly described the structure and anatomical relations of bursæ and tendon sheaths, their diseases and appropriatet reatment, calling attention to the fact that chronic disease of tendon sheaths was usually tuberculous in character, for which early removal was the only remedy.

The relation of the tendon sheaths to the ankle and wrist joints, and their liability to injury in sprains and fractures, explained the symptom—weakness, local pain, and limitation of normal motion, often persisting after such injury.

The importance of local massage and stimulation in the early stage, in order to prevent the formation of adhesions after secondary inflammation of tendon sheaths, was urged.

In chronic and neglected sprains, a careful examination should be made, and if adhesions or contractions were present, treatment should be directed to the recovery of the normal range of motion. This result might often be accomplished by a forcible over-stretching under ether, followed by massage and support. By such treatment, patients disabled for many months might be quickly and permanently relieved.

In conclusion, attention was called to the importance of slight injuries in childhood, which might be the starting point of tuberculous disease, the diagnostic value of chronicity and the necessity of careful observation and early treatment in suspicious cases.

Dr. Judson said that he had seen a case of tumor of the semi-membranous similar to the one shown in the model. The child was about 6 years old, and under a purely expectant treatment. The tumor disappeared in the course of a few months, leaving no deformity or disability.

Dr. Townsend said that he had seen many of the cases referred to by the author, and he had been struck with the many and varied diagnoses which had been made upon them before they came to the dispensary. The diagnosis in the early stages is often difficult, especially when there is only a meagre and often misleading history, such as accompanies most dispensary cases. The importance of differential diagnoses could not be too strongly emphasized, particularly as upon it depended a correct prognosis.

Dr. C. A. Powers said that he inferred from the author's remarks on injuries at the lower end of the radius that he recommended confining the flexor and extensor tendons of the fingers in the treatment of Colles' fracture. He saw a large number of these cases with functional disability following this method of treatment, and he therefore preferred to use the long anterior splint for the first five or six days, and then to shorten both the anterior and posterior splint to the first row of the carpus, directing the patient to make very active use of the fingers. Four or five days after this he expected them to be able to shut the fingers well down into the palm.

Dr. Kelly said that in Dublin, the home and birthplace of Colles' fracture, the keel-shaped splint which avoided injurious pressure on the thenar and hypothenar eminences, was almost universally employed. The mode of development of the bursæ found on various points exposed to pressure is difficult to understand, unless we remember that the peritoneum, which is the great areolar inter-space of the body, has had a similar development from the connective tissue structures.

He was glad that the author agreed with him as to the position of the foot, viz.: slight adduction with the foot at right angles to the leg. This slight adduction produces what he called "artificial talipes varus."

The chairman said that he inferred from what the author said that he considered these bursal tumors of tubercular origin. He wished to dissent from this opinion, for many of them were benign, and the result of injury.

Dr. Whitman explained that he had spoken of slow, chronic enlargement of the sheaths of the tendons of the wrist and hand as tubercular. The deep seated bursæ were favorably located for tubercular inflammation, and accordingly when they underwent chronic enlargement, he preferred to

treat them radically. He had only incidentally referred to the treatment of Colles' fracture. He did not consider the confinement of the fingers with vigorous massage and local stimulation, the same as the confinement treatment, which had been criticised during the discussion.

EXHIBITION OF AN IMPROVED ADJUSTABLE SCHOOL DESK AND CHAIR.

Mr. E. E. Hicks exhibited a chair and desk which he had devised, and to which reference was made in the recent discussion on the subject of the relation of faulty attitudes to lateral curvature of the spine.

The desk and seat admit of an independent vertical adjustment of four inches, which is manipulated by means of a key. The slope of the desk can also be varied to suit individual requirements. The desks and seats can be folded so as to occupy very little space, thus facilitating cleaning the school-room, and allowing room for gymnastics. The seat and desk have a common base of support; a child using the desk, therefore, occupies the seat joined to the desk next behind. This improved desk costs only about fifty cents more than those now found in the market.

Dr. R. H. Sayre thought this desk was a decided improvement on the usual style.

The chairman thought it might be desirable for a child already suffering from lateral curvature, but he did not believe that faulty attitudes at school were the cause of rotary lateral curvature.

TUBERCULAR DISEASE OF THE VERTEBRÆ IN ITS EARLY STAGES.

Dr. R. H. Sayre presented the second, third and fourth vertebræ of a patient, showing a very early stage of tubercular disease. There was a cheesy mass in the third lumbar vertebra which had not yet broken down and ulcerated through into the cartilage. The points of junction between the second and third, and third and fourth vertebræ were apparently normal. There was an extravasation of blood into the vertebra. The history of the patient from whom these specimens were taken was quite interesting. A child, suffering for some time from chills and high temperature, began to have a peculiar posture and mode of locomotion, and to suffer from abdominal pains. This led to a diagnosis of spinal disease, but in consultation with an orthopedic surgeon, this opinion was not confirmed, the latter believing that the child was suffering from malaria. The symptoms not subsiding under the administration of quinine, the child was brought to Dr. L. A. Sayre, who concurred in the

diagnosis of disease of the spine. At this time there was some psoas contraction on the right side, with spinal rigidity and very slight pains. It could hardly be said that there was a kyphosis; the lumbar spine was straight, instead of concave. The child was placed in a wire cuirass. About a month later he suddenly developed a temperature of 104 degs., with vomiting, photophobia, phonophobia, stiffness of the neck, and a rapid pulse. He was then seen by the speaker, who found an abdominal enlargement near the left side of the umbilicus, which could be separated by percussion from the spleen. It was quite freely movable. Small doses of bichloride of mercury were administered, and in a few days the temperature fell to 100 degs. and remained at this point, and the other meningeal symptoms disappeared. There was no colic indicating tubercular peritonitis. The child became now even more anæmic than before, and the abdominal swelling increased in size. It seemed hardly possible that the mass could be a psoas abscess pointing in such an unusual position. After some time the mass became larger, and moved toward the posterior surface of the abdomen. In consultation with Dr. W. T. Bull it was decided to be inadvisable to operate. The child died six days ago, and for a few days before death there was slight jaundice. The post-mortem examination showed that the abdominal tumor was formed by a tubercular mass which united the intestines into one large mass. There were no small miliary tubercles scattered over the peritoneum. One little band pressed upon the gall bladder, and so accounted for the jaundice. The kidneys were firmly bound down with adhesions, and the left one was very large and waxy and its pelvis was much dilated. There was a large quantity of fluid in both pleural cavities, and cheesy nodules at the apices of the lungs. The heart was enormously thickened; the brain was not examined.

The chairman thought the symptoms described were more like those of an acute non-tubercular meningitis, as in the initial stage of the tubercular variety a high temperature was unusual, and the pulse was ordinarily slow or intermittent. Then, again, the subsidence of the symptoms was not in accordance with such a diagnosis.

Dr. Kelly called attention to the fact that in the early and late stages of tubercular meningitis the pulse was rapid, while in the intermediate stage it was slow.

Dr. Ridlon said that he inferred from the remark of the chairman, that he shared in the general feeling in the profession, that if a child survived, it was proof that the meningitis was not tubercular, and *vice versa*. He desired to dissent from

this opinion. Eight or nine years ago, he had treated a boy who had suffered from a form of meningitis which several eminent consultants considered to be tubercular; and they had an opportunity of seeing the patient a good many times. The patient was still alive, but he did not believe this proved that the diagnosis was incorrect.

The chairman said that he had never seen one undoubted case of tubercular meningitis recover, although he believed there were a few such cases on record.

Dr. H. W. Berg was not aware that there was any symptom, either subjective or objective, which would enable one to make a diagnosis between simple and tubercular meningitis. He thought that where there was a high temperature at the beginning of a meningitis, it was due to a series of eclamptic seizures which, by paralyzing the heat centre of the body, allowed of a sudden rise of temperature.

Dr. Townsend had had an opportunity of seeing a considerable number of cases of tubercular meningitis, almost all of which had been proved by autopsy to be tubercular, and he could not recall any case where there was an extremely high temperature at the beginning.

Dr. R. H. Sayre said that he had looked upon the meningitis as tubercular, because of the very general tubercular infection. The child looked as if it would die within a few days after the onset of these meningeal symptoms, and he was much surprised when the acute symptoms subsided so rapidly. The high temperature might have been due to the abdominal lesions. The extent of the abdominal lesions was remarkable, as they were younger than the disease in the spine.

Dr. T. Halsted Myers, *Secretary.*

THE CLINICAL SOCIETY OF MARYLAND.

The 29th regular meeting of the society was held at Baltimore, December 18, 1891, and was called to order by the president, Dr. Robert Johnson.

Dr. C. W. Mitchell read a paper entitled

"AFTER INFLAMMATION, WHAT?"

Dr. Wm. C. Canfield read a paper on

DUST AS A CAUSATIVE FACTOR IN PULMONARY DISEASE.

The various kinds of dust may be divided into animal, mineral and vegetable. Opinions differ as to which kinds are most dangerous when inhaled. That which is generated in

brush factories is animal and very harmful. Makers of hats, especially felt hats, suffer much from the dust evolved. The vegetable dust that does the greatest and most lasting injury to the lungs, is that generated in tobacco factories. This dust has not only a mechanical action but has also poisonous effects.

It is in connection with the inhalation of mineral dust that the greatest amount of scientific investigation has been made, especially in relation to the diseases called the consumption of grinders, miners, potters, etc. Anthracosis, silicosis, siderosis, chalicosis, tabacosis, and other kindred names have been suggested to describe a similar condition produced by various kinds of dust. Zenker has handed down the word "pneumonoxoniosis," to cover all these conditions. The histories of these cases are very much alike. They begin with simple bronchitis, which gradually becomes chronic. They are usually non-tuberculous, at least at the beginning tuberculous complication is only an accident.

Where one is exposed to an atmosphere of dust, the contact of this dust with the sensitive nasal and laryngeal mucous membrane sets up coughing and sneezing, and much of the dust is expelled, and for a time no harm results; but a continued exposure to this dust causes a congestion of the mucous membrane of the nose and breathing passages, and, in time, an inflammation of the whole throat; the ciliated epithelium loses its power, and dust finds its way to the ultimate ends of the lung tubules. When the individual is asleep, or absent from this irritation, the ciliated ephithelium gets rid of a large part of this foreign substance, and the wandering cells may close around some of this dust and try to carry it off or render it harmless by burying it in a lymphatic gland. Much, however, finds its way either through the epithelium, or between the cells into the submucous layer, getting into contact with the connective tissue of the alveoli, and by irritation causing a hypertrophy of this tissue, and a condition resembling chronic interstitial pneumonia or fibroid phthisis. The general opinion seems to be that the fibroid condition seems to oppose a direct barrier to the growth and multiplication of the bacillus tuberculosis, and in large tracts of lung tissue converted into this material often not a bacillus could be detected. In one of the author's cases, bacilli were found in abundance, and yet, two years afterward, the man reported himself as entirely well.

The color of the expectoration is a prominent sign in these cases. In one case of the author, a stoker, the expectoration still continues absolutely black at times, and always tinged, although it is almost two years since he gave up his occupation. Examination of this sputum under the microscope shows

it to contain in abundance carrier cells, which in all cases contained pigment, and in some instances the black crystalline coal could be recognized within these cells. This pigment and foreign material has a tendency to collect at the apices of the lungs, and is only present at the bases when the dust inhaled is excessive in amount and exposure prolonged.

In diagnosis, physical signs do not yield as much as the microscope. By the microscope we see the cells containing the dust. In the author's cases (four), râles were heard on auscultation, but nothing marked was obtained on percussion.

The prognosis is good, if the man has not worked too long at the occupation.

The treatment is to take the patient from his dangerous occupation, when improvement begins at once. Owners of large factories are adopting stringent prophylactic measures in order that they may not lose so many good workmen. The best methods are: (1) To prevent the formation or escape of dust by using wet grinding or by grinding in closed vessels. This is not always practicable. (2) To prevent inhalation of dust by wearing respirators, &c. But these are uncomfortable, and the men remove them at every opportunity. (3) The removal of dust as fast as it is produced by using fans and air shafts. This is by far the best plan.

Still further the following rules should be enforced: (1) Workmen should change their outer clothing after work. (2) They should keep their faces and hands as clean as their work will allow. (3) They should never be allowed to eat in the workroom.

Dr. Randolph Winslow related

A CASE OF ELEPHANTIASIS SCROTI.

J. C., colored, aged 44 years, was admitted to the University Hospital September 7, 1891, on account of enlargement of the scrotum and perineum. His father died of meningitis and his mother of phthisis. Patient is one of seven children, six of whom died of phthisis. He had measles in childhood, typhoid fever at 21, and gonorrhœa about eight years ago. The present disease began about three years ago, with slight thickening of the tissues of the scrotum, penis and perineum, the infiltration first showing itself in the skin of the scrotum and increasing slowly until, at the time of his admission, the scrotum was enormously enlarged and reached one-third of the distance to the knee. There were a number of suppurating sinuses and superficial abscesses in the scrotum and perineum. There was some pain. The tissues of the scrotum were brawny, and very little impression could be made on

them by pressure. The perineum was composed of similar tissue and was enormously hypertrophied. The skin of the penis was also thickened, but retained its suppleness, and the prepuce could easily be retracted. The patient said that his virile powers were unimpaired. He was a sailor, but had never been much beyond the coast of this country, and had never resided in a tropical country.

Several efforts to detect the filaria sanguinis hominis were unsuccessful.

The sinuses were incised and a long incision made in the perineum to relieve tension and allow the lymph and blood vessels to empty themselves. He was placed upon iodide of potassium, as syphilis could not be excluded. He did not improve, and excision of the scrotum and perineal hypertrophy was performed October 1. The skin and subcutaneous tissues were very dense and thick and freely supplied with blood vessels. The testicles were carefully dissected and were uninjured. The gap in the perineum was closed with sutures, but there was not sufficient tissue to cover the testicles, hence lateral incisions were made in the contiguous skin, and strips of skin dissected up and brought over so as to form a new scrotum. The tension was great and the stitches cut out, allowing the flaps to separate considerably. Healing was effected under about five dressings, and he was discharged well on November 8, relieved of pain and discomfort, and ready again to resume his ordinary avocations.

WILLIAM T. WATSON, M. D., *Secretary.*

ADAMS COUNTY MEDICAL SOCIETY.

MEETING OF JANUARY 5, 1892.

TREATMENT OF SPASMODIC CROUP AND ALLIED CONDITIONS BY COMPOUND TINCTURE OF IODINE.

Read before the Adams County Medical Society, January 15, 1891.

There is hardly a condition occurring to the general practitioner the treatment of which has proved more unsatisfactory than simple spasmodic croup, not because of failure to relieve his patient or because he has not the many agents at his hand with which he can induce the necessary relaxation, but because of the depressant effects of these agents, which make the cure equal in severity almost to the disease; then, too, the treatment as practiced in the paroxysm does not in the least prevent its return.

This then makes the theory and practice radically wrong.

The agent which should relieve the paroxysm, should also be one which should radically cure the disease. Such an agent, I believe, we will find in the compound tincture of iodine.

The agent was brought to mind in this way. Time and time again had I heard patrons of the Homœpathic practice, in the course of ordinary conversation, say: "I was waked last night by one of the children having the croup; got up, and gave two or three doses of *Spongia*, and the child was relieved." So often did I hear such statements, that conviction came, in spite of opposition, that Spongia must of a necessity be an agent in the treatment of croup more valuable than any of which I had a knowledge. This being the case, the sooner I added it, or its more scientific equal, to my materia medica, the better for my patients. Spongia is made by taking an ordinary sponge, cutting it into small pieces, and roasting it to a rich brown, as we roast coffees. A certain amount of this is mixed with a proportionate amount of alcohol, and when filtered, the Spongia is completed. Knowing that the essential ingredient of the sponge was iodine, and Spongia only a very mild tincture, with probably other impurities, the conclusion was reached, that the compound tincture of iodine would be of equal value as regards efficiency, and at the same time prove more scientifically exact.

Having on hand about this time a little case (a girl of 2½ years, who had been having these attacks of spasmodic croup for eighteen months, and at intervals of three or four weeks, and upon whom I had about exhausted all the measures I could derive from text-books on the subject), it occurred to me to try the iodine; so a small bottle of the compound tincture, it being mixable with water, was secured, and her next paroxysm rather impatiently waited for. It arrived at 1 o'clock A. M., and the remedy was commenced, giving one-fifth drop dose in water every fifteen minutes. In an hour almost all evidences of the trouble had disappeared, and the same dose was directed to be given at two-hour intervals. When morning came there was not an evidence of croup in all her other paroxysms—some evidences had remained for forty-eight or more hours.

The same dose of the medicine was continued at four-hour intervals, through the day only, for four days. There was not a sign of an attack for thirteen months. When another paroxysm put in appearance, it was treated in the same way, and eighteen months have since gone by and still no croup.

This treatment has since that time been tried and verified in various instances. It possesses untold advantages over the

old method and will be found worthy of extended and impartial trial.

The following case, in which the remedy was used, is specially to be noted, as tracheotomy might have been resorted to but for the relief afforded. It also brought this thought to mind: that perhaps the dyspnœa was not entirely dependent upon narrowing of respiratory passages by the diphtheritic membrane, but by two causes, the membrane, and the spasm induced by its irritation; that if this consequent spasm could be controlled the indications for operative measures might occur much less frequently in such cases.

I was called about dark to see a little child, aged 2 years; her general condition was not encouraging, vocal sounds were only whispers, and on inspecting anterior thoracic region, it was plain to see that the dyspnœa was due to some obstruction to respiration, for with each inspiration there was retraction instead of expansion. Examination of throat showed a diphtheritic membrane, covering tonsils and pharynx and extending downward beyond the range of vision. The child had been sick for four days and had no attention beyond the home remedies used. The treatment in this case was about the same as in the one mentioned previously: one-fifth drop was given every fifteen minutes, until six doses were taken; then the interval lengthened to an hour, until six doses had been given; after which it was given in same dose, at three-hour intervals, until all throat trouble had disappeared. In this case it appeared that almost of a necessity would be the performance of tracheotomy would be necessary.

Explicit instructions were left with the parents, that should the child's breathing become more embarassed, I was to be sent for. The operation seemed almost inevitable, and on reaching my office preparations were made, so as to avoid all delay if called. Agreeably surprised at not being called through the night, I visited the little patient at an early hour and found her resting remarkably well, respirations much more easily accomplished, and no retractions of chest walls on inspiration, voice sounds better and general condition much improved. The faulty respirations had changed to nearly natural after the sixth dose of the medicine had been given, with the exception of some diphtheritic paralysis coming on about four weeks later, and which was only temporary. Her recovery was perfect.

Ben. D. Watkins,
House Surgeon of Natchez Charity Hospital.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated Meeting, November 11, 1891.

The President, John B. Roberts, M.D., in the chair. Dr. James Tyson read a paper on

THE MEDICAL TREATMENT OF CYSTITIS.

The medical treatment of cystitis does not furnish a very satisfactory chapter in therapeutics. It includes such treatment as the physician is called upon to use supposing the exciting cause, such as a stone or obstruction in the urethra, to have been removed, wherever possible. I say when possible, because the enlarged prostate which is responsible for so many cases of cystitis is, in the vast majority of cases, not removable even in these days of brilliant surgical results. It must also include the treatment of a certain number of cases in which no removable cause is ascertainable, as well as cases where, as with a long previous gonorrhœa, the cause has long since been removed, but has left a deep-rooted tendency scarcely eradicable.

It should be stated, too, at the outset, that the vast majority of cases of so-called cystitis are inflammations of the neck of the bladder and of that part of the urethra passing through the prostrate.

Acute cystitis is far less commonly met by the physician than the chronic form, while its treatment is far simpler, and, I may add, more satisfactory, at least so far as the removal of the acute symptom is concerned. Rest in bed is a primary and essential condition. Leeches to the perineum should be applied more frequently than they are. A poultice to this same region and over the abdominal region is always useful, while a brisk saline cathartic should never be omitted.

As the feverish state which always accompanies cystitis is more or less constantly associated with a scanty urine, concentrated and irritating to the inflamed mucous membrane, it is desirable at once to increase the secretion, and thus dilute it. Copious libations of pure water, to which the citrate or acetate of potassium is added, in fifteen to twenty grain doses for an adult, should be allowed. The ordinary spirits of nitric ether in two drachm doses every two hours is an admirable adjuvant, and may be combined with the officinal liquor potassii citratis, which contains about twenty grains of citrate potassium to the half ounce. Formerly the mucilage of flaxseed or flaxseed tea was much used as a diluent menstrum for the diuretic alkalies indicated, but I am doubtful whether it is any more efficient than a like quantity of water.

Where there is much pain and straining, as is often the case, especially where cantharides is the cause of the inflam-

mation, opium is indispensable, always in the shape of a suppository, half a grain to a grain of the extract being thus administered, or a proportionate amount of morphine. Iced water injections into the rectum, or pieces of ice similarly applied, are very efficient in allaying the pain and irritation where additional measures are needed.

The successful treatment of *chronic cystitis* is a much more difficult task, for three evident reasons: 1st, the constant presence in the bladder of the urine with its irritating qualities, especially to an inflamed mucous membrane; 2d, the difficulty in getting remedies to reach the inflamed surface; 3d, the pent-up inflammatory products, which in their decomposition often make the urine still more irritating by exciting in it ammoniacal changes. There is no doubt that, if the urine could be kept from entering the bladder during the existence of an inflammation, the latter would rapidly heal: that cure would be facilitated by obtaining ready escape for the pus and mucus formed in the inflammatory process; while happier results might also be reasonably expected if we could secure readier access for remedies to the inflamed areas. None of these indications can be met entirely, hence the difficulty in attaining a cure. They remain, however, the conditions to be fulfilled, and while none can be thoroughly secured, they may be approximated in various degrees. To do this should be the object of treatment.

First, the irritating qualities of the urine may be diminished by the use of diluents, as already recommended in the treatment of acute cystitis. Almost any of the negative mineral waters, so highly recommended by their owners, are useful for this purpose. Just as good is pure spring water, or even Schuylkill water, and better is distilled water. From one to two quarts should be taken daily. If the kidneys are equal to their office, a large quantity of light-hued urine, of low specific gravity and relatively weak in solids, will be secreted.

When it is proposed to go further and add to the efficiency of diluents, mistakes are often made. While one can scarcely go astray in adding alkalies to the fluid ingested in acute cystitis, it is very different with the chronic form. In this the urine is often alkaline, or ready to become so on the slightest addition of alkali to the blood. Such alkalinity of urine in turn favors decomposition, the effect of which is to convert the pus, if present, into a tenacious, glairy fluid which the bladder can not evacuate. Notwithstanding this tendency, I have known liquor potassæ and other alkalies to be administered under precisely these conditions—adding fuel to the flame. The indication under these circumstances is to render the urine acid if

possible, although this is very difficult to accomplish. Benzoic acid has the reputation of doing this, and it probably is true of it when administered in very large doses. It may be given in the shape of a five-grain compressed pill, of which at least six must be given in a day to produce any effect. The same property has been assigned to citric acid, but this is a mistake, as all of the vegetable acids, when ingested, are eliminated as alkaline carbonates.

The second indication is to medicate the inflamed surface. Two ways, of course, suggest themselves: (*a*) by the internal administration of drugs; (*b*) by the injection of medicated liquids into the bladder.

To carry out the first method, an enormous number of infusions, decoctions, and fluid extracts of vegetable substances have been suggested, the vast majority of which are absolutely useless, except as they serve by their quantity to act as diluents. Among the best known of these are buchu, pareira brava, uva ursi, and triticum repens. I have never known any beneficial results from any of them, and have long ago ceased to prescribe them.

The only class of remedies I have found of service in cystitis through their internal administration are the balsams. Of these, the balsam copaiba is practically unavailable, because not one stomach in a hundred will submit to its ingestion in sufficient doses or for long enough time to permit it to be of any use. On the other hand, I have found sandal-wood oil very useful, and it is about the only remedy of which I can say this for its direct effect upon the mucous membrane of the bladder. It is also comparatively well borne by the stomach, and is best administered in capsules containing ten minims. I believe it has heretofore been the usual custom to give these and like remedies after meals, but I have recently adopted the method of giving them on an empty stomach before meals. I believe they are as well, and even better, borne than when given after food, and they pass into the blood much more quickly. It is desirable to impregnate the blood and impart to the urine a balsam odor. This is scarcely possible with less than eight capsules a day—two before each meal and two at bedtime. I think I may say that I have found the so-called Santal-Medy capsules, which are, I believe, nothing but a very pure sandal-wood oil, better borne than the other specimens of the oil. I have given as many as twelve of these a day for considerable periods of time without deranging the stomach.

Both boric acid and benzoic are useful adjuvants to the treatment of chronic cystitis through their antiseptic effect on the urine, each in 5 grain doses rapidly increased to 10. I have

used resorcin in 5 to 18 grain doses, and naphthaline in 2 grain doses for the same purpose.

The application of remedies to the bladder by injections can be conveniently considered in connection with the third indication—the getting rid of the products of inflammation, the pus and mucus, and the compounds resulting from their decomposition. The latter are, of course, not always present, but all who have had much experience with cystitis are familiar with the tenacious, glairy mucoid matter, which will not drop or rise up in a pipette, glistening with large crystals of triple phosphate, and exhaling a stinking ammoniacal odor which quickly contaminates an entire apartment. There is only one way to get rid of this, and that is to wash out the bladder, and too often this is too long deferred. Tepid water should be first used, and the injection made through the soft catheter now so invariably adopted. Sir Henry Thompson is very emphatic in his directions that no more than two ounces should be thrown in at a time, and that this should be allowed to run out, a like quantity again injected and allowed to run out, and this repeated until the water comes out as clear as it enters. In a very large experience in washing out bladders, I have never met an instance in which the amount named by Sir Henry may not be doubled with advantage, so that I begin with four ounces. When this quantity is used, a much shorter time is necessary to cleanse the bladder thoroughly; and after the capacity of the bladder has been determined, I often throw in more, because it is sometimes useful to distend the viscus a little, for in this manner the depressions and inequalities between the muscular trabeculæ, always present in advanced bladder inflammations, are thoroughly reached.

These simple injections, practised once a day, or in severe cases twice a day, often result most happily. I have seen the pus reduced from large bulk to a mere trace, and micturition reduced from five or six times to once a night. Commonly, after a few injections with plain water, I add some medication. My favorite is the salicylate of sodium in the proportion of a drachm to the pint. Its disinfecting qualities are undoubted, and I have some reason to believe that the soothing effect claimed for it is not without foundation. I have used a good deal of Sir Henry Thompson's soothing solution—of biborate of sodium an ounce, glycerine two ounces, water two ounces, and of this mixture half an ounce to four ounces of tepid water —with about the same result. Boric acid, in the proportion of a drachm to the pint, is also very satisfactory.

Alum is an astringent which has been too much overlooked of late in suppurating processes in mucous membranes, and

may be substituted for the salicylate with advantage where the pus does not diminish as rapidly as is desired. It should be more cautiously used than the salicylate of sodium. Sufficient of the powdered alum should be first added to a pint to give it a distinctly astringent taste, when the bladder should be washed out as described, while a small quantity may be allowed to remain after the last injection.

Where there is a foul odor present I use the bichloride of mercury in solution, but exceedingly dilute. It is almost incredible how small a proportion of this salt is irritating to the bladder, and, having learned by experience, I never begin with a solution stronger than 1:25,000, but gradually increase the strength if it is well borne. Carbolic acid may be substituted for the bichloride of mercury, but it has not been so satisfactory in my hands.

Other drugs are recommended to be similarly used, but I have had little or no experience with them. One from which much may, with reason, be expected is the peroxide of hydrogen, one part to five of water. In the single instance in which I have used this the patient, who had been previously using the bichloride solution, returned of his own accord to the latter, because he thought it more satisfactory. Among other remedies recommended to be used the same way are acetate of lead, one grain to four ounces; dilute nitric acid, one or two minims to the ounce; and nitrate of silver, one grain to four ounces; but I have had no experience with them.

Anodynes are indispensable in many cases of cystitis to relieve the patient of extreme pain and the frequent desire to pass water, which are the result of the same cause. Opium and its alkaloids are the most efficient, and they are best introduced by the rectum. There appears to be no absorbing power for opium at least, and there is no use in attempting to use any iodynes by that channel.

Cocaine, from which so much might reasonably be expected, has failed of its purpose in my hands. I have injected as much as two ounces of a 2 per cent. solution into the bladder without effect, except to produce some of the symptoms of cocaine poisoning. Most disappointing, too, has been the use of cocaine to remove the exquisite tenderness of the urethra which sometimes attends this condition, and is a serious drawback to the use of the catheter.

Where there is greatly enlarged prostate, catheterization is indispensable, and is attended often with the most happy results. It is often too long deferred, because of the natural repugnance to the use of the instrument. Of course, the patient or his friends should be taught to use the catheter and to wash

out the bladder. In these days of refined antisepticism it is scarcely necessary to say that the extremest precaution should be taken to cleanse the catheter after its use, in order to avoid sepsis. There is nothing better for this purpose than the bichloride solutions 1: 1000, in which the catheter should be allowed to lie for a short time after being cleansed with boiling hot water.

How much can be accomplished by such treatment as the above described? That an absolute and total cure is ever obtained in chronic cystitis is exceedingly doubtful. Hence the statement at the beginning of my paper, that the medical treatment of cystitis does not furnish a very satisfactory chapter in therapeutics. On the other hand, that a life of suffering may be converted into one of comparative comfort is certainly true, and I have many times seen it. Nay, more; I have more than once seen a life prolonged half a dozen years in such comfort by careful attention to the bladder of the kind described.

It occasionally happens, of course, that all treatment of this kind fails, and yet the patient lives to be tortured by the discomfort of the situation. Three times I have had perineal section done by the surgeons for the relief of such cases, in each case with some relief, although with less than was hoped for.

DISCUSSION.

Dr. H. A. Slocum—I am sorry that Dr. Tyson did not say something about diet—about such articles as tomatoes and asparagus, particularly the latter.

In the local treatment of cystitis I have obtained good results from the use of boracic acid, two drachms to a pint of water used warm. This is introduced with a catheter with a little funnel. I have recently seen described a method of washing out the bladder by means of a catheter introduced into the urethra. To this is attached a tube, and the fluid is allowed to enter by hydrostatic pressure.

I have also used boracic acid internally. This in ten grain doses every two hours has been of more service than anything else that I have tried.

Dr. T. S. K. Morton—In the treatment of chronic cystitis I have found most satisfaction from the use of salol in conjunction with milk diet. I have the greatest confidence in the administration of salol in doses of from three to five grains repeated several times daily. The theory is, that in the kidneys salol liberates carbolid acid. While many cases have been benefited by the use of the drug, in other instances it has, like everything else, failed.

I feel convinced, also, that I have had good results from the internal administration of cocaine, owing to its diuretic action. I think that it has some local effect upon the bladder.

A third drug from which I have had good results is sandalwood oil, and the preparation mentioned by Dr. Tyson (Midy) is the best; but it is objectionable on account of the fact that it is largely advertised, and the name of the manufacturer is stamped on the capsules, thus giving to a certain class of patients a clue to their treatment which is an advantage neither to them nor us.

Dr. George E. Shoemaker—I wish to add a word in regard to the internal administration of boracic acid. I have in the past four years used it in a number of cases with a great deal of satisfaction, giving it in doses of from five to eight grains every two hours in plain water or cinnamon water. I have used it with benefit in one case of perineal fistula of long standing in the male. Of course, all medical treatment is subsidiary, but this is the drug which has given me most satisfaction.

Dr. Charles P. Noble—I have heard no mention of benzoate of ammonia or benzoic acid. I have found these drugs of great advantage in foul alkaline urine. Under some circumstances I have had good results from boracic acid. Rest, a restricted diet, and leaving off meats, have had a good influence. Locally I have used a saturated solution of boracic acid, and rarely have had to reduce the strength of this. I wash out the bladder every second or third day. I have seen good results from triticum repens, particularly in cases where *ardor urinæ* was very marked. Better results can be had by combining it with tinctures of aconite and belladonna, and with bromide of sodium. In summer time a pleasant remedy is watermelon used freely. This, as is well known, is a powerful diuretic. It gives a bland, unirritating urine, and in a measure avoids the necessity for irrigation.

My experience in the treatment of cystitis has been largely with women. A growing experience makes me the more convinced that cystitis has some local cause, as a rule, which must be sought for and removed. In women a torn perineum, resulting in cystocele, and tubo-ovarian inflammation are the most common causes of cystitis. When these conditions receive appropriate treatment the cystitis disappears.

Dr. Joseph Hoffman—There is a combination of three drugs which I have used with benefit—these are benzoate of ammonium, salicylate of sodium and bromide of potassium. The last is a local sedative. I think that benzoate of ammonia is perhaps the most efficient of all remedies in chronic, and

even in acute, cystitis. The salicylate of sodium is also of value. The mechanical treatment should not be forgotten. It is absolutely impossible to cure acute cystitis with the patient going about. Rest is an important factor in the treatment. It is only by rest in bed that we can secure absence of abdominal tension, which is important.

Dr. Donnaly—In one or two instances in which I have used iodoform in the proportion of two grains to the ounce in four drachms of mucilage, it acted very efficiently and prevented ammoniacal decomposition.

Dr. Lorgaker—I have found benzoate of ammonium most effective, but prefer to give it with belladonna rather than with bromide of potassium. Ten grains of the salt, four times a day, is sufficient.

Dr. Mary E. Allen—In one case where I tried a number of remedies without effect, benefit followed the use of fluid extract of buchu with fluid extract of These were used in conjunction with Buffalo lithia water, and a diet consisting principally of milk and vegetables.

Dr. Tyson—I have had no experience with asparagus as a therapeutic measure in cystitis. Boric acid and benzoic acid I quite forgot to mention in the paper, which was prepared hurriedly. I have used them both freely. Benzoic acid has the disadvantage of affecting the stomach unpleasantly. I have not used benzoate of ammonium, but shall take the first opportunity to give it a trial. I cannot say that I have seen any curative results from boric acid or benzoic acid. They affect the urine favorably. I have also used salol, but have found it very uncertain. In one case where the disagreeable odor of the urine was complained of, I gave salol in large doses without any effect.

Stated Meeting, December 9 and 23, 1891.

The President, John B. Roberts, M. D., in the chair.

Dr. T. B. Schneideman read a paper on "Ophthalmia Neonatorum as a Cause of Blindness."

DISCUSSION.

Dr. George E. de Schweinitz—Unfortunately, I came into the room too late to hear the first portion of this paper. There is no question that bichloride of mercury, under ordinary circumstances, is an excellent germicide, but in spite of the good results which have been reported, I am very much against the use of strong solutions of this drug in ophthalmia neonatorum. It is true that investigations have shown that a solution of 1:10,000 will retard the vitality of certain bacteria—for ex-

ample, staphylococcus pyogenes aurens; but in ophthalmia neonatorum and in gonorrhœal ophthalmia, the characteristic behavior of the gonococci is their residence within the living cells, and under these circumstances I do not believe it is possible for irrigations of bichloride of mercury to act in their ordinary germicidal function. Moreover, I am convinced from clinical and direct histological experience, that strong solutions of sublimate have a distinctly deleterious effect. I need not refer at any length to the disastrous results to the cornea that have occurred from the use of this drug in strong solutions during cataract operations. Especially is this true when they have been employed to irrigate the anterior chamber. It is of the highest importance during ophthalmia neonatorum that the epithelial surface of the cornea shall be kept intact; and while I am not prepared to say that the use of a strong solution can actually produce an abrasion, I am well satisfied that it adds distinctly to the dangers of the case. A recent European investigation in regard to the effect of this drug upon the cornea has demonstrated its capacity for producing changes that might well make one hesitate in its employment in very active strength. It should be remembered that during the height of an attack of ophthalmia neonatorum, the resisting power of the cornea is materially decreased, and hence very irritating solutions, no matter of what composition, are to be deprecated. I beg to be understood in this matter; I do not for one moment dispute the value of bichloride in purulent affections of the conjunctiva, but I deem it inadvisable to use the drug in strong solution, and believe that it is impossible to employ it *safely* in such strength that it will act as a *true germicide*. Moreover, it has been shown that bacteria in the presence of albumen have the power to reduce bichloride of mercury to calomel. Now, calomel, to a certain extent, is a germicide, but must have very inferior qualities under these circumstances. There does not seem to be any objection, for cleansing and antiseptic purposes, to a strength of 1 : 10,000 (Cohn, in his recent book, recommends 1 : 5000). A convenient strength is a grain to the pint—*i. e.*, about 1 : 7500. In the Philadelphia Hospital, as my colleague, Dr. McKelway, will testify, we are in the habit of using alternately a solution of bichloride of mercury, a grain to a pint, and a saturated solution of boric acid. If the cleansings are made hourly, first one and then the other drug is employed. Boric acid is without germicidal value, but it is an excellent slightly astringent cleansing agent.

Referring to the other portions of the treatment advocated

by the Doctor in his paper, I beg to agree with him most emphatically—*i. e.*, with his use of nitrate of silver. It should not be employed in the earlier stages, or in any stage in which there is much infiltration and the formation of false membrane; but when there is free secretion of yellow pus, when the lids are supple, when the conjunctiva is covered with hypertrophied papillæ and positive granulations, nitrate of silver, in the strength of ten to fifteen grains to the ounce, is the germicide *par excellence*. Applied carefully with a cotton mop, and properly neutralized, if strong solutions are employed, any irritating effect upon the cornea may be avoided. It acts in three ways: as a germicide, because it is at the same time a superficial caustic, destroying a layer of epithelial cells, and probably the bacteria which are contained within them; as an astringent; and as an alterative, using that term to imply its efficiency to alter the nutrition of a mucous membrane which is inflamed.

In regard to the other solutions which various surgeons have employed in this condition—carbolic acid, aqua chlorini, weak solutions of nitrate of silver, etc.—my experience is limited. They come to us indorsed with high authority. In regard to one drug, however, I wish to place myself on record—namely, pyoktanin. I hope that no one will treat cases of purulent ophthalmia in the newly-born with this drug.

Finally, I may say that, in my belief, the more or less continuous application of cold is of great value in the earlier stages. The essayist has referred to atropine and eserine, evidently giving his preference to the former drug, should corneal ulceration indicate its use. I would reverse the order and place eserine first, provided no iritic complication contra-indicates its instillation.

Dr. Charles H. Thomas.—There is one suggestion growing out of what Dr. Schneideman has said which seems worthy of further amplification—that is the question of some legal enactment which shall help to prevent the blindness which is so frequently the result of ophthalmia neonatorum. Such a law has been enacted by the State of New York, and there has been some attempt to establish one in the State of Pennsylvania. It seems to me that there is no place in the State of Pennsylvania where a movement with this object in view could be more effectively inaugurated than in this society. It is my hope that all who have heard this very able and true statement, will resolve themselves into a committee to further the enactment of such a law as has been suggested. There is no question as to the propriety of compelling midwives to report such cases, and I am not sure but that we

could go further with propriety and require medical practitioners to report these as well as other cases of infectious diseases. There are, of course, many physicians who should not be put to this trouble, but there are others who see but few such cases, and it would have a wholesome moral effect upon all to feel that this disease was dignified enough to require a report to the Board of Health.

Dr. Charles P. Noble—I will speak upon this subject from the standpoint of the obstetrician rather than from that of the ophthalmologist. There are several points which interest me. I am much pleased to find that so long ago as 1807 some one had insisted upon the fact that the treatment of *ophthalmia neonatorum* should begin with the mother.

This has been insisted upon by various obstetricians, and I have myself long felt the importance of it. It has been a rule with me for years to pay attention to the question of vaginal discharges in pregnant women. If there is a free vaginal discharge, even though no complaint is made of its irritation, I have always made a local examination, and if vaginitis were found to be present, have insisted upon systematic local treatment. I think that this is a most important point, and one that is even more important than the early treatment of the eye. If we can prevent infection, we do not need the early treatment of the ophthalmia. Some years ago, when connected with the Lying-in-Charity, I saw quite a number of cases, and I have had several in private practice. I may say that among these cases there was only one in which an eye was lost. This occurred in a syphilitic infant. In this case, Dr. Lautenbach acted as a consultant, so that the child had everything that opthalmological science could do for it. The treatment used at the Lying-in-Charity was frequent irrigation with a saturated boric acid solution. When the discharge was very free, it was used as often as every half hour, together with silver nitrate solution (ten grains), used twice daily. It was thought that advantage was derived, particularly when the swelling was great, from the application of cold compresses.

Speaking still from the standpoint of the obstetrician, I should advise that the practitioner always avail himself of the counsel of an oculist in the management of such cases. He will thus be saved the anxiety and regret of occasionally losing an eye and forever injuring the prospects of the infant

On motion, the following committee was appointed to confer with the State Board of Health relative to the subject: Drs. T. B. Schneideman, C. H. Thomas, Benjamin Lee, Edward Jackson, G. E. de Schweinitz.

Dr. T. Ridgway Barker read a paper on "Some Mooted Points Concerning the Vomiting of Pregnancy." (See page 133).

DISCUSSION.

Dr. Charles P. Noble—Dr. Barker prefaced his remarks by saying that he should not take up the matter from a theoretical standpoint, and that he would not present the theories held by others, but would study it from the standpoint of anatomy. I think, however, that the theory he advances, that the vomiting of pregnancy is reflex in its origin, due to the growth of the ovum, is a very old one. There are a great many theories to account for this affection. Among the most important is that held by Grailly Hewitt—namely, that the vomiting is due to induration or inflammation of the cervix, or to flexion. Dr. Hewitt has gone very fully into the subject, and while we may not agree that this is the only cause of vomiting of pregnancy, yet anyone who has studied the large number of cases which he reports, can not help but feel that there is a close relationship between exaggerated flexion of the uterus and also induration of the cervix due to inflammatory trouble and the vomiting of pregnancy. I have myself not infrequently seen this combination. I have also seen vomiting associated with more or less endometritis, and with induration and thickening of the cervix, which was present before pregnancy took place. Again, the uterus may be more or less fixed by old inflammatory trouble, and when it becomes pregnant it is prevented from rising into the belly, as is usually the case, and in that way also the reflexes are increased. Again, we know that the uterus may be retroverted and caught under the promontory of the sacrum, and may then be prevented from rising into the abdomen and may produce such reflex symptoms. I am satisfied that old inflammatory trouble in the pelvis has a great deal to do with the vomiting of pregnancy. It, however, simply acts to increase the reflexes from the uterus.

A more recent theory, and one supported by so eminent an authority as Kaltenbach, is that the vomiting of pregnancy is hysterical. I think that there is no doubt that a certain number of cases are due to hysteria. But I would not go so far as to hold that all cases are due to this cause.

There is no question that not only do we have as a result of pregnancy changes in the pelvis, but the whole body of the woman increases in size and undergoes changes. The entire vascular system becomes hypertrophied, and the heart also becomes enlarged. We know that pregnancy changes the entire form of woman. The entire system is involved, and we

can readily understand that congestion of the alimentary canal can be brought about. We all know that the nervous system in the pregnant woman is extremely irritable. It resembles the nervous system in children. For this reason, irritation from the pelvis which ordinarily would not be sufficient to cause reflex symptoms, can do so at this period.

The doctor assumes that the reason why primiparous women are more apt to have vomiting than multiparæ, is because the uterus of the multiparous woman is larger, and, therefore, the growth of the ovum would not cause so much distention. There is no question concerning the fact, but the explanation is not satisfactory.

It is true that the uterus of the multipara is larger than that of the primapara. It is also true that the abdominal walls are more relaxed, giving a less degree of intra-abdominal and intra-pelvic pressure. The woman is better prepared for pregnancy, having already been pregnant. The mental condition is probably not so disturbed, and the emotions not so excited in the multipara. All these points must be considered. Moreover, it must not be forgotten that the uterus grows as well as the ovum, so that it is at least questionable whether the ovum distends the uterus. Does it not simply fill it?

It seems to me that the practical outcome of the whole matter is that, given a serious case of vomiting in pregnancy, it is the business of the practitioner to find the cause of the trouble. Whether it is intrinsic purely—due to indigestion or uræmia; or whether due to excitability of nervous system or to hysteria; or whether some pelvic lesion is the source of irritation. If this plan of treatment were followed better results would be obtained.

Dr. John B. Roberts reported a "case of inversion of a non-puerperal uterus."

DISCUSSION.

Dr. Charles P. Noble—It has been my experience to see two cases of inversion of the uterus, and in both cases the attempts at reduction failed. The first case I saw at the Lying-in-Charity, and was, I think, a long-standing post-puerperal case. Manual reduction was tried, but abandoned for the reason that the uterus was soft and macerated. In this case the uterus was amputated and recovery occurred. The second case I saw with Dr. Kelly, and was present at an operation in which he opened the abdomen. The abdominal neck of the inversion was dilated with forceps, and manipulations were made with one hand in the belly and one in the vagina, but the effort at reduction failed. In that case, Dr. Kelly took out the whole uterus, and the patient made a good recovery.

Speaking of the treatment, Dr. Roberts did not mention one method which has met with excellent results. It is the method of gradual reduction advised by Dr. Aveling. Constant pressure on the inverted uterus is made through a repositor, which is attached by electric bands to a support about the waist. A large series of cases has been reported in which this method has been employed with almost universally successful results. Of course, in some cases the presence of adhesions will prevent the reposition of the uterus. The reasons for the success of this plan is plain. The problem is to overcome the resistance of the muscular tissue in the upper part of the cervix, and to make it relax and dilate. This tissue is resistant enough to tire out the muscles of the surgeon while attempting rapid reduction, but gives way before the steady action of the rubber tapes. It seems to me that in a case of any standing, attempts at rapid reduction are inadvisable, and are liable not only to fail but to do harm. It seems to me that in a long standing case of inversion, the thing to do would be to pack the vagina with an astringent tampon, and afterward apply the gradual method of Aveling. If that did not affect reduction, the best thing would be to do a radical operation. The question arises whether it would not be better to remove the ovaries and tubes, which would bring about a cessation of the hæmorrhage. This would be a simple matter, and I think that reduction in the size of the uterus would take place. If this were not done, I think that a simple amputation of the protuding mass would be quite a feasible operation; but, of course, the danger there would be that after the mass of the uterus was removed the remainder would reinvert itself, and possibly infect the peritoneal cavity. This could be obviated by using transfixion pins. My own feeling would be in favor of removal of the tubes and ovaries, and later to do a vaginal hysterectomy, if necessary.

Dr. Roberts—In this case the uterus was not soft, but was as hard as a fibroid tumor. The tightness with which the neck grasped the inverted uterus was something astonishing.

I am somewhat familiar with two other cases of inversion of the uterus. One happened some years ago in the country. The practitioner did not know what was protruding after labor, and sent for Dr. Levis, who, after a good deal of manipulation, pushed the inverted uterus back. The second was also, I think, a puerperal case, and happened not long ago at the Woman's Hospital, of Philadelphia. In this instance, the physician was able, after manipulation for several hours, to replace the uterus. It was, perhaps, the knowledge of these cases which led me to make such prolonged attempts at reduc-

tion. I see now that it was unwise, and I agree with Dr. Noble that if such a case again came under my care, I should be inclined to first remove the ovaries, and if that were not sufficient, to make a total hysterectomy. This patient was *in extremis* at the time, and I did not feel justified in doing a too radical operation when I removed the two small tumors.

Correspondence.

MALARIAL HÆMATURIA OR "LYSÆMIA," WHICH SHALL IT BE?

CAMDEN, Ark., December 30, 1891.

To Editor New Orleans Medical and Surgical Journal:

In the December number of the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL is an article, exhaustive in its character, on the subject of Malarial Hæmaturia, or "Lysæmia," by Dr. E. H. Martin, of Green Grove, Mississippi. In this article he proposes the new name of "Lysæmia," for the old and familiar one of Malarial Hæmaturia. To this latter christening and also to some of the Doctor's conclusions, I, notwithstanding they receive the editorial endorsement of the editor of the JOURNAL, modestly but firmly demur, and will give a few of the reasons for the faith that is in me.

In the first place I will notice the new name proposed, "Lysæmia." It is defined to mean "a dissolution of the blood or a losing of the integral parts of it." "The hæmoglobin set free rapidly stains the saliva and skin an intense yellow, a jaundice generally without bile." These are the definitions given by Dr. Martin, as I understand them. In other words a breaking down of the corpuscular elements of the blood, and a setting free of hæmoglobin.

Now "Lysæmia" doubtless describes the condition of the blood present in this disease very accurately, but it falls far short of even suggesting the ensemble of symptoms that accompany Malarial Hæmaturia. The term merely expresses a *condition* without regard to cause, a condition of disintegrated blood corpuscles and free hæmoglobin in excess. I believe this is a fair statement of the case.

Now, my objection to the term is, that it merely describes a "condition" that a variety of agents, uninfluenced by malaria, can, and do, readily induce.

Loomis, in his truly classical work on the Practice of Medicine, pages 427 and 428, describes the same condition of the blood, under the caption of Hæmatogenous jaundice, which is a setting free of the coloring matter of the blood in excess, and gives as causes, "yellow fever, typhus fever, puerperal fever, and the poison of snake bites, phosphorus, etc.; also, the excessive use of chloroform and ether." Austin Flint, in edition of 1886, page 922, also describes this condition of the blood as follows:

"If from *any* cause the red blood corpuscles be dissolved in the blood, the hæmoglobin which is thus set free is excreted by the kidneys. The condition of the blood thus produced is called hæmoglobinæmia, that of the urine hæmoglobinuria." * * * * "Hæmoglobinæmia and the consequent hæmoglobinuria may be produced by a *variety* of *causes*. A *large number of substances* when taken into the blood cause a dissolution of the red blood corpuscles. Such substances as pyrogallic acid, napthol, etc., poisonous fungi, and various infectious diseases, as scarlet fever, etc., are all capable of producing this condition."

Now this is exactly the condition for which Dr. Martin proposes the name "Lysæmia," a condition that may be induced by a legion of causes utterly dissimilar. Malarial hæmaturia suggests the generally admitted cause of this dangerous malady, and at the same time describes one of the principle objective symptoms.

Lysæmia may be present in a variety of diseases; so may anæmia or convulsions. To say that a patient died of anæmia would not even suggest whether he died of a chronic malady or had his carotid artery severed; and to say that he died of convulsions would not afford the slightest clue as to whether he had epilepsy or was poisoned with strychnine. With all deference to Dr. Martin's ingenuity in coining a new nomenclature, I must insist that anæmia and convulsions are as much entitled to be classed as distinct entities as is lysæmia.

On page 410 Dr. Martin says "the word hæmaturia is incorrect, for pure blood is not found in the urine," and a little further on he says "true hæmorrhage does not occur in this or any malarial fever, except from secondary causes." I will frankly confess that I am not a microscopist, and am not qualified to make complete tests for blood in the urine. My examinations of specimens have been from chemical tests and the gross appearances of the fluid. Heat and nitric acid have in my hands invariably produced a heavy coagulum, and this certainly establishes the fact that there is present at least some of the coagulable constituents of the blood—something more

than hæmoglobin. Still further to establish the fact that there is a real hæmorrhage—an escape of the vital fluid without dissolution—I will invoke the authority of much abler investigators than myself, and in this connection I shall appeal to no less an authority than Dr. Martin himself.

On page 404 of this same article he says "death is due to the suppression of the urine, and the suppression is due to the *hæmorrhage* into the stroma of the kidney;" "the Malpighian tufts and uriniferous tubules must be kept free from *clots*, with lumen clear." Again, on page 403, he says "we have an outpouring of blood-coloring matter through the *ruptured capillaries*." (Italics mine in these quotations.)

Now, in view of his conclusions, these are very unfortunate expressions. He speaks of "hæmorrhage into the stroma of the kidney," "clots in urinary tubules," "ruptured capillaries;" but, in conclusion, objects to the word hæmaturia, on the ground that "pure blood is not found in the urine."

Dr. Jos. Jones, who has extensively investigated this disease, says, in THE NEW ORLEANS MEDICAL AND SURGICAL JOURNAL, February, 1878, page 590, that he has made microscopical examinations of the kidneys of persons dead of malarial hæmaturia, and that he has "found the tubuli uriniferi filled with coagulated blood, and the urine containing blood corpuscles." He says:

"In many specimens I have been able to ascertain that the rupture of the capillaries occurred chiefly in the Malpighian corpuscles, and have been able to trace the tubuli uriniferi through their whole extent as brilliant opaque cylinders filled with *coagulated blood*."

The late Dr. Bemiss, in Pepper's System of Medicine, page 611, volume 1, says, under the microscope the urine of such patients exhibits "abundant blood corpuscles." Now, the testimony of these eminent observers, although delivered some years ago, is against Dr. Martin's conclusion.

The absence, from a given specimen, of red blood corpuscles would not disprove a hæmorrhage, as such corpuscles are said to readily and rapidly break down in the presence of urine that has undergone ammoniacal decomposition.

Malaria is admitted by all observers to be the predisposing and exciting cause of this malady, and as I believe that the existence of a true hæmorrhage has been established, why not call it by the suggestive name of Malarial Hæmaturia? To do otherwise, would be to rob malaria of its well-earned laurels.

As to his plan of treatment, it seems rational, and I have no words of criticism for it. A plan that has been so success-

ful that it enables a man of Dr. Martin's intelligence to approach a case "with suppression of urine and grave uræmic symptoms" with but little anxiety, should certainly commend itself to the profession.

This review of Dr. M.'s article is written in the most friendly spirit. In the interest of truth I have endeavored "nothing to extenuate," and Dr. Martin, who stands as godfather for the new name, Lysæmia, is doubtless well able to give us further reasons for the adoption of his bantling.

J. W. Meek, M. D.

THE RADICAL TREATMENT OF UTERINE CANCER.

Dr. Wm. Goodell (*The Medical News, Dec. 5, 1891*) considers that the extirpation of the cancerous uterus *per vaginam* competes most successfully with excision of the breast for cancer of that organ. He believes the number of recoveries, both immediate and permanent, very encouraging. But to obtain good results, neither the vagina nor broad ligaments should be involved. He prefers using silk and catgut sutures to clamp ing the ligaments. The following statistics are offered: "311 cases of vaginal hysterectomy performed up to the end of 1886, compiled by A. Martin, 47 died from the operation, giving a percentage of 15.1 per cent. Individual operators have done better than this, Leopold having lost but 4 of 80 vaginal hysterectomies, and Stande, 1 of 22. On the other hand, of 778 excisions of the breast collected by Koester, the immediate mortality reached 15.6 per cent."

The doctor believes that greater success will be met with in vaginal hysterectomy when the operation is better known.

The latest statistics offered are those of the Dresden Klinic. In these Leisse says: Of 80 patients examined over two years after the operation, 45 were free from recurrence; 58.6 per cent. (of 58 patients examined) were well after three years; 59.5 per cent. (of 42 cases) were well after four years; 60 per cent. of 30 cases examined after five years were well; 66 per cent. of 9 cases examined were well after six years; and 2 patients that had survived the operation seven years were perfectly well.

P. M.

N. O. Medical and Surgical Journal.

ESTABLISHED IN 1844.

PUBLISHED MONTHLY, $2.00 A YEAR.

Articles from physicians are respectfully solicited. All articles, news and exchanges, and books for review, should be sent to the EDITOR, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL. Business communications should be addressed to the BUSINESS MANAGER, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

EDITED AND PUBLISHED BY

AUGUSTUS McSHANE, M. D.

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Editorial Articles.

THE DISTURBANCE AT THE CHARITY HOSPITAL.

On Wednesday, the 27th ultimo, while THE JOURNAL was going through the press, an incident happened at the Charity Hospital that has caused much comment, and has served as a starting point for an agitation looking to the reform of certain conditions which have long been known to exist, but which no one, for ten years, at least, has undertaken to correct.

The incident referred to is, briefly, as follows: Two members of the staff of the New Orleans *Picayune* were detailed to *write up* the hospital for the readers of that paper. One of the persons was a lady, to whom the descriptive part of the work was entrusted. The other, Mr. Winterhalter, an artist, was to furnish sketches of the institution. Armed with the proper credentials, these reporters presented themselves to Mr. Marks, the secretary of the hospital, and were by him introduced to Sister Agnes (the superioress), and to a visiting member of the staff and a resident student, who were requested to furnish them with the information that they desired. The reporters represented one of our most esteemed daily papers, and they

set about their work in such a manner as would naturally be expected in persons detailed to work for a respectable publication. In the course of his visit, Mr. Winterhalter went into the amphitheatre, in company with a student (not a resident student). At the time, Dr. E. S. Lewis was operating on a woman, and a large number of students was present at his clinic.

The artist, not knowing and not having been told that a layman had no right to be present at such clinics, began to sketch the amphitheatre and its contents. Suddenly a student exclaimed: "There's a reporter of *The Mascot* making sketches!" *The Mascot* is a weekly publication that does not represent the highest and noblest traits of journalism. It is better adapted to the needs of a liquor shop than to those of a Sunday-school; and it had rendered itself obnoxious to the class by certain articles which had appeared in it. When Dr. Lewis heard the exclamation of the student, he looked up and requested the reporter to retire. Exactly what happened immediately afterward it is difficult to ascertain, but it is certain that the sketch-book was taken away from the reporter, and he himself was hastened or helped down the steps at an exceedingly rapid rate. He says that he was kicked and cuffed; and as he was there, it is probable that he knows whereof he speaks.

Excessive zeal is sometimes more productive of harm than lukewarmness; and it is possible that the students, thinking that they were dealing with an unauthorized representative of a disreputable paper, were too generous in bestowing assistance upon the reporter in retiring from the sanctum into which he had unwittingly intruded. Mr. Winterhalter is unquestionably a man of standing; and in doing what he did, he was acting in perfect good faith, and was merely discharging the lawful duties of a reporter for a respectable publication.

Much indignation has been caused in journalistic circles by what *The Picayune* designates an outrage. The matter has been brought to the attention of the Board of Administrators of the hospital, and *The Picayune* has expressed its determination to have the matter fully investigated and reparation made. A mistake has certainly been committed, but whether

by the reporter or the students remains to be determined by the Board of Administrators. Until the board reaches a decision, judgment should be suspended.

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* *

The occurrence of the Winterhalter incident has drawn a vast amount of attention to the hospital and its management, and particularly to the defects in the latter.

The hospital is a noble institution; it is one of the greatest benefactors to the destitute sick that the country contains. Yet it is not all perfection. A hospital that answered the requirements of the age thirty or forty years ago does not necessarily answer the requirements of the present age.

The world moves forward; the medical sciences move forward; but the Charity Hospital does not keep pace with them. The hospital was a model institution when the requirements of a model institution were few and primitive; but the vast progress realized in the last thirty years makes the hospital and some of its features seem antiquated, fossilized.

THE JOURNAL yields to none in appreciation of the relief afforded by the Charity Hospital to suffering and destitute humanity. A blemish, however, can not be other than a blemish, and no amount of praise can hide the fact that our boasted hospital is far, far behind the age in two essential features, namely: 1st, the nursing; 2d, the medical service.

Nursing is an art. It must be learned, and the learning process requires about two years of a man's or woman's time. Some knowledge of anatomy, physiology, bandaging, etc., is absolutely necessary, especially in a surgical nurse. The question of sectarian affiliation should play no part. A man can not become a carpenter or a cobbler without serving a reasonable term of apprenticeship. The same holds true with regard to trained nurses. In selecting and retaining nurses, a medical man makes the best judge, and to such should the selection naturally belong. At the hospital, however, the medical men do not select the nurses; the nurses are usually recruited from the ranks of the convalescent patients. Competency or ability to nurse is not asked for, and not expected. The nurses are picked out by the Sisters of Charity, who attend

to the domestic affairs of the hospital, for which the hospital pays a certain sum. The only nurse who receives pay is the one in the pay-ward.

There is a belief abroad in the land that the Sisters themselves do the nursing. That is a mistake; they never do anything of the sort. These excellent and pious ladies are the housekeepers of the hospital, on pay. It is difficult to understand why they exercise the power to appoint the nurses, or how they managed to acquire that power. It is certainly wrong for them to exercise such a purely medical function; and how can they be expected to judge of the competency of the nurses they select when they themselves practically know nothing of nursing? That is an anomalous state of affairs; it has existed for a number of years, and every physician in the city knows of it and deplores it. This matter should be looked into and corrected at once. Careful nursing plays an important part in all diseases, and particularly so in acute affections. It would be interesting to know how many lives are annually sacrificed in the Charity Hospital upon the alter of careless nursing, and the question naturally arises: Who is to blame?

A NEW SPRING SCHOOL OF MEDICINE.

The University of the South, at Sewanee, Tennessee, will open next April its new medical department.

It is claimed, the cool mountain weather, already tested by the University for many years, will enable students to study and dissect at times when most of the schools of the country are closed

The Faculty consists of several prominent Tennesseeans, notably Dr. J. S. Cain, of Nashville, and Dr. J. A. Witherspoon, of Columbia. Dr. H. W. Blanc, formerly of New Orleans, is Professor of Materia Medica, Therapeutics, and Dermatology, and Dean of the Faculty. The course is to be three years, and aims at a high standard similar to that of the University of Virginia. We wish good luck to the enterprise so favorably begun.

Abstracts, Extracts and Annotations.

SURGERY.

THE CATALYTIC ACTION OF THE GALVANIC CURRENT.

This subject was brought before the Berliner Medizinische Geselschaft in an address by Dr. Moritz Meyer. The little use made of electricity led him to attempt to demonstrate *ad oculor* what an ordinary battery was capable of effecting. The action was principally chemical at the poles electric, or between the poles catalytic. The first action involved destruction of molecules, whilst the second was not visible to the eye, but perceptible to the finger by diminution and disappearance of indurations. He should confine himself to the latter. In order to bring about the greatest possible catalytic effect, in addition to intensity of the current and duration, it was necessary that the part involved should be affected by the greatest possible number of strong currents. This was effected by using very flexible electrodes, placed opposite to each other. If joints were to be treated, the finger or knee, for instance, the limb was to be enveloped in the cathode, whilst the anode was to be placed on the arm or upper arm. The strength of the current and duration of sitting were to be determined by the patient's feelings. He, however, would not extend the sittings to more than ten minutes. The Siemens-Halscke battery was sufficient.

When one passed in review the cases in which a catalytic action had chiefly been of service they would be found to be neuroses of sensibility and motiliiy, depending on pathological processes. In most cases the effect was demonstrable to the finger, and in some to the eye even. Obtstinate sciatica was more tractable to the galvanic current than to any other treatment. It was sufficient to place the flexible cathode over the swollen nerve and the anode over the thigh. In no case did the disease return, and in the rare cases in which the treatment did not succeed, nothing else did. Equally good results had been obtained in cramps from overwork, writers' and piano players' cramps, when the point of the disease was once discovered. In the early stage, if the parts could be spared at all, recovery could be brought about in ten days by a small cathode over the painful spot, and the anode in the infraclavicular fossa. In peripheral spasm of the facial nerve good results

have been repeatedly obtained by treating the painful point; it must be confessed, however, that one did not succeed in all cases, especially in those that were chronic.

Infiltration in muscles, the subcuneous connective tissue glands, sheaths of tendons, small indurations in the "schnellenden" finger, gouty deposits, exostoses, stiff joints, offered a not less favorable field for treatment. A case of gouty deposit of eight years' standing in the fingers of a man, aged seventy-nine, was cured, and the affection did not return. In a case of enlarged supraclavicular glands with continuation below the clavicle, and intercostal neuralgia, in twelve sittings the pain had almost gone, but the swellings had increased until they became red and œdematous. In fifteen further sittings, however, the swellings entirely disappeared. He mentioned the case of a teacher of singing who had an absolutely stiff knee from rheumatism, who recovered almost completely after eighty-nine sittings, which were always followed by tapottement, and attempts at walking. He thought it would be very useful in cases of stiff limbs after injury, periostitis or cicatrices.—*Med. Press and Circular.—Cin. Lancet-Clinic.*

THE CLOSURE OF LARGE DEFECTS IN BONES.

By Dr. Le Dentu.

In a paper read before the Société Savante, the author stated that bone grafting by means of pieces of living bone has not proved of much value. The ingrafted fragments are gradually absorbed, or are cast off as foreign bodies, and even when they appear to have preserved their vitality, they only bring about repair very slowly. If the bone is derived from an animal, its disintegration takes place even more rapidly than when taken from the patient himself or some other person; in the latter case we also run the risk of transplanting syphilitic or tuberculous osseous tissue on healthy bone. It is not therefore surprising that the grafting of a healthy bone has been discarded in favor of aseptic decalcified bone.

To Dr. Senn belongs the credit of introducing this method. In 1889 he reported a number of cases in which he had filled up osseous defects with small chips of decalcified bone—a procedure which has given him fair results. In March, 1891, Kuemmel, of Hamburg, published the results of his experiments in replacing the small long bones, like the metatarsal and metacarpal bones, by decalcified bones of the same length. M. Le Dentu was led to believe that the transplantation of larger fragments might give similarly good results.

A resection of the tibia and fibula in the lower part of the leg furnished him the first opportunity of testing this idea.

The patient was a young man, sixteen years old, who had suffered for twelve years from tuberculous ostitis. Several fistula had formed which exuded a sero-purulent fluid; the malleoli were greatly enlarged, and the tibio-tarsal articulation had become anchylosed. This condition, together with a talipes valgus, rendered walking a matter of great difficulty. There was a marked shortening of the limb and atrophy of the muscles. The tibia and fibula were resected to the extent of seven centimetres, the fungosities destroyed, and the superior surface of the astragalus abraded. The excised bones were then replaced by a single piece of decalcified bone of the same length taken from a calf. Over this graft the periosteum and integument were sutured with great care. A plaster-of-paris bandage was then applied to immobilize the foot and leg. The first dressing was left on for two weeks. On the fifteenth day after operation a small opening was made to permit of the escape of a large quantity of serum. Six weeks after operation incipient solidification was noted, and at the end of three months the patient left the hospital, walking with the aid of a silicate dressing. The consolidation has since become complete and the articulations are perfectly movable.

M. Le Dentu has successfully employed this method in nine other cases. The bone is prepared as follows: The bones are taken from a calf, ox or sheep, freshly killed, and deprived at once of their marrow and periosteum. The femur and tibia of the ox, which have a thick layer of compact tissue, are preferred. The bones are cut into fragments of various size, and placed in a solution of hydrochloric acid, 1 in 10, for eight days. They are then washed in pure water, left for twenty-four hours in a solution of corrosive sublimate, and preserved in a solution of iodoform in ether.—*La Tribune Médicale.*

RETROGRADE DILATATION OF ŒSOPHAGEAL STRICTURES.

Dr. J. Giessler reports the method employed by Prof. Kraske in a case of impermeable cicatricial stricture of the œsophagus of uncertain origin. After the performance of gastrostomy several unsuccessful attempts were made to pass instruments from the stomach into the œsophagus, and Kraske therefore proceeded as follows: A silken thread was carried down to the stricture by way of the mouth, by making a thick knot at the lower end and pressing this into the opening of a thin œsophageal catheter. The thread was removed from the

fenestrum by injecting water into the tube, which was then withdrawn. By means of active movements of swallowing, the patient succeeded in forcing the knot through the stricture into the stomach. As it was not possible to seize the knot with instruments, the stomach was irrigated through a glass tube, and the thread floated out. Small olive-shaped plugs of ivory could now be introduced into the stricture by the use of the thread, and dilitation was thus rapidly effected. After closure of the gastric fistula, the patient was discharged perfectly cured.—*Münch. Med. Wochenschr.—International Journal of Surgery.*

MEDICINE.

"THE CAUSES OF THE TOXIC NATURE OF NORMAL URINE."

MAIRET AND BOSC, Archives de Physiologie, April, 1891.

Mm. Mairet and Bosc refer to the fact that the toxic nature of the urine has been ascribed to various particular constituents without satisfactory evidence. The urea, kreatinin, the sodium chloride, and the potash salts have severally been designated as the essentially poisonous elements. Their researches have been in the direction of discovering the part played by the water, by oxidation products, by mineral salts, and by coloring matters.

Their experiments were performed on dogs and rabbits. The method of introduction of the particular substances into the animals' circulation was by intravenous injection, and the introduction was gradual, the whole quantity injected being spread over a certain interval. They found the injection of simple urine to have the same effects as had been previously described by Bouchard, some amount of contraction of the pupil, a considerable secretion of urine, slowing of the respiration, and a quickening of the heart-beat. The temperature was unaltered. As regards the nervous system, some degree of somnolence was at first noted, and later, coma and epileptiform convulsions. Finally, the animals died. Comparing the effects with those obtained by the injection of the different substances referred to above they obtained the following results:

After the injection of a certain quantity of water the animals died. [Either spring or distilled water was used with the same result.] The deaths in this case they referred to the mechanical effects. They found, as would be expected, nothing to indicate any toxic nature as far as the water was concerned.

To obtain a material containing the oxidation products and the salts, they decolorised urine with charcoal, and used this fluid. They also used separately urea, and sodium and potassium salts. They concluded that the salts of potassium had some slight poisoning effect; that urea and the salts of potassium and sodium promoted diuresis, and that the accelerated heart-beat was to be referred to the sodium salts. They then addressed themselves to the coloring matters, which they isolated and injected, as before, intravenously. They found that the injection of coloring matters, by themselves, had very much the same result as the injection of urine. They caused contraction of the pupil, diarrhœa, abundant secretion of urine, slowed respiration, and accelerated circulation. A state of coma supervened, and convulsions were observed. They therefore conclude that the coloring matters are the essential cause of the toxic nature of urine.—*J. Sydney Edkins in Manchester Medical Chronicle.*

A PROPHYLACTIC AGAINST INFLUENZA.

Every indication points toward a return of a severe pandemic of influenza. On the 24th of December, 1889, after numbering thousands of victims abroad, it suddenly appeared in the United States, and cost more lives than many epidemics of cholera.

The nature of the affection, the marked debility induced by it, and its sequelæ, all point to a remarkable depression of the general system. During its presence in this country, the prevalence and severity of other acute diseases were largely increased, and the mortality from all other causes augmented. This condition of affairs continued for some time after the subsidence of the epidemic.

The value of coca as a tonic to antagonize any tendency to adynemia is too well known to require elaboration here. Its therapeutical effects tend to build up precisely what influenza tends to destroy—a fact instanced by the use made of coca leaves by natives of Bolivia and Peru, which renders them capable of undergoing the greatest possible physical strain, and that frequently with sparse nourishment. This remarkable tonic action of coca in medical therapeutics has further been attested by Brown-Sequard, Dujardin-Beaumetz, Ball, Bouebut, A. McLane Hamilton, A. E. Macdonald, H. M. Lyman, I. N. Danforth, P. S. Conner, and many other eminent physicians too numerous to mention in the space at our disposal.

The coca wine made by M. Mariani, of Paris, and termed vin Mariani, is a preparation based on a scientific study of the individual virtues of the several varieties of the plant, conducted with a view to extract from them the most potent components giving rise to tonic effect. The wine employed as an excipient is also selected with the same idea in mind, its fineness and purity giving the vin Mariani the agreeable aroma which is peculiar to it. It is not only indicated as a prophylactic against influenza by the strongest inferences of experimental therapeutics, but its use meets the approval of pure common sense. A wineglassful should be administered three time a day, after meals, or about half an hour before each meal.—*Charles E. Sajous, M. D., in The Sattalite.*

EFFECT OF DESTRUCTION OF THE SUPRARENAL CAPSULES.

M. Abelous and M. Langlois, in the course of their experiments on the suprarenal bodies, removed these from a frog and noted a remarkable diminution in the nervous excitability. They injected into a healthy frog blood taken from a dying frog, from which the suprarenal bodies had been removed, and the sciatic nerve lost its excitability after a short while. On the other hand the sciatic nerve on the side on which the blood vessels had been tied preserved its excitability almost completely. The effect is analogous to that of curari.—*La Medecine Moderne, Dec. 24, 1891.*

THE VISITING NURSE SOCIETY OF PHILADELPHIA.

There is a little society in Philadelphia which is accomplishing, in a quiet way, a most important and noble piece of work, and which deserves not only the hearty support of the charitably disposed, but emulation in every city and town in the country.

The chief objects of the society, as stated in the little pamphlet recently issued, are: First, to give a good nurse for a short visit to persons of means who can afford to fully pay for this care, but do not require the entire time of a trained nurse; second, to send an "Outside" nurse to a family in moderate circumstances where the service can be paid, but where there is no one to attend the sick person; third, to provide fully trained nurses for the sick poor, that by skilled care recovery may be hastened, and contagion and other evil consequences avoided.

It is the desire of the society to work under the orders of physicians among such patients as are neither suitable cases for hospitals nor able to obtain proper care at home. The nurse will visit each case once or twice a day, as may be required, and in extreme necessity will remain all day when possible. A moderate charge is made for each visit. As the nurses make visits daily, it is impossible for them to undertake contagious diseases.

Special nurses are provided for obstetric cases.

The society hopes for the co-operation of physicians both to help the destitute and those in narrow circumstances, and to establish among them a higher standard of hygiene.

As an evidence of the good work accomplished, we find by the report of the society that during the five years of its existence there were attended 2818 cases, and 35,703 visits made.

Nurses are furnished under the following terms:

1. A *visiting* nurse is furnished without charge to those unable to pay for her service.

2. From those able to give the car fare, it is expected, being ten cents a visit.

3. For those in comfortable circumstances a visiting nurse can be furnished, but the charge must, in such cases, fully cover the expense to the society, fifty cents or one dollar a visit, according to the time required.

4. The "Outside Nurses" mentioned in this report must be paid by the patient according to agreement, as the society has no connection with them except keeping their names on file.

5. Visiting nurses will remain with a patient for the first twenty-four hours after a major surgical operation, and will visit after that daily as required. Should a patient need continuous care, an outside nurse must be engaged and paid for by the patient.

6. The hours of the nurses are from eight o'clock in the morning until eight at night. After that time they cannot respond to calls.

7. The nurses will visit in the morning those cases which have been reported the previous day, while those coming to the office before twelve o'olock will receive attention that afternoon.

8. The nurses are for the use of the public, and it is desired that physicians and others interested in the sick shall send for them. The service should be paid for whenever possible, as the society is supported entirely by charity.

We hope that the evident need of such a society in every large community, and the splendid work that has already thus been accomplished in this city, will be the means of stimulating others to follow in its footsteps. It is only when we or those near and dear to us are very ill, and need skillful attention, that we fully appreciate the invaluable offices of the Trained Nurse—the greatest luxury in medical practice of the century.—*Medical and Surgical Reporter.*

SULFONAL-BAYER.

Sulfonal retains its highest position as a hypnotic in all forms of insomnia except in those dependent upon pain. Sulfonal is neither an anodyne nor a narcotic. It is hypnotic pure and simple, and gives that effect and that only. It is in all respects safe; it gives rise to no gastric or other disturbances, and it causes no drug habit. In cases in which insomnia with pain is to be treated, a very advantageous combination may be made with sulfonal-Bayer and phenacetine-Bayer. In simple insomnia sulfonal alone is all that is required. Care must be used to administer it according to directions, for unlike the narcotics, it procures sleep by soothing the patient and not by stupefying him. In all nervous conditions sulfonal is useful, and in many of them it is curative. In the symptomatic treatment of insanity, sulfonal has received the highest commendation from alienists.

GONORRHŒA.

Thomas R. Neilson states that the plan of internal treatment which he has pursued for so many years past, consists, first, during the earlier stages of the disease, in the administration of an alkaline sedative mixture, for the purpose of alleviating the scalding caused by urination, the tendency to frequent micturition and to chordee. The standard formula in his dispensary practice has been:

℞ Potass. acetat.....3 drachms
Potass. bromid.....1½ drachms
Acid boric.....2 drachms 2 scruples
Tinct. belladon.....30 minims.
Liq. potass. citrat.....8 ounces.
M. Sig.: A teaspoonful in water every three or four hours.

Secondly, as soon as the symptoms are in a measure relieved, the administration of either oleoresin of cubebs and balsam copaiba in capsule, or cubebs alone in powder, in teaspoonful doses, or finally, where chordee is troublesome, a combination of two parts by weight of powdered cubebs and one part of bromide of potassium, given in the same doses, and from three to four times daily.—*Univ. Med. Magazine.*

MEDICAL EDUCATION IN GERMANY.

By O. J. Stein, M. D., Würzburg, Germany.

It will, perhaps, prove of interest to the readers of *The Courier* to become familiar with the medical educational doings —their requirements, their course of instructions and mode of instructing—in Germany, the very pinnacle in the system of education, where one gazes upon science at its fountain head.

The theme to some may also disclose the insignificance of our own medical educational system, and it will then dawn upon one's mind that the American *rush* (a pride to every true American) should be tempered to a degree that it will not only support the temple of medicine, but raise it to that pinnacle of perfection that it may proclaim a just reward for its support and advancement, and thus efface the humiliating evidence which now so plainly announces its morbid conditions.

It is not my wish or desire to offer a *modus operandi* of revision, but to simply offer a suggestion, would say that the potent force required to start this wheel of education in the right direction is, first of all, a more stringent and rigid demand in the requirements, and, secondly, an extended course of college terms.

Over here, when one desires to pursue a course at a medical university, with a view in mind to become a physician, he must first before he can matriculate as a student, present satisfactory credentials of his having had the required preliminary school education and a nine years' course at a gymnasium. The law provides here that every child on attaining his or her sixth year *must* enter upon a school term of eight years, after which he is fitted for the pursuits of ordinary life. But should the parents desire to fit their son for some branch of science, he is at his sixth year sent to the *Forschule* (a preparatory school) until his ninth year, when he enters the gymnasium. Should the parent not decide beforehand to fit him for some profession, he may, after finishing at his fourteenth year, undergo an examination

in the *Sexta* of the gymnasium (the under department), which then fits him for his nine-year gymnasium course. These gymnasiums are under the conduction of the *Staat* (State), *Stadt* (city), and, formerly, many were private institutions, but of which few exist to-day.

The gymnasium course is divided into nine different divisions in which the student devotes one year to each. They run thus:

1. Sexta.
2. Under Quanta.
3. Over Quanta.
4. Under Tertia.
5. Over Tertia.
6. Under Secunda.
7. Over Secunda.
8. Under Prima.
9. Over Prima.

During the course they undergo a series of instructions in Latin, Greek, French, German, natural philosophy, physics, higher mathematics, literature, religion, etc.

Finishing this they undergo the so-called "*abiturientem examen*," or final examination. Now he is fully prepared to enter upon his scientific studies in whatever particular chosen profession he is inclined. As a "*mediziner*" he would matriculate at some chosen university, where he must attend ten *semesters* of five years. During the first four semesters he studies physics, chemistry, zoology, botany, physiology and anatomy. When this is through he makes his "*Tentamen Physicum*," an examination which is conducted publicly. A failure of three times in any of the above six studies disbars him from the further study of medicine.

He now commences his studies in pharmacology, general and special pathology, pathological anatomy, percussion and auscultation, surgical pathology and therapy, gynæcology, obstetrics, medicine, hygiene, ophthalmology, bacteriology, laryngology, otology, rhinology, dermatology, neurology, electro-therapie, and insanity. He is compelled to *beleg* (take) the surgical, medical and gynæcological clinics *twice*, both times acting as *practikant*, when he is expected to make the diagnosis and give the prognosis and therapy of a case presented to him, as well as to conduct personally two (2) labor cases. In the eye clinic he acts as *practikant* but once.

Besides these, the polyclinic and operative course on the cadaver in surgery, obstetrics, and ophthalmology are open to him.

Having now finished this course of studies to the satisfaction of the various professors, he presents himself in his tenth *semester*, as a candidate for the so-called *Staats Examen* which is conducted by the professors of the university. He makes here the following seven (7) distinct examinations, in which is embraced the entire subject of medicine.

1. Anatomy.
2. Physiology.
3. Pathological Anatomy and General Pathology.
4. Surgery and Ophthalmology.
5. Medicines.
6. Obstetrics and Gynæcology.
7. Hygiene.

Of which anatomy and physiology *must* be made *first*.

The examinations are of a very rigid and thorough nature, but at the same time—and upon which great stress is laid—practical.

Demonstrative work in the dissecting room and practical work in the laboratories are demanded.

In surgery, ophthalmology, medicine, obstetrics and gynæcology, the candidate assumes one or two cases, of whom he is to take entire charge, make the correct diagnosis, give the prognosis and treatment, keep a journal of the case and visit his patient twice daily for seven days.

When this is all finished satisfactorily, he is given his Diploma as *Practischer Arzt*.

The appellation of "Doctor" is but a title here given by the university and does not allow the privilege to practice. It can be made after one's eighth *semester*.

These two titles must not be confounded, as they are apt to, for the "Doctor" title is also used by theologists, chemists, lawyers and philosophers, while the *Practischer Arzt* is the only legitimate title for the practice of medicine.

One word now in reference to foreigners. A foreigner can not make his *Practischer Arzt* in Germany, *unless* he makes first the "arbiturientem examen" of the gymnasium, and then follows the five year course at some university. But a "Doctor" can be made by showing evidence of having passed through eight *semesters*, which are left to the discretion of the faculty, based on the standard of the university from which one has taken his degree.—*St. Louis Courier of Medicine.*

RULES FOR THE ADMINISTRATION OF COCAINE.

Dr. Magitot, in the *Repertoire de Pharmacie*, formulates the following rules which should govern the employment of cocaine as an anæsthetic:

1. The dose of cocaine injected should be appropriate to the extent of the surface desired to render insensitive. It should not exceed in any case 1 to 1¾ grains. Each dose should be restricted in large surfaces.

2. Cocaine should never be employed in cases of heart disease, in chronic affections of the respiratory apparatus, or in nervous subjects; and this exclusion applies also to the other anæsthetics.

3. Cocaine should be injected into the interior, and not under the derm of the mucous membrane or of the skin. This is the intradermic method of Reclus, which should be substituted for the hypodermic method. By this means the introduction of a substance into the vein is avoided, and the risk of accidents therefore minimized.

4. The injections should always be practised upon the subject in a recumbent position, and he should only be raised when the operation is to be performed upon the head and mouth, and then only after anesthesia is complete.

5. The cocaine should be absolutely pure, since, as pointed out by Laborde, its mixture with other alkaloids forms highly poisonous compounds.

6. Cocaine should be injected in divided doses, with a few minutes' interval.

7. Suspension of administration, or, as the author terms the method, "fractional injection," renders it possible to guard against the production of sudden symptoms of poisoning.—*Therapeutic Gazette.—Columbus Medical Journal.*

GYNECOLOGY.

IMPREGNATION FROM SEMEN DEPOSITED ON THE VULVA.

A paper read before the Academy of Medicine, October 19, 1891, by R. C. Longfellow, M. D., Cincinnati.

On January 12, 1891, I was consulted by a gentleman who desired a recipe for a lady, saying "she had missed three menstrual periods." Upon request the lady herself came, with such a history of her condition as rendered a diagnosis of pregnancy almost certain. When informed of the fact that she was probably pregnant, the lady said it was impossible, as no sexual intercourse had taken place, and was indignant at the suggestion, saying "she had never had an intercourse, and the idea of pregnancy was absurd," and left the office with the gentleman. He returned the next day and gave the following particulars: "Some three and a half months before he had

attempted to introduce the penis in the vagina. It was impossible to do so on account of pain given to the lady, but soon an emission of semen occurred on the vulva. Soon after they left his office without making any toilet, the semen being allowed to remain on the vulva over night. This only occurred once between them, and the next menses did not appear, as also the second and third, which was attributed to a cold. She, becoming anxious, asked him to consult a physician and get a recipe."

The lady was asked to come to the office, and was persuaded to have an examination made, to confirm my diagnosis. When examined the vulva presented a virgin condition, a thin hymen present, and the vaginal orifice so small as to hardly admit the small finger. In so doing the hymen was ruptured. As there was no vaginismus present, the disparity of the sizes of penis and vaginal orifice gave conclusive evidence that no penetration had occurred. By using a solution of 8 per cent. cocaine the uterus was found enlarged; gave Hagar's test, and ballottement; the presence of enlarged nipples, morning sickness, anorexia, with the above uterine conditions, gave the proof of pregnancy. She was examined by another physician, who did not think she was pregnant. Two months more she was fully convinced of her condition, and early in August was delivered of an eight-pound child.

The case proves to us the vitality and migratory power of the spermatoza, under adverse circumstances, when the vaginal secretions are favorable, even though the semen was deposited but once upon the vulva.—*Cincinnati Lancet-Clinic.*

Book Reviews and Notices.

A Manual of Venereal Diseases: Being an Epitome of the Most Improved Treatment. By Everett M. Culver, A. M., M. D., Pathologist and Assistant Surgeon Manhattan Hospital, of New York City; Member of the American Association of Andrology and Syphilology, and late of the Department of Venereal Diseases of the Vanderbilt Clinic; and James R. Hayden, M. D., Chief of Clinic Venereal Department of Vanderbilt Clinic, College of Physicians and Surgeons, New York. With illustrations. Philadelphia: Lea Brothers & Co., 1891.

As far as it goes, this book is interesting and readable. It is not a "Manual of Venereal Diseases," however, but consists of monographs upon syphilis, chancroid and gonorrhœa. The subjects of syphilis and chancroid are well presented, but contain nothing new. The article upon gonorrhœa is the best, and shows some original study and research on the part of the author, Dr. Culver; but is unfinished, treating in full of stricture of the urethra, but ignoring such important complications as epididymitis, prostatitis, etc.

The illustrations are good, but, taken as a whole, the work is incomplete, even for an epitome. H. W. B.

Massage and the Original Swedes' Movements: their Application to the Various Diseases of the Body. By Kurre W. Ostrom. Second edition, enlarged, with 87 illustrations. Philadelphia: P. Blakiston, Son & Co., 1891. [New Orleans: Hawkins & Co., 194 Canal street. $1.]

A, B, C of the Swedish System of Educational Gymnastics. A Practical Hand-Book for School Teachers and the Home. By Hartvig Nissen. With 77 illustrations. Philadelphia and London: F. A. Davis, 1891.

These two little books give clear and concise instructions in an art that has proven itself to be a valuable auxiliary in the treatment of chronic diseases, especially those attended with marked tropical changes.

Mr. Ostrom's work, while not as profound or exhaustive as that of Douglas Graham, is, notwithstanding, a very good guide in the practical application of massage. His work abounds in sensible expressions, one of which reads as follows: "Massage treatment is an art which can not be self-acquired, but must be taught by an experienced instructor." Massage has been raised to a high plane; and text books, while they are serviceable, can not entirely supplant personal and practical instruction. Fifty pages of Ostrom's work are devoted to Swedish movements. These movements, which are first cousin to massage, are well described and fully illustrated.

Mr. Nissen's work confines itself to the method that may be employed in teaching movements (Swedish gymnastics) to classes or individuals. It is intended for teachers. It describes the method very minutely, and gives a "drill-manual" for all of the various movements. It is virtually a development of Ostrom's section on the same subject. A. McS.

State News and Medical Items.

[Communications from Physicians of Louisiana are solicited for this Department. News of personal interest is especially desired.]

THE CHARITY HOSPITAL.

REGULAR MONTHLY MEETING OF THE BOARD OF ADMINISTRATORS.

The Board of Administrators of the Charity Hospital held their regular monthly meeting on December 7, 1891, at the office of the secretary and treasurer. Dr. C. J. Bickham, vice-president, was in the chair. Those present were: Dr. J. H. Wiendahl, Colonel W. G. Vincent, Messrs. G. W. Sentell, J. H. Keller, Hugh McManus, Leon Joubert and George Seeman, Edwin Marks, secretary and treasurer, and Dr. A. B. Miles, house surgeon.

The minutes of the previous meeting were read and approved.

The following report of the finance committee was read:

RECEIPTS.

From payment accounts State warrants, fourth quarter year 1891	$10,000 00
From ordinary sources	2,431 46
	$12,431 46
Cash balance Dec. 1, 1891	31,926 74
	$44,358 20

DISBURSEMENT.

Transfer to Clinic building fund	$6,000 00
Ordinary expenses, including bills for Dec. 1891	14,172 65
	$20,172 65
Cash balance Dec. 31, 1891	$24,185 55

The following report, submitted by Clerk J. C. DeMahy, was read and approved:

Financial report for December, 1891.

Amount received from pay patients.....	$388 00	
Amount returned to pay patients.....	58 00—	$330 00
Amount received from gate fees.....		386 30
Amount received from burial cerificates..	17 50	
Amount received from legal certificates..	1 00—	18 50
Amount paid over to Sister Agnes.....		$734 80

There are at present 12 pay patients in Ward 14. Number of patients remaining in hospital January 1, 1892, 686; males, 473; females, 213.

The report of ambulance services was as follows: Number of calls—Surgical 57, medical 6, dressed 23, conveyed home 5, obstetrical 2, died 6, false 3, not needed 17, transfer calls 7, total 129. Average time 42 minutes, three pay calls $30, paid.

Dr. A. B. Miles, house surgeon, reported that during the past month the capacity of the hospital had been more heavily taxed than any other portion of the year; that in comparison with the number of patients cared for during the same period last year, the month of December showed a large increase, with a lower death rate. He also reported that Mr. John Johnson, the chemist, who had been ill and out of the city for several days, had recovered and returned to duty.

Dr. Miles, in reference to the proposed appointment of a registrar, suggested that the matter be taken up and acted upon at once.

Colonel Vincent said that he thought that such a registrar should be appointed by the president of the board, after a competitive examination. It was urged that the person best qualified for the position could be picked out by the president personally. The matter was laid over for final discussion at next meeting.

Colonel W. G. Vincent, chairman of the house committee, reported that everything about the institution was working satisfactorily, and that the furnishing of meats, bread and other supplies for the institution was giving satisfaction. He further reported that the work of erecting the new clinic building was progressing rapidly toward completion, and stated that there was 16,000 feet of piping in the new buildings.

Colonel Vincent suggested that when the new clinic buildings are completed and ready for occupancy, that they be formally opened, and that the governor of the State, the mayor of this city, and the State and city officials be invited to be present, and that the buildings be formally presented to the State through the governor.

Other members stated that they fully coincided with Colonel Vincent. The matter was finally referred to the house committee.

Chief Engineer Ponder submitted a report of the work being done on the new buildings, which was read and approved.—*Picayune.*

EYE, EAR, AND NOSE HOSPITAL.

THE BOARD OF DIRECTORS OF THE HOSPITAL MEET.

The regular monthly meeting of the board of directors was held on January 6, 1892, President W. B. Schmidt in the chair, and Colonel W. G. Vincent, Messrs. S. D. Kennedy, Charles Hall and Dr. A. W. De Roaldes, five members and a quorum present.

Dr. De Roaldes informed the committee that owing to a severe attack of la grippe, Secretary Joseph A. Hincks could not attend the meeting, and he therefore suggested that the clerk, Mr. L. R. Jacquet, take down the minutes. The suggestion was approved, and Mr. Jacquet acted as secretary.

The report of the secretary was read, showing that during the month of December, 1891, there were admissions 334, consultations 2418, operations 46.

The report of the treasurer was read and ordered filed.

Through Secretary Joseph A. Hincks the generous donation of $500 received from Mrs. Charles E. Schmidt, was acknowledged.

On motion of Dr. DeRoaldes Mrs. Schmidt was elected a life member, and her name ordered engraved on the tablet containing the role of honor.

On motion of Mr. Hall, seconded by Colonel Vincent, it was ordered that a copy of the monthly report of admissions during December, 1891, be forwarded to the Mayor and City Council.

The surgeons in charge presented their report for December, 1891, of the orthological department submitted by Drs. McShane and Pothier, which was read and ordered filed.

Upon the recommendation of Dr. Kennedy, in commendation of the services of Dr. E. Jowers in the eye department, recommending his appointment as assistant surgeon in that department, and on motion of Colonel Vincent, seconded by Mr. Hall, Dr. Jowers was elected assistant surgeon. Dr. Behrend was re-elected clinical assistant in the eye department.

Dr. De Roaldes stated that in recompense of the valuable services rendered by Drs. A. McShane and C. J. Landfried, that he would suggest that the former be appointed first assistant surgeon and pathologist, and the latter second assistant surgeon in the Ear, Nose and Throat department.

On motion the suggestion was adopted.

The following doctors were appointed clinic assistants in the Ear, Nose and Throat department: Drs. J. M. Elliot, Edgar S. De Poincy, Philip Berge, A. P. Boston, and A. L. Pothier, assistant pathologist.

On the recommendation of Dr. De Roaldes, Dr. S. B. Jenkins was appointed resident house surgeon for the ensuing term.

On motion of Colonel Vincent, duly seconded, the following special committee was appointed, to report as soon as possible, relative to the lots, lands, etc., for the construction of a hospital building: President, W. B. Schmidt, *ex-officio* chairman; Colonel W. G. Vincent, Dr. A. W. DeRoaldes, Messrs. Charles K. Hall, James E. Hayden and Joseph A. Hincks.

Dr. DeRoaldes, on behalf of the Committee on Entertainment, reported progress and informed the Board that, owing to the illness of some of the artists, "The Huguenots," as announced, could not be given as a whole, but, instead, the following mixed programme would be given: Fourth act of "The Huguenots"; fourth and fifth acts of "L'Africaine"; the charming operetta of Offenbach, "Monsieur Chouflieut Vrestera Chez Lui."

The meeting then adjourned.

Dr. Robert C. Myles of New York, was in New Orleans last month on a flying visit.

Dr. Mouton is a new subscriber and a good man.

Dr. J. C. Christian's mineral well is creating a stir in Arcadia, and parties are already projecting the erection of a big hotel and the development of a flourishing health resort.

Dr. Wm. H. Long.—Late advices give the details of the death of Dr. Wm. H. Long, ranking surgeon in the U. S. Marine Hospital corps, at the time of his demise on duty at the magnificent hospital at Cincinnati. He was admitted to the corps, in which he obtained prominence, in 1873, as assistant surgeon, and stationed at Louisville, Ky., from that time to 1884.

Transferred to Detroit, where he remained until 1888, and where in addition to his duties he was created Professor of Military Surgery of the Detroit Medical College. Transferred from thence to Cincinnati, in 1888, he was in charge of the hospital until his demise. In August last he lost his wife, and never rallying from the shock he died January 5.

Among other honors which he attained was as a delegate to the Medical Convention of the Mississippi Valley, wherein he took a leading part. By his death, Dr. H. R. Carter, well known in New Orleans by virtue of his being connected with the service in this city, from 1885 to 1889, and at the Gulf Quarantine, as Passed Assistant Surgeon, attains the rank of full Surgeon.

The death of Dr. Long is deplored, as he was a physician of more than ordinary ability, and one of the representative officers of the U. S. Marine Hospital Service.—*Item, Jan. 11, '92.*

Dr. and Mrs. Roger de Montluzin visited Baton Rouge last week and were the guests of Mrs. Brook. Who is he?—*La. Review.*

Dr. Wm. B. Taylor, an old and honored Morehouse citizen, is dead.

Dr. R. L. Armstrong, Jr., and wife, celebrated their "tin wedding" on January 26, at their home, in Pleasant Hill, La.

The appointment of Dr. Walter Wyman to be Surgeon General of the marine service was made in the face of extraordinary pressure brought by Secretary Foster in behalf of Dr. J. B. Hamilton, who wanted his old place back. It will be remembered that Dr. Hamilton resigned to accept the professorship of the Rush Medical College of Chicago.—*Picayune.*

MARRIED.

On January 5, 1892, Dr. Jas. B. Bonney, of East Carroll, to Miss Jessie Yerger, daughter of Dr. Yerger, of Madison parish.

On January 20, 1892, Dr. Franklin J. Mouton to Miss Anita Horst, both of Lafayette, La.

On January —, 1892, Dr. Geo. H. Lee, of Galveston, Texas, to Miss Townsend, of New Orleans, La.

At Flora, Miss., December 17, 1891, Dr. Chas. J. Hester to Miss Octavia Childress.

DIED.

Dr. John Calderwood, at Monroe, La., on January 21, 1892. The announcement of the death of John Calderwood will be received with universal regret throughout this section. He died Thursday night, at Langfelder's restaurant, of pneumonia, aged 49 years.

Dr. Calderwood was one of the best known and most eminent physicians in this section of the State. He studied medicine under his uncle, Dr. John Calderwood, for whom he was named, and who ranked at the head of his profession in ante bellum days, inheriting, as it were, his mastery of medicine. He early acquired a large practice, maintaining it up to a few years ago, when he retired from active practice on account of ill health, with a competency.

Dr. Calderwood married, about seventeen years ago, Miss Jane O'Kelly, a sister of Messrs. Tom and William O'Kelly, who preceded him to the grave. Miss Mary Calderwood, now 15 years of age and at school in New Orleans, was the only issue of the marriage. He also leaves two sisters, Mrs. Harris, of Alexandria, and Mrs. Hanson, of Donaldsonville. They have been telegraphed to and are expected to-day. The funeral will take place to-morrow.—*Exchange.*

Dr. Robert Layton, at Monroe, La., on January—, 1892. Dr. Layton graduated from the Medical Department of Tulane University of Louisiana, in the spring of 188 . He was for two years a resident student of the Charity Hospital. He fulfilled all expectations based upon his industry, intellect and personal character, and his demise in early life deprives Louisiana of one of her most promising sons.

Chicago Philanthropist Dead.—Dr. A. W. Morris, a prominent Chicago physician, was stricken with apoplexy and died immediately on Dec. 26, 1891. Dr. Morris was noted for his many acts of charity. He was born in Jackson, Miss., April 30, 1847, and had lived in Chicago since 1882. He leaves a widow.

Dr. A. B. Hewson, of Orange, Texas, died December 12. The deceased was well and favorably known throughout southwest Louisiana, he having regularly visited merchants of that territory for the past twenty years in a business capacity. The Medical Journal joins the many friends of the deceased in extending condolence to his bereaved widow, children and relatives.

Dr. Henry Frazer Campbell, one of the leading physicians of his day, died *here* on Tuesday, after a long illness, aged 67 years. He was the discoverer of the over-excito motory system, although Drs. Marshall, Hall and Claude Benten, of London, at first disputed Dr. Campbell's claim of this discovery, but finally admitted Dr. Campbell made the discovery two years previous to them. Dr. Campbell was honorary fellow of the Imperial Academy of Medicine, at St. Petersburg, Russia; a member of the American and Southern Gynecological Society, and in 1885 was honored and held the office of president of the American Medical Association.

Dr. A. W. Morris, formerly of Jackson, Miss., died in Chicago, of apoplexy, on December 23, 1891.

Our Sympathies are With You, Sir.—For the past two years the editor of the *Memphis Medical Monthly*, Dr. F. L. Sim, has suffered with a detachment of the retina and a choroiditis of the left eye. Occasional exacerbations of the disease have caused him much suffering and his friends much anxiety. After a long but unsuccessful struggle to retain the eye, if not the sight, he became convinced of the necessity for its removal. This was done during the present week, and at the time of going to press Prof. Sinclair states that he is doing extremely well.

As the other eye is good and his general health is perfect, we have every reason to hope that his wide sphere of usefulness will not in the least be curtailed, and that he will live for many years, as he has lived for many past, the champion of what is good and progressive in his profession.

The Austrian Government has promulgated a law regarding the practice of the various specialties in medicine and

surgery. According to this, no physician can style himself a specialist in any branch of medicine unless he furnishes proof that he has devoted special study to the disease he professes to treat. This rigorous action appears to be justified by the fact of the existence of so many specialists of all kinds, who are only such in name, so far as a large majority is concerned.—*Ex.*

Medical Education.—The time a medical student has to spend in college is: Austria, five years before obtaining his degree; Belgium requires eight, Canada four, Denmark seven, England four, France four, Holland eight, Hungary five, Italy eight, Norway eight, Portugal five, Russia five, Spain two, Sweden ten, Switzerland eight, and the United States three or four.—*Med. Examiner.*

Dr. W. E. B. Davis, recently of Birmingham, Ala., has become associated with Dr. J. B. S. Holmes, at the Sanitarium of the latter. Dr. Davis is president of the Tri-State Medical Society of Alabama, Georgia and Tennessee; secretary of the Southern Surgical and Gynecological Society; vice-president of the American Medical Association; member of the Birmingham Board of Medical Examiners; surgeon of the Birmingham Hospital of United Charities, and is one of the brightest, most prominent and most promising surgeons in the South. He has already made considerable fame for himself in gynecological and abdominal surgery.

Alvarenga Prize of the College of Physicians, of Philadelphia.—The College of Physicians, of Philadelphia, announces that the next award of the Alvarenga prize, being the income for one year of the bequest of the late Señor Alvarenga, and amounting to about $180, will be made on July 14, 1892. Essays intended for competition may be upon any subject in medicine, and must be received by the Secretary of the college on or before May 1, 1892. It is a condition of competition that the successful essay, or a copy of it, shall remain in possession of the college.

Charles W. Dulles, *Secretary.*

MORTUARY REPORT OF NEW ORLEANS.

FOR DECEMBER, 1891.

CAUSE.	*White*	*Colored*	*Male*	*Female*	*Adults*	*Children.*	*Total*
Fever, Yellow							
" Malarial (unclassified)							
" Intermittent		1	1			1	1
" Remittent	2	3	1	4	4	1	5
" Congestive	3		1	2	2	1	3
" Typho-Malarial	4	2	3	3	4	2	6
" Typhoid or Enteric	9	4	11	2	9	4	13
" Puerperal	2	1		3	3		3
Scarlatina	1			1		1	1
Small-pox							
Measles							
Diphtheria	4		1	3	1	3	4
Whooping Cough							
Meningitis	8	4	4	8	2	10	12
Pneumonia	23	29	30	22	30	22	52
Bronchitis	15	11	11	15	8	18	26
Consumption	47	27	42	32	73	1	74
Cancer	8	3	4	7	11		11
Congestion of Brain	6	3	5	4	5	4	9
Bright's Disease (Nephritis)	18	19	15	12	27		27
Diarrhœa (Enteritis)	23	11	22	12	24	10	34
Cholera Infantum		1	1			1	1
Dysentery	12	3	12	3	15		15
Debility, General	1	6	3	4	6	1	7
" Senile	26	18	19	25	44		44
" Infantile	3	10	4	9		13	13
All other causes	185	108	151	142	222	71	293
TOTAL	400	254	341	313	490	164	654

Still-born Children—White, 28; colored, 30; total, 58.

Population of City—White, 184,500; colored, 69,500; total, 254,000.

Death Rate per 1000 per annum for City—White, 26.02; colored, 43.86; total, 30.90.

F. W. PARHAM, M. D.,
Chief Sanitary Inspector.

METEOROLOGICAL SUMMARY—DECEMBER.

STATION—NEW ORLEANS.

Date.....	TEMPERATURE. Mean	Max...	Min...	Precipn. in inches and hundredths..
1	48	58	37	0
2	60	66	53	.04
3	67	74	60	.12
4	51	60	42	0
5	58	70	47	0
6	68	76	59	.01
7	46	50	42	.35
8	42	49	36	0
9	47	56	38	0
10	54	61	47	0
11	60	65	55	T
12	61	65	57	0
13	64	69	59	T
14	68	76	60	.09
15	60	62	58	2.84
16	54	56	53	.01
17	48	51	46	.11
18	50	56	44	.01
19	48	52	45	0
20	52	55	48	0
21	54	58	50	T
22	63	70	56	T
23	68	78	58	.09
24	56	64	49	0
25	62	74	51	0
26	50	53	47	.09
27	45	54	36	0
28	52	65	40	0
29	61	66	56	.17
30	53	62	44	0
31	62	71	53	0

SUMMARY.

Mean barometer, 30.20.
Highest barometer, 32.59, 8th.
Lowest barometer, 29.84, 3d.
Mean temperature, 56.
Highest temp., 78, 23d; lowest, 36, 8th and 27th
Greatest daily range of temperature, 25, 28th.
Least daily range of temperature, 3, 16th.

MEAN TEMPERATURE FOR THIS MONTH IN—

1871.....56.0	1876.....48.0	1881.....59.0	1886.....52.0
1872.....51.0	1877.....56.0	1882.....54.0	1887.....53.0
1873.....56.0	1878.....51.0	1883.....60.0	1888.....51.0
1874.....59.0	1879.....60.0	1884.....59.0	1889.....64.0
1875.....62.0	1880.....53.0	1885.....53.0	1890.....56.0
			1891.....56.0

Total excess in temp'ture during month, 20.
Total excess in temp'ture since Jan. 1, 266.
Prevailing direction of wind, N. E.
Total movement of wind, 7137 miles.
Extreme velocity of wind, direction, and date, 36 miles, from S. W., 3d.
Total precipitation, 3.93 inches.
Number of days on which .01 inch or more of precipitation fell, 12.

TOTAL PRECIPITATION (IN INCHES AND HUNDREDTHS) FOR THIS MONTH IN—

1871..... 1.46	1876..... 9.57	1881..... 6.62	1886..... 2.57
1872..... 5.25	1877..... 4.96	1882..... 4.27	1887..... 7.56
1873..... 1.79	1878..... 8.69	1883..... 3.47	1888..... 3.68
1874..... 3 27	1879..... 2.90	1884..... 8.01	1889..... 0.67
1875..... 5.15	1880..... 6.45	1885..... 4.38	1890..... 2.58
			1891..... 3.93

Total excess in precip'n during month, 0.81.
Total excess in precip'n since Jan. 1, 24.40.
Number of cloudless days, 4; partly cloudy days, 9; cloudy days, 18.
Dates of frost.
Mean maximum temperature, 63.
Mean minimum temperature, 49.

NOTE.—Barometer reduced to sea level. The T indicates trace of precipitation.

G. E. HUNT, *Local Forecast Official.*

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XIX. MARCH, 1892. No. 9.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the first day of the month preceding that in which they are expected to appear. A complimentary edition of twenty-five reprints of his article will be furnished each contributor should he so desire. Any number of reprints may be had at reasonable rates if a *written* order for the same accompany the paper.]

TREATMENT OF PELVIC SUPPURATION BY VAGINAL DEBRIDEMENT AND ANTISEPTIC DRAINAGE.*

By DR. FELIX FORMENTO, New Orleans, La.

Laparotomy was formerly the only known method of reaching tumors and suppurations of the uterus and its appendages, all those, in fact of the abdominal and pelvic cavities. This operation, one of the boasts of modern surgery, has become relatively easy and of little danger, thanks to improved operative procedures and to the systematic and thorough antiseptic treatment now adopted in every country.

This improved technique in the operation procedure, these greatly diminished dangers resulting from the use of antiseptics have been of immense benefit and advantage, beyond a doubt, but have they not had likewise, we must admit, in some respects, indirect deplorable consequences?

Abdominal surgery, once the exclusive domain of a select few, has now fallen in the province of general surgery, and is performed by the majority of surgeons. There are but few now-a-days that can not boast of their exploits in abdominal surgery, of having opened with more or less justification and success, a number of abdominal cavities. We hardly read a medical journal without finding some reports of cases of lap-

*Read before the Orleans Parish Medical Society, January 30, 1892.

arotomy for some cause or other. I am too great an admirer of the wonderful achievments of this operation—one of the triumphs of modern surgery—not to admit, with deep regret, that it has been discredited, in a measure, by the abuse made of it by the facility with which it has been performed, at least until recently.

Fortunately, this abuse has brought on an unavoidable salutary reaction.

Laparotomy was at one time performed without hesitation, not only for tumors and well-defined lesions of the uterus, ovaries and tubes, but also for all sorts of obscure, unexplainable female ailments; for the many forms of nervous affections, such as hysteria, melancholia, insanity, even for neuralgia and cephalalgia.

Uterine, or ovaric castration, was proposed and accepted by many nervous and timid women as a sure cure for all their complicated, multiform neuroses. How many women have been unsexed without any benefit to their real or imaginary evils! Such an exaggeration, such an unreasonable abuse of an operation which, in its proper limits, had accomplished, and accomplishes, so much good, was certain to bring on, as I have said, a reaction in the opposite direction. These *hardiesses chirurgicales* had gone too far. Unjustifiable operations had, in some cases, been attempted, and, strange to say, had sometimes been followed by success, as if to sanction the Latin saying: "*Audaces fortuna jurat.*" Could we not, some of us, justly address to ourselves, on this subject, a well-deserved reproach? But there is a limit to everything. Nowadays laparotomy is less frequently performed than a few years ago, and only in well-determined cases, and more conservative and safer methods have been substituted for former more brilliant but more dangerous procedures.

Of late vaginal hysterectomy has taken the place, in a majority of cases, of the abdominal operation, greatly to the benefit of the patient, experience having demonstrated the greater facility of, and above all, the smaller mortality resulting from said operation. We do not mean to say that vaginal hysterectomy should be preferred in all cases requiring ablation of the uterus and its appendages. There are distinct indica-

tions that should govern the operator in the choice of the method: such as the size of the tumor, its nature, complications, etc. In the majority of cases positive diagnosis can be made per vaginam, aided by bi-manual exploration, and, if necessary, by the uterine sound. In the majority of cases also a radical cure can be obtained by the vaginal route. Laparotomy should be reserved for large tumors. In the words of Jean, all tumors of the uterus and its annexes, the volume of which is over that of a fœtus head at turn, should be removed by laparotomy. Whatever may be the site, the consistency, the nature of a uterine tumor, and the difficulties attending the removal of the same, if its size is not above the volume indicated, we should give preference to the vaginal method, with or without previous incision of the os, for a more precise diagnosis in doubtful cases and the dissection of its peritoneal culs-de-sac.

But aside from the greater facility in the operative procedure, and the greatly diminished dangers resulting from vaginal hysterectomy, the vaginal route affords in many cases the means of curing the disease, whether of the uterus and its annexa or of the surrounding tissues, without removing the organs themselves—by deep incision in the uterine cavity, for instance—thereby relieving pent-up collections of blood or pus, by puncturing and draining purulent abscesses, originating from the ovaries, tubes, peri-uterine cellular tissue, or peritoneum. We are thereby enabled to open, scoop out, disinfect and drain all such collections. We are here led naturally to speak of the new method of treatment which forms the subject of this paper.

Long before the method of Prof. La Royenne, which consists in the free incision, or debridement, and antiseptic drainage in the purulent cavity per vaginam, had been systematically established and recognized by the profession, I had occasion, like many others, to use the vaginal route, to freely open abscesses and hematoceles and obtain a perfect cure by antiseptic drainage.

I remember distinctly the case of a Mrs. S———, the wife of a distinguished Spanish architect then living in this city. That was before the days of laparotomy. She was suffering

from a peri-uterine abscess, which was threatening her life. She presented symptoms of septicæmia, rigors, high fever, vomiting, pinched countenance, great prostration, etc. Called in consultation at this stage of the disease, I proposed to open the abscess per vaginam; fluctuation was very obscure, and the prospect of reaching the purulent collection not very encouraging.

The operation was accepted. We used such antiseptic precautions as we had at that time. The largest trocar of Dieulafoy's aspirator brought out a large quantity of greenish offensive purulent material. Using the canula as a guide, a wide incision was made in the cavity and a large drainage tube inserted and fixed to the os uteri by means of an elastic ligature; disinfectant injections were used and tonics and good nourishment administered. The patient made a perfect recovery within a short time.

Many years after I was delighted to read in the French medical journals of a most interesting memoir "On the Vaginal Debridement of Purulent Collections in the Pelvis," by Prof. La Royenne, of Lyons. At the Congress of French surgeons, which took place in 1889, this distinguished surgeon treated of the same subject in a masterly address. He laid down most conclusively the indications calling for and the rules governing this new operative procedure; he invented new instruments to facilitate it; he created, in fact, a new method of great value and justly deserves the honor of giving it his name.

He communicated to the French Congress of Surgeons a series of over fifty observations, taken in his service, at la Charité, of Lyons. These comprise every possible cause and form of purulent collections and hemotoceles, hydro-salpynx, pyo-salpynx, pelvic peritonitis, cellulitis, pelvic abscesses, etc.

The principal features of La Royenne's method are:

1. Direct penetration into the purulent cavity by means of a curved trocar and director (his trocar sound).

2. Incision or debridement by Simpson's metrotome which is introduced along the groove of the sound.

3. A special hemostatic method, by means of a sponge specially prepared and introduced into the foyer, in cases where the hemostatic forceps can not well be used.

The principle of the method consists in the debridement of the pelvic collection made in the posterior vaginal cul-de-sac, and thorough antiseptic drainage. This debridement, in a majority of cases, is sufficiently large to admit two or three fingers, far different in this aspect from a simple puncture or timid incision, or a natural fistulous opening, all of which are apt to be followed by septicæmia.

Ablation of the uterus, ovaries or tubes is only performed in exceptional cases.

It is sometimes performed as a secondary operation when the patient has not been cured by the primary milder method —debridement and drainage—which, in most cases, is sufficient.

We all know that during the performance of laparotomy it is not always possible—nor is it always necessary—to remove all adhesions or to enucleate completely the pelvic cyst. There are frequent cases of recovery in which a portion of the sac had been left behind.

Prof La Royenne performed three secondary subsequent removals of the uterus and its appendices out of a total number of more than fifty operations, the balance having recovered without such operative procedures.

He published four observations of subsequent pregnancies in patients, who had been treated for pelvic collection by debridement and drainage. He also reports the case of a pregnant woman suffering from an enormous salpingitis, who went to her full term after having been operated upon by his method.

Every variety of pelvic suppuration, except those of a tuberculous nature, have been successfully treated by La Royenne's method. He reports numerous cases of multiple and multilocular purulent cavities in which the recovery was perfect. Pyosalpynx of both tubes co-exists very often and can be operated upon, either in the same sitting or at different intervals.

All these facts show the fallacy and mistake of condemning fatally to castration every woman affected with pelvic purulent collection. A woman will more readily submit to an operation which will cure her, in the majority of cases, without unsexing her, she still retaining the hope, however faint, of a future conception.

Finally, the great and decisive superiority of La Royenne's method over any other lays in its comparative innocuousness and excessively small death rate. Dr. Edmund Blanc, in his thesis, gives twenty-seven observations of vaginal debridement with perfect recovery. At the Surgical Congress of 1889, seventy cases of the same operation were reported, with one single death. Since that time, sixty new cases have been published, without one single death.

The mortality can be put down at 2 per cent., including secondary and too long delayed operations.

In all cases of recent pyosalpinx, pelvic peritonitis, peri-uterine phlegmons, hæmatoceles, etc., operated on in the service of Prof. La Royenne, recovery has been invariably the rule. His method is applicable, we have said, to all cases of pelvic suppuration or collections of different nature. It should be performed in all cases in which bi-manual palpitation, and the touch per vaginam and per rectum, assisted by the uterine sound, reveal the presence of a collection of the size of an orange or more, reaching as far down as the posterior *cul-de-sac* level, so it can be reached by proper instruments. Fluctuation is often very obscure on account of the thickness of the purulent cavity walls. The sensation of a renitent inflammatory mass is generally sufficient.

In order to distinguish between a liquid collection and a fibroma or a deviated fundus uteri, the precise location of the uterus should be ascertained by bi-manual palpation, rectal and vaginal touch, and the uterine sound. An exploration by means of a small aspirating needle could also be made.

The operative procedures consist, (1) in puncturing the well limited collection by means of a special trocar in the posterior vaginal cul-de-sac, except in rare cases of abscesses pointing between the vagina and bladder; (2) in incising largely and transversally with a metrotome and keeping the cavity dilated and well chained until cicatrization. The means of controlling the hemorrhage, which is of rare occurrence, consists in a properly shaped, fine, elastic iodoformed sponge introduced into and compressing the incision in the cul de sac In order to facilitate the operation, Prof. La Royenne invented, as we have said. a special trocar groved sound.

The transversal debridement should be limited to eight or nine centimetres. The finger will be the best instrument to reach multiple cavities. The puncture of the rectum should be avoided by placing a finger in that organ and another in the vagina.

The following rules should be followed:

1. After complete anæsthesia and thorough disinfection, the patient lying on her back with her thighs strongly flexed, the purulent cavity should be once more well defined and the position of womb and rectum well made out.

2. An assistant presses down on the abdomen to cause bulging of the cavity on the vagina.

3. The operator plunges his trocar, properly directed, in the centre of the posterior cul de sac, immediately back of the os uteri.

4. The trocar, after penetrating the cavity, is withdrawn, and through the groove of the canula, held in situ, the metrotome is introduced into the abscess. The canula is withdrawn, the metrotome opened to the proper width, and withdrawn while opened, thus incising transversely the walls of the abcess and vagina.

A weak antiseptic solution is injected. A proper sponge, well iodoformed and tied with a thread, is introduced into the abscess and left protruding through the vaginal incision. This method, thus followed, is very simple and offers but little danger.

We will say in conclusion that Prof. La Royenne's method should be ranked among the best in the treatment of pelvic collections.

His operative procedure is complete, safe, and of easy execution. It immediately affords immense relief.

Its subsequent results, in patients seen from eighteen months to six years after the operation, have been most satisfactory, and the patient's condition improves more and more with time. Four women have become pregnant after the operation.

The good results of the operation have been verified in phlegmons, pelvi-peritonitis, hæmatoceles, tubal collections, in all kinds of pelvic collections. The secondary ablation of

the appendices remains as an ultimate resource, and of less gravity, in case of recurrence or persistency of the symptoms. The superiority of the method consists in its less danger, in its very low death rate.

The mortality in cases of pelvic suppuration treated by laparotomy is 10 per cent; when treated by vaginal debridement it is from 1 to 2 per cent.

A CASE OF EXTERNAL PERINEAL URETHROTOMY WITHOUT A GUIDE FOR THE RELIEF OF ASPERMATISM RESULT OF TRAUMATIC LACERATION OF URETHRA.

By Frank D. Smythe, M. D., Kosciusko, Miss.

Mr. W. W., æt. 36, native of Mississippi, residing in Texas for the past nine years; occupation, farming; family history, tubercular on father's side. Patient states, while riding a broncho several years ago was thrown out of the seat, lodging on the horn of the saddle, and clinging in this attitude while the frightened beast reared and pitched, until finally dashed to the ground. As soon as he landed, great pain was felt in the perineal region, testicles, and hypogastrium, associated with nausea, vomiting and blindness. On recovering from the shock incident to the injury, he experienced a sensation of a flux from the urethra, and on examination found blood flowing freely from urinary meatus.

From loss of blood and intense suffering, he was unable to rise, and there remained for more than an hour, when he was discovered and conveyed to his home some three miles distant, still losing blood and growing weaker. Medical aid was at once summoned, and relief obtained by the use of opiates. The hæmorrhage continued throughout the greater portion of the succeeding twenty-four hours. As his urine had not been voided, an attempt to catheterize him was made, which caused severe pain and a recurrence of bleeding. A second trial, under chloroform, was successful, and the bladder emptied. The catheter not being left in situ, extravasation was favored.

He was confined to his bed for seven weeks. As to the occurrences during this period he can give no accurate account

but states a notable diminution in size of stream had taken place, which continued to grow smaller until it passed drop by drop.

This, together with inability to ejaculate during copulation caused him to seek relief at my hands.

Condition of patient upon examination: Seemingly well kept, appetite and digestive powers good, no pulmonary or venereal taint, but wore an anxious expression peculiar to subjects with diseases of the procreative organs. His chief affliction being inability to properly perform the sexual act, as he was contemplating matrimony. Genital organs of normal size and healthy appearance, erections were perfect, and sexual intercourse accompanied by the usual pleasant sensations, but was completed without the emission of seminal fluid. After copulation, he experienced a feeling of fullness, together with a burning pain about the perineo-scrotal junction and found that by exerting pressure over this point, the contents could be forced out drop by drop. I may here mention that a feeling somewhat similar existed after micturition, and the remaining urine forced out by the same method.

From symptoms, I was satisfied that his trouble lay along the urethra, between the orifices of the ejaculatory ducts and bulbous portion. I at once began to explore the urethra by means of sounds, beginning with the No. 14 American, which passed with ease to the membranous urethra, where I met with a stricture, which forbade entrance; several smaller instruments were tried, but without success. As the parts were very irritable and bled easily, I postponed further procedure until the patient was anæsthetized, then I succeeded in passing a filiform bougie, with a spiral extremity, but could not manage to introduce a small railroad catheter, threaded on the filiform.

I made no further attempt, but awaited the return of consciousness, when I explained to him the necessity of a perineal section, to which he readily consented. On the following day, assisted by my associate, Dr. E. C. Coleman, Dr. M. Jones, of this city, and my student, Will Carnes, I performed external perineal urethrotomy without a guide beyond the bulb, the patient having previously been chloroformed and placed in the lithotomy position.

A section was made through the middle line, cutting upward and inward toward the point of the sound, being careful not to injure the bulb. Before reaching the membranous urethra I was confronted by dense bands of fibrous tissue, which I proceeded to divide. On introducing my index finger I detected a fluctuating mass, which I punctured, and allowed the contents to escape by the perineal opening, which was somewhat milky in appearance, and streaked with blood and broken down tissue. Having no microscope at hand, I could not subject it to further examination. The sac was carefully dissected away, being in size about that of an English walnut. This, together with the division of bands of cicatricial tissue (result of old laceration), completed the cutting of the operation. I resorted, while in position, to the passage of sounds. A No. 12 passed with comparative ease, and I continued to introduce them, increasing in size up to No. 18. I then put in a permanent catheter, No. 14, and proceeded to close the perineal opening, using silver sutures under the usual antiseptic precautions. Nothing unpleasant developed during the first week except a hard chill twelve hours after operation, with elevated temperature.

I put him on salol and quinine (aa gr. 3) every four hours, and no further trouble in this connection was noted. The sutures were removed on the seventh day and the whole line of incision had healed by first intention, with the exception of a small opening at the upper extremity. I then withdrew the catheter and directed the patient to pass his water, some of which passed through the sinus, and a good stream *via naturale*.

I reintroduced the catheter and set about closing the fistula, which seemed rather rebellious to treatment. After exhausting other measures, I introduced a deep silver suture and drew the edges of the opening together, throughout its entirety. On the fourth day the wire was removed and perfect union had taken place. I directed the patient to pass his water, and a full stream issued forth, with no unpleasant sensation, as had formerly existed. I advised him to use the soft catheter several weeks, so as to allow nature ample time to heal the urethral wall. I kept him under observation for a month after

the catheter was thrown aside. Before his departure he could retain his water, pass a full stream, and the remaining few drops, which annoyed him so much prior to operation, no longer existed.

Last, but not least, he has since sacrificed at the altar of Venus, and to his delight he found he need have no further apprehensions about the marital state, on the ground of inability to ejaculate. A letter from him, dated five months afterwards, states that he is gaining in weight and strength, and has never experienced the least inconvenience since his return home.

Correspondence.

Editor of the New Orleans Medical and Surgical Journal: Since its resurrection in 1878, the Louisiana State Medical Society has "like a wounded snake dragged its slow length along."

Scanning the pages of its transactions since that epoch, we find that each meeting has teemed with good intentions, resolutions and suggestions, for increasing its membership; but, alas, each and every one of these has gone to add another stone to a celebrated pavement, of which we all have heard.

The time has arrived in the history of the society when we should either make a systematic and exhaustive effort to place it on a solid foundation, or else consign it to oblivion, for with a nominal membership of two hundred on its rolls—the faces of not one-half of whom are seen at its annual convocation—it can not claim to be either the exponent or representative of the fifteen hundred medical men comprising the profession in the State.

The question now arises, how can we obtain "this consummation devoutly to be wished ?"

Two things are absolutely essential for its accomplishment:

1. Recruit the ranks of the society with the bulk of the profession in the State.

2. Engraft such alterations on its constitution as will guarantee at each meeting a representation of every parish in the State.

To increase the membership, I would suggest that at the meeting in April next, a resolution be offered and adopted, appointing a committee consisting of one member from each congressional district, whose functions would be, to have a thorough personal canvass made of the State in the interest of the society.

Being supplied with the proper data, let this committee compile a list containing those practitioners of each parish whose accession to the society would be desirable.

Then let them engage a competent canvasser, furnish him with proper credentials and said list, and instruct him to call on every doctor whose name is there recorded, and after laying before him the advantages to be derived from a strong State society, solicit his application for membership in the same.

The story of the past has proved conclusively that circulars have but little weight, and to really see what were the possibilities of a personal canvass, I made one of my parish (Iberville) during the past summer, and succeeded in obtaining the applications of most of my professional brethren for membership in the State society.

At my solicitation my classmates, Dr. Hanson, of Ascension, and Dr. Himel, of St. James, did likewise in their respective parishes, with equally happy results.

The committee can very easily obtain the funds requisite to defray the expenses of the canvass by private contribution.

In respect to the second essential, let us offer the following suggestion towards remodeling the constitution:

1. Let every member of the State society be a permanent fellow of the same; have the privilege of attending all meetings, participating in debate, reading and discussing papers, but not voting.

2. Clause 1. Let the physicians of each parish send one representative to each annual convention of the society, who shall represent his parish and cast its vote on all questions upon which a ballot may be required.

Clause 2. Said representative shall also act as treasurer for his parish, collect annual dues of his confreres, and remit them to the State society treasurer by the 1st of July each year.

Clause 3. Let the State society pay the mileage and per diem of each representative.

3. Let the New Orleans Medical and Surgical Journal be made the official journal of the society and forwarded at its expense, to each permanent fellow.

4. Let the office of secretary and treasurer be consolidated, said officer to be bonded, and receive a monthly honorarium sufficient to requite his time and trouble.

5. Let the funds of the society be procured by an annual tax of $6 on each permanent fellow, said amount to be paid the parish representative, and by him forwarded, to the State treasurer not later than the 1st of July each year.

The above contains the gist of the improvements I would suggest, and their addition will require but slight modifications of the existing constitution, necessitating only a corresponding change in the by-laws. If our canvasser can induce one-half of the physicians in the State to enter the society its future welfare becomes assured. With an annual income of $4200, it does not require an elaborate calculation to demonstrate its ability to discharge all obligations, and with the preceding system, I am convinced its meetings will always find each parish represented.

The idea of paying a representative to a scientific body may be repugnant to some of my confreres, but speaking ex-cathedra, being one myself, I contend it is the only method by which you can depend on the presence of the country physicians.

Under the present régime, he attends the sessions of the society at the sacrifice of his time and practice, besides the not inconsiderable item of actual cash expended; and the only equivalent received is hearing a number of papers read, which he knows full well he can peruse at his leisure in the next issue of the journals.

Again, the society sending the JOURNAL to all permanent fellows, would have a tendency to quicken their interest, and show they were receiving something for their annual tax. If this movement is tested and proves successful, the society will no longer be compelled "to crook the pregnant hinges of the knee" in unsuccessfully attempting to have medical legislation enacted; for, when its fiat is issued, and seconded by the demand of the united profession throughout the State, our legislative Solons will only be too glad to comply with its wishes.

Of course this plan admits of many improvements, being necessarily crude and imperfect, as it is still in its embryonic stage, but its proposal is dictated by a sincere desire for the progress of the society.

I, for one, am proud both of my profession and my State, and fain would see every physician of Louisiana, who is true to himself, and true to the traditions of his calling, enrolled beneath the banner of a State society, where all would meet on the lofty plane of striving for the common weal, and the common advancement of the profession.

W. GLENDOWER OWEN, M. D.

Whitecastle, La.

RUSH MEDICAL COLLEGE,
CHICAGO, Feb. 8, 1892.

Editor of the New Orleans Medical Journal: A concourse will be held at Rush Medical College, beginning Tuesday evening, March 1, for the purpose of filling the positions of lecturer on anatomy and on materia medica and therapeutics in the spring faculty.

The spring course begins March 31, directly after the close of the regular term, and continues two months, with a class of from 250 to 300 students, thus affording the lecturers an excellent opportunity to exercise their skill as teachers.

It is the policy of the college, so far as practicable, to fill vacancies in the regular faculty from the corps of spring instructors. Nine of the present members of the faculty have been selected in this way.

The concourse will consist of twenty-minute lectures by each of the applicants before the faculty students and local profession, upon subjects pertaining to their branches, which will be furnished by the professor of anatomy, and materia medica and therapeutics, a week before the contest.

E. FLETCHER INGALS,
Registrar.

Proceedings of Societies.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON ORTHOPÆDIC SURGERY.

Stated meeting January 15, 1892, Samuel Ketch, M. D., chairman.

THE DISAPPEARANCE OF LARGE PSOAS ABSCESSES.

Dr. Halsted Myers presented a case of Lumbar Pott's disease to illustrate the disappearance of very large psoas abscesses without material interference with the general health during the process.

In this case, which had a strong family tendency to tuberculosis, the abscess appeared early, had gradually increased in size, but after an attack of measles it had become much larger, so as to fill both iliac fossæ, and form pouches in both inguinal regions as large as a man's fist. At this time the liver

was slightly enlarged, but there never has been a trace of albumen in the urine. Eight months later, though still anæmic, the child felt well, had an excellent appetite, and the liver had regained its normal size. Absorption was rapidly progressing.

At present, the child has a temperature ranging between 98.4 deg. and 99.6 deg., and has a few enlarged cervical glands, but he plays hard all day, has a good appetite, and feels well. The abscesses have almost entirely disappeared, and recovery seems assured.

Dr. Newton M. Shaffer said that he had seen this case from time to time, and could testify to the large size of the abscesses. This case would certainly have been considered by some of their colleagues, a fit one for operative interference, notwithstanding that such an operation would necessarily have proved rather serious, on account of its extent. As usual, under proper mechanical treatment, the abscesses had disappeared.

Dr. V. P. Gibney said that in connection with this subject he desired to report an instructive case. About fifteen years ago a boy was brought from the West to the hospital with disease of the lumbar spine. The brace at that time in vogue at the hospital was applied, and the child did well for two or three years, when he experienced some pain in the left thigh, and a tumor appeared in the left iliac fossa. The speaker had advised the systematic use of hot water douches over the parts, and the result of this treatment was considered at the time to be quite brilliant. He had only just learned the sequel of this patient's history. Shortly after the disappearance of the abscess from the iliac fossa, and while still wearing the spinal support, an elongated tumor made its appearance in Scarpa's space, and then burrowed down until it nearly reached the inner condyle. There was then some redness and tenderness, so the hot douches were resumed, with the effect of causing an entire disappearance of the tumor. Nothing further occurred until several years afterward, when after a fall or strain of some kind, a large and tender tumor made its appearance very suddenly on the outer side of the thigh, at the junction of the middle and upper thirds. This was accompanied by pain and considerable constitutional disturbance, and a surgeon incised the abscess, removed some bone detritus, and irrigated the cavity. Since then, although the sinuses have been washed out daily with bichloride of mercury solution, and afterward with peroxide of hydrogen, and then dressed with sublimate gauze, they have been discharging pretty constantly, and there have been occasional symptoms of sepsis. The remnant of the sac can still be felt in the iliac fossa. The tumor which appeared on the outer side of the thigh was prob-

ably nothing more than the old abscess deflected by the concussion of the fall.

Dr. Gibney said that he had narrated this case, because it was one of those in which the abscess had disappeared, under what was considered to be good treatment, and yet he was not entirely satisfied with this treatment. He had seen many cases in which the abscess had disappeared in this way, and he was glad when this occurred, but sometimes he could not help feeling that it might be better if he could, under thorough antisepsis, remove this pus by a surgical operation, and to relieve the patient from this constant menace.

THE USE OF IODOFORM IN THE LOCAL TREATMENT OF STRUMOUS JOINT DISEASES.

This was the title of a paper by Dr. J. D. Bryant. In this paper the author used the terms "strumous disease," and "tuberculous disease" synonymously. For practical purposes, the products of tuberculous joint disease may be said to be located in the joint cavity and its lining membrane, and in the peri-articular tissue associated with this membrane. The rice and melon-seed bodies in these diseased joints are often infected with the tuberculous agents. In the present paper the author excluded from consideration disease of the integument and of the immediate sub-cutaneous tissues.

The preparations of iodoform which had been used by the author were 10 per cent. solutions with ether or glycerine. The ethereal solution was easily obtained in an aseptic condition, it flowed freely through needles of small calibre, and by its rapid diffusibility quickly deposited the iodoform upon the disease products. But this very property of rapid diffusibility made it objectionable on account of the liability of producing constitutional effects, and because of the irritation produced by the fluid, which made the injections extremely painful and often gave rise to circumscribed abscesses. A solution of iodoform in sterilized glycerine or oil had the advantage of not producing these unpleasant constitutional effects, and of not being painful when injected, but on account of its viscidity it was necessary to employ needles of large calibre. It was well to remember that all iodoform solutions are prone to undergo chemical decomposition, especially when nearly saturated, or when exposed to sunlight. Camphor has the property of increasing the solubility of iodoform in these fluids, so that a saturated solution of camphor in olive oil will dissolve 6 per cent. of iodoform.

No definite rule can be laid down as to the amount of iodoform which can be injected without danger of producing

constitutional effects, thus: One and a half grains have been known to give rise to these symptoms, while in other cases, no such result has followed the introduction of 150 grains. It is generally considered that thirty grains of iodoform may be injected, but the difference of action of the ethereal and the glycerine solution must be borne in mind.

The author then spoke of the different manifestations of iodoform poisoning, those cases being considered the most dangerous in which there was a rapid and compressible pulse, either with or without fever. Then the presence of iodoform in the human system is evidenced by a disagreable taste; the introduction of a silver piece into the mouth will immediately develop a garlic taste, which, according to Poncet, is characteristic of the presence of iodoform. Another test is the production of a canary-yellow color when calomel is mixed in the saliva.

The author related in detail the histories of two cases to illustrate the action of the iodoform in the treatment of joint diseases. In the first one, the patient, aged eighteen, was admitted to Bellevue Hospital on February 17, 1891, with a history of having suffered from disease of the knee joint for three years, during which time he had been treated in various ways without benefit. The synovial cavity was greatly distended with fluid, there was no special tenderness, and no increase in the temperature of the joint. There was much relaxation of the ligaments, and lateral motion on hyper-extension. Walking did not cause pain, but there was so much relaxation of the lateral ligaments, that locomotion was impracticable without confining the joint with a bandage or splint. On February 21 the joint was opened by a free incision, and its cavity thoroughly irrigated with a 1:2000 solution of bichloride of mercury. Numerous melon seed bodies were evacuated, and the wound then closed. The wound healed by primary union, and the joint was diminished in size, but the previously over-distended soft parts remained fleshy, and the relaxed ligament made the joint very insecure. On April 1 the joint was opened in two places, at the site of the former incision, and at the outer side of the quadriceps tendon so as to lead directly into the outer pouch of the upward prolongation of the synovial cavity.

After a thorough irrigation with 1:2000 solution of bichloride of mercury solution, and the complete removal of numerous "rice seed" bodies, the cavity was irrigated with a 10 per cent. ethereal solution of iodoform, and the wounds closed as before. Primary union occurred without reaction. A portion of the synovial membrane was removed at this operation, and was sent to Dr. Biggs, who reported that there was

no doubt about its being involved in the tubercular infection. From this time until May 1, the knee diminished in size, and increased in stability, yet the latter was not sufficient to render the joint secure. On May 9, a small quantity of fluid still remained in the joint, and as the patient was anxious to leave the hospital, two ounces of a 10 per cent. solution of iodoform in glycerine were injected directly into the joint cavity. There was no reaction, and after four or five days' rest in bed, the patient was allowed to go around the ward, and on June 16 he was discharged. There had been no pain, tenderness, or effusion for two weeks prior to his leaving the hospital. Should a similar case come under his observation, the author said that he would prefer to open the joint at once, in two places, clean out the cavity by irrigation and manipulation, and after perfect union had been secured, inject into the cavity two or three ounces of a 10 per cent. solution of iodoform in sterilized glycerine or oil.

In a second case, one of old knee joint disease, attended with considerable flexion of the leg and subluxation of the head of the tibia, occurring in a man twenty years of age, iodoform injections were begun, after other recognized methods of treatment had failed to produce any noteworthy local improvement. The case was under the care of Dr. Girdner of this city.

Eight drops of a 20 per cent. solution of iodoform in ether were injected at each of three separate points of greatest tenderness, into the deepest tissues, and perhaps some portion into the joint itself. Great pain was produced at the site of the injection, followed by numbness of the limb, and persistent nausea for twelve hours, and as the same symptoms followed a second injection, it was decided to substitute a 20 per cent. solution of iodoform in glycerine. This latter preparation caused less pain in the limb, and no systemic disturbance. The injections were repeated every two or three days. At the end of thirty days, the joint was free from pain and swelling, the doughy feeling was gone, there was voluntary motion, and considerable weight could be borne by the limb. His general condition also kept pace with the local improvement, and at the present time, the limb is nearly as strong as the other; there is considerable motion, so that the patient can walk on it without artificial aid. There can be no reasonable doubt of the tuberculous nature of the disease of the joint in this case, nor of the curative effects of iodoform.

DISCUSSION.

Dr. A. B. Judson had failed to see the necessity or desirability of using iodoform in joints which are under mechanical

treatment. In children thus affected, local medication may be ignored in favor of general treatment. He believed that the trouble is not so much a local fault as failure, for some reason or other, of the system to arrest the morbid action, and repair the damage already done, and the system, rather than the affected part, should receive most attention. Mechanical treatment is a local application, but its indirect action is of the utmost importance in relieving pain, permitting sleep, facilitating locomotion, and promoting general well-being. It prevents the injurious effects of habitual trauma, and provides for ultimate symmetry and ability. Beyond this roborant and reconstructive treatment, general medication is in order, reinforced by hygiene and an abundance of rich and wholesome food, in which cream and other forms of animal fat should be in excess. He believed the effects thus produced leave no room for the administration of anti-strumous injections.

Dr. Royal Whitman said that he was surprised to hear the previous speaker express doubt as to the influence of iodoform on tuberculous processes, for it was not a matter of opinion but of record. Bruns, Krause and other investigators had shown that the membrane of tuberculous abscesses ordinarily consists of four layers, (1) an outer layer of thick porous tissue, (2) a layer of spindle cells in a state of active proliferation, (3) actual tuberculous granulations, and (4) necrotic and degenerated tissue. The two inner layers contain the tubercle bacillus. Under the iodoform treatment, it was found that healthy granulations sprang from the spindle cell layer, the bacilli disappeared and the tuberculous granulations and inner layer were converted into a fluid, which might be absorbed or withdrawn with an aspirator. Arens, in a recently reported series of 255 cases of tuberculous disease of various joints, states that under the iodoform treatment 40 per cent. showed very marked improvement.

The most favorable cases were those of disease of the wrist and elbow. Trendelenburg had given up the use of the ethereal solution in his clinic, because of the pain produced. Instead, he uses a 20 per cent. solution of iodoform in oil, injecting about one teaspoonful at intervals of eight days. Krause uses a larger quantity—thirty to eighty cubic centimetres, injecting at intervals of three weeks. Bruns states that 80 per cent. of all abscesses may be made to disappear by the use of iodoform, and the specific action of this drug on the tubercle bacillus seems to be very generally recognized. Trendelenburg is now using oil and iodoform at a temperature of 100 deg. C., with the object of making a solution of the iodoform in the oil, and of securiug its deposition in a more finely divided state.

Dr. Samuel Lloyd said that he had seen very remarkable re-

sults in his clinic following the use of injections of iodoform emulsion, both in joint difficulties and in tubercular adenitis; in fact, in the latter class of cases they acted so satisfactorily that they had been used almost to the exclusion of operative measures. In some cases where tubercular deposits had been found in the lungs the change was very decided after the injections, especially when these were pushed up to the point of producing constitutional effects. In one or two cases where operative procedures had been undertaken, and, secondarily, injections had been used on a recurrence of the disease, the improvement was much more rapid than after the first operation, when iodoform was not employed. When using the iodoform injections in abscess cavities the results had not proved good until the cavity of the abscess had been washed with hot water, or with some antiseptic solution. It is advisable then to inject the emulsion up to the point of causing some distention. Dr. N. Senn had had a similar experience, and in his recently published article on this subject he says he uses weaker solutions of iodoform, but in larger quantities.

Dr. R. H. Sayre said that in using these injections he had felt the necessity of employing the iodoform in a more finely divided state, and, therefore, he thought it was an advantage to use the heated oil. He recalled two cases of suppurating ankle joint disease, one of which had been treated by injections of iodoform, and the other by injections of aristol. They had done equally well, and after about two months of treatment the evidences of inflammation had entirely disappeared, and there was no pain or tenderness about the ankle. A splint had been applied to take off the weight of the body. In a case of tubercular inflammation of the thumb, he had obtained a good result from the injection of a 10 per cent. solution of iodoform, and likewise in some abscesses.

Dr. H. L. Taylor said that he endorsed what Dr. Judson had said as to the value of mechanical treatment, and yet welcomed the method presented in the paper. His experience with iodoform in a few cases had convinced him that it had a specific action on the tubercular tissue. One of his most striking cases was that of a typically tubercular subject, a youth of seventeen years, who had been for some time under observation of Dr. DaCosta, for suspected pulmonary disease. He had been hobbling about without crutches, in spite of advice, for about one year after the development of symptoms of tarsal disease, before he came under the speaker's care. He was made to use crutches, and the foot was immobilized with an apparatus. After a certain time, on the advice of Dr. Abbe, injections of an ethereal solution of iodoform into the joint were begun.

He could honestly say that the entire appearance of the affected parts was changed after one injection, and the subsequent progress of the case to complete cure, although slow, was steady. He had also used the iodoform emulsion in sinuses about joints, and he believed that this treatment produced beneficial effects independently of its antiseptic action.

The chairman said that about two years ago, while visiting the clinics in Germany, he had seen a good deal of this treatment with the ethereal solution of iodoform, and he had been impressed with the great frequency of symptoms of iodoform poisoning, and with the general disregard of mechanical treatment shown by these surgeons. Still, he believed that in these iodoform injections we had a valuable adjunct to mechanical treatment, and one which had not been sufficiently tested by American orthopædic surgeons.

Dr. Bryant, in closing the discussion, said that he had not had the slightest idea of substituting the iodoform injections for mechanical treatment, but he had thought that it could not fail to be a valuable adjuvant to this treatment, on account of its well known influence upon the tubercle bacilli, and because the injections could be so easily made. In the case of knee-joint disease which he had described, where the rice and lemon-seed bodies were in such large numbers, he did not believe that mechanical treatment alone would have cured the case; in fact, the patient had had this treatment and had not been benefited by it.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

SOME NEW STUDIES OF THE OPIUM DISEASE.

By T. D. Crothers, M. D., Supt. Walnut Lodge Hospital, Hartford, Conn., Read January 27, 1892.

As a preface, I wish to express my emphatic dissent against the common use of the word *habit*, in describing the opium disease. The popular meaning conveyed by this term is some state or condition voluntarily acquired and retained with the certainty of being thrown off at any time at the will of the patient. This view assumes a knowledge of the physiology and psychology of the brain and its functions that is not yet attained. Hence the use of the word is incorrect, wrong, and contradicted by the facts in the clinical history of each case. It also conveys a false impression of the nature and origin of such cases, and is a word to which different meanings will always be given. No other word is more misleading and confusing, when applied to opium, alcohol, and other border-land neuroses.

Beyond all question, the toxic use of opium and its alkaloids is rapidly increasing. Only about 50 per cent. of opium and morphine manufactured is required by the legitimate demands of medicine and pharmacy. The enormous balance is consumed in some unknown way. Comparative estimates make the number of opium cases in this country over a hundred thousand. Whether this is correct or not, it is evident that the number is very great and largely concealed, and many of them are very hopeless and difficult to treat. The natural history of such cases indicates a steady, progressive degeneration, on to death. Recovery is rarely spontaneous and without the aid of applied science. Up to the present, all clinical studies have been confined to the symptoms and treatment, starting from some indefinite point after the opium addiction begins. The old superstition of a moral origin, and of some wilful, wicked impulse, is accepted as the first original cause. Writers, and even specialists, seldom go back into the early etiology, or inquire what conditions or forces led to the first use of opium. The object of this paper is to trace some recent facts which throw new light on this unknown stage of etiology.

From a careful clinical study and grouping of the history of a number of opium cases, it is evident that a large proportion have a distinct *neurotic diathesis*, or, more literally, have inherited from their parents some condition of brain and nerve defect which favors and predisposes to the development of neurotic diseases. A more careful study of these records shows that in some cases *opium diathesis* is present, or a special inherited tendency to use opium. Here are two conditions which influence and favor this disease. It is a well-known fact that a large proportion of all nerve and brain diseases appears in children of neurotic and defective parents. Such children have received some special tendency and predisposition favoring the growth of nerve diseases, springing into activity from the slightest causes.

The latency or activity of this diathesis will depend on certain conditions of life and surroundings, which in many cases can be traced. In some instances the diseases of parents reappear in the children, in others in allied diseases, and not infrequently these defects pass over and reappear in the third generation. Often such defects are dormant, and only break out from the application of some peculiar exciting cause. Thus a hysteric mother and paranoic father were followed by three children. One was an alcoholic, the second was a wild, impulsive temperance reformer, the third was a sad, depressed, melancholic man. In the third generation opium and alcoholic inebriety, insanity, pauperism, also feebleness of mind and

body, appeared. These varied forms of nerve diseases all had a neurotic diathesis as a basis, and the different phases were the direct result of different exciting causes. These facts are numerous and well attested, and so uniform in their operation that it is entirely within the realm of possibility to predict that, from a knowledge of the diseases of the parents and the environment of the child, certain forms of degeneration and diseases will appear with almost astronomical precision.

This term, neurotic diathesis, covers a vast unknown field of causes which extend back many generations. The evolution of brain and nerve defects can often be traced through the realms of environment, nutrition, growth and development. Medical text books and teaching which fail to recognize this, give very narrow conceptions and strange exaggerations of the influence and force of many insignificant and secondary factors in the production of disease. The opium-taker has often this neurotic element in his history. It may be traced back to his ancestors, or it may be associated with brain or nerve injuries, cell-starvation, faulty nutrition, auto-intoxications, brain strains or excessive drains of nerve force. A train of predisposing causes may have been gathering for an indefinite time back. Then comes the match which kindles or fires the train of *gathering forces*. This same train of exciting causes may not explode, because the germ soil is absent. Opium in all forms is given daily, and yet only a comparatively small number of cases become addicted to its use. Why should an increased number of persons take opium continuously for the transient relief it gives? Why should the effects of this drug become so pleasing as to demand its increased use, irrespective of all consequences? The only explanation is the presence of a neurotic diathesis, either inherited or acquired. The existence of a special opium diathesis has been doubted with supercilious contempt by many writers. Any clinical study of cases will show the error of such doubt. The notes of a few cases which have recently come under observation are illustrations by no means uncommon, and indicate the concealed factors of disease in many instances.

In Case 1, the mother was a secret morphine-taker, the father was a hypochondriac and melancholy clergyman. Two children followed, who were highly educated and healthy. One, a boy, became a physician, and at thirty suddenly began to use morphine, and soon became a chronic case. The other, a girl, was well up to her marriage at twenty-four, when she began to use opium, for no apparent reason.

Case 2, reported by the late Dr. Parrish. Both parents used opium for sleep and neuralgia, and died leaving three children

under five years of age. They were brought up in temperate families, and had no knowledge of the opium addiction of their parents. One, at twenty, continued the use of morphine after it had been given for some intestinal trouble. The second child suffered from dysmenorrhœa and began to take morphine for this trouble, and became a morphine maniac. The third child was a druggist, who at thirty was a confirmed opium taker

Case 3. Both parents were neurotic, and probably opium-takers. Both died, leaving an infant child which was excessively irritable and peevish. By accident, morphine was used as a remedy, and from thenceforth the child would become delirious unless morphine was given daily. All efforts to break up its use failed, and for five years increasing doses were used constantly until the child's death.

In case 4, five children of unknown parentage were all opium-takers; all lived in different conditions and had different occupations. Two began the use of opium from some bowel trouble. Two have been under treatment, and relapsed.

The relief which this drug brings on all occasions, and its impulsive use, are unmistakable indications of a distinct opium diathesis. I believe a careful clinical study will reveal many such instances.

There is a large class of opium cases in which a complex diathesis exists—particularly following inebriety and various forms of brain exhaustion. Often alcoholics will use opium irregularly and transmit to their descendants a diathesis which very commonly favors the use of this drug. Thus the alcohol diathesis frequently becomes the opium craze, with but slight exposure. Both of these disorders are rapidly interchangeable. The children of opium-takers may turn to alcohol for relief, and *vice versa*. It is clear that the moderate use of alcohol produces a degree of degeneration that frequently appears in the next generation as predisposing causes to the opium or allied diseases. Clinical study of cases brings ample confirmation of this. The children of both alcohol and opium inebriates display many forms of brain degeneration. The paranoics, criminals, prostitutes, paupers, and the army of defectives, all build up a diathesis and favoring soil for the opium craze. Descendants from such parents will always be markedly defective. They are noted by brain and nerve instability, hyperæsthesia, and tendency to exhaustion; also extreme pain from every degree of functional disturbance, with low powers of restoration, inability to bear pain, and suffering from mental changeability, impulsiveness and drug credulity, etc.

These characteristics are prominent, and mark a neurosis

that quickly merges into the opium disease. Yet a minority of these cases show a sensitiveness in the effects of opium that prevents them from using it. I have seen a neurotic patient become dangerously narcotized by the use of half a grain of solid opium. Some of the alcoholics and other narcomaniacs have exhibited an incompatibility to opium that is often startling. The emesis and prostration, and the brain-stimulation which approaches and becomes hyperæmia from one or more doses, are familiar to all. This intolerance precludes the use of the drug, and is recognized with alarm by the patient. On the other hand, when the effects are rapid and marked, relieving pain or restoring the disturbances of the functions with no other than a pleasing sense of rest and cure, a dangerous diathesis should be suspected. While the physician recognizes the constitutional incompatibility in one case, he ought not to overlook the abnormal attractiveness of the drug in the other. The dose of morphine which gives the first complete rest, or calms the delirious excitement, or relieves the neuralgic pain, or the digestive disturbance, soon calls for its repetition, and many physicians will unconsciously sanction and advise its use. Thus, far more fatal conditions are cultivated and roused into activity. In all neurotic cases, the use of opium in any form when given, should be concealed and watched with care. If a special predilection for this drug appears, equal care and skill should be exercised to divert and change it. Opium should only be used from a knowledge of the nature and character of the case. I have seen the most disastrous results from the reckless use of morphine with the needle. Recently, a man to whom morphine was intolerant, was cut and stunned by a falling plank in the street. The surgeon gave him a hypodermic of morphine and ordered him to the hospital. He died in a short time from opium neuroses. Police surgeons often make this mistake, giving morphine that from some unknown reason becomes fatal.

There is another class of opium-takers in which abnormal nutrition seems to be the most active factor in the causation. The neurotic or opium diathesis is not apparently present, and opium-taking dates from some nutrient disturbance. Such cases are very commonly sufferers from dyspepsia, derangement of the liver and bowels. They have a deranged appetite, headaches, cramps, thirst, and fever at times, with nausea. They are anæmic and hyperæsthetic, and complain of varied pains and neuralgias. These cases are evidently ill nourished, and, in all probability, suffer from imperfect digestion, assimilation, and elimination of food products and waste material. Poisonous compounds and auto-intoxications form sources of

serious trouble. The brain suffers from fatigue and pain, the cells are imperfectly nourished, and congestions, complex neuralgias, nerve irritation and instability follow. For this condition opium is almost a specific paralyzant.

These cases are found among the over-fed, the under-fed, and those who neglect common hygienic rules of living. Cases of the over-fed are usually epicures, gormands, and persons living sedentary lives, and eating at all times and places. Dyspepsia and derangement of the bowels and kidneys make them drug-takers, then follows opium in some form. Defective elimination and auto-intoxications are always present. The under-fed are usually misers or persons very poor and very neglectful of themselves, or paranoics who have some food delusion. They are practically suffering from cell and tissue starvation and nutrient debility. The same dyspepsia and bowel derangements follow. Then follows drug-taking or special foods, and soon opium is discovered and adopted as a remedy. The same poisonous waste-products appear from deranged assimilation; also, elimination and the nerve centres are deranged by these new and dangerous chemical compounds. The class of persons who, from simple neglect, become diseased, are often the very poor and ignorant, or some division of the great army of border-liners, who live both mentally and physically on the very frontiers of sanity and insanity. Such persons clearly suffer from many and various forms of auto-intoxications, and this is proven inductively by the result of eliminative treatment. In all of these cases of nutrient neglect, many favoring conditions encourage the use of opium. These cases are numerous and comprise a large part of the invalids, hypochondriacs and chronic drug-takers, who are seen in our offices and at the dispensaries. They are all practically suffering from faulty assimilations, and faulty eliminations, and the irritation of retained poisonous compounds. Opium is a remedy of positive force in covering up the protests of the defective cells and irritable nerves. Often these cases are concealed and are partly the result of previous disorder, and partially acquired from the effects of opium.

Next to this class of nutrient sufferers, who become opium-takers, are those who have some entailment of disease or injury. In their history it will appear that some stage of invalidism was present, dating from brain nerve, or bodily injury. Fevers, heat, or sun-strokes, brain shocks from any source which are followed by unconsciousness, or marked mental perturbations, with exhaustion, and also a profound lowering of all the vital forces. These and other events have left damaged functional and organic activities, manifest in various neuralgias and physical disturbances.

The use of opium conceals and covers up this trouble. Many veterans of the late war have become opium maniacs for the relief of their pains and sufferings, and this is often concealed where it might possibly peril the procuring of a pension. The pension bureau should recognize the use of opium as a natural sequence and entailment following the disease and injury in the service. In Prussia both alcohol and opium inebriety are treated as diseases when occurring in the army or civil service. The suffering and hardships growing out of the war have been the exciting causes of a great many opium cases. Many persons who have no special nerve diathesis in their history, after some severe illness, injury, or mental strain, exhibit a degree of nerve instability and feebleness that is significant of serious organic change. Such persons manifest perversions of taste, with delusions of foods and medicines, and are on the border lines of narcomania, ready to use any food or drugs which will bring even transient relief. The use of opium is always perilous. Why all these and similar cases do not become opium-takers, is owing to the absence of some diathesis inherited or acquired.

We can see some of the many complex causes favoring brain and nerve strain, with rapid exhaustion and degeneration, and the interchangeability of nerve diseases, in which the use of opium is only another form of the same disease. But we can not yet trace the early causes and cell-conditions which develop the opium craze. This morbid impulse, like the delirious thirst for water on a desert plain, completely dominates all reason and so-called will-power, and every consideration of life and surroundings. It is more than an accident, more than a failure to reason and act wisely; it is a disease, an organized march of dissolution. The demand for opium is only a symptom; the removal of opium is not the cure. Some central brain-degeneration has begun and is going on. Narcomania, a morbid thirst for any solids or fluids that will produce neuroses, is the general name, and opium mania is only one member of this family.

In this study the fact is emphasized that the opium disease appears most frequently in persons who have a neurotic and opium diathesis, and also in persons who are suffering from nutrient disturbances, and those who are invalids or have some entailment of previous disease and injury; also that certain diseases and symptoms seem to furnish favoring soils for its growth and development. While these are but faint outlines of many unknown facts, they are urged as starting-points from which to base other and more accurate studies. The medical treatment from this point of view is very suggestive. Obviously

the removal of the opium is not the cure. The various methods of removal detailed with great exactness, as if they would apply to each case, are unfortunate reflections of the failure of the writers, and are based on the assumption that all cases are the same, and the removal of opium is the great essential in the treatment. Basing the treatment on the clinical study of the case, it will be evident that where an opium diathesis exists, the withdrawal of opium should be very gradual. The treatment and surroundings should be arranged with great care and exactness. Such persons should live in an institution for years, or be under constant medical care. The danger of relapse and the future of such cases will depend entirely on the conditions of life and surroundings. Rapid reduction and any heroic treatment is never permanent, even with the consent of the patient. Specifics, faith cures, or any measures that promise speedy cure, are failures from the beginning. The road back to approximate health is straight and narrow, and only along lines of applied science. Where the history of a *neurotic diathesis* is present, the withdrawal of the opium should be equally slow.

More attention must be paid to the brain and nerve nutrition. The removal of opium may be followed by the appearance of very serious disorders, such as epilepsy, hysteria, complex neuralgias and paranoics phases, alcoholism, and various other neuroses. The slow withdrawal of opium enables one to discover and anticipate these neurotic troubles which have been masked before. In one case, suicidal melancholy; in another, hyperæmia of the brain, with delusions; in the third, irritation and delirium; in the fourth, hysterical spasms appeared when the opium was removed. I have seen two cases of general paralysis suddenly spring into great activity after the opium was taken away. This condition was not suspected before. Alcoholism is a very common sequel after the removal of the opium. *Cocaine*, *chloral*, and almost every drug that has narcotic properties are also very common entailments. While these are extreme cases, they are likely to be formed at any time. Great care should be exercised in using other narcotics to lessen the irritation from the withdrawal of this drug. Foods and tonics should be given. These cases require the same general treatment as neurasthenia and other states of brain exhaustion. They are drug-takers, and will resort to anything for relief. They are secretive, and require more care and more mental remedies, with long, exact hygienic surroundings.

Where the opium addiction has apparently come from bad nutrition and faulty elimination, with auto-intoxication,

the treatment is very hopeful. A long preliminary course of baths, mineral waters, and tonics should precede the removal of opium. Then the opium may be removed at once, without the knowledge of the patient. In proper surroundings with frequent baths, little danger of relapse or suffering will follow. Careful study and treatment of nutrition and digestion will fully restore the case, and relapse seldom occurs except from failure or neglect of the surroundings.

In the last class, where opium is taken and apparently follows from the entailment of some injury or disease, or the exhaustion of old age, a preliminary period of treatment seems to be required. Often the opium can be abandoned at once for some milder narcotic, and from this, by gradations, discontinued entirely. Full knowledge of the diseased states present will always suggest the lines of treatment. In some cases the opium should not be removed; its diminution and concealment is required. In others, its rapid removal is essential. Many varied and difficult questions will appear in these cases. The more accurately the diseased states, also predisposing and exciting causes, the diathesis, and varied influences which have caused opium to be used, are studied, the more accurate the treatment. As in many other diseases, the causes may be anticipated, also neutralized and prevented. Opium-taking should be seen as a symptom; remove or break up the cause, and this symptom disappears.

Routine treatment, either by slow or rapid reduction of the opium, is not wise. The substitution of other narcotics is equally unwise. In a certain number of cases the withdrawal of opium only unmasks more serious diseases, and is positively wrong. A case of general paresis is now under treatment for the opium addiction. Before this opium addiction began, the patient caused great distress by his delusions and extravagantly strange conduct. This treatment is wrong. A rheumatic woman of seventy is going through the same course to be free from opium, which has made life tolerable for ten years past. The treatment of opium mania is something more than the application of means and remedies for withdrawal of the drug with least suffering. The symptomatology and organic lesions often date back to other causes more complex than opium. The treatment must begin by their removal. The general or special diathesis must be treated; the nutritive disorders, intoxications and starvations must be recognized and removed. The influence of pathological states from previous disease and injury must be ascertained and treated. The power of environment, climate, occupation and idiosyncrasies are also powerful factors to be considered.

These are the essential facts and conditions which must enter into the practical treatment. Among the many important problems, that of prevention promises the greatest possibilities. A recognition of the neurotic diathesis and other predisposing causes would enable the physician to successfully guard against its approach.

The successful *stamping* out of both this and the alcoholic disease will be a reality in the future.

It is evident that the opium disease is still an undiscovered country, and the few student experts have not yet passed beyond its frontiers. This disease is all about us, and may invade our homes and firesides at any time, and hence demands recognition and most careful study; above all, ethical and moral levels. Its laws of growth, development, treatment, and curability all follow the great highway of evolution and dissolution.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.

JANUARY MEETING.

The president, Dr. Wm. E. Moseley, in the chair.

Dr. T. A. Ashby, exhibited a specimen of a dermoid cyst which he had recently removed from a single woman, twenty-five years of age.

The cyst grew from the left ovary, and had been diagnosed as ovarian cyst. It measured 4½ by 5½ inches in its diameter. Its removal was accomplished without trouble and the patient made a prompt recovery.

The interest in the case centered in the character of the cyst and its contents. It was lined internally with dermal tissue, and at one point the layer covered a small piece of bone. At this point a long twist of hair grew from the skin and measured thirty inches in length. The cyst contained a large collection of sebaceous and oily matter, and large strands of hair disconnected from the tumor and matted together in the cyst.

The specimen is an uncommon variety of dermoid cyst. A similar case has been reported by Dr. Mundé, of New York. Dr. Ashby referred briefly to the origin of dermoid tumors.

They are no doubt due to an irregular development of the epiblastic layer of the tissues of the fœtus in embryonic life. The cysts are almost uniformly found in organs and tissues which owe their origin to the layer of the epiblast and this circumstance goes to explain the peculiar

features which they present. The ovary is a very common location for them and this fact would tend to prove that the organs of generation originate in the epiblast.

Dr. Wilmer Brinton read a paper on "Pregnancy Complicated by Placenta Previa Centralis."—I was summoned at 3:30 o'clock on the morning of September 1, 1891, to see Mrs. B. T. M. Her second confinement, from her reckoning, would take place October 15. I did not see her until sent for as stated, on the morning of September 1. Upon arriving at her home I found my patient in bed with the history of being awakened, some time before I was sent for, by having a few sharp pains, which were followed by a profuse hemorrhage. Upon examining Mrs. M. I found the vagina filled with large clots of blood, the os slightly dilated and very soft, and a placenta presenting. At this time, her pains having ceased, I cleaned out the clots from the vagina, and found the bleeding had stopped. I determined to return home, which I did, leaving orders for my patient to remain quiet, and to send for me at once if the pains or bleeding returned. I was informed before leaving the house that a week previous the patient had had a severe hemorrhage, and, knowing I was out of the city, Dr. W. J. Jones, who lives in the immediate vicinity, was sent for. He saw her twice, and under the treatment and advice which he gave her bleeding ceased.

At 6:30, or about three hours from the time I left the house, I was again sent for. I immediately responded; and I was soon joined, at my request, by my colleague, Dr. Crouch, and by Dr. J. H. Robinson.

A vaginal examination made at this time found the vagina filled with blood, which was continuing to flow. The os was more dilated and dilatable than it had been at my previous examination, and a more complete examination found the placenta presenting, which was of the most complete central variety which I have ever seen. In running my finger around I found the placenta was completely attached to the mucous membrane of the lower segment of the uterus with the exception of a small space on the left side from which the bleeding came, and which a tear had taken place during the recent contractions, which had severed a small portion of the placenta from the attachments, my opinion being verified by the gentleman present, and as the hemorrhage and pains were continuing, we determined to deliver at once. Chloroform was administered, and introducing my hand I found the cervix not well dilated, and had some trouble in introducing my hand. I tore rapidly through the placenta at the left side, and found a child presenting vertex. I ruptured the bag of water, and delivered it living

by podalic version. In my efforts to do this, I was made conscious for the first time that the uterus contained a second child; so tying the cord of the first child, and handing it to Dr. Crouch, who was ably assisting me, I introduced my hand for the second time and found the second child presenting shoulder Dorso-anterior position, the head being to the mother's left. I turned and immediately delivered a second living child, after which I introduced my hand in the uterus, and removed the placenta which presented a very ragged appearance, from my efforts made in passing it at its attachments to the uterus on the left side.

After removing the placenta, the vagina and uterus were thoroughly washed out with warm water, during which I discovered the cervix was lacerated on both sides, due no doubt to my efforts to deliver the children through an imperfectly dilated cervix. Although a large amount of blood was lost during the operative procedures, the woman rallied well from the chloroform, the uterus contracted well, and our patient within a few hours presented no special traces of the severe ordeal which she had passed through. The children, both males, presented the appearance of having advanced to the 7½ months' utero-gestation, and for two or three hours after birth did well, but later on in the day their extremities became cold, lips blue, heart weak, and they died some seven hours after their birth. The mother did fairly well for about one week, although the pulse and temperature were somewhat above normal, the pulse averaging between 90 and 100, the temperature being about 100. She sat up on the eleventh day, and on the following day I was sent for, and found her with a high temperature and rapid pulse, with some indication of phlegmasia alba dolens, and for three weeks she was under my constant care, with evidence of well-marked septic complications, and as soon as the tendency for the phlebitis disappeared in one leg it appeared in the other.

I am satisfied the late septic complications occurred from the lacerated cervix, which healed up kindly on the right side, but not so on the left, which healed slowly by granulations.

Upon my recall to the case on the eleventh day I took charge of the vaginal injections myself. Previous to this time I had entrusted this to the nurse, much to my regret, for upon my first examination I was satisfied they had not been thoroughly given; so every day for several days I introduced a speculum, and with an ordinary piston syringe I washed out the uterus, the cervix and vagina with bichloride or carbolic acid solution, and dusted the seat of laceration with either boracic acid or iodoform. Internally was given quinine, phenacetine, large doses of iron, and good food.

The leg was bandaged from time to time with an ordinary roller bandage. Greatly to my relief my patient finally recovered, and seven weeks after her confinement returned to her home in Washington.

My object in reporting this case is to impress on the minds of physicians the importance of not temporizing when they have to do with a case of placenta previa.

There is no safety for the mother as long as she remains undelivered. I am satisfied no one can lay down dogmatic rules in every individual case, but my own personal experience has taught me that in performing podalic version, and delivering either rapidly or slowly, as the case may indicate, you are working for the best interest of the mother and child in the vast majority of cases.

Dr. Wm. P. Chunn—I have seen only two cases of placenta previa. One I saw with Dr. Neal. The patient had been tamponed with cotton. He took out the cotton, inserted his left hand, and delivered the child by podalic version. Both mother and child did well. I had one patient of my own. It was a marginal implantation, and I thought I could use the forceps better than turn, and I did so. I had some difficulty in getting the forceps on and failed at first, but the attending physician forced the head firmly down by external pressure, the forceps were put on and the child delivered. I think I might have done better by podalic version.

Dr. Brinton —There is no absolute law for the treatment of placenta previa. In my first call the patient was lost by delay. In another case the woman had bled considerably, but about the time I was called the head came down, and the bleeding stopped.

Forceps were put on and the child delivered. I am now satisfied that the first patient could have been saved by prompt action.

In the ten cases of placenta previa which I have seen in practice, only two of the children have been saved. The mothers have all recovered with the one exception as specified above.

Dr. T. A. Ashby—I think Dr. Brinton did the proper thing in the case. My experience with these cases has been limited, having seen but two. In one the child was dead born. The mother recovered. The placenta was attached over the entire cervix, and had to be torn away before the child could be delivered. In the second case, I removed a dead fœtus, of five or six months, with placenta previa. She had been bleeding for some weeks. She recovered and subsequently gave

birth to a living child. More recently I delivered her of another dead fœtus.

With reference to the septic trouble, which the doctor's patient had suffered from, I am satisfied that lacerated cervix is a prolific cause of pelvic troubles, and I frequently find laceration of the cervix and involvement of the tubes associated.

The treatment that the doctor suggested, of going into the uterus and washing it out thoroughly, is very good. My own method is somewhat different. I put in a speculum, fill up the vagina with a bichloride solution, and then with some cotton on an application, remove all the debris from the cavity of the uterus. I have treated eight cases in this way in the last year, and in each case got a good result.

I have seen but one case of pure septicæmia that came on four weeks after confinement. There were no local lesions, and there was nothing in the uterus to be removed. The symptoms came on the twenty–first day after confinement, and she died in about a week.

WILLIAM S. GARDNER, M. D. *Secretary.*

ORLEANS PARISH MEDICAL SOCIETY.

MEETING OF JANUARY 30, 1892.

Dr. C. Chassaignac, president, in the chair.

Dr. F. Formento read a paper on

TREATMENT OF PELVIC SUPPURATION BY VAGINAL DEBRIDEMENT AND ANTISEPTIC DRAINAGE.

(See Original Article.)

Discussion.

Dr. P. Michinard—This method is a good one in simple pelvic suppuration, but to avoid hemorrhage, it would be better to make a small incision and stretch it with a uterine dilator, pushing aside the vessels.

In abscess of the ovaries or tubes, however, laparotomy is preferable and should not be delayed, as the tumor may rupture into the peritonial cavity, causing collapse and death. He considers it bad practice to open pelvic hematocele, for in so doing we simply remove aseptic blood and expose patient to septic infection. Rest is usually the only treatment necessary. Some operators open the abdomen, stitch the sac to wall, open and drain.

Dr. R. Matas—Prof. La Royenne has systematized this operation, for which he deserves great credit; but this hardly justifies the specific title of La Royenne's method. In choosing between this operation and laparotomy we should not be influenced either by size of tumor or origin of the pus. In cases when the tumor is movable and unattached, so that it can be isolated and brought up to the abdominal wall, laparotomy should be given the preference.

On the other hand, any fluctuating tumor firmly fixed in Douglas' cul de sac should be opened per vaginam. While it is usually an easy matter to ascertain whether a pelvic tumor is bound down by adhesions, it is exceedingly difficult to say exactly where the suppuration began.

Dr. C. Chassaignac—As to mortality, the figures presented by Dr. Formento are greatly in favor of La Royenne's method; but he believed the difference could be accounted for, to some extent, at least, by the fact that laparotomy was employed in more desperate cases.

REPORTS OF CASES.

Dr. F. W. Parham referred to a case previously reported by him. The case was one of necrosis of sternum resulting from gunshot wound.

In removing the diseased bone the pericardium was exposed and each pulsation of the heart could be distinctly seen. The wound is now granulating nicely, and the patient doing well, notwithstanding the fact that he had, after the operation, a severe attack of lobar pneumonia. A year previous to this time he had an almost fatal pneumonia resulting from the gunshot wound of lung.

Dr. E. D. Martin reported a case of labor probably precipitated by detachment of placenta. Patient was having some pains when first seen, as was dilated so as barely to admit the tip of the finger, which was bloody when withdrawn. Os resembled caput. Had lost a small amount of blood a few days previous, following a terrible fright. Suspected placenta previa, but after delivery of a dead fœtus the placental attachment was found to have been normal.

Dr. Matas reported the following case:

NON-TRAUMATIC DACTYLITIS, WITH NECROSIS OF THE TERMINAL PHALANX OF THE LEFT MEDIUS, ASSOCIATED WITH ANÆSTHESIA AND ATHETOSIS OF THE CORRESPONDING HAND AND OTHER LOCAL NERVOUS DISTURBANCES,

which he believed was especially interesting from the diagnostic and pathological standpoints.

The patient, a railroad engineer, aged about fifty years, of good, temperate habits and without any hereditary or acquired history of specific taint, placed himself under the reporter's professional care for what he, the patient, thought was a simple "run around" or paronychia, which had existed several weeks prior to consultation. On examination, it was found that the finger was twice as large as its fellows; it was uniformly swollen and displaced its neighbors by its size; the skin was tumid, red and apparently highly inflamed, especially along the dorsal aspect. The appearance of the finger suggested the idea of great painfulness and exquisite tenderness. It was, therefore, very surprising to hear the patient speak of this apparently very grave condition as a mere "run around," but this was explained when it was found, upon further exploration and free manipulation, that the finger was, as the patient said, "numb," or almost completely anæsthetic and analgesic.

The nail was loose and nearly detached by a suppurative inflammation of the matrix; under the free edge of the nail, a small sinus was discovered, which led directly to the *denuded* terminal phalanx, evidently necrotic. The sinus was enlarged, considerable pus was discharged, and the extent of the osseous denudation was thoroughly ascertained by the probe without the least pain or complaint on the patient's part. The adjoining fingers, especially the ring and little fingers, were very anæsthetic, the hand itself near the interdigital web was also anæsthetic, though it was not swollen or congested. The anæsthesia gradually merged into the areas of normal sensibility, though it was recognizable as far up as the dorsum of the wrist and forearm. Voluntary movements were effected readily enough by all the fingers except the *medius*, which was stiff from the inflammatory swelling.

The movements of the fingers and of the hand were, notwithstanding, seriously interfered with by the constant choreic (non-rythmical) movements which kept them in motion, in spite of the patient's best efforts at volitional control. They were only controlled by bandaging the hand on a splint. The athetosis had already attracted the patient's attention some time before consultation, and was believed by him to have coincided with the inflammatory signs in the finger. A careful interrogatory revealed that the patient had suffered several months, almost a year, before the trouble with the hand began, with burning sensations in the skin of the left thoracic region, which had been followed by a "numbness" of the same character as that felt in the hand, only that it had been felt "*in patches*." The patient had verified the anæsthetic nature of these spots by introducing pins into the skin without feeling pain.

These areas were not diffused over the whole chest, but were pretty well circumscribed, and, judging by the patient's answers, appeared to be most distinct in the left lower intercostal regions, in the are as supplied by the lateral and anterior perforating and superficial branches. There was no œdema in these regions, nor in the affected hand, nor shooting pains, nor atrophic changes in the muscles. The swelling in the affected finger had been effected slowly, not suddenly, as in the acute inflammatory affections. Furthermore, the patient stated that the first intephalangeal joint was the first point of departure in the disease of the finger; this joint swelled considerably; subsequently, the inflammation appeared to spread to the whole finger. At present it was difficult, in the midst of so great a swelling, to localize a special disease of this joint. The main trouble appeared to be concentrated in the terminal phalanx, which was necrosed. Sometime before the trouble in the finger began, the patient noticed that he had to be very careful in his work, because of the frequency with which he burned his fingers, "the numbness" preventing a due appreciation of dangerous heat, etc.

In view of the necrosis, the terminal phalanx was disarticulated, very little cocaine being used to secure absolute insensibility. Notwithstanding careful antiseptic precautions, a rapidly destructive thecitis of the flexer tendons supervened. The deep and superficial flexer tendons both sloughed off, and had it not been for the free incisions made into the palm, it is certain that the whole palm would have gone into phlegmonous suppuration. Finally, the finger was amputated at the metacarpo-phalangeal joint, and the patient is now doing well from the surgical standpoint.

The question that now arises is: What is the true pathogenesis of this condition? Is it a case of Morvan's disease? Or a precocious tabetic osseous lesion (Charcot's disease)? Or even can the phenomena presented be in any way assimilated to the local asphyxial conditions of Reynaud's disease? Some of the symptoms would point to peripheral neuritis, but there are too many symptoms and signs wanting to complete the picture of the latter condition.

Without formulating a final diagnosis, Dr. Matas submitted the case, hoping that after the completion of the histological examination of the amputated finger, and after further inquiry into the neurological phenomena, he would be able at some future time to complete his report.

Dr. Parham said this case recalled to mind a somewhat similar one he had seen in the Charity Hospital some years since.

A woman had stuck a needle into her finger with a great deal of force.

She afterward complained of continual pain in the finger, which was so persistent as to necessitate amputation of the member. Even this afforded only temporary relief.

Later atrophy set in, and when last heard from the entire arm was much reduced in size, and her general health steadily failing. He did not wish to say the atrophy was a consequence of the injury; it seemed rather that the injury had occurred in one who was at the time developing some spinal trouble.

Dr. A. W. DeRoaldes reported two cases of membranous croup.

When called to first case, found temperature 100 deg., pulse 90, with slight embarrassment of respiration. Urine contained albumen. Next morning was summoned hurriedly, and found child asphyxiated. Intubation afforded immediate relief. Case did well until following day, when breathing again became labored. Tube was removed and found to be plugged with a piece of membrane. Patient then breathed easy, so tube was not replaced. The case, however, terminated fatally.

The other case has pursued a more favorable course. At one time it was thought child would have to be intubated, but case improved and is now doing well. Urine contained no albumen.

The doctor spoke of the doubt that always exists as to the condition of the larynx in these cases and emphasized the necessity for having some sort of laryngeal speculum, so as to widely separate the vocal cords and inspect the trachea as far down as the third or fourth ring.

M. J. Magruder, M. D., *Secretary.*

MEDICAL ASSOCIATION OF GEORGIA.

The forty-third annual session of the Medical Association of Georgia will meet in Columbus, Ga., on April 20, 21, 22.

The officers are: President, G. W. Mulligan, M. D., of Washington, Ga.; vice presidents, James M. Hull, M. D., of Augusta, Mark H. O'Daniel, M. D., of Macon; treasurer, E. C. Goodrich, M. D., of Augusta; secretary, Dan H. Howell, M. D., of Altanta, Ga.

Dan H. Howell, M. D., *Sec'y.*

N. O. Medical and Surgical Journal,

ESTABLISHED IN 1844.

PUBLISHED MONTHLY, $2.00 A YEAR.

Articles from physicians are respectfully solicited. All articles, news and exchanges, and books for review, should be sent to the EDITOR, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL. Business communications should be addressed to the BUSINESS MANAGER, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

EDITED AND PUBLISHED BY

AUGUSTUS McSHANE, M. D.

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DR. R. MATAS. DR. JOHN DELL'ORTO. DR. P. MICHINARD.

Editorial Articles.

MEDICAL REFORM AT THE CHARITY HOSPITAL.

In our last number, we touched upon one point in the internal management of the Charity Hospital, in which, it appeared to us, improvement would not be out of place. A careful review of the whole of the medical management of the hospital would show that it is not alone the nursing department that needs remodeling. This fact has been forcibly brought before the public notice by a lengthy communication from one Capt. F. S. Dugmore, late of the British Army, in *The Times-Democrat*, January 29, 1892.

In his letter of complaint, Capt. Dugmore gives a plain recital of what he saw and felt in the pay ward of the Charity Hospital. That he has not made any improbable statements is patent to every physician who has ever been connected with the Charity Hospital long enough to become familiar with its poor methods of nursing. Elsewhere in our pages we give a condensed statement of Capt. Dugmore's charges, and also a copy of the report of the grand jury thereon.

It was unfortunate for the hospital patients that the political issues of the hour were entangled with the affairs of the institution; but the recent withdrawal of the proposition to perpetuate the Louisiana Lottery eliminates the great apple of discord in our political affairs, and leaves the question of hospital reform entirely unencumbered.

The indigent unfortunates whom fate guides to the doors of the Charity Hospital have some rights that must be respected. It is not charity to give a helpless man a bed to lie in, and then let him die for want of proper food and nursing. That such does occur at the hospital can not be doubted; and in making the statements that he did make, Capt. Dugmore merely told what must perforce happen when matters are allowed to go on as at the Charity Hospital.

The involvement of political issues has caused the opposition newspapers to deny everything that Capt. Dugmore asserted, and to call him all the vile names that are permitted to find a place in a respectable newspaper. But no amount of denial or vituperation can alter a fact, and the disagreeable fact remains that the nursing (so-called) at the Charity Hospital does not give the unfortunate patients those cares to which even a pauper is entitled, and does not reflect much glory upon the medical executive of the hospital, who is the source whence salutary suggestions should emanate.

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* *

The report of the grand jury on the Dugmore charges is a weird literary composition. It is, indeed, fearfully and wonderfully made. It is hard to describe. We shall not call it twaddle, for THE JOURNAL is not given to flattery. It is a precious gem of inconsistencies, and loudly proclaims the utter inability of the common herd to pass judgment in matters that are purely medical.

The secret inquest by the grand jury is a frayed-out remnant of the famous, or infamous, Star Chamber. How much good a secret inquest does is not apparent to the ordinary mind, but if the ordinary mind knew anything of nursing and kindred matters, it would not be long before the ordinary mind would demand the abolition of secret inquests.

The grand jury investigated the Dugmore charges in particular, and the affairs of the hospital in general. The report says that the grand jury was convinced that the hospital was under the most efficient management. From the large number (about 20,000) of patients treated annually in that noble institution, it is not unnatural to find some chronic grumblers and soreheads; and, it might be added, such an army of invalids may contain a few persons with intelligence enough to perceive the weak points in the medical service of that noble institution. The report says: "The publications made in *The Times-Democrat* were calculated to bring to the surface and to our notice such cases (of complaint), but only a few have been discovered. These cases were all, including Capt. Dugmore's, closely investigated, and, with trifling exceptions, were found to be without foundation."

After thus politely intimating that Capt. Dugmore is a liar, the grand jury goes on to say: "Considering all the conditions incident to the hospital, we do not see how it could be better managed than at present, except in the matter of nursing and perhaps some minor details."

We will leave aside for the present the possible and unmentioned minor details, and dwell on the admission as to the nursing. The burden of Capt. Dugmore's song was the inadequate and incompetent nursing in the hospital. The grand jury first condemns the man, and then admits that there was a very substantial basis for the charges preferred by Mr. Dugmore. It seems that some persons have stultified themselves. We do not think that Mr. Dugmore is either a liar or a simpleton.

But let us gaze upon another gem from that remarkable report. It says: "The nursing in this hospital seems to be conducted on a system very different, if not totally different, from other hospitals. The system, briefly, is as follows: There are three classes among the nurses.

"1. Are the resident students.

"2. Are the Sisters of Charity, who have general charge of the nursing under the students, as well as exclusive management of the domestic affairs of the hospital.

"3. Are the ward nurses, who are mainly taken from the

convalescent patients, who, of necessity, are in some cases deficient.

"It is claimed by some who have experience in the affairs of hospitals, that the efficiency of the Charity Hospital could be improved by the employment of only professionally trained and paid nurses. (It must not be understood that the hospital has not at present a large number of efficient nurses, who have been trained in the hospital, where they have served for many years—some of them for twenty years or more). Much could no doubt be said in favor of such a system. Such a system, however, would appear to conflict with the valuable services of the resident students [*Sic!!*], who, in a great measure, seem to perform the most important duties, which would be required of the professional nurse."

The resident students are a set of patient, law-abiding young gentlemen, but that report was the least bit too much for them. They rushed into print, and informed the world that the grand jury was mistaken in its estimate of their services.

In a letter to *The Times-Democrat*, February 25, 1892, they say: "In the report of the grand jury upon their investigation of the management of the Charity Hospital, the following statement is made: 'There are three classes among the nurses: first, are the resident students'. We feel that, unintentionally, a grave injustice is done us by this classification. Although it is true we perform some of the higher duties of trained nurses in the Northern hospitals, such as recording temperatures and applying surgical dressings, this is but a minor part of our work; we are entrusted with many important and responsible medical and surgical duties. Every one who thoroughly understands our position in the institution knows that we are recognized medical officers, not nurses."

Under the third caption, in its classification of the nurses, the grand jury makes a very ingenuous admission in saying that the ward nurses (who are, or should be, the *real nurses*), are recruited from the ranks of convalescent patients, *some of whom are of necessity deficient*. That is a pretty state of affairs in these latter days, when trained and competent nurses are regarded as an indispensable auxiliary to the physician or surgeon.

In the above, the grand jury virtually admits the correctness of the statements made in the February number of THE JOURNAL, and also exposes a condition of affairs from which circumstances, such as those described by Capt. Dugmore, must necessarily arise.

We might regale our readers with more bright extracts from this marvellous report, but we respectfully refer them to the report entire, which is published elsewhere in THE JOURNAL. To sum it up, we might use the saying of Lord Somebody, who, in speaking of Lord Somebodyelse's garden, remarked: "Nothing is wanting to make it imperfect."

* * *

Let us now take a general glance at the medical service of the hospital, properly speaking.

The medical force of the Charity Hospital comprises: 1, house surgeon and assistant house surgeon; 2, visiting physicians and surgeons; 3, resident students (internes).

* * *

The house surgeon, as well as all medical officers, is elected by the board of administrators, in which power and responsibility are lodged.

The house surgeon receives a yearly salary of $3000; besides, he receives his board and lodging. The position is eagerly sought for, not particularly for the pecuniary consideration, but because it establishes a man for life; it gives him a foothold in this community that nothing else could give, provided that there is anything in the man.

The house surgeon's office, as the grand jury says of the nursing system, is conducted on a system very different, if not totally different, from other hospitals. In other hospitals the house surgeon is inferior in authority to the visiting staff. House surgeons, we believe, are supposed to devote almost their entire time to the institutions to which they are attached, and not to foster outside practice; but it is currently reported that the worthy gentleman who honors the Charity Hospital by being its house surgeon, has quite an extensive practice outside of the hos-

pital walls. An old regulation of the Charity Hospital (1834) positively forbade the house surgeon to have any outside practice. This regulation may possibly have lapsed.

The present house surgeon is a man of travel. He is a skilful surgeon, and a good observer. He must certainly have studied the systems of nursing in vogue in well regulated hospitals, and have noticed the excellencies of trained nurses. Why he has not undertaken to introduce methods in keeping with modern progress he may perhaps be able to explain. To an humble looker-on, it appears that the gentleman referred to, in his ten years of service as House Surgeon, has lost an opportunity which, if properly developed, would have earned for him increased esteem from his *confrères* and untold gratitude from suffering unfortunates.

* * *

The visiting physicians and surgeons are appointed by the Board of Administrators every six months, upon the recommendation of the House Surgeon.

In the hospitals in the large Eastern cities it is a great honor to be a visiting physician or surgeon. The same, however, can not be said with regard to the Charity Hospital. A young man may receive his degree in medicine, and in a few days become a visiting physician. This gives him an excellent opportunity for practical study, but it does not always do much good to the patients. It would be better to appoint on the visiting staff men who have been graduates of several years' standing. This would certainly redound to the benefit of the patients. Most of the members of the staff are not recent graduates, but no rule is in force exacting mature knowledge as a prerequisite to an appointment on the visiting staff of the Charity Hospital. As compared with other hospitals, the standard is low; in fact, the standards nearly all over the Charity Hospital might be raised without detriment to the patients.

The term of service (six months), is too short. Some of the present members of the staff have been in constant attendance at the Hospital for nearly ten years, but such men are not in the majority. When a man is elected for two years, or five years, or ten years, he takes an interest in his service that can

not be developed by a service of six months. True, if a man does good work and chooses to remain, he can easily be re-elected, every six months, for an indefinite period. In advocating a longer term, or a life term, some persons of small calibre will say that such a system would shut out the young graduates. Well, suppose it does, it will only shut out younger men and retain older and abler men, who could do more for the patients. In some of the arguments advanced by those who want things to roll on at the Charity Hospital as before, there is one conspicuously absent feature, namely, a regard for the welfare of the patients; and it is precisely for their benefit that such hospitals are maintained.

But it is a mistake to suppose that the younger graduates would have no chance for personal improvement. On the contrary, their chances would be increased. A young graduate could be attached to the service of an older man (as a chief of clinic, for instance). He would learn practical wisdom from his superior (without risk to the patients), and would be able to study the course of diseases, and absorb the ideas on treatment that have been formulated by his older and more experienced superior. The young graduate would thus be virtually taking a post-graduate course of instruction, and when at the end of two or five years, the elder man's term of service shall expire, he will, in the event of vacancy, be in a position to give his patients the benefit of good, practical knowledge. The visiting staff (apart from the professors in the medical department of the University) should be recruited from this under-service.

The services (medical and surgical) should be distributed uniformly. All men should be equal, and should have an equal number of beds.

The members of the visiting staff should be kept up to their duty. It has not seldom happened that a physician will forget, or be unable, to visit his wards for several consecutive days; during his absence the work of attending to the patients devolves upon the resident student assigned to that service. The resident students are undergraduates. They do their best, but the patients are entitled to something more.

In European cities, we believe, it is a source of pride for a man to be a visiting physician or a surgeon to a great hos-

pital. This is especially true in Paris, where a *médecin des hopitaux*, who has been an *interne* (or resident student) is a man of eminence; his future is assured. Why is there such a difference between Paris and New Orleans? The answer is easy: Because the standard there is immeasurably higher than it is here. In Paris a man must study (and serve) for eight years, and under masters of more than local fame; in New Orleans, we believe, the time and conditions of apprenticeship are somewhat different.

The resident students, or internes, are fourteen in number. They are selected, by competitive examination, from the students of the medical department of Tulane University of Louisiana. They can not remain longer than two years; some remain only one year.

The students are overworked, and also badly worked. A student may be assigned to two or three different physicians. It is manifestly impossible for him to give proper attention to his superior officers, when they are both in their wards at the same time. The number of resident students should be increased. Again, as the grand jury happens to say, the students perform certain duties that should be performed by nurses, and are performed by them when they are intelligent and know their business. This absorbs a part of the students' time, which should be devoted to other duties.

The system of internes is borrowed from French hospitals. Many institutions in New Orleans are of French origin, but that does not imply that they keep pace, in regard to excellence, with the parent institutions. The internes of the Charity Hospital do very good work, as far as it goes, but that does not mean that they could not do more work and better work under a better system. A number of externes, or day students, appointed by competitive examination, might be attached to the resident students, one for each. These externes could relieve the internes of much routine work. It might be so arranged that the internes would be selected from among the externes. This would tend to raise the standard among the internes, and make them more like the internes in Paris, who usually attain that distinction only after five years of hard study and previous service as an externe.

A striking deficency in the Charity Hospital is the want of a diet-list. In these days, when physiological chemistry plays so important a part, it seems strange that in large institutions the attending physicians really do not know what their patients are getting in the way of food. Patients are not all alike; some require more nitrogenous or farinaceous or fatty foods than others; but there is no list at the hospital from which the attending physician might order a diet which in his judgment is best adapted to the needs of his individual patients. At present the patients are fed in a haphazard and uncertain way.

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The reforms in the medical and nursing services at the Charity Hospital advocated by THE JOURNAL, and only briefly alluded to above, would mean a small revolution in that institution. It is a task worthy the arm of Hercules; but it must come, sooner or later. The Charity Hospital can not be allowed to go to sleep while all the rest of the world is moving forward. To what source shall we look for a remedy? All the power of the Charity Hospital is vested in its Board of Administrators. The present board has shown great wisdom in the management of the financial affairs of the hospital. The board is composed of men with clean hands and level heads. Matters of a purely medical character are not as familiar to them as ordinary business affairs, and, hence, it is not surprising if they are not as prompt in making the necessary medical reforms as they are in attending to the administative affairs of the hospital. But these reforms must come, and the longer they are deferred the more disagreeable will be their enforcement.

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In all that THE JOURNAL has said concerning the management of the Charity Hospital, it is hoped that no one feels that the remarks made have been prompted by any personal animosity. The Hospital does a vast amount of good work, but not as much as it ought to do. THE JOURNAL has briefly indicated what might be done to increase the efficiency of the Hospital. No doubt there are persons who hold views different from those enunciated in THE JOURNAL. If such persons desire to address themselves to the same audience as the EDITOR, THE

JOURNAL will take pleasure in publishing any communication on the subjects under discussion. THE JOURNAL is endeavoring to obtain better service for the patients of the Charity Hospital. It has no private cause to further; it has no axe to grind; it wants only the truth.

THE STATE MEDICAL SOCIETY.

The time for the next annual meeting of the State Medical Society is not far off (April 26). The chairmen of the various committees are now soliciting papers for their respective sections, but it is as yet too soon to make a forecast of the literary work of the approaching meeting. We earnestly hope that the members will, by papers and attendance, make the coming meeting a decided success.

Elsewhere in this number appears a letter from Dr. W. G. Owen, of Whitecastle, La. It deserves to be carefully read by every member of the society. Dr. Owen's plan for increasing the membership of the society, and making it a working body, is a very practical one. Certain minor points recommended by Dr. Owen may meet with objection, but it would be hypercritical to pick out small flaws when the plan, as a whole, presents such evident hope of making the Louisiana State Medical Society the peer of any similar organization in the Union. The expense of making the canvass suggested by Dr. Owen would be about five or six hundred dollars. If twenty men can be found who will each subscribe twenty-five dollars to the canvassing fund, the matter is settled; but if the requisite twenty cannot be induced to rush into the breach, the future of the society will not look very bright.

THE JOURNAL would be glad to receive from members of the society, in different parts of the State, expressions of opinion concerning Dr. Owen's plan.

Abstracts, Extracts and Annotations.

SURGERY.

FLOATING KIDNEY AND NEPHRYDROSIS.

In the September, October, and December numbers of the *Revue de Chirurgie* there is to be found an exhaustive article on intermittent nephrydrosis (*hydronéphrose intermittente*) by M. Félix Terrier and M. Marcel Baudouin. There exists, say these authors, a variety of nephrydrosis, not well understood until within recent years, that seems to be commoner than has been supposed; it is an intermittent nephrydrosis. Very often it is the first stage of a confirmed nephyrydrosis. It is due to lesions of various sorts; in the great majority of cases it occurs as a complication of renal displacements, wherefore it is observed oftener in women than in men. In the former, it is met with especially on the right side; in the latter, on the left. More rarely it may be the consequence of a calculus in the pelvis of the kidney or of temporary compression or obliteration of the lower end of the ureter. In some cases it is of congenital origin.

When it is a complication of floating kidney it is produced in the following way, as shown by experiment and by post-mortem appearances: An abrupt bending of the uterer occurs, with or without torsion, at the same time with renal displacement; there is a temporary arrest of the flow of urine, with the progressive development of a nephrydrotic sac, which empties itself as soon as the kidney resumes its place; irritation arises around the renal pelvis, either from embarrassment of the circulation or from infection of the mucous membrane of the pelvis; and fibrous adhesions unite the sac to the upper part of the ureter, and finally lead to the transformation of the intermittent into a confirmed nephrydrosis. These alternations of distension and evacuation of the renal pelvis, consequent on temporary obliteration of the ureter, are manifested clinically by attacks of pain that are well-nigh characteristic, occurring in the course of a state of health more or less deranged, about once a month and sometimes oftener. These attacks, which present three stages—the onset, the acme, and the decline—are constituted by extremely intense pains, sometimes absolutely intolerable, coinciding with the appearance of a liquid tumor, rarely fluctuating, seated most commonly in the right flank, and

with a notable decrease of the amount of urine voided. They are the result of a sharp bend in the ureter in consequence of the displacement of a movable kidney. The attack lasts for a number of hours, and ceases suddenly when the kidney resumes its normal situation. The tumor disappears with the pains, and a considerable discharge of urine ensues—the pelvis of the kidney empties itself.

At the last meeting of the British Medical Association, before the Section in Surgery, Mr. R. Clement Lucas made remarks to much the same purpose. Mr. Lucas' remarks are published in the *British Medical Journal* for December 26. His conclusions are as follows: Movable kidney is a condition that during displacement may, and often does, lead to nephrydrotic destruction, owing to twisting of the pedicle or to pressure of the organ upon its duct; to avoid such danger and to relieve the patient from pain, all such cases should be treated by nephrorrhaphy, which is a simple and safe operation; even when nephrydrosis has already advanced, cases in which it is clearly due to the mobility may be cured by nephrorrhaphy, and the remains of the organ saved from further degeneration. *N. Y. Medical Journal.*

MEDICINE.

HERACLEUM LANATUM (MASTERWORT—COW PARSNIP) IN EPILEPSY.

By H. N. Avery, A. M., M. D., Minneapolis, Minn.

This is no the European species, *imperatoria ostruthium—divinum remedium*—of European countries, but the *pentandria digynia* of this country, which it resembles. It is an annual umbelliferous, with a perennial root of a strong, pungent smell, throwing up a hollow, thick furrowed, branching stem, three to five feet high, of one to one and a half inches at the base, leaves are downy, supported on downy footstocks, the flowers are white, in large umbels, followed by orbicular seeds, fruit compressed, oval, with a broad, flat margin. This plant grows in moist meadows from Labrador to Alabama. The recent leaves and root when placed in contact with the skin irritate and inflame it, and is very poisonous, owing its effect to an active alkaloid.

It is an active cerebro-spinal poison, affecting both the brain and spinal marrow directly and the heart indirectly.

The poisonous effects of this plant may be well illus-

trated by two cases of poisoning, by eating the leaves, given in the language of the parties who saw them, May 25, 1890:

About 11 o'clock Sunday evening, John Cass and James Cummings, two well-to-do and highly respected farmers residing just across the Tennessee river from Stevenson, Ala., both men of families, strolled along the river bank, smoking and chatting as they walked. Near the edge of the river they plucked what they thought to be spignet, a kind of herb which the natives have from time immemorial used with success in kidney troubles. They were chewing contentedly on the harmless-looking, five-leafed herb, when a moment later another farmer, a neighbor, came up. He, too, started to nibble the leaves as the others were doing, but suddenly spat out what he had in his mouth, saying: "Why, that isn't spignet; that is cow parsnip!" Cow parsnip, or masterwort, is a deadly poison.

Glancing up, the third farmer saw that his companions were apparently in great agony. Their faces were convulsed, their frames shook with tremulous agitation, their teeth were clenched tightly, and the cuticle of their faces was rapidly tinging with a blackness that quickly convinced him his companions were poisoned.

Suddenly the two men gave vent to agonizing shrieks and fell prostrate to the earth. They tossed about in convulsive agony, gnashing their teeth and evincing symptoms akin to hydrophobia. The third farmer was powerless to aid them, and started off for assistance. As he did so, Cass crawled to the water's edge, lapped up a few mouthfuls and suddenly fell back on the edge a corpse. Cummings was writhing on the ground in great agony. In his convulsive state he bit half his tongue off and completely crushed out all the front teeth in his head. It was a pitiable sight.

I have used during the past year an alcoholic infusion of the leaves in two cases of epilepsy which have improved, and I am in hopes of curing. I desire to call the attention of the profession to this remedy, thinking that the proper dilution may prove of value.—*New York Medical Times.*

COMMON ERRORS AND FALLACIES IN THE TREATMENT OF CHILDREN.

Cheadle (Practitioner, July, 1891) writes that the chief points with regard to which faulty practices prevail, are the following:

1. The sudden weaning of infants onto fresh cow's milk and water. The large curds of cow's milk are often beyond

the feeble digestive power of the infant. The undissolved clots, under favorable conditions of heat and moisture, ferment and set up colic, vomiting, or diarrhœa. Boiled milk with barley water seems to be much more readily digested. In the case of very delicate children the milk should always be peptonized at first.

2. Insufficient gross amount of nutritive material. For example, a child is found unable to digest a mixture of cow's milk stronger than one in four. The capacity of the stomach, however, is limited, and it is impossible for it to take a sufficient quantity of this mixture to supply the material required for growth and nutrition. The difficulty may be overcome by adding some cream, or perhaps some of Valentine's meat juice.

3. The use of food deficient in fat. This is an element of especial importance in the food of children, but it is almost wholly wanting in most artificial foods, and is deficient in most condensed milk.

4. The use of food deficient in proteid. Most artificial foods are lacking also in nitrogenous matter. Children deprived of these two elements are often large and fat, but are anemic, flabby and rachitic.

5. The use of diet deficient in antiscorbutic elements. This is a point that is frequently overlooked. All condensed foods, farinaceous foods, and dry artificial foods are lacking in this regard, and should be supplemented by some fresh element.

6. The prolonged use of artificially digested foods. These preparations do excellent service in the case of children just weaned, or with small power of digested cow's milk. If they are continued for months, the power of digestion becomes seriously impaired, nutrition falls off, and the child becomes anemic and rachitic.

In the management of diarrhœa numerous errors are prevalent, one of the most common and dangerous, perhaps, being the idea that a moderate amount of diarrhœa is beneficial. So far from diarrhœa being a safeguard against convulsions, it is precisely those children who have been reduced by diarrhœa and vomiting who are most liable to them. Young children bear purging badly. A diarrhœa which begins moderately is apt to develop dangerous proportions in a short period, and reach a point beyond control of medicine. The younger the child the greater the importance of getting a diarrhœa under control. As regards food, give nothing that is not sterilized, nothing that is not predigested or easily digested. Astringents are useless in the acute stage, especially the vegetable astringents. Opium is essential in severe cases, even in young

children. Gray powder and Dover's powder in small and repeated doses should be given, if there is vomiting. The most efficient remedies are bismuth in full doses, with small doses of opium.

In the treatment of chronic constipation in children, as a rule, three devices only seem to be adopted: (1) The administration of more or less active purgatives from time to time, the remedy being repeated as often as the bowels become confined again. (2) The use of enemata, sometimes regularly. (3) The inclusion in the diet of coarse foods and fruit, oatmeal, cabbage, prunes, figs, and the like. If the constipation is chronic, and hence habitual, it can not be cured by spasmodic efforts; but that is the criticism upon the treatment described. In most cases a drug is required, the constant daily use of some mild laxative being essential to ultimate success. Treatment must be continuous. Spasmodic, intermittent overtreatment will fail.

Night-terrors occur usually, but not invariably, in delicate neurotic children. The direct cause is usually undue stimulation of the brain, or of the imagination, by exciting stories, unkind treatment, a visit to the zoölogical garden, or overpressure at school. By far the most common cause, the author believes, is constipation, often slight but persistent, the stools being hard and dry, and usually of light color. The error in the management of these cases is the use of sedative treatment, constipation being neglected. The neurotic element alone being recognized, bromides are prescribed, often with good effect for the time. The cause being allowed to remain, the relief is in many instances temporary.

Among the drugs most heedlessly used at the present day are those which have the property of reducing bodily temperature, such as aconite, antipyrine and antifebrin. These are powerful drugs, and are too readily resorted to. Pyrexia is a symptom, not the cause or essence of disease. Yet the temptation to reduce the temperature is strong. It must be remembered, however, that in addition to their antipyretic power, these drugs have other active properties. They are especially cardiac depressants. In many of the diseases in which they are used, the danger lies not in the pyrexia, but in heart failure. High pyrexia is an element of danger, but is not the sole danger. This is especially true of pneumonia, and the results of decided antipyretic treatment of that disease has not been favorable. Children do not bear such treatment as well as adults. The mere forcing down of temperature by means of antipyretic drugs is futile as a means of curing the disorder, which gives rise to the febrile state, and is besides often dangerous.

One of the most universal mistakes, although perhaps not one of the most serious, is that of relying largely or chiefly upon drugs in treatment of diseases of defective nutrition. Children are apt to be dosed with cod-liver oil and other drugs without regard to their digestive organs. A delicate child is drenched with these drugs because it has a poor appetite, is ill-nourished, and anemic. The tongue is coated and the bowels confined, and the child is receiving improper food. Here the chief cause of the anemia and defective nutrition is the disordered state of the functions of digestion and absorption. A few doses of calomel, followed by a tonic with a mild saline laxative and judicious feeding, will do far more good than cod-liver oil, iron, and hypophosphites. They are most valuable drugs in their place, but in these states of disordered function, by intensifying digestive difficulty and impairing appetite, they do more harm than good. In rickets far too much reliance is placed upon drugs to the exclusion of milk, cream, meat juice, sunlight and fresh air.

The cruel and useless practice of swabbing out the throat with caustic applications in diphtheria has almost died out, but this method of applying astringents and solvents still survives. After long experience and observation the author unhesitatingly condemns the practice as injurious. Such applications probably do more harm than good, while the terror, excitement, heart-strain, and physical exhaustion are conditions most inimical in a disease tending to death by asthenia.

Other errors in the treatment are briefly mentioned, such as oppressive poulticing of the chest in pneumonia; the administration of emetics in diphtheritic croup, which is utterly ineffectual except to exhaust and depress the patient; their frequent repetition in bronchitis and whooping cough when there is no extreme mucuous obstruction of the air passages to justify it, and the too frequent purging of rickety children.—*Med. and Surg. Rep.*

OBSTETRICS.

SOME MOOT POINTS IN ECTOPIC GESTATION.*

By X. O. Werder, M. D., Pittsburgh, Pa.

On the 16th of May of this year, there came under my care at Mercy Hospital, Mrs. R., aged thirty-eight years, mar-

* Read before the American Association of Obstetricians and Gynæcologists, New York, September 18, 1891.

ried seventeen years, mother of five children, the youngest over four years of age. She also had four miscarriages, the last one two years ago. Her menses were somewhat irregular, sometimes appearing every three weeks, sometimes going over time, also more profuse and of longer duration than previous to the birth of her last child. She always had good health until three months ago, since which time she was subject to irregular pains, referred to the lower part of her abdomen and over to the right iliac fossa, of a bearing-down nature, like labor pains. April 16, just a month ago, she had a very severe attack of these pains, accompanied with a feeling of faintness, so that she was compelled to go to bed. In two or three days she had improved sufficiently to be able to go about, but she had repetitions of these paroxysms at irregular intervals of a less severe character. During the last four weeks she was compelled to spend half of her time in bed, and was unable, when up, to attend to her ordinary household duties. For the last six weeks she has had a constant bloody discharge, never profuse, and at no time were any shreds of decidua passed, as far as she was able to observe.

Mrs. R. is of medium height, well nourished, but rather pallid and anæmic. She complains of some pain in the lower part of her abdomen, extending over toward her right side, with bearing-down sensations. There is some tenderness on pressure over this region. Vaginal examination reveals a marked bilateral laceration of the cervix, with erosions and cervicitis. Pushing my finger up toward the fornix vaginæ, it encountered a mass filling up Douglas' pouch, causing the latter to bulge down somewhat, which I at first mistook for a retroflexed gravid uterus, but, on making a more careful bimanual examination, I discovered the fundus uteri pushed out of its median position over to the left side of the pelvis by this mass, which was very closely connected—in fact, almost continuous—with it on its right side, but the fundus was found projecting over it. The uterus was considerably enlarged and slightly movable; moving it also imparted some very slight motion to the tumor. The mass was situated in Douglas' *cul-de-sac* and extending over toward the right side, but was not attached to the right pelvic wall; in fact, my finger could easily be pushed up between it and the pelvis. It was soft, almost giving the sensation of fluctuation, at least at its upper surface, and seemed almost immovable; it was of the size of a large orange and slightly tender.

A positive diagnosis was not made. It seemed most probable that this tumor was either an ovarian cyst, with firm adhesions to the posterior pelvic wall, or an intraligamentous or

broad-ligament cyst. The possibility of extra-uterine pregnancy was also considered, the symptoms pointing to it being the menstrual discharge keeping up for six weeks and the paroxysms of pain.

Laparotomy was performed on May 23. After pushing up the intestines and omentum, which covered the tumor and had formed loose and soft adhesions with it, dark blood appeared in the incision, and my hand filled up with a soft, friable substance, which, when brought to the surface, was found to be semi-organized blood coagula. Several handfuls were emptied out and then the tube was brought up, which was dilated and ruptured and filled with blood-clots and the, at least in one place, firmly adherent placenta. The fœtus was not found. This blood tumor was situated principally in Douglas' *cul-de-sac*, and partly, also, to the right of it, but did not fill up the whole right side of the pelvis. It was bounded in front by the right broad ligament, and the uterus (which also formed the boundary line on the left side) above by intestines, and posteriorly by pelvic wall. There was no membrane surrounding it which presented the least resistance to the finger; after separating the intestines it broke right into the mass. The abdominal cavity itself, before the ruptured mass had been broken into, was entirely free from blood. Neither was there any sign of any inflammation, the only abnormal condition being a marked congestion of the peritoneal lining of intestines and abdominal walls. The abdomen was washed out with distilled water, a drainage tube inserted, which was left forty-eight hours, and the abdominal wound closed. The patient made an ideal recovery and is now in excellent health.

This case is of great interest, because it proves to my mind the fact that not all cases of tubal pregnancy are fatal. Rupture in this case undoubtedly had occurred on April 16, almost six weeks before operation: the hæmorrhage evidently was not very profuse, probably a slow oozing, because the symptoms at no time were of an alarming nature. The bloody serum in the abdominal cavity became absorbed, the coagula by the natural law of gravitation found their way to the lowest portion of the peritoneal cavity, the Douglas pouch, when the protecting hand of Nature surrounded them by lymph, encysting them there and shutting this foreign body out from the general peritoneal cavity. That Nature's conservative efforts would have succeeded in restoring the patient's health in time is more than probable.

Simple as this matter seems, some of our best and experienced operators in this field doubt, or even deny, the possi-

bility of this occurrence. Tait says that "intraperitoneal ruptures seem to be almost uniformly fatal." "I have never seen a case of suspected rupture, or one in which we suspected intraperitoneal effusion of blood, recover if left alone."* Joseph Price, whose experience with ectopic gestation has been equaled only by Tait himself, seems to share this opinion. Their teaching seems to be that the only hope of recovery is in an operation. The only cases of tubal pregnancy which, according to Tait, recover spontaneously, are those rupturing between the folds of the broad ligaments, and such cases he regards apparently as quite common—so common that he has been able to see from fifty to eighty cases of this condition.

Price's experience differs from Tait's in this regard: in his opinion, rupture into the broad ligaments is extremely rare. He says: "Mr. Tait's position in regard to hæmorrhage into the broad ligaments differs from the rest of the world. I have operated fifty-four times for ectopic pregnancy, and I have failed to find hæmorrhage between the leaflets of the broad ligaments." †

The opinions of these two men should, by means of their unexcelled experience, be regarded as authoritative, but they disagree in a matter pathologically of great importance. There is no doubt that Tait's singular experience in regard to intraligamentous rupture of tubal pregnancy has not been verified by other observers, nor can his statement in regard to the uniform fatality of intraperitoneal hæmorrhage be borne out by facts. I am of the opinion that many of these cases recover, and in this I am supported by Olshausen, Veit and other authorities. My own experience, which, it is true, covers only six cases, has proved this to my own satisfaction. In addition to the case with which I introduced this paper, I have seen two other cases in consultation in which there could be no reasonable doubt about the existence of ectopic gestation with rupture into the peritoneal cavity, in which operation was refused and still the patients recovered. The first patient when seen by me was profoundly collapsed and exsanguinated, and seemed to be on the verge of death. Both the attending physician, Dr. J. J. Buchanan, and myself urged laparotomy as the only hope of recovery, but this the patient refused. As this patient was very thin and the abdomen not tender, the examination was very easy. The fluid in the abdominal cavity could distinctly be made out. Bimanual examination discovered the uterus of but little more than normal size, movable and pushed to the

*Tait on *Diseases of Women* and *Abdominal Surgery*.
†*Transactions of the Philadelphia Obstetrical Society*, February 5, 1891.

right by a boggy mass in the position of the left Falloppian tube. This mass was of about the size of a large orange, but somewhat more elongated. The sac of Douglas was filled with a doughy mass. The patient gradually rallied and improved, but very slowly, and her recovery was very tedious. Three months afterward I had an opportunity to examine her, and found a mass in her pelvis of the size of a large lemon, and even then she was unable to attend to her household duties.*

The history of the third case is almost identical with the one just narrated, with this exception, however, that her condition had never become extremely alarming and threatening, as the other. She also recovered without operation; but though rupture occurred last April, her family physician, Dr. J. J. Buchanan, reported to me a few days ago that there was still a mass in her pelvis, and that she was so very tender that examination could only be made with great difficulty. It is needless to say that though over five months have elapsed since her intraperitoneal hæmorrhage, she is still suffering from its effects.

Of the four cases in which I performed laparotomy, in one case reported in this paper, the operation was made almost six weeks after rupture, when the patient was slowly recovering from an intraperitoneal hæmatocle; in two others, rupture had occurred five days previous to operation; both patients were rallying from their condition of collapse, and there were no signs of any renewal of hæmorrhage, and as the fœtus in both cases had escaped from the tube into the abdominal cavity, it is at least probable that recovery would have taken place without operation. We have, therefore, five cases out of a total of six in which there is a strong probability of recovery, though undoubted rupture into the peritoneal cavity had occurred. Ordinarily, we could hardly expect such favorable results, but I feel confident that the percentage of recovery is much larger than we have been led to believe. Granted, then, that this be the case, should we change the method of treatment of this affection now generally advocated, namely, laparotomy, as soon as this condition is recognized? I would say emphatically, No! There is too much uncertainty in this matter, and while undoubtedly many would recover without operation, there is a very large percentage which only prompt operation can save; unfortunately, we have no means of knowing which are the fortunate cases that would escape a fatal termination. Within a year I have had an opportunity to see two specimens of tubal pregnancy removed post mortem from cases unknown to me, which probably could have been saved by prompt operation. One of these, whose ovisac was not larger than a raspberry,

* Reported in the *Pittsburg Medical Review*, 1891.

died in a little over five hours. Promptness in operating should, therefore, be our rule; trusting in nature to avert the fatal termination is illusory and is apt to be disappointing. I would advise, therefore, with Dr. Charles A. L. Reed,* to operate—(1) Before rupture as soon as the condition can be presumptively diagnosticated. (2) In cases after rupture, as soon as evidences of internal hæmorrhage become apparent.

I think we all subscribe to this treatment, with the exception of those, perhaps, who still pin their faith to electricity. We are probably not so unanimous in the cases which have passed the most critical period, danger of death from hæmorrhage—*i. e.*, cases in which the hæmorrhage has ceased and the patients begin to rally and improve. Most authorities, I believe, counsel conservatism and advise against operation, but I doubt whether such a course would serve the best interests of our patients. On the one hand we have the danger of recurring hæmorrhage (cases in which bleeding returned at intervals of days and weeks have been reported by Veit, Olshausen, Price, Tait, and others) and an accumulation of blood in the abdominal cavity, which, in spite of the well known digestive properties of the peritonæum, is liable to produce sepsis and peritonitis. Even if the hæmatocele has formed, there is still danger of sepsis and suppuration. If the patient survive all these dangers, her convalescence will be slow and tedious, as has been shown in the two cases referred to in this paper, and the tube which was the seat of the rupture will not only be a useless organ, but it may prove a source of ill-health and possible danger to life at some future period. On the other hand, laparotomy should be, and has proved to be, a perfectly safe operation in skilled hands, especially in these cases, as they have already recovered from their collapsed condition; by it we are able to remove all present and future danger. In none of my abdominal work have I seen such ideal recoveries and such rapid convalescence as in the four cases in which I operated. The patients gained strength during the two weeks they spent in bed. One, in whom the pulse had been from 120 to 160 during the five days previous to operation, had a pulse of 90 the morning after the operation. I would therefore, in the interest of the patient, advise laparotomy, though all present hæmorrhage had ceased and even if an intraperitoneal hæmatocele had formed, provided, of course, the operator has the necessary skill and the surroundings are favorable for an aseptic operation.

In closing this already too lengthy paper, permit me a few words in regard to a danger referred to by Olshausen, Reed,

* *Indications for Operation in Ectopic Pregnancy.*

and others, which patients with ectopic gestation are liable to encounter—namely, a recurrence of such an accident in the other tube. To avoid this danger it has been suggested to remove both tubes in operating for tubal pregnancy, justifying this course by the assumption that ectopic pregnancy is almost invariably due to salpingitis, which, in the large majority of cases, is bilateral. It is not my purpose at present to go into the ætiology of this affection, but to simply look at this matter in its practical bearings. Where the tube not the seat of fœtation is seriously diseased, its removal is plainly indicated: but where no such marked disease is present, such a course, in my opinion, would hardly be rational. Of my four cases, in two the tube and ovary were perfectly normal; in one (the case reported in this paper), the left ovary was slightly adherent, but the tube and ovary otherwise normal; in one only was the removal of the other tube indicated for disease. The result of this conservative course of treatment was pregnancy in two cases; one patient has been delivered of two living children since, and the other is in her seventh month of pregnancy. —*N. Y. Medical Journal.*

INFANTILE DEFORMITIES AND MATERNAL IMPRESSIONS AND EMOTIONS.

The following presidential address before the Obstetrical Society of Glasgow, by Dr. George Halket, is published in the *Glasgow Medical Journal* for January:

There are few things more painful to a mother than to give birth to a child that is in any way deformed. How often do we hear a mother say that it matters little to her whether her child is a boy or a girl, or what it is like, or whom it is like, so long as it is "like the world."

We are apt to look upon these words as an idle tale, and worthy of little attention; but I firmly believe that they bear more real significance than they generally get credit for.

A deformed child is a lifelong sorrow to its mother, and an object of pity as long as it lives, yet we not infrequently see children come into this world deformed as to their face, their limbs, or other parts of their body, and bearing these deformities along with them from their cradle to their grave.

The deformities of which I am going to speak are those which have occurred in children at whose birth I attended, with whose family history I was acquainted, and, in the case of those who survived, whose subsequent career I have been able to follow.

I will take first those deformities affecting the head and

face, then those affecting the upper extremities, then the lower extremities, and then those affecting the trunk.

The case of greatest interest affecting the face and head was the child of a woman residing in Stobcross street. It was her second child, the first being as healthy and well-formed a boy as one could wish to see, and who is still alive. The child of which I am speaking was also a boy. Its nose was only partly developed, being very small, and had only one nostril. It had the appearance as if only half the nose were there. The right eye was situated considerably further back on the head and at a much lower level than the left eye. The child could not close that eye, and, sleeping or waking, the right eye was always wide open. On the right side of the forehead there was a small growth, half an inch in length, tipped with bone, and which looked like a small horn. This I took to be the undeveloped part of the nose. The child was otherwise strong and healthy, and lived till it was fifteen months old, when it died of acute bronchitis.

There were five cases of hare-lip. Two of these were simple and uncomplicated, and situated on the left side of the median line. These were successfully operated upon. Two cases, one on the right side and one on the left, were complicated with cleft palate. One died in infancy from bronchitis, the other was operated upon and is still alive. The fifth case was a double hare-lip, with cleft palate, and died in the Western Infirmary, whither it was taken for operation.

I had three cases of children with hydrocephalic heads, all dead-born. One of these required perforation and the application of the forceps; another, born at the end of the eighth month, was delivered with the aid of the forceps. This child had no neck, the head being fixed directly on the shoulders. The third case was a breech presentation, and was delivered with great difficulty. The bones of the head in this case were not united, otherwise craniotomy would have required to have been performed.

I had one case of complete ossification of the bones of the head. The mother of this child had had a large family, and all her confinements were normal. In the present case, after the cervix was completely dilated, the head remained for a considerable time above the brim of the pelvis. To aid delivery I applied the forceps, but, do what I could, I made no impression on the position of the head. The case being in Crosshill, I got the assistance of Dr. Nairne, but with no better result. We then decided to turn, and again the head gave trouble. It was only after efforts which exhausted us both that the child was brought into the world, with a head as round as a ball and as hard as a stone.

Coming now to the deformities affecting the upper extremities, there was one case where the forearms were only partially developed—that is, they were short and thin as compared with the upper arms, and they were firmly fixed at right angles to the upper arms, to which they were attached by a thin web-like membrane of skin and fibrous tissue. On each hand only the thumb and forefinger were present. This child was dead-born, but the mother believed it was alive at the beginning of labor.

The next case was a child born at the end of the eighth month of pregnancy. It had both hands firmly fixed at right angles to the forearms, and resembled the condition which is found in talipes equino-varus in the foot.

There was one child born in which the index and middle fingers of the left hand were not developed, and two cases where the child was born with a sixth finger on the left hand. As the attachments of these sixth fingers were only slight, I separated them and bandaged the hands.

In the lower extremities the only deformity I had was that of club-foot, and of this I had three cases—all of the talipes equino-varus type. In two of these cases only one foot was implicated; in the third, both feet.

All were successfully operated upon.

I had one case—a breech presentation—where one of the feet was very much twisted by intra-uterine pressure, and had all the appearance of a bad club-foot; but manipulation and bandaging eventually restored it to its proper shape.

On the trunk I had three cases of spina bifida. One was in the dorsal region and had no tumor. One was in the lumbar region, and the third was over the upper part of the sacrum. The first two cases died within a few days of their birth from convulsions. The third case did well, the tumor taking on a thick covering of skin. This child, a boy, is still alive, and about eight years of age. He was three years old before he could walk, still walks with a stooping and shuffling gait, and is not intellectually the equal of his brothers and sisters.

These, gentlemen, are the deformities and malformations worthy of note which have occurred in my midwifery practice, and the question now arises, Can their appearance in any way be explained?

The belief that maternal impressions and emotions affect the development of the fœtus has existed from the earliest periods, and, up to the beginning of the eighteenth century, was generally accepted by the medical profession. From that date up till now, and more especially within the last fifty years,

writer after writer, and among them men of distinction, both in this country and America, have expressed their disbelief in this theory, and have written many articles to controvert it.

They hold that maternal impressions or emotions are exceedingly common among pregnant women, and that deformities are very rare.

That deformities sometimes occur when there was no history of maternal impression.

That when deformities follow well-marked maternal impressions, they are due to coincidences, and are not cause and effect.

That there is no nerve tissue in the umbilical cord, and that mental emotion can not, in this way, be carried from the mother to the child. And, further, that, as the action of maternal impressions and emotions can not be explained pathologically, they can have no effect whatever on the fœtus *in utero*.

But, gentlemen, "there are more things in heaven and earth than are dreamt of in our philosophy," and case after case has been put on record, substantiated and confirmed by medical men whose names are sufficient guarantee, that mental impressions and emotions do sometimes affect the development of the fœtus.

One thing is certain: that, knowing the sympathy that exists between the brain and the womb, if there is one time more than another when a woman should be treated with gentleness and care, when her surroundings should be pure and free from anything that is repulsive, it is when she is pregnant.

If, on the other hand, we see her exposed to everything that is bad — the fury of a drunken husband and the annoyance of quarreling neighbors, hearing obscene language and seeing foul sights; if, in addition to that, we find her addicted to drunkenness and the other evils that spring from that—there is little wonder that the course of nature in the development of the fœtus should sometimes be interfered with.

Now, what do we find in the cases I have laid before you?

In the first case, where the nose was only partially developed, and where the right eye was displaced, the father of the child was at that time a confirmed drunkard, and frequently assaulted his wife. There was a history of repeated kicks and blows over the abdomen during the early months of pregnancy, not discovered only after the birth of the child, but of which I was made aware at the time, and measures had to be taken on more occasions than one to prevent abortion.

In this case I believe the deformities were the result of external violence.

Taking next the deformities which were due to arrest of development—hare-lip, cleft palate, and spina bifida—there was not, so far as I was made aware, in any of them any history of particular maternal impressions, but there were in every case circumstances which I believe tended to cause these deformities.

In the two worst cases of hare-lip and cleft palate the mothers were given to frequent and long-continued fits of intemperance; and from this cause, aggravated by violent emotions to which every intemperate person is exposed, the blood became vitiated and so changed as to interfere with the proper nutrition and development of the child.

In two other cases the mother suffered bereavement about the time of conception, and had long periods of grief and mental depression. Another was deserted by her husband and left in poverty and suspense, and the others suffered in many ways from ill treatment and neglect.

Now, bearing in mind the absolute dependence of the fœtus on the blood of the mother, it is not difficult to imagine how mental emotion, long continued, should so affect the quality of the maternal blood as to cause it to act injuriously on the child.

In the two cases where the hands and arms were deformed or only partially developed I did not seek for any history of maternal impression. I thought it better in each case that the mother should be kept in ignorance of the deformity of her dead child.

But there was one case that would not hide, and that was where the child was born alive with the index and middle fingers wanting from one of its hands. The mother was a young woman who knew nothing about maternal impressions, but when she was made aware of the state of her child's hands, she stated without hesitation that she had to work for some months after her marriage; that the foreman under whom she worked had lost two fingers through an accident; that when she saw his hand for the first time she had a "grueing," or shivering, and that every time she saw him she could not keep from thinking of his deformed hand.

A few years ago an interesting correspondence was carried on in *The British Medical Journal* on the subject of maternal impressions, and medical men in different parts of the country gave an account of cases which had come under their own observation. One medical man had a patient who, in the early months of her pregnancy, wished to have her ears re-

pierced, that she might wear her ear-rings again. When she got this done she wished she hadn't, and the matter preyed heavily upon her mind. When she was confined, it was found that the child's ears were likewise pierced, and a thread was passed through one of them.

Another related how a patient of his, in her pregnancy, was served daily with milk by a boy who had lost his middle finger, and that as he handed her the milk she always observed the absence of that finger. When her child was born, the middle finger of one of its hands was wanting.

A third medical man described how a workman was brought into his surgery with one of his hands cut right off by some machinery. He narrated this incident to a lady friend of his, who was at that time in the early months of pregnancy, on whose mind it made a marked impression, and who could not keep from detailing the incident to others. Her child was born with only one hand.

Another doctor had a patient who, about the time of her conception, had lost a near and dear relative. Her grief was inconsolable, and she spent the early months of her pregnancy in weeping and covering her eyes with her handkerchief. When her child was born it was born blind.

And this brings me to speak of a case that occurred in my own practice, now a good many years ago, but the facts of the case are as firmly impressed on my mind as if they had occurred only yesterday. It was the saddest case I ever had, for though the confinement was as simple a one as I ever attended, the child was born dead, and the mother died within a few hours afterward, and that from no apparent cause.

On October 4, 1884, a lady residing in the western district of Glasgow called upon me and asked me to attend her in confinement, which she expected about the middle of December. It was to be her third confinement. Both previous confinements had been normal, and I had attended her in her second confinement, when she made a good recovery. I remember telling her that I did not think she looked quite as well as she did when I saw her last, and she replied that since the death of her mother, who had resided with her, she had felt dull and lonely, and was often in low spirits. Otherwise, she said, she was in good health.

I may here mention that, though I had been frequently in her house visiting her mother and her children, I had never been asked to prescribe for herself, and none of her friends ever suspected her to be suffering from any bodily trouble.

I did not see her again till the early morning of December 9, when I was called to her confinement. I found her

sitting at the kitchen fire, the very image of despair. On my advice she went to bed, and on examination I found the labor well advanced, the head presenting normally, and the membranes unruptured. The pains were strong and regular, and with every pain she cried out in a tone which resembled that of grief rather than of bodily suffering: "Oh, my poor mother, my poor mother." I told her that she was not bearing up so well as she did at her previous confinement, and encouraged her as well as I could. She paid no attention to what I said, but with every pain kept crying: "Oh, my poor mother, my poor mother." Shortly afterward the membranes ruptured, and in a few minutes the child came into the world, but the first view I got of it convinced me that it was dead. There was no discoloration of any part of its body, but it had that soft, white appearance which indicated the absence of life. I did attempt resuscitation, and while doing so asked her when she found the movements of the child last, and she answered that she had felt no "life" since her mother died. Now, her mother had been dead nearly a year.

After removing the placenta and bandaging her, I waited a short time to see that the uterus was contracting properly, and then left her, to all appearances well. In about three hours afterward I was called hurriedly to come back and see her, and was just in time to see her breathe her last. There had been no undue hæmorrhage, internal or external; and the only information I could get was that she had attempted to sit up, and had fallen back in a fainting fit.

I was visiting in the neighborhood the following day, and reference was made to what had happened. I stated that I had difficulty in accounting for the cause of death, but the lady to whom I was speaking said she believed the cause of death was a broken heart. And then she told me how in the summer time she had frequently met the deceased lady at the coast, and how her whole talk on every occasion was about her dead mother.

Gentlemen, I have laid before you, for your opinion, every fact of this sad case with which I am acquainted; but whatever the scientific or pathological explanation may be, I am firmly convinced, in my own mind, that the death of this child and the death of its mother are in some way connected with maternal emotions.—*N. Y. Med. Journal.*

Book Reviews and Notices.

History of Circumcision from the earliest times to the present. Moral and Physical Reasons for its performance, with a History of Eunuchism, Hermaphrodism, etc., and of the different operations practiced upon the Prepuce. By P. C. Remondino, M. D., Philadelphia and London. F. A. Davis, 1891.

Works relating to the sexual organs and their functions, or aberrations therefrom, always possess a great interest to all persons, whether lay or medical. Dr. Remondino's work is a curious as well as instructive work, and it will prove interesting to layman and physician alike.

Circumcision dates back to earliest antiquity. It was not confined to the Jews, but was practiced as well by the educated Egyptians and Greeks, to whom it spread after the Jews had practiced it for centuries. Its origin is involved in obscurity. Savage warriors used to cut off the external genitals of vanquished enemies as a proof that they overcame men; the North American Indian removes some of his fallen foe's scalp, and hangs it to his belt. In the course of time barbarism became less fierce, and the mutilation of fallen enemies became less revolting. Among the Jews, however, it does not seem that circumcision was the ultimate phase in the evolution of mutilation of the genitals; Dr. Remondino thinks that the custom among them was of divine origin. The Jews practiced it primarily as a religious rite; the Egyptians practiced it first as a hygienic measure, and it afterwards became engrafted upon their religious system. Among the Egyptians, the circumcised penis, as well as the rite itself, was the symbol of religious and political community, and the circumcised member was emblematical of civil patriotism, as well as of the orthodox religion of the nation. "To the Egyptian, his circumcised phallus was the symbol of national and religious honor; and as the Anglo-Saxon holds aloft his right hand, with his left resting on the Holy Bible, while taking an oath, so the ancient Egyptian raised his circumcised phallus in token of sincerity."

Dr. Remondino traces out the spread of circumcision among different nations. He decribes the methods of performing the operation, and treats of the various diseases that are connected with the prepuce. His work is practical as well as historical. He gives highly interesting chapters on eunuchism,

emasculation, infibulation, etc. His remarks on the manufacture of eunuchs, at the present day in Africa, reveal a shocking state of affairs, which is a standing reproach to our boasted civilization.

Dr. Remondino has given to the world a book that is curious, instructive, and full of wisdom. Only prudes and hypocrites need be offended at it. A. McS.

A Practical Treatise on the Diseases of the Ear, including a Sketch of Aural Anatomy and Physiology. By. D. B. St. John Roosa, M. D., I.L. D., Professor of Diseases of Eye and Ear in the New York Post-Graduate Medical School, etc., etc. Seventh revised edition. New York: Wm. Wood & Co., 1891.

This standard work has taken a new lease of life and a stronger hold on the affections of men interested in the ear. In his last edition, Dr. Roosa brings his work to the most recent developments of the times. His ripe scholarship and constant absorption of all that is valuable in periodical medical literature, enable him to produce a work that reflects accurately the present status of otology.

The present edition opens with an interesting historical sketch of otology. The methods of examining patients are next fully described. The anatomy and physiology of the organ of hearing are not given in a one part, but are divided into sections. Thus, the anatomy and physiology of the external ear precede the description of the diseases of that part of the organ, all being grouped in one section.

Dr. Roosa's work has been before the profession too long to need an extended analysis. It has already been favorably noticed in The Journal, and the present reviewer can only confirm what his predecessors have said.

In his chapter on the removal of the ossicles, Dr. Roosa is not quite as hopeful as Dr. Sexton, who has performed the operation many times, and frequently with very favorable results.

We take the liberty of noticing particularly what he says in regard to adenoid vegetations of the naso-pharynx. In speaking of the diagnosis of these growths, he very justly gives prominence to digital examination of the pharynx; but he is mistaken when he says that the adenoids can usually be detected by simple inspection of that portion of the naso-pharyngeal space to be seen when the mouth is opened. In commenting on Meyer's paper on adenoids, Dr. Roosa says

that these growths do not appear to be as common in this country as in Denmark. We do not know how common they are in New York, but we can assure Dr. Roosa that they are distressingly common in New Orleans. That chapter in his work needs retouching for practitioners in this part of the country. But that is only a small part of a large and valuable work that is a safe guide in the treatment of diseases of the ear.

A. McS.

PUBLICATIONS RECEIVED.

Age of the Domestic Animals. By Rush Shippen Huidekoper, M. D. F. A. Davis, 1891.

A Manual of Practical Obstetrics. By Edw. P. Davis, A. M. D. D.

Diseases of the Nasal Organs and Naso-Pharynx. By Whitfield Ward, A. M., M. D.

Manual of Physical Diagnosis for the Use of Students and Physicians. By James Tyson, M. D.

Surgery, Its Theory and Practice. By Wm. Johnson Walsham, F. R. C. S. Third edition.

The Modern Treatment of Hip Disease. By C. F. Stillman, M. D.

Microscopical Diagnosis of Tuberculosis. By Paul Paquin, M. D.

Syphilis in Ancient and Pre-historic Times. By Dr. F. Buret, Paris, France. Translated by A. H. Ohmaron-Dumesnil, M. D.

Consumption: How to Prevent It and How to Live with It. By N. S. Davis, Jr., M. D.

The Chinese, Their Present and Future. Robert Coltman, Jr., M. D.

Physical Diagnosis: A Guide to the Methods of Clinical Investigation. By G. A. Gibson, M. D. (Edin.), and Wm. Russell, M. D. (Edinburgh).

Botany: A Concise Manual for Students of Medicine and Science. By Alex. Johnstone, F. G. S. (Edinburgh).

Surgical Anatomy for Students. By A. Marmade Shields, M. B. (Cantab).

Diseases of the Bladder and Prostate. By Hal. C. Wyman, M. D.

State News and Medical Items.

[Communications from Physicians of Louisiana are solicited for this Department. News of personal interest is especially desired.]

CHARITY HOSPITAL.

ANNUAL REPORTS FOR THE PAST YEAR.

A Committee Appointed to Investigate the Conduct of the Students Who Assaulted the Picayune Artist.

The board of administrators of the Charity Hospital met in monthly session February 1, 1892. In addition to the

routine business of the board the recent assault upon Mr. Louis Winterhalter was referred to a special committee of five for investigation and report.

There were present Dr. Bickham, vice-president, and Messrs. Vincent, Sentell, Keller, Seeman, Joubert and McManus. After the reading of the minutes of the last meeting Secretary Marks read a letter from Dr. Weindahl, who was ill and sent his regrets at not being able to attend the meeting.

Dr. A. B. Miles, house surgeon, submitted his annual report, in which he said that work at preseut was rather heavy. There had been 122 ambulance calls during January, and the average number of patients in the hospital was 707, with only 700 beds. The average number of patients exceeded the number of beds, especially in the surgical departments, and the patients have been much crowded.

The number of inmates remaining in the hospital at the end of 1890 were 642, and 6706 were admitted; making a total of 7348 inmates treated; 6509 of those admitted were free, and 197 pay patients; 623 were admitted in excess of previous years, owing to the prevalence of influenza. There were 1028 deaths during the year, a total mortality of less than 14 per cent.

The treasurer reported the following income during January: From ordinary purposes $13,661.16; cash balance January 1, 1892, $24,185.55; total $37,846.71. Disbursements—Ordinary expenses, $4033.49; cash balance January 31, 1892, $33,813.22.

The clerk's report showed that 686 patients remained in the hospital January 1, 1892. There were 750 admitted, discharged 594, died 119; remaining in the hospital February 1, 723; males 508, females 215. Daily average of patients during the month 707.

The clerk's financial report showed: Received from pay patients $285, from gate fees $343.45, certificates $24; amount paid over to Sister Agnes $625.45.

The ambulance corps reported 122 calls during the month of January. The average time was 32 minutes. Ten dollars was received for four pay calls.

Still the mortality for the year was less than the average mortality. Outdoor visits, 16,189. All told, 23,537 patients were attended to. The ambulance corps answered 1348 calls; one less than last year.

Dr. Miles, in concluding his report, spoke favorably of the general condition of the hospital. The outdoor clinic buildings, which were almost completed, was an improvement of paramount importance.

Dr. H. Dickson Bruns, pathologist, submitted his annual report, showing that 151 autopsies had been held, and 1051 examinations made during the year.

The annual report of Dr. Bickham, on behalf of the board, was submitted. It detailed what had been done during the year.

The annual report of the house committee gave a summary of the improvements made during the year, and paid a high compliment to Engineer Ponder and the Sisters of Charity.

The committee on clinic buildings reported that the structures were virtually finished.

A comprehensive and interesting annual report was sent in by Engineer Ponder, which was received with thanks.

The committee to examine the books and accounts of the treasurer reported that it had made a careful examination and found everything correct.

The building contractors petitioned the board for the return of $80 demurrage, caused by a delay of eight days in certain work. The petition was granted.

Under the head of new business, Col. Vincent arose and spoke as follows:

I deem it proper and incumbent upon me as chairman of the house committee to officially call to your attention the recent publications in relation to the charges made against the students of Tulane University, in expelling from the amphitheatre, during the performance of an abdominal operation on a female patient, a person who was there present; and suggest and urge the appointment of a committee to examine into and report to this board all the facts and particulars in this matter, with a view of such final action on the subject as this board may direct; and that the committee further examine into and report to this board if it is necessary and advisable to establish any additional or more stringent rules for the furtherance and maintenance of the continued good order and discipline of this institution.

It is my most earnest wish to see that this institution, whose well known and high development we have all so much at heart, kept well in the front rank and ahead of similar institutions in other cities, and I speak for us all when I say that no devotion to our duty will be too great which will enable us to do so. It will not be inappropriate for me to here state that I have the very highest confidence in the administration of the duties confided to our medical staff, and can bear witness to their devotion to their duties; and it would be needless for me to say anything in praise of their well known work; so of our most honored Sisters of Charity. As regards the work of the

Board of Administrators, we simply ask to be judged by the results around us.

In connection with this matter I would suggest that a committee of three or four, as the board may deem proper and right, together with the vice-president of this board, and also the house surgeon, be appointed to take this matter in charge and report to the board. I, therefore, put this in the shape of a resolution.

Mr. McManus—This is rather a public attack on this institution through the papers, and one which, I think, is not called for. This institution has a national as well as a State reputation, and I don't think it is right. I don't know why this attack has come. I don't know what it is based on. Now, mind you, I have not conversed with anybody on it, but I have been studying it up pretty hard. There is no institution in this country to-day that is better attended to than this one. We have 707 patients to-day, and it is possible that one might become displeased. It is that way with all patients. Take a patient in your own house, and you'll find that he becomes cranky. When it goes out in the public press to publish an institution of this sort, where the good Sisters work so hard and do so much for it, I think the matter should be looked into. It has never failed to my memory, whenever this institution is attacked, those who attack it always get the worst of it. The papers have come out with editorials and publications against this institution with a view of making the good Sisters feel bad. I don't know about this man who came to this amphitheatre. If it was an overt act I am not prepared to say. But I will say that the gentleman went where he had no business to go. I say——

Dr. Bickham—I would suggest that this matter will be before the committee, and that that is the place for you to go.

Mr. McManus—I just want to express my opinion. The general attack is a strange thing to me. If there was cause for it, whether I was connected with the institution or not, I would complain. Everything is getting along as nice as possible, and it never was in a better condition as to improvements, finances or anything else.

Dr. Bickham—No doubt, justice will be done by the committee.

Mr. McManus—Exactly, and that is just what I want.

Col. Vincent's resolution was adopted, and the chair appointed on the committee Messrs. Vincent, Keller and Sentell.

Under the resolution Dr. Bickham and Dr. Miles are made members of the committee, making a committee of five.

The board then adjourned.—*Times-Democrat.*

THE GRAND JURY.

A SPECIAL REPORT ON THE CHARITY HOSPITAL.

On February 23, 1892, in Judge Baker's section (B) of the Criminal District Court the grand jury submitted the following special report:

Owing to serious charges made against the management of the Charity Hospital published in *The Times-Democrat* of January 29, over the signature of Capt. F. S. Dugmore, a British subject, who was a patient of the hospital for a short time previous to the publication of his letter, which was supported by two editorials in the same journal, 29th and 31st of January, together with the request of the editor of *The Times-Democrat* that the grand jury should investigate said charges, the managers of the hospital also demanding that the charges be investigated, the grand jury have deemed it wise to make more than the usual examination into the affairs of the hospital, and have investigated most thoroughly the charges in question and all other charges growing out of the recent publication, and submit herewith a special report on same, which also covers the affairs of the hospital in general.

From the investigation, which occupied us for several days, including a thorough inspection of the hospital buildings, we are convinced that the Charity Hospital is under most efficient management, which aims to alleviate and care for the largest number of the unfortunate sick and afflicted needing the charities of the State. Over 20,000 patients are treated annually, which, perhaps, is the best evidence of the great good it is accomplishing, and the appreciation in which the institution is held by the indigent sufferers needing this charity.

From so large a number of patients it would be impossible not to find some who had complaints to make of the hospital, and it is only fair to say that in some cases the complaints may not be wholly unfounded.

The publications in *The Times-Democrat* were well calculated to bring to the surface and to our notice such cases, but only a few have we discovered. These cases were all, including Capt. Dugmore's, closely investigated, and, with trifling exceptions, were found to be without foundation.

It must always be remembered that the hospital offers what its name indicates—a charity—and no one should, or has any right to, expect that he will have exactly the same comforts and attentions as are afforded in private hospitals charging four or five dollars per day to each patient, or in richly endowed hospitals, where the difficulty is found in some cases in expending their income, while in the Charity Hospital every dollar is needed and used in maintaining and improving the institution.

To quote from Capt. Dugmore's letter: "A dime goes as far as a dollar in the hands of the Sisters of Charity connected with the hospital."

It is fully understood by all that the hospital could be improved and its facilities enhanced by the elaborate expenditure of more money, which, of course, is not available.

The hospital is steadily improving year by year, not only in its capacity to care for a greater number of patients, but also in the facilities for treating them.

Considering all the conditions incident to the hospital, we do not see how it could be better managed than at present, except in the matter of nursing and perhaps some minor details.

The nursing in this hospital seems to be conducted on a system very different, if not totally different, from other hospitals, and successfully. The system, briefly, is as follows: There are three classes among the nurses—

First, are the resident students.

Second, are the Sisters of Charity, who have general charge of the nursing under the students, as well as exclusive management of the domestic affairs of the hospital.

Third, are the ward nurses, who are mainly taken from the convalescent patients, who of necessity in some cases are deficient.

It is claimed by some who have experience in the affairs of hospitals that the efficiency of the Charity Hospital could be improved by the employment of only professionally trained and paid nurses. (It must not be understood that the hospital has not at present a large number of efficient nurses who have been trained in the hospital, where they have served for a number of years—some of them twenty years or more.) Much could no doubt be said in favor of this system. Such a system, however, would appear to conflict with the valuable services of the resident students, who in a great measure seem to perform the most important duties which would be required of the professional nurse. This privilege also furnishes a most valuable hospital experience to the student, so necessary to fully equip him in his profession, which would always be borne in mind as one of the important functions of the hospital.

This system, it is further claimed, would not harmonize with the duties of the Sisters of Charity, whose excellent and self-sacrificing services have done so much for the success of the institution; services it would not seem advisable to part with, at least until the other system had proven superior, and the necessary money in hand to carry it out. Besides, such a change would appear to be subversive of the plan upon which the hospital was founded.

The "pay ward" of the hospital seems to us undesirable in a charitable institution of this character, and we would recommend that it be abolished, for the reason that the stipend of one dollar per day charged causes the patient to lose sight of the fact that he is still in a measure upon the charities of the State, and leaves him to expect those superior attentions and luxuries to be found only in regular pay hospitals.

The ambulance system of the hospital is especially deserving of mention, as it is a most valuable adjunct to the hospital service. It seems perfect in every particular; so much so that it is regarded as a model system and copied by Northern hospitals. T. H. Bowles, *Foreman.*

THE DUGMORE CHARGES.

The New Orleans *Times-Democrat* of January 29, 1892, contained a startling letter upon the Charity Hospital from a person signing himself "F. S. Dugmore, Captain British Army on Retired Pay, and Lieutenant Royal Naval Reserve." The communication of Capt. Dugmore is quite lengthy, and only a brief résumé of its main features can be given here.

Capt. Dugmore begins his letter with a statement of the manner in which he had been induced to enter the hospital, in which he remained in the pay ward, under the care of the house officers. He briefly reviews his experience with hospitals, civil and military, and on the battle field, in nearly all civilized countries. His opportunities for studying hospitals seem to have been unusually good.

In our Charity Hospital, Capt. Dugmore finds a state of dual authority, from which numerous evils flow. There is a broad gap in the service between the purely medical work and the housekeeping work performed by the Sisters of Charity.

This gap embraces some very necessary personal attentions to the patients, which ought at all times to be supplied. The sanitary arrangements (water-closets, baths, etc.) in the male wards are extremely defective. The bath-room is not well placed, and not properly heated in cold weather. Capt. Dugmore's first bath was his only one in the Charity Hospital. His first experience deterred him from taking another bath, no matter how pressing the needs. The ventilation [in the male wards; the female wards are better arranged.—Ed.] is of the crudest description, fit only for summer weather. The pay-ward was entirely destitute of certain clinical necessaries of which Capt. Dugmore had never known even a field hospital, on active service 800 miles from the base of operations, to be

deficient (bed-pans, etc.). The night-nursing is imperfect; if a patient should be very thirsty, or should need a bed-pan, he would sometimes have to hammer on the wall or the side of the bed for several minutes before receiving assistance. Patients suffering from venereal diseases were permitted to remain in the same ward as those not so afflicted. The dejecta of patients, in the ward, are not deodorized, thus entailing considerable annoyance upon patients not accustomed to such odors. Owing to careless or incompetent night-nurses, patients sometimes fail to receive necessary medicines during the night. Violent patients are not properly watched. A patient upon whom laparotomy had been performed groaned all night for a drink of water. The ignorant night watchman refused to give it to him, being probably under the impression that the doctor had forbidden it. The patient afterwards rolled out of bed in the attempt to get some water, and he died. Emergency cases, when brought into the wards, are not seen promptly enough.

Other points are mentioned in Capt. Dugmore's letter, but we have not space for them all. Comparing the Charity Hospital with well regulated hospitals in various parts of the world, Capt. Dugmore thinks that the following things are needed: 1, medical inspection of patients immediately on adt mission; 2, a better system of concert among the differen- medical officers; 3, the providing of deodorants and certain clinical appurtenances; 4, an increase in the medical staff; 5, trained nurses; 6, modern sanitary arrangements.

DIED.

TEBO.—At Ocean Springs, Miss., on Monday, January 25, 1892, L. Cheves Tebo, Jr., eldest son of Dr. L. Cheves Tebo and Amelia Prague, aged eighteen years and three months.

TREASURY DEPARTMENT,
OFFICE OF THE SUPERVISING SURGEON-GENERAL,
MARINE HOSPITAL SERVICE.

WASHINGTON, D. C., February 23, 1892.

A board of officers will be convened in Washington, May 2, 1892, for the purpose of examining applicants for admission to the grade of Assistant Surgeon in the United States Marine Hospital service.

Candidates must be between twenty-one and thirty years of age, graduates of a respectable medical college, and must furnish testimonials from responsible persons as to character.

The following is the usual order of the examination: 1. Physical. 2. Written. 3. Oral. 4. Clinical.

In addition to the physical examination, candidates are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate.

The examinations are chiefly in writing and begin with a short autobiography by the candidate. The remainder of the written exercise consists in examination on the various branches of medicine, surgery and hygiene.

The oral examination includes subjects of preliminary education, history, literature, and the natural sciences.

The clinical examination is conducted at a hospital, and when practicable, candidates are required to perform surgical operations on the cadaver.

Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order as vacancies occur.

Upon appointment the young officers are as a rule first assigned to duty at one of the large marine hospitals, as at Boston, New York, New Orleans, Chicago, or San Francisco.

After four years' service, assistant surgeons are entitled to examination for promotion to the grade of passed assistant surgeon.

Promotion to the grade of surgeon is made according to seniority and after due examination, as vacancies occur in that grade. Assistant surgeons receive sixteen hundred dollars, passed assistant surgeons eighteen hundred dollars, and surgeons twenty-five hundred dollars a year. When quarters are not provided, commutation at the rate of thirty, forty, or fifty dollars a month, according to grade, is allowed.

All grades above that of assistant surgeon receive longevity pay, ten per centum in addition to the regular salary for every five years' service, up to forty per centum after twenty years' service.

The tenure of office is permanent. Officers travelling under orders are allowed actual expenses. For further information or for invitation to appear before the board of examiners, address:

(Signed) WALTER WYMAN,
Supervising Surgeon-General, M. H. S.

DONT'S UPON LA GRIPPE.

Don't lose your wits and get to striking out wildly, but weigh well the conditions, and prescribe only with a definite object in view.

Don't be carried away by popular fancies, and give one drug for everything.

Don't go in with the determination to "knock it." This species of insanity is very prevalent just now.

Don't over-dose. The system of an influenza patient is highly susceptible to drugs of all kinds.

Don't give heavy doses of sedatives. The influenza is itself debilitating.

Don't give too much heart tonic. You may kill your patients thereby.

Don't forget that other diseases may be present during an influenza epidemic.

Don't forget that during an influenza epidemic its imprint is on every other disease.

Don't allow your patients to eat too little or too much.

Don't allow your patients too much alcohol.

Don't allow your patients to dose themselves for any minor ailment during influenza.

Don't let your patients return to their business too soon.

Don't order more medicine than enough to last until your next visit. You will likely desire to change it somewhat, and it weakens the patient's confidence to see a medicine stopped when only partly used. It looks like indecision on your part.

Don't neglect the careful nutrition of your patient.

Don't let go your hold on your patient too quickly. Relapses and troublesome sequelæ, over-exertion and consequent collapse, are apt to follow.

Don't forget that a steady and persistent sustaining medication, carefully regulated by the effect on the heart, with the treatment of local symptoms, forms the only rational treatment of influenza.—*The Times and Register.*

To vaccinate or not? That is the question.
Whether 'tis better for man to suffer
The painful pangs and lasting marks of small-pox,
Or to bare arms before the surgeon's lancet,
And, by being vaccinated, end them? Yes,
To feel the tiny point, and say we end
The chance of many a thousand scars
That flesh is heir to, 'tis a consummation
Devoutly to be wished. Ah! soft you now,
The vaccination! Sir, upon your rounds,
Be my poor arms remembered.—*Puck.*

MORTUARY REPORT OF NEW ORLEANS.

FOR JANUARY, 1892.

CAUSE.	*White.....*	*Colored...*	*Male.....*	*Female....*	*Adults ....*	*Children.*	*Total .....*
Fever, Yellow							
" Malarial (unclassified)	3	1	3	1	3	1	4
" Intermittent							
" Remittent	2		2		2		2
" Congestive	4	2	6		3	3	6
" Typho	5		5		4	1	5
" Typhoid or Enteric	2	2	3	1	2	2	4
" Puerperal	1			1	1		1
Influenza	45	10	29	26	44	11	55
Scarlatina		1	1			1	1
Measles	1		1			1	1
Diphtheria	4		1	3		4	4
Whooping Cough							
Meningitis	3	1	3	1		4	4
Pneumonia	50	42	57	35	60	32	92
Bronchitis	14	8	12	10	10	12	22
Consumption	47	41	48	40	82	6	88
Cancer	8	1	4	5	9		9
Congestion of Brain	7		7		7		7
Bright's Disease (Nephritis)	15	8	17	6	23		23
Diarrhœa (Enteritis)	15	6	11	10	16	5	21
Cholera Infantum	1	2	2	1		3	3
Dysentery	2	2	3	1	4		4
Debility, General	3	5	5	3	7	1	8
" Senile	24	20	25	19	44		44
" Infantile	10	4	7	7		14	14
All other causes	216	139	192	163	247	108	355
TOTAL	482	295	444	333	568	209	777

Still-born Children—White, 25; colored, 17; total, 42.

Population of City—White, 184,500; colored, 69,500; total, 254,000.

Death Rate per 1000 per annum for month—White, 31.35; colored, 50.94; total, 36.71.

F. W. PARHAM, M. D.,
Chief Sanitary Inspector.

METEOROLOGICAL SUMMARY—JANUARY.

STATION—NEW ORLEANS.

Date.....	TEMPERATURE. Mean	Max...	Min...	Precipn. in inches and hund'ths..
1	64	71	58	.32
2	45	51	39	0
3	46	54	37	0
4	56	70	42	0
5	68	77	59	T
6	50	55	44	0
7	42	48	36	0
8	49	60	38	0
9	57	62	52	.92
10	50	54	46	.01
11	56	68	45	2.29
12	55	64	46	1.56
13	38	44	32	.34
14	31	34	28	T
15	34	42	26	0
16	36	44	27	0
17	46	56	37	0
18	53	60	46	.01
19	40	48	33	.35
20	37	46	28	0
21	38	49	28	0
22	50	60	39	T
23	50	54	46	.07
24	50	61	39	0
25	54	66	43	0
26	54	65	44	0
27	48	54	41	0
28	52	64	39	0
29	58	69	47	0
30	59	67	51	0
31	52	62	43	0

SUMMARY.

Mean barometer, 30.19.
Highest barometer, 30.49, 15th.
Lowest barometer, 29.57, 5th.
Mean temperature, 49.
Highest temp., 77, 5th; lowest, 26, 15th.
Greatest daily range of temperature, 28, 4th.
Least daily range of temperature, 6, 14th.

MEAN TEMPERATURE FOR THIS MONTH IN—

1871.....54.0	1877.....54.0	1883.....57.0	1889.....53.0
1872.....48.0	1878.....51.0	1884.....47.0	1890.....65.0
1873.....49.0	1879.....53.0	1885.....52.0	1891.....53.0
1874.....56.0	1880.....63.0	1886.....46.0	1892.....49.0
1875.....54.0	1881.....50.0	1887.....51.0	
1876.....60.0	1882.....62.0	1888.....56.0	

Total deficiency in temp'ture during month, 151.
Total deficiency in temp'ture since Jan. 1, 151.
Prevailing direction of wind, N. W.
Total movement of wind, 6308 miles.
*Maximum velocity of wind, direction and date, 32 miles, from S. W., 5th
Total precipitation, 5.87 inches.
Number of days on which .01 inch or more of precipitation fell, 9.

TOTAL PRECIPITATION (IN INCHES AND HUNDREDTHS) FOR THIS MONTH IN—

1871..... 6.75	1877..... 5.30	1883 ....10.63	1889..... 6.51
1872..... 5.10	1878..... 5.36	1884..... 4.35	1890..... 0.66
1873.... 5.06	1879.... 2.34	1885..... 9 70	1891..... 3.75
1874..... 1 68	1880..... 1.02	1886..... 7.53	1892..... 5.87
1875..... 8.44	1881.....11.15	1887 ... 4.36	
1876..... 4.43	1882..... 4.54	1888..... 3.29	

Total excess in precip'n during month, 0.47.
Total excess in precip'n since Jan. 1, 0.47.
Number of cloudless days, 16; partly cloudy days, 2; cloudy days, 13.
Dates of frost.
Mean maximum temperature, 57.
Mean minimum temperature, 41.

NOTE.—Barometer reduced to sea level. The T indicates trace of precipitation.
* To be taken from any five-minute record.

G. E. HUNT, *Local Forecast Official.*

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XIX. APRIL, 1892. No. 10.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the first day of the month preceding that in which they are expected to appear. A complimentary edition of twenty-five reprints of his article will be furnished each contributor should he so desire. Any number of reprints may be had at reasonable rates if a *written* order for the same accompany the paper.]

LACERATED CERVIX.*

BY W. G. BOGART, M. D., CHATTANOOGA, TENN.

Mr. President and Gentlemen: There is no department of medicine that has received more attention or made more rapid progress in the last quarter of a century than the branch of gynæcology, and it has been only through the untiring energy and labors of such men as McDowell, Sims, Thomas, and our own much esteemed Battey, that to-day we stand, as American surgeons, at the head of the profession of medicine.

It is my intention to-day to speak of a not unfrequent accident, and especially the treatment for which we are indebted to Dr. Emmett, of New York, *the lacerated cervix.* It was not until after he had written his paper in 1862, entitled "Principles and Practice of Gynæcology," that this subject has attracted any special attention in the profession; but especially in his first paper on this subject, in 1869, we find that the attention of the practitioner has been attracted as much, if not more, to this subject than any other. It has been found that, by its existence, many pathological conditions have followed as a natural result. At first, of course, we have nothing but a simple wound, which may heal more or less rapidly, according to the greater or less amount of cleanliness.

*Read before the Tri-State Medical Association, Oct. 29, 1891.

Under very favorable conditions we have union to take place by first intention; but a perfect union, however, is very rare. There is usually a certain amount of cicatricial tissue, under circumstances of this kind, which has a less supply of blood than we normally find, and the nerve supply is found in most cases to be either abnormally furnished, or there is a marked exaltation of function. We frequently find the cervix painfully sensitive to the touch, which is due either to the jarring of a nerve, or likely to a cellulitis or peritonitis existing. With these conditions we have hypertrophy, cystic degeneration, bringing along with it a multiplicity of symptoms, which, by many, are diagnosed as diseases. The symptoms by which we may suspect, or even, with some degree of certainty, diagnose a laceration, are many.

I may say that laceration may exist for a time without exciting enough attention for the patient to know that anything with the pelvic organs is wrong, but it is not until after it has reached a chronic form that the symptoms begin to point to the pelvis as the seat of trouble. We find this patient pale and haggard, and she complains of dragging sensations in the hips and loins. Most often she will have a sanguineous discharge, or leucorrhœa, no appetite, digestion variable, despondent, sleep disturbed and bowels constipated. Many of you may think that I have overdrawn the line of symptoms pointing to a laceration, but when we consider the many pathological conditions which are likely to exist at the same time, we are not surprised: subinvolution, areolar hyperplasia, often some of the displacements, together with cervical degeneration, with an existing vaginitis, urethritis, and along with these conditions probably menstrual disturbances, in some instances amenorrhea, while at other times we may have menorrhagia, or metrorrhagia, which is by far the most frequent. Repeated miscarriage is another condition which is not at all uncommon, while on the other hand we may have sterility as a result of laceration. There is a long line of nervous conditions which are either directly or indirectly due to this condition.

Dr. Emmett says the importance of lacerated cervix can not be exaggerated, since one-half of all the ailments of those who

have borne children are to be attributed to the laceration of the cervix. This statement is substantiated by men of equal eminence, as well as by many general practitioners; and it is a statement not to be disputed, that the lacerated cervix, together with the many complications which are certain to follow, is the source of much suffering, disappointment, and, I might say, unhappy homes.

Since this is true, let us see what can be done for the unfortunate individual who may be suffering from this condition.

Understanding it as we do, we see that in many cases we have a physical wreck as well as a local lesion. For convenience let us divide the treatment into preventive, preparatory, and operative.

Preventive treatment more properly belongs to the obstetrician, and if prevented at all, must be prevented at the time of confinement. We all know that often a laceration of the cervix can not be avoided, no matter how skilful we may be; but we do know that there are some things done often, which make it very much more liable to occur: the administration of ergot, the untimely use of the forceps, the rapid dilation of the os by artificial means, and I might say by a general unskilful and meddlesome manipulation.

As to the preparatory treatment, much can be said, for in the proper preparation of our patient depends the entire success of our labor; and just as the wise farmer would first prepare his soil before sowing his seed, so a wise physician will prepare the system before attempting to prepare this local lesion.

General tonics, nutritious diet, open air, appropriate laxatives and local preparatory treatment should command our attention. Iron, quinine and strychnia, together with vegetable tonics, would be found very useful, a tonic laxative being required in most cases, as constipation is one of the conditions which usually exist.

As to the preparatory local treatment, much can be done by the use of wool or cotton tampon, the wool being preferable. The tampon may be soaked in glycerine, boroglyceride, or glycerotanin, glycerine and iodine. Blood letting by puncture, Churchill's Tincture of Iodine, iodized phenol, and the use of a large amount of hot water for its stimulating effect, would

be some of the means preparatory to the operation, if any operation be necessary.

While I would not attempt to detract from the operation any of its usefulness when needed, I am opposed to the too frequent use of the knife in these cases, just as I am in many others.

My reading, as well as my experience, teaches me that it is best, in a large percentage of cases, to try other measures first. Dr. W. Gill Wyle said that a lacerated cervix should not be sewed up until it gives rise to symptoms; and that when it does produce symptoms, there is some disease behind that needs treatment. Dr. Paul F. Munde, in the same discussion, said that he never considered a laceration with regard to operation unless it produced symptoms. Its mere existence does not call for sewing up, no matter how large it may be, or how much everted. Dr. A. F. Currier says: "I decline more and more to perform the operation." Dr. Emmett says: "I think sometimes that more harm than good has been done by the operation, although in so many cases there is no operation that can take its place or accomplish so much." He further states that where we have subinvolution, or a thickened condition of the broad ligaments, that the case must be properly prepared before the cervix should be operated upon; and until the preparatory treatment has been carried out it is impossible to say what cases require operation and what do not. Dr. Batty corroborates the above statement, as to frequency of operating upon the cervix, and states that where he used to operate a number of times, he now only operates upon the cervix a few times.

But that we have cases that require trachelorrhaphy is certain. The day before the operation it is good practice to thoroughly move the bowels with a laxative. The patient may be anæsthetized; however, this is not necessary. The patient is placed in a Sims position, and the vagina dilated as large as necessary to bring the cervix in view. The neck is seized with a vulsellum forcep and drawn until the lips can be transfixed from before backward with a strong needle armed with a double thread. The threads are drawn through far enough to form two loops; these loops are left long enough to pass out of the vagina several inches, and by them we are able to com-

pletely fix the cervix, or change the position at will. The loops may be held up by an assistant; a small tenaculum may be used to hold the cervix in position.

These preparatory steps having been taken, the operator seizes the edge of the laceration with the tenaculum and pares off all the cicatricial membrane. The entire cicatricial surface should be removed, seeing well that the angles are thoroughly pared. After this is completed and the hæmorrhage has been overcome, we take our stitches, beginning about one-eighth of an inch from the incision on either side of the flap. The needle is passed perpendicularly through to a point that will include the same distance in the endocervical membrane. To this thread should be attached a silver wire eight or ten inches long, drawn through and held by an assistant, until all are placed in. Before twisting the wire the edges of the wound should be cleansed of all clots, and the wires should then be twisted evenly. Catgut, silkworm gut, or silk thread are equally as good as the wire. After the operation the vagina should be thoroughly cleansed and the patient placed in bed. Of course, antiseptic measures have been carried out fully.

It would be well to consider here some of the causes of failure in obtaining a perfect result.

The first is an imperfect performance of the operation. But the most frequent cause of failure is an imperfect preparation of our patient. These, with the mismanagement of our patient after operations, are the chief causes.

The patient must remain quiet, and the bowels should not be moved for at least three or four days. Strict attention to the evacuation of the bladder; light diet, and for the most part liquid; the vagina kept clean by warm water injections two or three times per day. The sutures should be removed in about ten days, and the patient allowed to take moderate exercise for a time.

TUBERCULOSIS, ITS ETIOLOGY AND PROPHYLAXIS.

An extract from report of Health Officer J. W. DUPREE, for year 1891.

One-seventh of the deaths of the human race is due to tubercular disease, says Dr. Robert Koch, and surely there is no higher authority. Hirsch confirms this statement, and adds, that "two-thirds of all chronic diseases are of tubercular origin." Biggs, Prudden and Loomis, pathologists to the health department of New York City, in their report "On the Prevention of Consumption," state, that "about one-fourth of all the deaths occurring in the human being, during adult life, is caused by it," and that "nearly one-half of the entire population at some time in life acquire it."

Aside from the fatality, heavy death rate and great prevalence, the aggregate of sickness and suffering, the protracted illness and the helpless and hopeless invalidism that hangs like a pall for years over many households, and that compels humiliating dependence of the unfortunate victims in the very prime and flower of life, are abhorrent features to contemplate. And who, or where, is the political economist that can estimate the financial loss to the world from this constant, unremitting and ever-present devouring foe? Nor is this sad loss of life, of health and of productiveness only in remote countries, or by occasional invasions from abroad. It is our heritage. All over our own fair land, from the frosty hills of Maine to the dewy vales of California, from the rolling waters of our northernmost lakes to the rollicking waves of our southernmost gulf, this cruel and relentless monster wields his bloody sceptre over thousands and thousands of prostrate victims, of whom the life-blood of a hundred thousand annually fails to content his insatiable greed. To this yearly slaughter, in 1890, Baton Rouge was forced to contribute twenty-nine of her citizens.

A disease causing such distress and destruction to the human family, and that saps so much of the world's strength, should receive more than ordinary investigation, with a view to its prevention and its restriction; especially when we consider the unsatisfactory results obtained from so-called curative agents, whether directed from the standpoint of the bacillary theory of its causation, including the long list from Weigert's

hot air inhalation to Koch's tuberculin inoculation, not omitting Bergeon's gaseous enemata, or from the host of other remedies employed in accordance with its supposed clinical indications, and practically with a disregard for the bacillus.

Until recently measures for such purposes were regarded as almost useless, both by the medical profession and the laity, so firm was their belief in its heredity. Born to the doctrine, they accepted it without investigation, and clung to it with fanatical pertinacity, ignoring the many instances of healthy parentage, and invoking the principle of atavism in behalf of said belief.

Physiology instructs that only intrinsic parts of parents can be transmitted to their offspring. Disease is an entity itself, and consequently extrinsic to, and temporarily engrafted, upon the body, between which and the economy a constant warfare is waged, so long as a vestige of it remains, and unless cast off, results in death. It is possible, even probable, that a a child conceived, matured and born while this conflict is being actively carried on, will be affected by the disease from which the parent suffers, but that a child born of diseased parents can be healthy at birth, and subsequently develop the identical disease of its parents from something derived from them, is contrary to reason, and involves the acceptance of the doctrine that disease is a physiological process, a quality of the body.

Predisposition, being a quality of the body, can be transmitted; unfortunately, heredity and predisposition are often confounded by even physicians.

Parents may give to their children a peculiar conformation, a peculiar nervous system, a peculiar digestive apparatus, or even a certain condition of blood that may render them more or less liable to particular diseases, but they can not instill into them pathogenic germs that will subsequently and unexpectedly spring into activity and destroy them. Congenital, as distinguished from inherited, contagious matter may pass directly from mother to fœtus. Demme found extensive phthisical changes, with cavities in the lungs, of a girl aged twelve days. Berte records two instances of pulmonary tuberculosis in the new-born infant. Johne describes a case in a fœtal calf with tubercle bacilli in the diseased spots.

Fox has shown that only twenty-five per cent. of tubercular disease is in any way connected with heredity. The belief in the innocuity of tubercle has perhaps had as much to do with the non-employment of preventive measures as has heredity, and until the infective nature of consumption is recognized, no progress can be made, either in its prevention or its restriction. Clinical observation and experience have long pointed in this direction; as early as the fifth century before Christ, Isocrates believed that consumption was contagious. Aristotle states that its contagiousness was a common belief among the Greeks. Galen regarded it unwise to pass even a day with a consumptive. Valsalva avoided the dissection of the lungs of persons who had died of consumption, believing himself predisposed to the disease. The illustrious Morgagni foresaw its infectious nature. Andral and Lænnec suspected it; in fact, in every age since medicine began its history, philosophical bedside observers have recognized its communicability, but were unable to prove it to the satisfaction of others. In recent years, however, clinical evidence has accumulated to such an extent and of such character as to establish its contagious nature. Numerous instances have been recorded, where houses occupied by consumptives have become infected and have conveyed the infection to others; a topographical study of tuberculosis by Dr. Laurence Flick, of Philadelphia, shows that houses occupied by consumptives became centers of infection, and that deaths occurred in them for an indefinite time, some of which in a period of twenty-five years furnished as many as eight deaths from tuberculosis. Cornet has shown that nurses of consumptive patients die more frequently from tuberculosis than do persons engaged in other occupations. Among the nursing orders of Germany the mortality rate from this disease is 62.89 per cent., while among its people at large it is only 23.78 per cent.

Reich describes this curious and interesting instance of infection. Neuenburg, a town of 1300 souls, divided its midwifery practice equally between two women, one of whom had consumption and was accustomed to apply her mouth to the mouths of new born infants, to suck out mucus or blow air in. Within two years, ten children, from this woman's practice,

died of tuberculosis, while none of those delivered by the other midwife had tubercle.

Leihman reports ten cases of tuberculosis in which the virus was transmitted by the mouth of a tuberculous rabbi, who was in the habit of applying suction to the wound after circumcision. Eisenberg reports a similar case in which the sputum of the rabbi was found to contain the bacilli. Tscherning reports that a healthy girl injured her finger while cleaning a glass containing sputa abounding in tubercle bacilli; she very soon had tuberculosis of the sheathes of the tendons and lymphatic glands. Tscherning, Pfeiffer and Duering have reported instances of infection through the skin, in one instance, by means of the expectorated phthisical blood, which infected a slight hand wound. A French committee of investigation reports 213 cases in which the communicability of the disease was clearly established. In 64 of this number the disease was conveyed from husband to wife, and in 43 from wife to husband. Another collective investigation of a German society reveals the fact that of 938 married persons who died of acquired phthisis, in 101 instances either the husband or the wife also contracted the disease. Zasitzky reports the interesting case of a tuberculous woman who married, between 1872 and 1883, three husbands, all perfectly healthy—the first died in 1879, tuberculous; the second, in 1881, in the same condition, and in 1884, the third was a victim to the disease. Additional evidence might be piled Pelion high from the record-books of every active physician, of the wives, mothers, and sisters who have laid down their lives as sacrifices at the altar of devotion as nurses of consumptive loved ones.

Experiments begun by Kartum in 1789, continued during succeeding times by numerous investigators, signalized by Villemin's inoculations in 1865, and so brilliantly concluded by Koch in 1882 by the discovery and isolation of the tubercle bacillus, furnish the most exact and convincing evidence of its infectious nature. True, the logical deductions from Villemin's experiments were in dispute, and the subject of much contention for years. It was admitted that pathological processes could be produced in animals by inoculation, which had the same microscopic appearances as the tubercular processes

in man, but their identity was stoutly denied by Waldenburg, Cohnheim, Fränkel, and others, claiming that the same appearances could be produced by very different materials. The confounding of different diseases and the chaotic mixing of such conditions as struma, scrofula, broncho-pneumonia, "inflammatory neoplasms," and caseous retrograde metamorphosis, through the false doctrine of the German school, led by the learned pathologist Virchow, and the great practitioner Niemeyer, apparently sustained these claims until it transpired that the materials used by the opposing investigators as different materials of inflammation of various causes were in reality tuberculous matter, and thus was established the unity and identity of tubercle, and its infectious character was recognized. Cornet, Cadeac and Malet have shown that the scrapings from rooms occupied by tuberculous patients, when introduced into the veins of animals, produced tuberculosis. The tubercularization of animals by the enforced inhalation of powdered tuberculous sputa, first accomplished by Tappeiner, of Germany, in corroboration of Villemin's inoculation experiments, have been repeated by Lippel, Schweninger and a number of other experimenters. In such experiments, Cornet has recently shown that solutions of continuity of the mucous membrane of the air passages are unnecessary conditions for success. Dr. Dixon, professor of hygiene in the University of Pennsylvania, lacerated the gums and mucous membrane of the oral cavity of a guinea pig, not more, he claims, than the dentist lacerates man's, and succeeded in producing tuberculosis by powdering the wounds with a mass of tubercular material; he also produced the disease by rubbing the scarified skin of the guinea pig with a mass of bacilli.

The success of properly directed preventive measures also proves its contagious nature. Isolation in special hospitals in England has, in forty years, reduced the mortality from this disease 50 per cent., and it is claimed that preventive measures in the kingdom of Naples, during upwards of a century, have almost completely stamped it out (Flick). In Greece and Turkey such measures have been efficient in restricting the disease.

A study of the history of consumption furnishes evidence

equally as convincing of its infectious character. Dr. Rush claimed that it did not exist among the Indians of North America until the advent of the white man, and that it was rare among the first settlers. This statement, made more than a hundred years ago, has never been successfully controverted, and must be accepted as true. The countries most active in the early population of the territory now the United States were England and Spain. England never accepted the theory of contagion as applied to this disease, and consequently employed no restrictive measures. Spain, on the contrary, did practice measures for its prevention and limitation, from which circumstances we find that wherever England colonized, the Indian took the disease, while those portions of the country settled by Spaniards, viz., California, Arizona, New Mexico, Texas, Florida and Colorado, were free from the disease until they became sanitaria for consumptives. This fact is attested by intelligent natives, who declare that the disease was unknown to them prior to the coming of the English speaking people among them.

These sections are fast losing their reputation for exemption from phthisis, and are in danger of becoming sections to be avoided by those subject to this disease. Santa Rosa, Cal., has already acquired this unenviable character. The islands of Bermuda and Madeira, were once considered ideal climates for consumptives; they, too, have lost their reputation. Dr. John Gordon testifies that no pecuniary consideration whatever will induce a native of Madeira to accommodate a phthisical patient, so great is his fear of the disease. It is believed that the Jews were free from this disease while they dwelt in the land of promise.

Africa was free from consumption until its natives began to associate with the outside world. The increase of tuberculosis in North Carolina is significant. From the report of the State Board of Health, for 1890, I extract the following: "Practically, we have to consider several problems in relation to the spread of phthisis in this State, in view of the marked influx of consumptive patients as residents in the sanitaria, and as visitors in private houses and hotels. California, through her physicians, has spoken out decidedly against the influx of

consumptives into her borders, deeming their territory of far too much value to turn it to the questionable purposes of sanitaria." M. Delargy, in a paper quoted by Dr. Tyrrell, of California, directs attention to the fact that certain mountainous regions of Europe, formerly exempt, have now become infected, since intercourse with cities and phthisical localities has been opened, and believes that the presence of phthisical patients in the most healthful localities will soon effect the purity of the atmosphere.

Clinical observation and experience, experimental research, successful preventive measures, and an historical study of tuberculosis, thus unite in furnishing such an array of evidence in support of the contagiousness of consumption, that it can no longer be questioned; call the process transmission, infection, communication, inoculation, or what you please, the fact remains.

No disease in the whole nosological table rests on a firmer basis of ascertained causation than does tuberculosis; and that the bacillus of Koch is its sole cause is as certainly established as any other scientific fact. The supposition that the presence of the bacillus is secondary to the tuberculous affection is not tenable, in view of the fact that the affection is produced by the introduction of the organism, after it has passed through several generations, by culture out of the body. Koch's experiments have been repeated by so many able and conscientious investigators of various nationalities, and his statements so fully corroborated by their results, that the logical deductions therefrom must be accepted as absolute truth. We know but little of the cycle of life of this bacillus, outside of the body; that it produces spores, we are quite sure; yet, while acknowledging our ignorance of its life history, we claim that we do know that it can be cultivated on artificial media, and that thus removed by millions of generations, from its original source, it is capable, when introduced into the system of healthy animals, of producing a tuberculous condition that can not be differentiated from human tuberculosis.

Just how long tubercle bacilli or their spores can retain their vitality after isolation from their nidi has not yet been ascertained; but that some time elapses before their death

occurs may be reasonably inferred from what we know in this respect of other germs. Even should it be determined that separation results in their immediate destruction, it must be remembered that a slight current of air can carry with it not only the germ, but its nidus. The bacillus tuberculosis has been repeatedly shown to possess great viability, and to be one of the most refractory of germs to the action of the most destructive agencies or germicides. According to Uffelman, it is kept propagated in appropriate media at a temperature from 99 to 108 deg., and that it ceases to grow below 50 deg., or above 108 deg. Tilleau and Petit affirm that it can live at temperatures between 86 and 104 deg. and retain its virulence after lying in putrid sputum for forty days, and for 186 days away from the contact of air. Sormani and Voelsch claim that its spores remain unimpaired for 180 days in putrid sputum. De Toma denies this, and says that they are destroyed in from three to nine days. Petri asserts that tuberculous matter will retain its virulence after ten months' drying.

Dr. A. K. Stone, of Boston, found bacilli abundant and fairly well-stained and virulent, as evidenced by successful inoculations on animals, after remaining in tuberculous sputum in jars from December, 1886, to December, 1889, nearly three years. Soamani claims that it requires fifteen to twenty minutes' exposure to steam under pressure, or boiling for the same length of time, to destroy the vitality of their spores. Wesener and Folk appear to indicate that bacilli resist the action of gastric juice. Bacilli have been found in the air of street railway cars, dwelling houses, hospitals, public institutions, public halls, etc., from which we may conclude that they exist, to a more or less extent, in the outside or general atmosphere, their number influenced by the distance from infected spots and the degree of the infection of said spots. They have also been found in the flesh and milk of a number of tuberculous animals. This brings us to the question of their entrance into the human system. By what channels may they gain access? That they most frequently enter by way of the air passages is generally conceded.

The expectoration of phthisical persons falling on the floor, carpet, wall, clothing, ground, etc., becoming dry, is broken

up and disseminated in the atmosphere, and then inhaled into the respiratory cavities. That this mode of entrance is possible is established by the inhalation-experiments previously mentioned. Perfectly healthy lungs, with their cilia as watchful sentinels on guard, may arrest and expel the invading microbial foe; their capacity for screening out deleterious particles of matter is wonderful. Professor Tindall has beautifully illustrated their filtering capacity, by means of an illuminated tube. It may not be so with lungs whose cilia have become enfeebled by catarrh, bronchitis and other conditions that impair the respiratory functions. Perfectly healthy lungs are rare appendages to the human body. That they may enter through solutions of continuity in the cutaneous surface has been shown by the numerous instances already mentioned in connection with their infectious nature.

That the bacilli do gain access to the animal economy through the mucous membrane of the digestive tract will appear from the following: Carnivorous, herbivorous and omnivorous animals fed with caseous masses of bovine tubercle develop tuberculosis. Dr. Dixon fed a puppy, six months old, on tuberculous lung and produced the disease. He concludes that since the mucous membrane of the dog and man are so similar, that man may contract the disease by eating raw tuberculous meat.

To approximate the conditions most frequently found in every day civilized life, he roasted a piece of bovine tuberculous lung in an oven until it was better done than most of the roast beef eaten by epicures; from the centre of which he opened a tubercle and grew from it bacilli.

Demme reports four cases of intestinal tuberculosis in children, infected by the milk of a tuberculous cow, and adduces chemical and anatomical proof of his assertion.

Dr. de Lamallaree, France, furnishes an instance of the possibility of the transmission of the contagium of tuberculosis from man to man, from man to animal, and from animal to man, through the digestive tract, so interesting, that I offer no apology for presenting it in extenso. In a report to a medical society, he says: "In a little hamlet of ten cottages, isolated in the midst of a large forest, and always, hitherto, free from any case of tuberculosis, a young soldier returned home, affected

with pulmonary tuberculosis; his wife also became tuberculous, and gave birth to a child who speedily showed evidence of tuberculosis. Another woman in the same hamlet presented in her turn the evidence of pulmonary phthisis; she had had no intercourse with the other cases, but had eaten of eleven chickens which had died in the yard of the soldier's house. The chickens were cooked very little before being eaten. The autopsy of another of the same flock showed tubercular lesions of the intestines, and the tubercle bacilli were found in great numbers. These chickens would thus seem to have been the means of conveying the specific virus, having themselves become tuberculous from eating the sputa from the affected individuals."

From the facts we have reviewed, to prevent or minimize the spread of tuberculosis, we should endeavor to destroy all tuberculous material, especially tuberculous sputum. Vessels for its reception containing water should be plentifully provided wherever persons congregate, either for work or amusement, their contents thoroughly disinfected before final disposal, and the vessels cleansed by means of an efficient germicide. Bacillary sputa, while moist, are not liable to contaminate the air, since bacilli are not readily dislodged from wet surfaces, nor is the expired air of consumptives regarded as an element of danger, for it has been shown by Cadéac and Malet that it is free from bacilli.

The cuspidor, an American invention, much ridiculed by Europeans, seems destined to become a sanitary essential, and soon to ornament the floors of the ladies' waiting rooms at our railway stations, "the only places from which this eternal little round piece of furniture is now excluded," says Max O'Rell. Consumptives should be instructed as to the proper treatment of their excretions, not only in the interest of the unaffected, but in their own, because of the liability of their reinfection. It is now known that consumptives recover more frequently than was formerly supposed. It is stated that "in no less than 60 per cent. of all patients dying at Bellevue Hospital there were old tubercular changes in the lungs, the disease having been recovered from." Similar observations have been made at the Philadelphia hospital and at the Paris morgue. For

the use of out-door patients, small pieces of cloth (each just large enough to properly receive one sputum) and paraffined paper envelopes or wrappers in which the cloths, as soon as once used, may be put and securely closed, and with its envelope burned on the first opportunity, as suggested by Dr. Baker, of Michigan, may be found convenient and efficient.

Prof. Dettweiler, of Germany, has devised a closed flask spittoon for this purpose, to be carried about by patients themselves. No difficulty need be encountered in the destruction of the sputum of patients in the sick room, since it can be received in cups constructed of paper or wood, either of which are of such small cost as to admit of being cast, with their contents, into the fire. All vessels containing tuberculous material should be protected against the depredations of house flies, possible disseminators of the infection. Spillman and Hanshatter, in a report made to the Academy of Science, Paris, relates that after repeated experiments they found tubercle bacilli in the excrement and contents of the intestines of flies that fed upon the spit cups that contained the sputum of consumptive patients; also, in the dried excrement of flies as it was scraped from the walls and windows of rooms occupied by consumptives. All dejecta of consumptive persons should be destroyed or disinfected, for it has been shown that the bacilli are to be found in the urine of persons having tubercular disease of the urinary organs, and in the feces of those having tubercular disease of the bowels, and they may be in the feces of those who swallow sputa containing bacilli, that is possible of any consumptive.

All articles used by consumptives that are likely to convey the contagium from person to person, such as knives, forks, spoons, cups, etc., should be thrown into scalding water immediately after using. The gum lancet of the dentist and the clinical thermometer of the physician are special candidates for disinfection.

All tuberculous animals should be killed and their bodies cremated; the vending of the meat of such animals should be made a criminal offense. The sale of the milk and butter of animals thus diseased should be forbidden under a heavy penalty. The claim that the milk of tuberculous animals is free

from bacilli and harmless, unless lesion exists in their udders, is invalidated by the following conclusion, reached by the Massachusetts Society for the Promotion of Agriculture, after a thorough investigation of the subject: "Emphatically that the milk from cows affected with tuberculosis of any part of the body may contain the virus of the disease; that virus is present, whether there is disease of the udder or not, and that there is no ground for the assertion that there must be a lesion of the udder before the milk can contain the infection of tuberculosis, but that, on the contrary, the bacilli of tuberculosis are present and active in a very large proportion of cases in the milk of cows affected with tuberculosis, but with no discoverable lesion of the udder."

Klenke, as early as 1846, urged the probability of spreading the contagion by the use of the milk of tuberculous cows. Goltier states that the cheese made from such milk is not without danger.

Enough evidence has already been adduced to show that the meat of tuberculous animals is capable of infecting man. The agency of bovine tuberculosis as a factor in the production of the disease in man may be inferred from the extent of its prevalence. Virchow places the average of the disease among the cattle of Prussia at from fifteen to twenty per cent.; a moderate statement fixes it in England at twenty per cent. Professor Law, of Cornell University, is responsible for the following: "Twenty-nine per cent. of the adult males (cattle) dying in New York city are tuberculous. In certain of the herds that supply that city with milk, twenty, thirty, and even fifty per cent. are affected with the same disease; in some country districts of New York can be found large herds, with ninety per cent. the subjects of tuberculosis.

"Were all the known facts published concerning the ratio of tuberculosis in certain communities in the herds supplying their meat and milk, there would be testimony far more striking than even this example of New York city. One stands appalled at the enormity of the evil, covering, as it does, the entire country, threatening at every step the health of communities and crying loudly for redress." Official reports of the inspections of the herds in the New England States are to

the effect that a herd is seldom met with in which the disease does not exist. In Massachusetts, veterinarians claim that at least, 25 per cent. of cattle are tuberculous. Dr. Bush, who has made extensive examinations of cattle, finds that from 5 to 20 per cent. of dairy cows are tuberculous, and makes the startling announcement that the prevalence of consumption in any community is in exact proportion to the perfection and distribution of the dairy cow. The finding of Bayard in Germany, in 1889, that the ratio of frequency of occurrence of tuberculosis in man and animals, in different districts, was almost parallel in both cases, lends much support to Dr. Bush's announcement.

To what extent tuberculosis prevails among the cattle from which our milk, meat and butter supplies are drawn, I have no means of learning; the absence of all law relating to contagious diseases of animals from our statute books, parish, municipal and State, is conspicuous. That the disease exists, I know; the hollow horn of our "country folk" is but another name for it, and I know, too, that much of the sausage made and used is from the lean meat of animals that have been so reduced by disease or starvation, that adipose tissue is almost entirely absent from their bodies, and as a substitute hog's fat is employed—from where obtained, God only knows. I do know, however, that I have been often called to relieve gastric and intestinal disorders from its use.

Of the number of the trichinæ contained in the pork used, I am equally ignorant. Competent veterinary inspection will be required and should be employed to detect the infection, not only in home products, but in those that come to us from abroad. Dr. Henry Behrends, a noted Hebrew physician of London, attributes the freedom of the Jews as a people from tuberculosis to the religious rules concerning the choice and killing of cattle and the sale of meat. He writes that of 13,116 beeves slaughtered for the Hebrew market trade in London, in six months, only 6993 came up to the peculiar Jewish requirements, and that the average rejection for five years had been 40 per cent., and adds, that in a large practice of over thirty years he had never met with a case of consumption among the members of the Jewish faith, and claims that

other Hebrew physicians have had a similar experience. Kosher meat, as the post inspection Hebrew meat is called, deserves imitation by the Gentiles.

Tuberculosis should be made returnable to the Board of Health, for the same reasons that small pox, diphtheria and other infectious diseases are returned.

The fact that man is so constantly beset by the germs of this fell destroyer in such numbers commingled with the air that he breathes, and clinging to the very food that he eats, and does not more frequently succumb to their influence, should teach the sanitary lesson that he possesses intrinsically a resisting power to their morbific action, and that a susceptibility, vulnerability, or receptivity must exist whereby the viability, prolification and functioning of these pathogenic germs may be assured. I have long believed that this condition oftener consists in a deranged condition of the digestive apparatus than in any other. I have never known a person with tuberculosis who could properly digest the fats. This condition is not secondary to the disease, but always, in my experience, has preceded it. All measures calculated to preserve intact the digestive functions should be regarded as preventive of tuberculosis. I believe that the healthy stomach, supplied with gastric juice, normal in quantity and quality, will digest, and the system assimilate, the bacillus as readily as it does any other species of organic matter, notwithstanding the intimation of Wiesner and Folk to the contrary, just cited.

I have noticed that persons who have recovered from tuberculosis (and I have known such), or who have even got better of it, have generally been those in whom the digestive function had been restored or bettered. I have always felt justified in encouraging patients when, by treatment, I could enable them to digest and assimilate cod liver oil and alcohol. I say digest alcohol, for I believe it to be a food in this disease. Drunkards rarely die of tuberculosis; perhaps it were better if they did. Cod liver oil, alcohol and pure air are prophylactic, inasmuch as they remove predisposition. The great Flint in his article on "Pulmonary Phthisis," written for Pepper's System of Medicine, declares that facts go to show that alcoholism opposes

its development. I make this statement with the firm conviction that the habitual use of alcohol will make a "healthy man a sickly beast."

All conditions of life that lower the tone or diminish the vital resistance of the human system predispose it to consumption. All unsanitary conditions, under all circumstances and understood as applying to every state and stage of human existence, conduce to this end. Dr. Henry I. Bowditch, the Farr of America, as long ago as 1862, in an address delivered before his State Medical Society, directed attention to the very close and intimate relation that existed between the prevalence of tuberculosis and ground water, as the disease occurred in Massachusetts. Three years later Dr. Buchanan, Medical Health Officer of the Local Government Board, England, discovered a similiar connection in his very extensive field of observation, and in 1867, Mr. John Simon, president of the same Board, asserted "that tuberculosis is shown to be a disease which develops in proportion as men are dwelling upon a humid soil." The Register General of Scotland affirms these views by his researches. Drs. Harveland, Pettenkofer and Pepper record like results from investigations in their respective districts.

Perhaps the most convincing evidence is that furnished by Dr. Bryce, of Ontario, Canada, who reports "health districts six and seven present two very decided differences of physical surface conditions. East district six is a central plateau averaging nearly one thousand feet above the sea, fifty or more miles from the great lakes, and having a soil largely gravelly loam, while district seven is the Niagara peninsula between lakes Erie and Ontario, about seven hundred feet above the sea, flat, and having a soil largely of post glacial clays. An analysis of the deaths from phthisis in 1881 gives the following results:

"District six, 8.5 per cent. of total deaths; district seven, 12.7 per cent. of total deaths," and adds: "These figures are to me convincing, for the reason that in neither district are there any large towns, while the great bulk of the population in both is engaged in agricultural pursuits, is of the same race, and equally industrious and intelligent.'

Thorough drainage of the soil upon which we live is of paramount importance as a preventive measure.

Dr. Henry B. Baker, of Michigan, who has contributed more than any living man to the advancement of the exceedingly new meteorological branch of sanitary science, has shown by continued and painstaking observations that the prevalence of consumption, as well as that of a number of other diseases, the infection of which enters the system by way of the air passages, is much greater after long continued exposure to a cold, dry atmosphere, and urges the greater care in the application of methods of warming and moistening of the air of all houses and other buildings in which our people live and work, as possible restrictive measures. His suggestion is entitled to thoughtful consideration.

That density of population is a potent agent in bringing about a susceptibility to this destructive malady, whether consisting in overcrowding on the superficial area or in cubic space, is shown by statistics. In England, Dr. Farr claims that the mortality is 24 per cent. greater in cities than in agricultural districts. Mager, from Bavarian statistics, estimates the proportion of deaths from phthisis between town and country at 100 to 61. Foucault attributes the strikingly common occurrence of consumption in seminaries, nunneries and such institutions, to overcrowding. Boer sums up his experience as prison physician, as follows: "An intact, that is, non-tuberculous condition of the lungs in the body of a prisoner, is to be regarded as an exception to the rule." But nowhere does the baneful influence of overcrowding in cubic space more prominently appear than among the negro occupants of tenement houses in Southern towns and cities; consumption, comparatively unknown to the well-fed, properly housed, comfortably clothed and contented slave, now claims its victims by the thousands from among freedmen; and, in connection with the syphilitic diathesis, seems to threaten the very existence of the race, constituting a constant menace to the lives and health of others. That this increased prevalence has mainly its relations to the increased danger of infection, seems probable from recent investigations by Professor Carnelly, of Dundee, on the relative number of germs and amount of organic impuri-

ties in houses with different number of rooms. Interspace and house ventilation surely would seem essential as preventive measures.

While less than 100 bacilli introduced into the system of an animal has been known to produce tuberculosis, laboratory experiments prove that the rate of mortality is directly affected by the quantity of tuberculous material taken into the animal economy. Rabbits inoculated by Trudeau with the bacillus tuberculosis and kept in a cellar-like place, and on restricted diet, died of the disease in a much greater proportion than did similar animals similarly inoculated but kept in the open air with abundance of food. That foul, prebreathed or house air in any way contributes either to the growth or virulence of tubercle bacilli, there exists no scientific proof; but that it lowers vitality, and consequently reduces the resisting power of the system and permits an accumulation of bacilli, is abundantly sustained. Rooms occupied by consumptives, who spit upon the floor or in handkerchiefs, contain bacilli in their air, while they are absent when spit-cups are used; the remedy is obvious.

Since Hippocrates wrote, "We can by no means neglect the study of the seasons, with their variations of the wind, both as to heat and cold, and those peculiar to certain regions, and of the properties of different waters," the professional mind, no less than that of the laity, has ever hopefully turned to climate as a possible means of escape from this dread disease. That the complex conditions expressed by the term climate is *per se* antagonistic to tuberculosis, in the light of our present knowledge of its etiology, would seem a fallacy, for there is no evidence to show that tubercle bacilli can not live in any climate and at any altitude; however, the following elevations are regarded by Fuchs as likely to afford immunity from the disease.

In the north temperate zone, at an elevation of 1300–3000 feet; in the middle temperate zone, at an elevation of 2000–5000 feet; in the tropical zone, at an elevation of 7000–14,000 feet, Miquel, Frankland, Petri and others found that the air at an elevation between 6000 and 7000 feet was quite free from germs. Pasteur and Tyndall have shown that the air at great altitudes was entirely free from organic impurities. Moreau, Miquel and Fischer ascertained that sea air, 120 miles off the

coast, was absolutely free from bacteria. It is not probable that the air of such localities would remain free from germs and impurities long after being inhabited by consumptives; in fact, the so-called immunity claimed for certain climates has been shown to be largely due to their sparsely settled conditions. While climate has no significance for the pathogenesis of consumption, we have seen that various conditions that influence it contribute greatly in bringing about changes in the system that render it unable to resist the morbific action of bacilli; hence those predisposed, either by heredity or by acquisition, when possible, should select a home in a country whose climate is mild and equable; whose soil is well drained and uncontaminated; whose atmosphere is fresh and unpolluted by organic impurities; whose water is pure and abundant for drinking and bathing; where sunshine and cheerfulness predominate over rain-clouds and woefulness; with diversity of hill and dale for the easy and pleasant change for muscles exercised.

In such a climate one can pass the greater part of the time out of doors, constantly bathing his blood with the oxygen freshly exhaled from the chlorophyl of the surrounding flora. Here the 21,000,000 of alveoli which nature has provided in the lungs for supplying oxygen to his organism, will meet the conditions for their fullest expansion; and his blood, exposed in the capillaries to this life-giving principle in the vesicles, spread over a superficial surface measuring 139,505 square inches, more readily gives up its carbon dioxide, to be in turn absorbed by the flora furnishing his oxygen, thus conducing to the most vigorous and robust bodily health possible, which really is the prime condition that constitutes non-susceptibility to this disease.

These conditions are often found nearer than the blue skies and the lofty Sierras of the far west. A change of location is frequently all that is required, away from the contaminated air of towns and cities. Surely they are not to be found in crowded sanitaria, where rooms are thickly carpeted and heavily curtained, with little or no attention paid to the plainest requirement of modern sanitation—everywhere existing conditions that permit the maximum of exposure to infection with

the minimum of protection against it. Nothing could be more disastrous to health-seekers, or prejudicial to the people among whom they go, than the precipitate rush to Florida, California, Texas, and other localities. Witness the 2142 deaths in California for the fiscal year ending June 30, 1890, only 521 of which number were of native born—a number which does not represent the actual mortality. Owing to incomplete statistics, and the enormous and rapidly increasing death-rate from the disease in Florida, North Carolina and other States whose climates are sought by this unfortunate class, the exact number and the ratio of foreigners to natives can not be given. Porter, health officer of Florida, says: "It is to be regretted that the reports do not show the nativity of those dying from this disease. It is plain that many hopeless cases are sent into the State for the sake of temporary relief, which adds largely to the death rate. Benefits are too often prevented by the delayed coming to Florida, the disease, except in rare instances, being always fatal."

The intermarriage of tuberculous and non-tuberculous persons should be discouraged. However imperative, from the standpoint of "natural selection," the prohibition of such unions would seem, it can not be accomplished, but the almost inevitable results can and should be plainly and positively pointed out. Sir Joseph Clark says: "The marriage of consumptive females for the sake of arresting the disease by pregnancy is morally wrong and physically mischievous."

Surely the marriage of phthisical men, under any circumstances or for any purpose, is none the less wrong. Consumptives should always occupy separate rooms. Phthisical mothers should be warned against the danger of giving suck to their infants. This danger should be emphasized, since, in discussing the subject, so great an authority as Routh declares that "even in such cases we must not lose sight of the healthy influence of suckling; it may, after all, be better to let her do so, if it be done within reasonable limits, and especially if she be assisted by artificial food, also given to the child." The bacillus tuberculosis has been detected in the secretion of the mammary gland.

As a protection against sudden changes of temperature,

there is no more efficient means than the use of flannel from neck to toes, except perhaps the following, which I desire to indorse, suggested by Winternitz: "Water, or the temperature conveyed by it, is the best, simplest, and most accessible means for strengthening and hardening a feeble body which is predisposed to catarrhs or colds. Even the simple rubbing of the entire surface immediately after rising from bed with a wet, cold cloth, accustoms the skin to sudden cooling, exercises the neurovascular system of the peripheral arteries to prompt reaction, and acts as a thermic irritant centrepetally on the central nervous system, and from thence acts excentrically, stimulating the innervation and functions of respiration, circulation and digestion."

Individuals with any tendency to pulmonary involvement should eschew all occupations that are likely to develop the disease, such as dusty trades, etc. Dust has proven to be a great conveyer of microbes; 650,000 microbes have been found in fifteen grains of weight of dust; in some hospitals 2,100,000 have been found in an equal weight of dust. In some places the number was so great that it was impossible to count them. (Miquel.)

Metallic and mineral dust is especially harmful. Hirt's tables show that of the patients treated in the hospitals of Breslau and Wurtzburg, from eighteen to eighty per cent. of those whose occupations involved an exposure to metallic and mineral dust were tuberculous, while of those employed in an atmosphere practically free from dust, only from eight to eighteen per cent. were thus diseased. Among needle polishers, Tracy reports sixty-nine and nine-tenths per cent. tuberculous. It is said that formerly the needle polishers of Derbyshire died of consumption before reaching their thirty-fifth year. All sedentary and indoor occupations should be avoided by the predisposed. Brice quotes Dr. C. Lombard as saying that of one thousand deaths of adults from consumption, they could be classed as follows:

Occupations with mineral emanation	176
Occupations with various dusts	145
Sedentary life	140
Workshop	138

Hot and dry air	127
Stooping posture	122
Sudden movement of arms	116
Muscular exercise by active life	89
Exercise of voice	75
Working in open air	73
Animal emanation	60
Occupations in which watery vapor is breathed	53

The subject of isolation hospitals for consumptives has of late received much of the attention of sanitarians. While I do not believe it either practicable or advisable to segregate consumptives by compulsion, I can see no objection to the establishment of such institutions, where the poor could and would gladly go for treatment. I would expect only good to the affected inmates, and just as many foci of infection would be removed from among the well in the communities furnishing the sick.

There is a consensus of opinion among authorities as to the methods that bring about the best results in the treatment of this disease. Brehmer says: "Special institutions for the treatment of consumption give the greatest promise of cure." Trudeau states that: "If anything is to be done for those who are both poor and consumptive, it can not be done outside of an institution." Dr. Hambleton, of London, in an able pamphlet on the suppression of consumption, as quoted by Dr. Dubbs, says: "I have a right to express a clear and emphatic opinion on this subject, for I, myself, and my patients, have unquestionably completely recovered from the disease. It is of great importance that the consumptive patient should be placed under treatment as soon as possible, and that it be uninterruptedly continued until the recovery is complete. For this purpose we require hospitals and institutions, placed in the most favorable conditions in the country and at the seaside, and I am sure the means will be gladly found for opening these institutions when once their necessity and immense importance have been realized. With such institutions, so placed, and this system of treatment thoroughly and continuously carried out, I am certain we shall have reduced the mortality from consumption to truly insignifi-

cant proportions before the next century has escaped from its infancy." The risk of the spread of contagion will in such institutions be reduced to a minimum. Humphrey, Pollack and Leudet have shown that in well-ventilated and properly kept wards, in chest and consumption hospitals, the disease does not usually spread.

This fact is the stock argument of non-contagionists in support of their theory, while it does duty for the contagionist, he attributing its non-spread to ventilation, cleanliness and disinfection.

Bollinger estimates that a phthisical person is capable of throwing off from the body twenty millions of bacilli daily. Nuttall, of Johns Hopkins University, place the probable limit at about four billion, while Heller fixes the number at seven thousand two hundred millions. The mean of these estimates, multiplied by the probable number of consumptives in the United States, will give some idea of the magnitude of the problem which confronts the sanitarian in devising means for their destruction. Rather discouraging figures; but it may be supposed that the vast majority of these germs fall upon "stony places," and, not finding suitable earth, are scorched by the sun and wither away. Koch has recently told us that tubercle bacilli are killed by direct sun light in from a few minutes to some hours, according to the thickness of the layer in which they are exposed, and that daylight, if it lasts long enough, will produce the same effect. Some may fall by the wayside and be devoured by fowls with better digestive apparatus than those possessed by the chickens of which Dr. de Lamallaree has told us. Those that fall upon good ground and bring forth more than an hundred-fold are the ones toward which our destructive measures are to be directed.

MALARIAL HÆMATURIA.

By Bruce McVey, M. D., Ella, Texas.

Since my article appeared in last September's Journal, on "Malarial Hæmaturia," I find myself the subject of some comment, and I feel impelled to come forward with a few more words, especially in defence of quinine. It would seem that some of our esteemed brethren, who expressed themselves on this point in recent issues of The Journal, would have quinine relegated to the past in the treatment of malarial hæmaturia. The basis for their belief that quinine is a poison in these cases seems to be clinical experience Strange, how clinical experience puts us at variance! This is, notwithstanding, true, even among our best authors.

One might think that this difference of opinion as to the effect of quinine on these hæmaturic patients is sectional, but it is not; for I have known more than one good physician in this country who never used quinine, or but little, and I presume they were fairly successful; but they never made any such marvelous cures as Dr. Martin claims for his turpentine treatment; that much I am sure.

As one's own cases are more important than any he could tell you about of somebody else's, I will first speak of some of my own. Since I wrote my article of last September, I have had further chance of observation, and to test the utility of quinine. I will not enter into a detailed account of the cases, but suffice it to say, that they were three in number, were all treated with quinine, and all recovered. Two of these cases had had the disease before, one last year, the other the year previous.

As an argument in favor of quinine, I wish to call your attention to a few statistics, as compiled by Dr. J. W. McLaughlin, in the March number, 1889, of this journal:

"In 93 cases treated by Dr. McDaniel without quinine, 16 died—a ratio of 10 per cent.

"In 23 cases treated by Dr. Webb with large doses of quinine, only 2 died—a ratio of 8.6 per cent.

"In 73 cases treated by Ferand with large doses of quinine, 5 died—a ratio of 8.6 per cent.

"In 71 cases treated by the same author with very small doses of quinine, 22 died—a ratio of 31 per cent."

While these figures show that recovery is possible without quinine, they fail to show that quinine is the poison it is represented to be by some of the latest literature on this subject; to the contrary, the best results were from the largest doses of quinine.

In this same article, Dr. McLaughlin says: "My own experience in the treatment of this disease is that quinine is always indicated. I give it in free doses, and have never seen or known it cause harm."

Such statements as this, coming from such high authority, should command the attention of every reader of medical journals. According to my judgment of authors, I know of none more eminent who have ever written on this subject than Dr. McLaughlin; to say the least, he is no extremist. In order to possess myself of the most correct data possible, and to "first be sure that I am right, and then go ahead," I have written to some of the oldest and most prominent physicians that I know of, who live in a malarious district, and have, besides, obtained verbal statements from some others.

I addressed a communication to Dr. A. R. Canfield, of Bryan, Texas, containing the following questions:

1. How long have you been practicing in a malarious district? 2. Where did you see your first case of malarial hæmaturia? 3. If you had seen a case before, do you think you could have failed to have recognized it? or would ever have forgotten it? 4. Did you ever see a negro have malarial hæmaturia?

Dr. Canfield replied as follows:

"In reply to yours of 18th inst., will say that I have been practicing in a malarial district since 1859. I saw the first case of malarial hæmaturia in 1867, in West Point, Miss., being treated by other physicians as a case of yellow disease. The first case under my immediate treatment was a child six or seven years old, in the year 1870, in Texas. I had, as consulting physician, one who was noted as the peer of all others in the treatment of this disease. His treatment consisted largely in the use of turpentine. This little girl went to her long home.

"I don't know that I understand your third question, but will say that the symptoms of the disease are such that no one could err in diagnosis, especially a doctor of medicine. I can not positively assert that I have ever seen a negro affected with this disease. I have seen a few cases of hæmaturia, but wanting in the jaundiced appearance in the sclera and other places it might be seen in this race of people.

"It will be a long time before Dr. Martin can educate the fraternity to follow his, or, more correctly, Dr. R. S. Williams', plan of treatment. Any one acquainted with the rapidity of the disease will see, at a glance, that remedies suggested in his treatment would be so tardy that dissolution would be the inevitable result in a very severe case. And, again, he produces the old exploded theory that the disease is produced by large doses of quinine. Now, do you suppose those who are, and have been, practicing in a malarial district for years will be converted to this idea? He tells us all the cases falling under his observation were, or had been, cinchonized before the chill. This may be so in his cases, but in my experience it is the reverse.

"In cases of malarial fever, with nausea and vomiting, so as to prohibit the administration of the drug, we meet with this accident. I have never seen a case of "Lysæmia," as he calls it, that was thoroughly cinchonized—a condition that cheers the heart of the physician, and fills the patient with hope; but alas! it is a condition, no matter how desirable, that is seldom, if ever, produced, because of nausea and vomiting, and the non-action of the secretory and absorbent organs.

"He wholly ignores the fact that bile has anything to do with the changes in the skin, admitting at the same time that the patient is yellow and jaundiced from engorgement of the capillaries, etc.

"He admits that the disease is malarial in its origin, and at the same time ignores the only safe and quick remedy in its treatment, substituting one that is very tardy, and in homœopathic doses. And again, his plan of treatment would necessitate his patient to be drenched every hour in the twenty-four, allowing no opportunity for sleep—the panacea of all ills.

"Now, in my opinion, the old North Carolina negro's treat-

ment is equally as scientific and rational as his. I have not your article before me, therefore can not name the parts subject to criticisn, but will say this much, that it is not invulnerable. * * * It is a conceded fact that malarial hæmaturia is caused by malarial poison. It is also a fact that quinine is the most reliable antidote to this species of poison. And another undeniable and indisputable fact is, that the course of this disease to dissolution is so rapid that nothing save our quickest and best remedies can arrest it, and no one will deny that cinchona, or some of its salts, is the most reliable. It not only acts as an antiperiodic, but also as an antipyretic. I have seen it reduce high temperature to normal. I give the drug freely. I use antipyrine to reduce temperature, morphine to control restlessness and nervousness, and calomel in large and heroic doses to correct the secretions, and all acquainted with the disease know of the congested condition of the portal circulation as well as of other organs. I use digitalis, and in every instance have had happy results.

"Turpentine stupes the whole length of the spine have given good results. Clysters, rubefacients, etc., have their place in the treatment and nourishment. Arsenic and iron also have their proper places."

Dr. F. M. Hall, in reply to a letter similar to the one written Dr. Canfield, says: "I settled on west bank of Brazos river in 1853, and did an extensive practice in the eastern half of Milam and western half of Burleson counties.

"The first case of malarial hæmaturia that ever came under my observation was in the person of M. Hargrove, recently settled in Brazos bottom, near Chapel Hill, Texas. When I reached him the bedclothes were stained with bloody urine.

"Never treated or saw a case in a full-blooded negro, and only two mulattoes.

"Had I ever met with a case before the one mentioned, I should certainly have recognized it, and would never have forgotten it.

"I graduated in 1851 or 1852, came directly to Port Sullivan, in Milam county, at which place I resided until 1868, coming to Bryan, and have resided here ever since."

Dr. J. M. Sole, of Bryan, Texas, in answer to my quer-

ies, says: "I graduated in Charleston, S. C., in March 1856, have been regularly in the practice ever since, and that in a malarious district.

"My first case of black jaundice was in the fall of 1867. I know that I never saw a case anterior to that time. If I had, would not have failed to recognize it, and would never have forgotten it.

"4. I never saw a negro with black jaundice, and have done a pretty extensive practice on large plantations, where they were having intermittent, remittent and pernicious types of fever. Why I should never have seen a case of black jaundice among them I can not say."

I will not attempt to reply to Dr. Martin in full, or even to repel half the attacks made on my article. I simply beg to notice a few of what seems to me the more glaring points, and to repel a few of the more formidable attacks.

Dr. Martin says: "But leaving out the quinine factor [as a causative influence], the three essentials before mentioned [malarial toxæmia, weakened capillaries from malnutrition, and local increase of blood pressure] are sufficient to explain the occurrence of the disease; and without the theory of a special hæmaturic germ, as advanced by Dr. McVey." I wish to add right here, for fear the next charge will be plagiarism, that this theory was derived by inference from Dr. J. W. McLaughlin's paper (March number, 1889), where he says: "Malarial diseases, of all types and grades, have prevailed, not alone in the Southern States, since their first settlement, but also in many portions of the Northern States; whilst the disease in question was almost unknown in this country until since the close of the civil war. "In view of the foregoing facts it would seem that, whilst malaria may be an important factor, alone it is not sufficient to cause hæmaturia. What the other factor or factors are can at present be only surmised. If I were permitted to guess, it would be nothing more, I would say, than that some unknown poison acting upon the victims of chronic chills is the cause of the disease. In support of this view I would refer to the fact, recently discovered, that eating an edible fungus, *morchella esculenta*, will produce hæmaturia. Is it unreasonable, then, to suppose that some vegetable organ-

ism, perhaps one of the fungi, macroscopic or microscopic in size, may enter the system through the stomach, or perhaps through the lungs?" Whether he meant to infer that this unknown poison is a specific germ or not, I do not know; but this is my belief, that there is a specific germ that finds a congenial home in the poisoned blood of persons living in low, damp districts, just as the tubercle bacilli find a home in the lungs of debilitated subjects of strumous diathesis.

First, if malaria or quinine, one or both, were sufficient to produce the disease, as claimed by Dr. Martin, why was it not as frequent from 1850 to 1870 as from the latter date to 1890? It was the rarest thing before the civil war. He says it did occur often, and was passed unobserved. Any man who has ever seen a case of malarial hæmaturia can never fail to recognize it as that, nor can he ever forget it if he has good mother wit.

He may say again, that there was not as much quinine used (admitting quinine for argument's sake as a factor in its causation) then as there is now. Admitting this as true, there was an excess of malaria to make up for the deficiency of the quinine.

Second, if malaria and quinine alone were sufficient to produce it, leaving out the specific germ, how could it prevail almost epidemically in some sections of the country, and other sections just as intensely malarious, and where there is just as much quinine used, be partially or wholly exempt? This I would like to know; and I re-assert that New Orleans is situated in a marsh, where all forms of malaria are seen, and quinine is used in abundance, yet they have no malarial hæmaturia; and with these two prime factors of Dr. M.'s, why shouldn't they have it?

My idea is that New Orleans and vicinity are exempt just the same, and for the same reason that other sections of the country were exempt years ago. Time may bring it to be just as prevalent there as in this section of country, notwithstanding Dr. Martin to the contrary. He says: "As to its not occurring in and around New Orleans, where much quinine is used—it *does* occur there, as the records of Charity Hospital will show."

I don't know if our friend, Dr. Martin, was ever in New

Orleans or not, or how he came by his information, but Prof. Jno. B. Elliott, M. D., of Tulane University, told me something like this: "I have never seen a case of malarial hæmaturia in New Orleans, and if ever I should, I would expect to find with it a history proving its origin elswhere." Prof. Elliott is well known to the medical fraternity of the Southwest as a gentleman of rare ability and integrity, and a word from him on any point is invaluable.

Prof. Elliott has been residing in New Orleans and connected with the Medical College and Charity Hospital for some fifteen or twenty years, and it is but natural to suppose that, being Professor of Theory and Practice of Medicine, and having charge of the wards of the Charity Hospital, where malarial hæmaturia would be most likely to be assigned, and doing an extensive city practice besides, he would know whereof he speaks.

As to the records of the Charity Hospital showing the prevalence of the disease there, it might be possible that during the half century her doors have been opened to thousands of sick annually, that the records will show a case of "Lysæmia," but we must remember that the great old Charity gets her inmates from Vicksburg to the mouth of the river and from New York to San Francisco. As to the people getting early treatment in New Orleans preventing the disease, is very good in itself, but it won't do, for in a city of 250,000 inhabitants they could not all get early treatment, and, besides, early treatment doesn't keep them from dying by the score every month with other forms of malaria.

Now, as a final question on the quinine subject, I wish to repeat, if quinine has any causative influence, why is the disease on the decline when quinine is being used more and more all the time?

Dr. Martin says: "Just why this is the case I do not know, but the fact stands on record in nine cases out of ten [that malarial hæmaturia does not recur]. And if, with Dr. McVey, I may be permitted to indulge in a little private theorizing, I will say that there may be certain chemical compounds formed or set free by the dissolution of the blood which are deleterious to the malarial germ, just as in alcoholic fermentation the

process is retarded and stopped by the formation of alcohol. This, of course, is only a speculative suggestion, but the fact remains that a patient with what we call 'malarial hæmaturia' has malaria to fear least of all the evils of his condition."

In regard to the liability of malarial hæmaturia to recur, I differ entirely with Dr. Martin. Dr. Martin's Mississippi "Lysmæia" may not recur, but black jaundice in Texas certainly recurs.

Finally, I wish to note that Dr. Martin says negroes in his part of the country have "Lysæmia." This I have no right to deny, only I have to say, that I have made careful research and can find no well authenticated cases in my vicinity. As to the results of my research, I would respectfully refer to the letters of Drs. Canfield, Hall and Sole, of Bryan, Texas, published in another portion of this article. Dr. Canfield says: "I can not positively assert that I have ever seen negroes affected with this disease. I have seen a few cases with hæmaturia, but wanting in the jaundiced appearance in the sclera and other places that it might be seen in this race of people."

I have myself on one occasion seen a negro with hæmaturia, but he had no chill, no fever, no jaundice and no traumatism. He was, as he expressed it, just sick, and had pains over his loins. He was treated by another physician. Dr. Hall says: "Never treated a case in a full-blooded negro, and only two mulattoes."

Dr. Sole says: "I never saw a negro with black jaundice, and have done a pretty extensive practice on large plantations, where they were having intermittent, remittent and pernicious types of fever."

These physicians have been practicing from thirty to forty years each, and the whole of the time in a malarious district, and have never seen a well-defined case of malarial hæmaturia in a negro. Besides verbal statements from a number more, who have spent almost a lifetime at the practice of medicine in the Brazos bottom, and their statements all concur in the one point that negroes do not have malarial hæmaturia.

OSTEO-SARCOMA.

By L. L. HILL, M. D., Montgomery, Alabama.

Osteo-sarcoma constitutes one-half of the tumors of the maxillae, more than half of the affections of long bones, usually commencing in the spongy substance at their articular extremities; they are the most malignant growths which we are called upon to treat, barring cancer.

The systemic infection of sarcoma, Billroth has shown, occurs chiefly, if not exclusively, through the veins; and where metastatic tumors form, as in 46 per cent. of the 165 cases collected by the late Prof. S. W. Gross, it is by these vessels becoming freighted with friable tumor substance which is wafted to different regions of the body, more especially the respiratory organs. These tumors of embolic origin do not differ in any respect in their pathological formation from the parent growth from which they are evolved. We have recently had an example in the Rev. Mr. S., of this place, of secondary sarcoma of the lungs, upon whom a hipjoint amputation, by Wyeth's method, had been performed several months previously for a primary growth in the lower end of the femur. This disease manifests great inclination to contaminate surrounding structures, and Prof. Gross estimated that once in every seven cases it will infect a joint, and may even reach the adjacent bone.

Bones may be attacked centrally, or peripherally, with round-celled, spindle-celled, giant-celled, or mixed-celled sarcoma, and though they preserve to a considerable extent their individuality, still, as Butlin says, their malignancy is marvelously influenced by the particular bone, or part of bone; thus the periosteal are more malignant than endosteal, and those near the trunk more so than the distant ones, with the exception of the tarsus.

Age seems to influence somewhat the character of the growth, occurring most frequently in middle life; but where the agec are attacked, it is usually with the central, and where the younger, the periosteal form. Men are more liable than women, which, I think, is due to their greater exposure to traumatitism. I will now call attention to the different forms

of osteo-sarcoma, and relate briefly a few cases which have come under my observation.

1. *Round-celled.* These very seldom attack a bone centrally, but usually peripherally. The cells greatly resemble lymph cells, and are frequently with an almost imperceptible intercellular substance. They usually form early in life, and are marked by great pain, discoloration of the skin, rapidity of growth and dilatation of the veins. This variety is very malignant, recurring or causing embolic infection in over 60 per cent. of cases.

J. R., of Clanton, Ala., aged 30 years, white, complained of intense pain in the lower jaw on the right side, near the second molar. I found a small swelling, projecting from the alveolar border, of a pale red color. It continued to grow rapidly, and finally commenced to ulcerate, when I advised excision of the lower jaw to the point of symphysis, which was consented to and performed by me, with a relief of pain and apparent cure for several months; but his respite was brief, and he returned shortly with the soft parts infiltrated with cellular elements, causing great pain, and he died about ten months after the operation.

2. *Spindle-celled*, next to the giant-celled, is the most frequent form, usually commencing in the medulla of the shaft, but may originate in the periosteum. Pathologically speaking, they are closely packed filament cells, generally devoid of intercellular substance. They are of a glistening grayish-white color. They are of tardy growth, but accompanied with great suffering. Spontaneous fractures are of frequent occurrence, and are of importance from a diagnostic standpoint. The prognosis depends largely upon the portion of bone affected; thus central spindle-celled sarcomas, according to Gross, recur locally once in every five cases, and metastatic tumors form in 23 per cent.

Periosteal spindle-celled sarcoma is the most malignant of all sarcomas, recurring in six-tenths of all cases, and almost invariably followed by metastatic deposits.

A. J., mulatto, aged 28 years, applied to me on April 15, 1889, for relief of an immense growth, measuring four feet in circumference, and extending from near the knee-

joint to within three inches of the hip-joint He gave the following history: Eighteen months previously he had fallen from a gin-house scaffold, fracturing the femur at the junction of the middle and lower third. From his description, I suppose, Prof. Smith's long anterior splint was used. He commenced to walk in ninety days after the accident, but suffered pain and noticed some enlargement, which continued to increase for three or four months, when a spontaneous fracture occurred, followed by an increased growth and pain, until it had reached the size above mentioned. I advised amputation at the hip-joint, which was performed by me three days later, after Dieffenbach's method. He lost but little blood, and the shock was not very great. He soon recovered and was apparently well up to July, 1891, when I noticed a recurrence of the disease in the gluteal muscles, which have grown steadily until it is now the size of a foetal head, and very painful at times.

B. H. W., aged 60, of Opelika, Ala., presented himself on May 4, 1891, with a growth of grayish color about the size of an English walnut located near the angle of the lower jaw, on the left side. He had noticed it about two months previously, since which time it had steadily increased, and given great pain. A few days before consulting me, while chewing tobacco, he fractured the jaw near the centre of the neoplasm. I advised removal of the left half of the jaw as far forward as the genial tubercles. I performed the operation, using every antiseptic precaution, with the satisfaction of seeing the wound heal rapidly; but two months later he returned with a recurrence in the posterior part of the cicatrix, which was also removed. About six weeks after the second operation I noticed the disease in the soft parts, near the place where I had severed the bone, and this time I removed it with a Paquelin cautery. Three months later it returned, infecting the soft parts of the left side of the face, and extending down the neck as far down as the thyroid cartilage. He was considerably emaciated and suffering great pain. I immediately commenced injections of pyoktannin into the neoplasm, and every second day with drachm doses of a 1 to 300 solution. He bore this without any discoverable toxic symptoms, until I had made five in-

sertions, when he had a feeling of malaise, nausea, vomiting and vertigo. This lasted for a week, when I resumed the injections, and have so far given three. He has certainly been largely relieved of pain, and the enlargement has softened somewhat; but what the ultimate result will be it is as yet too early to divine.

3. *Giant-celled.* These are partly round, polymorphous, and have offshoots. Virchow says they are the largest unformed protoplasm collections seen in man, and may contain thirty or more nuclei. They are the least malignant, but most frequent form of sarcoma, and are nearly always of central origin. They are circumscribed, and the bone is gradually destroyed, but new bone is constantly being developed from the periosteum thus enveloping the tumor in a shell. One of their peculiarities is their excessive vascularity, due to formation of traumatic aneurisms, in which a murmur is often perceptible. Their growth is slow and is often unattended with pain. The skin is of dark red color. There is metastasis in twenty-three per cent., and recurrence once in every fifteen cases.

S. C., aged twenty years, mulatto, applied to me September, 1887, with a large angry looking growth, about the size of an ordinary lemon, involving the alveolar portion of the right superior maxillary bone, and displacing all the teeth on that side, and preventing the fellows of the opposite side from coming in contact, thus rendering mastication impossible. He had never suffered any pain, excepting as a result of pressure in the antrum. I advised excision of the upper jaw, which was consented to, and since operation he has had no inconvenience, nor are there any symptoms of a return.

D. W., aged fifty years, white, of LeGrand, Ala., came under my observation in May, 1890, complaining of great pain in his left cheek with a distended antrum. The skin presented a dark red appearance. I drew several teeth and perforated the antrum of Highmore with a bone drill, after which I curetted the cavity, removing the fungus growth, and packed it daily with iodoform gauze. This gave him great relief for some time, but it reappeared, and by its pressure the antrum walls became parchment like, and in some places was com-

pletely destroyed. I am satisfied that the pain he suffered was not due to the tumor itself, but to the pressure it caused. Dr. J. B. Gaston and myself advised excision of the upper jaw, which was permitted, and since that time the patient has had no pain, and continues to gain flesh with a gradual disappearance of the maroon colored cheek.

J. S., aged seventy years, white, of Midway, Ala., presented himself in June, 1889, with a growth about the size of an orange, at the angle of the lower jaw on the left side, which he had noticed for the first time six months previously. It was a little painful and the skin looked a little red and adherent. I removed the growth, with a large part of the ramus, and as far forward as the genial tubercles. He has enjoyed perfect health since the operation, and has no signs of a recurrence of the disease.

4. *Mixed-celled*, as the name implies, is composed of a combination of other cells, with a clinical history varying according to the predominating type.

The character of the cells cannot with certainty be determined without the microscope, still the location may be diagnosed. If a neoplasm involves and expands the end of a bone, pulsating or giving an egg-shell crackling to the touch, with little tendency to spread up the shaft, its primary seat is probably central. If there is no swelling, but spontaneous fracture occurs, with an increase in size, it is also central. But if the shaft is involved and grows rapidly, without pulsation or egg-shell crackling, it is subperiosteal.

In treatment, palliative means are not to be considered if it is possible for the patient to bear an operation, for without surgical interference, death is inevitable. Where a long bone is involved, the late Professor S. W. Gross, whose labors contributed more to a thorough understanding of this disease than any other surgeon, advised amputation in preference to excision. When the superior maxilla is affected, excision of the entire bone should be performed without delay. Usually, it will only be necessary to remove one-half of the lower jaw. In those cases where the surrounding tissues have become involved and are inoperable, from my experience with pyoktannin, I should recommend its trial.

Proceedings of Societies.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

A Paper was read on February 10, by G. Betton Massey, M. D., entitled

METRITIS AS AN INITIAL LESION IN PELVIC DISEASE; ITS COMPLICATIONS AND TREATMENT BY ELECTRICITY.

The attractive field recently opened to surgical gynecologists by the discovery that the ovaries and tubes may be amputated without invariably resulting in the death of the patient, has caused an enormous preponderance of current medical literature to be directed toward diseases of these organs. So great has become the furor that little else is heard at our special societies but discussions on the wet specimens thus procured, which are brought in regularly in buckets by certain operators. This singular abundance of pathological material supplied by two organs out of an important group is calculated to make an onlooker who is, fortunately, free from what might be called the operative infection, inquire carefully into its reasons. Granting the peculiarly peccant nature of these organs as a justification, it may be asked why resort should invariably be had to amputation rather than to a more conservative operation. It may be that there is such a thing as a war-time in this work, when, as in military surgery in the field, parts of Nature's handiwork are hastily removed that a more thoughtful conservatism would have restored to health.

But it is not my purpose to discuss at present the debatable questions of the proper management of inflammatory conditions of the ovaries and tubes; they are merely alluded to at this time because it is my conviction that many ovaries and tubes have recently been removed when the real seat of trouble was within the uterus.[1] In examining for tender spots by the bimanual manipulation, it is exceedingly difficult to differentiate between a sensitive ovary and a tender uterus, and if one's mind is so constituted that the uterus is entirely ignored, and endometritis or metritis unthought of, a mistake is readily made. One operator declared some two years ago that he did not believe there was such a thing as endometritis. Dragging upon the tender uterus, as he did daily, in his endeavor to find salpingitis, he mistook the purport of the pain excited.

1. The grounds for this conviction are derived primarily from a number of cases of post-operative pain seen in private practice and at the Dispensary for Women at Fourth and Spruce Streets. Many of these cases had enlarged and tender wombs when seen by me and had either been made worse by the operation or left in an unchanged condition.

In contrast to this position it may be affirmed that inflammatory conditions of the uterus are the most frequent of all the local diseases of parous women and not infrequently found in virgins. More significant still, it may be said to be either the precedent condition or the nidus of many of the most formidable diseases in this locality, such as certain displacements, catarrhal salpingitis, pyo-salpingitis, ovaritis, cancer of the cervix, fibrosis, and many other lesser troubles, How great, then, is the necessity for its early recognition and prompt treatment!

The classical studies of this disease found in the books are most instructive, though the pathological conditions described in the several varieties of endometritis are of but little clinical use to us, since we do not often study these cases in the dead-house, and as yet but few specimens have been presented at the societies. Whether the case is one of interstitial, follicular, or polypoid endometritis, it is, moreover, of secondary importance in face of the present apparently well-founded belief that they are all examples of that protean disease of mucous cavities—microbic invasion. The several forms of cervicitis, endocervicitis, endometritis, and interstitial metritis are clinically distinct and largely separable, it is true, but the fact should not be lost sight of that they are all alike microbic in origin, even subinvolution being septic or trauma-septic, and hence are all mere local variations of the same disease.

The recent developments of bacteriology teach us plainly, then, that simple endometritis—a bacterial colonization of the endometrial gland—is the primal step in these progressive conditions. Whether the morbific germ is one of the common staphylococci of pus or some other organism, it seems clear that to its conquest of the local phagocytes is due the hyperæmia, hypersecretion, and hyperplasia of the glandular substance of the endometrium, which, later, extends to other situations by either direct continuity of structure or by lymphatic absorption. The reason for the peculiar susceptibility of the uterine cavity to such invasions is easily conceived when we remember that the intra-uterine mucosa is distinctly glandular—that the endometrium is, in fact, a gland rather than a mucous membrane.

The method by which the uterine cavity becomes the culture-medium of these infections deserves some consideration. On reviewing the conditions present, particularly the ubiquity of the pus-germs in the centres of population, one is disposed to ask why an infection of this region is not universal, instead of the exception. The natural, healthy mucus and the temperature would seem to be an ever-present invitation. Why, then, are germs normally absent above the internal os, though

so abundant below that point? The answer has never yet been given; but it can be none other than that of a body of sentinel phagocytic cells stationed in the cervical cavity to war upon morbific germs. Remove these sentinel cells, or lower their vitality, and the resistance they present is overcome by the outer hordes.

The ineffectiveness of these vital sentinels in puerperal infection is manifest. By a flank movement or brutal charge the seeds of destruction are planted well beyond the lines. An endometritis results, which is the cause rather than the effect of the subinvolution of the muscular fibres. In the nulliparous, and particularly in virgins, the method of invasion is not so clear, though we do not have to look far to find it. The prevalence of early stages of metritis—in other words, of endometritis—in perfectly pure virgins is a daily result of my inquiries. At sixteen, seventeen, and particularly between seventeen and twenty-three, in this climate, a uterine leucorrhœa is by no means uncommon in weak and delicate girls; and we do not have to adopt the harsh and generally untrue statement of Schrœder, as quoted in the most recent work on this subject, Pozzi's *Gynecology*, that the germs are introduced by masturbation. The condition of the general health of these patients is the real causal factor. The germs are always in the cervix normally unless the hymen be imperforate, and they are enabled to penetrate within the uterine cavity by reason of weakness on the part of the sentinel cells. A girl whose blood is impoverished by inherited weakness, to which is added the many imperfections in our methods of fashionable education, is in but a poor condition to marshal sentinels and defences against any morbific attack. The logic of this view is sustained by the methods of many rational physicians in dealing with this condition in such cases. Let the blood-making organs once be restored to health, and the invaders, *if not too deeply intrenched*, will be driven out.

At its inception this affection is usually subacute, if we except the more virulent forms of puerperal metritis, and runs its course without material disturbances of temperature, like the analogous affections of the nasal cavity. Even after the disease has extended so far as the Fallopian tubes, with the production of muco-purulent accumulations, the temperature may still be normal. In my experience, an acute stage is lacking, the onward march of the affection being as insidious as it is gradual. Beginning as an endometritis or endocervicitis, the patient is only conscious at first of a leucorrhœa which becomes more abundant and irritating to the vagina and vulva, and should be the sign for active and intelligent interference on the

part of her physician, though of late a do-nothing policy has been advocated by some. It has been said by an eminent authority that the womb has its natural secretions, like the nose. That is, of course, true; but it should be remembered that the nasal secretion is not normally muco-purulent; as soon as pus-corpuscles habitually occur in either secretion, the existence of a diseased condition is manifestly proven.

The subsequent stages and the effects of this catarrhal endometritis are natural consequences. Accompanying the hypertrophy of the endometrium into fungoid and cryptose conditions, we have a direct stimulation of the connective-tissue cells of the parenchyma. Trophic changes in this situation and general fibrosis of the uterus result. Coincidently, or at a later period, an extension upward along the mucous tract occurs, and salpingitis, ovaritis, or both, add their burdens to the suffering woman. I shall not recount the local symptoms of this conglomerate affection beyond the statement that at various periods in its course we find changes in the quantity and quality of the secretions, erosion of the os from irritating discharges, hypertrophy and tenderness of the cervix and corpus, combined with a reasonable movability of the uterus as a whole. With these facts you are all familiar. On the reflex symptoms some doubt has been thrown of late, but the best proof that pains down in the limbs, in the abdomen, and in the back, with or without nervous prostration, are caused by this "irritable" uterus is given by the disappearance of such symptoms as a result of local treatment. The reason for the doubt lies in the lack of neurological training in many gynecologists, who have mistakenly treated such diseases as hysteria, neuralgia, lateral sclerosis, and locomotor ataxia as mere nervous manifestations of pelvic disease.

I have elsewhere reported an instance of removal of the ovaries for pains that were due to an aggravated spastic condition; and the physicians that follow my service at the Spruce Street Dispensary recently saw an even more ludicrous error of a well-known colleague: A woman applied for the relief of a pain in the side in the region of the floating ribs, making the statement that she had been under treatment for it at a neighboring dispensary for several years. The treatment had been directed entirely to the pelvic organs, and much pressure had been unsuccessfully brought to bear on her to consent to a removal of the ovaries. In spite of this treatment her pain was somewhat worse. In glancing at her back I was led to request that the corsets be removed, which revealed a most marked case of scoliosis, with corkscrew twist of the vertebræ. A properly fitting brace gave her complete relief from pain. Even

a slight acquaintance with orthopædics would not hurt gynecologists; an elementary training in neurology is certainly essential to correct diagnosis in this specialty.

Besides errors of diagnosis, it is possible that the present tendency to minimize the effect of uterine disease in causing backache and other neuroses is due to the failure to cure such conditions by removing scar-tissue from the cervix. Failing to cure these cases by cutting out this harmless reparative effort of nature and by removal of the appendages, the remainder of the woman is kept in bed for long periods of time, under the theory that the rest cure was the proper thing after all, and that rest was the most essential part of the rest cure.

Clinical proof of the dissipation of these baneful symptoms by the use of means that combat the initial microbic affection, and its nutritional and hypertrophic consequences, is the best proof of their correlation.

A recent case will, I think, present this proof in a strong light. A healthy young lady fell a short distance from a hammock, striking the end of the spine. She suffered immediate pain, and two weeks later applied to an intelligent gynecologist, who treated her for retroversion, and latter for inflammation of the ovaries, so far as could be ascertained from the patient. After some early relief the condition became stationary. At this time the case was seen in consultation by Dr. Baer, of this city, with a view to removal of the appendages, which was, however, not done for some reason. Sixteen months after the beginning of the disease the patient entered my sanitarium in the following condition: Subjective symptoms: continuous, deep-seated scratching pain, about an inch and a half above each ovary; a tender pain in the sacrum, and an inability to walk more than two squares without an intensification of these symptoms and great prostration. Objective symptoms: external evidences of perfect health, marred only by coldness of the extremities. Internal examination showed considerable leucorrhœa; uterus apparently small and in normal position, but when elevated on the finger in the posterior cul-de-sac extremely painful.

Thinking the case one of posterior parametritis or ovaritis, she was treated by the vaginal galvanic method, in conjunction with general electricity and massage for the incipient nervous prostration that was becoming manifest. Considerable improvement resulted, but no headway was made with the peculiar pain in the ovarian regions until it was recalled that nothing had been done directly for the endometritis. The sound, now passed for the first time, showed that the apparently small uterus had a cavity exceeding three inches. An intra-uterine

positive application was therefore made, of a strength of twenty milliampéres, and this had the happy effect of checking the so-called ovarian pain permanently. Four subsequent applications of the same kind were made for the control of the discharge, and the patient was restored to health and has remained well, now for some time.

This patient had been kept for three months on a lounge by her previous attendant, under the theory that this supposed essential of what is called the rest-cure would be of service. Shorn of its institutional control and electricity, this fashionable mode of treatment is a two-edged sword that is responsible for more than one case of chronic invalidism. Used with such essentials, including direct electrical applications to the uterus in the class under consideration, these cases in the borderland between the domains of gynecology and neurology may be permanently restored to health, though he who essays but one part of the treatment will meet with frequent failure and disappointment.

For therapeutic purposes cases of chronic metritis are divisible into two classes that much resemble the divisions made by the late George M. Beard in cases of sexual neurasthenia in the male. In the one class the affection occurs as a purely local disease, the nervous organization of the individual being so robust that it fails to become affected by the local disturbance; in the other class a far less degree of local trouble may be found associated with profound depression and disorder of the nervous system—a disorder that seems greatly disproportioned to the local disease.

The treatment of the first class of cases is naturally entirely local and may generally be carried out in the office, when the disease has not yet ascended to the tubes and ovaries. Various modes of treatment have been efficaciously employed, though many are now abandoned as either ineffective or dangerous. I shall limit my remarks to the local use of electricity, first prominently brought forward by Apostoli, whose conclusions have been more than confirmed by my own experience. As in other subacute microbic affections of the glandular membranes, the galvanic current presents a typical alterative action which may be brought to bear directly upon the diseased surface, and by means of applicators that are in themselves innocuous because elastic, easily inserted, and lacking the dangerous piston action of the cotton swab. The contrast with acids or other cauterants that must be inserted by force is very great; no hooking or pulling on the cervix or other harsh methods are necessary, and the local action is, moreover, strictly mensurable and controllable. By reason of its greater

antiseptic effect the positive pole is usually preferable, though in the later stages of the disease, when the endrometritis has eventuated in a hyperplasia, the galvanic alternative method is better than the use of a single active pole. In subinvolution, particularly, the alternative galvanic method within the uterus is quickly curative, accompanied at each treatment by a primary faradic application.

Judging from results, the local electrical treatment seems to act in a threefold manner, each special element of the method varying in usefulness in different cases. One part of the action is a local alterative effect on the endometrium; another results in a quickened absorption of hyperplastic tissue, and still another in stimulation of the muscular fibres to immediate contraction and increased tone. The first action is most important in fungous and hæmorrhagic cases; hence, the positive pole should be used alone, with a duration of some minutes at each application. As the possibility of causing an immediate increase of muscular tone in the uterus increases, the alternative method becomes more valuable; and in recent subinvolution the faradic current alone is usually sufficient.

If, at the initial examination of a case, a reasonable doubt is present as to the preponderance at that time of the original metritic trouble or of a secondary extension into the tubes and ovaries, the intra-uterine method should be preceded by a more or less prolonged vagino-abdominal galvanic treatment; and in these cases, as well as in the second class here described in which the nervous system is affected, the value of institutional treatment is enormous. By a combination of internal and external electrical treatment, massage, diet and partial rest, these cases can be almost invariably restored to health, unless pus-cavities have formed—an event that is much rarer than some would have us believe. It may take weeks to accomplish these results, it is true; but it is also true that it takes years for the patient to recover health after the performance of a castrating operation.

DISCUSSION.

Dr. John C. DaCosta: I think that cases of pure acute endometritis are rarely seen. The cases that I generally meet with are chronic cases in which there is metritis in combination with endometritis and hyperplasia of the uterus. The treatment of acute endometritis should be as different from that of the chronic cases as that between an acute inflammation of the eye or legs and a chronic inflammation of them. In the acute as well as the chronic form injections are of much value. The reason that injections often do not benefit is that they are not properly given; they should be given with the woman in

the recumbent position, in such a way that the water will reach the neck of the womb and distend the vagina, opening out the folds in the anterior walls and washing away the poisonous discharge. In order to do this the patient should be instructed to keep the vulva closed with the fingers of the left hand until the vagina is filled and distended, and then allow the water to escape. This process can be repeated as often as necessary. In chronic cases nothing will do more good than a good free bleeding. Three to five ounces of blood should be taken, and the woman will often get up off the table with all the pain gone. Another good plan of treatment is by the thermo-cautery burning a hole one-quarter of an inch deep into the cervix. Ten days after such an application the uterus will look entirely different.

Dr. Baldy's method of treatment by dilatation and curetting in these chronic cases is one I have used for years, and is of value; for these uteri often have diseased membrane and fungous granulations, keeping up a continual irritation, which the scraping will relieve by removing a cause of irritation and setting up an acute inflammation instead of the chronic one. I should rather hesitate to follow Dr. Baldy's plan of injecting tincture of iodine in the uterus. I think a safer way is to take a piece of cotton in the dressing forceps and swab the whole surface with the preparation of iodine. If you use such a preparation as I do, twice as strong as Churchill's tincture of iodine, you will find that there is very little hemorrhage. The preparation which I use is one part of iodine, two parts of iodide of potassium, and four parts of glycerine. This will cause a decided contraction of the uterus; if it does not, give ergot in doses of a teaspoonful every hour until the bleeding stops. I do not like the idea of tamponing the uterus. I do not think that it is necessary; it is better to stop the bleeding before the patient is left.

Dr. Charles P. Noble: Dr. Baldy's paper discusses a very important subject, and one upon which every practitioner of experience has decided views. Concerning numerous special statements in the paper, there is a general concurrence among gynecologists; but in my judgment the general teaching of the paper is not sound, and if allowed to go to the general practitioner for his guidance, I feel certain that evil results will follow.

It seems to me that Dr. Baldy has gone back ten years, to the point where gynecology was when I was a student; and not only are we led backward, but are given no good reason therefor. A word with reference to pathology: A mere discharge from the uterus does not indicate endometritis. We

are indebted to Dr. Emmet and others for disproving the idea that every uterine discharge indicated endometritis. This may come from various constitutional derangements, such as feeble heart, general debility, phthisis, constipation, or a sluggish portal circulation, and if these are remedied the discharge will disappear. This class of cases must be eliminated strictly when discussing endometritis. Some even go far as to deny that there is such a disease as endometritis. I have not studied the endometrium microscopically; but clinically I believe that there is endometritis. Another important point in the study of endometritis from the therapeutic standpoint is whether the disease is or is not complicated. Treatment which is beneficent in uncomplicated endometritis may be and is dangerous where complications exist.

Endometritis is often the forerunner of salpingitis, which is the forerunner of peritonitis. Old chronic peritonitis cases generally have endometritis. We also know that cases of uterine fibroid often have endometritis. It is apparent that the treatment of such cases should be essentially different from the treatment of uncomplicated endometritis. Where the endometritis is uncomplicated, I think that treatment directed to the uterus is moderately safe, although even here we may produce complications from intra-uterine applications, and especially from intra-uterine injections. The experience of our predecessors has proved this, and has shown that most cases of endometritis can be cured without treating the endometrium directly. I have supposed that we had heard the last of intra-uterine injections. In the hands of our teachers the practice was found dangerous and was given up. When the cervix is dilated widely, as after curetting, the danger is probably slight; but when done in the office without such dilatation it is distinctly dangerous—how much so any old book on gynecology will prove.

I regret that the limited time allowed for debate will not permit me to discuss the subject further; but it seems to me that the points presented are very vital ones, and that they have been neglected by Dr. Baldy.

Dr. M. Price: I thank God that I am not a woman, if a woman is to be treated in this way. The question has often been asked, Why is it that we have so much pelvic trouble? I say that the paper to-night answers that question. Every sort of acid and application has been forced into the uterus. It has been burned by the hot iron. It is no wonder that we have endometritis. Why should we not have endometritis, with complications extending to the other organs and to the pelvis, requiring removal of the diseased tissues? The same

men that advocate this treatment admit that they have had to remove the appendages a few weeks after dilatation.

Dr. Baldy: The treatment which is so vigorously denounced referred simply to uncomplicated endometritis, not to endometritis associated with fibroid tumor or pus tubes, or any other serious pelvic or abdominal disease. I should treat these troubles as the occasion called for. Where endometritis is uncomplicated, it can be dealt with without the slightest possible bad effect. My cases are put to bed and kept there until safe from all inflammatory trouble. Intra-uterine injections can be made in one's office with impunity if done carefully. The cervical canal in some of these cases is so patulous that it would admit a tube twice the diameter of the nozzle of the syringe. I use the syringe almost daily, and have not seen the slightest trouble from it.

Dr. DaCosta spoke of scarifying and curetting to produce bleeding. The curette in my hands generally produces that effect. If the bleeding is moderate, I do not use ergot. When I use ergot, I give it in fair doses to produce contraction of the uterus. I select the cases which I subject to the treatment described, and I care not if I have gone back ten or twenty years if the treatment brings about the desired results safely. I am continually receiving patients on whom abdominal section has been done, in whom the uterus is large and heavy, and all the old symptoms remain. I scrape the uterus and remove a large quantity of *débris* from some, and in many this gives relief.

CLINICAL SOCIETY OF MARYLAND.

The 263d regular meeting was called to order by the president, Dr. Robert W. Johnson.

Dr. Herbert Harlan spoke of a case of buphthalmos which had recently come under his care. Buphthalmos is simply a very large eye. It is very rare. In over 56,000 cases at the Presbyterian Eye and Ear Hospital, not one case of buphthalmos has been recorded. There are some cases put down as bulging of cornea, and probably one or two of them were cases of congenital buphthalmos. Dr. Harlan's case is a girl of 11 years; both eyes affected, but one larger than the other. The condition was noticed at birth; eyes gradually grew worse. Sight was never good in one eye; the cornea became completely opaque. There was a good deal of inflammation and pain for six months, and then all light perception was lost. The other eye has likewise been somewhat painful. It is enormously enlarged—almost as big as the eye of an ox;

cornea of usual thickness; tension about normal; iris a little thin and apparently a little stretched about outer margin; eye exceedingly myopic. It looked like any other eye, except its enormous size. Quite a number of cases of enlarged eyes are reported, but they are not perfect, like this one.

Dr. Harlan saw another similar case recently in a negro man, but the eye was defective. It was 1½–1¾ inches in diameter. The eye was removed; vitreous and lens opaque; cornea cloudy, and ciliary region inflamed.

Dr. Robt. Randolph: I found, about a year ago, in a bottle at the Eye and Ear Hospital, a buphthalmic eye. It was evidently taken from a child six or eight years ago. There was a marked cylinder-shaped excavation of the optic nerve, very much as we see in glaucoma. The eye was thin; it was full of holes, showing that it was much atrophied. The ciliary body was atrophied; corner cloudy.

I think Nettleship reports a case in which iridectomy has done good. I understand that there is a case in France where the vitreous is systematically drained.

Dr. Chambers: Was the rest of the face symmetrical in Dr. Harlan's case?

Dr. Harlan: She is a very pretty little girl.

Dr. Randolph: Is it not generally one-sided?

Dr. Harlan: It was double in both cases of mine, but one eye larger than the other.

In these two cases I looked at the optic nerve, and there was no depression. I think it likely that the one Dr. Randolph found was one of secondary glaucoma.

Dr. Randolph: It was one of hydroöpthalmos in a child.

Dr. J. C. Ingle reported a case of osteomyelitis, in which the symptoms during life were so misleading that the real nature of the disease was only discovered at the autopsy. A healthy boy of 14 was, for several days, less vivacious than usual; then on November 20, 1891, was taken seriously sick. Previous to the 20th there had been a festered spot on left ankle, which had apparently healed. On 20th, fever 104 deg., severe pain in left leg from knee to toes. Fever high till 22d, when it fell to normal. On this day had some epistaxis, and on following day tympanites marked. Acute rheumatism was diagnosed, and salicylate of soda given. Mind wandered from the first. Constant headache from beginning to end, with persistent insomnia. On the 23d, Dr. Earle suspected typhoid fever from delirium and epistaxis. Dr. Ingle was inclined to regard it as a case of cerebral meningitis; the child lay with both eyes closed, was irritable when aroused, avoided light, was constipated, surface pallid, erythematous blushing, dilated

pupils. Instead of a retracted abdomen, there was an enormously distended one. At this time there was marked soreness all over the body. Patient put upon iodide and bromide of soda, but no benefit derived. Tympanites increased and interfered with respiration and circulation.

The child died, and an autopsy was made by Dr. Chambers.

Dr. J. W. Chambers: The meninges of brain were markedly congested and there was just such a condition as one would expect as the result of sepsis. There had been, seemingly, no definite cause for sepsis. The sore on the leg had scabbed over, and was dry. Looking over the extremity, it was observed that his left leg, over the tibia, was enlarged and œdematous, and this caused us to cut down. The periosteum was œdematous and red, and easily detached. When ripped away quite a large amount of bloody pus oozed from the centre of the tibia. No other bones were allowed to be examined, although, from the fact that he had had pain in the other leg and elsewhere in the body, we suspected that it was a case of multiple osteomyelitis, involving several bones.

As an idiopathic disease, osteomyelitis has not received much attention until within the past few years. The cause of the disease is probably simply the pus microbe getting into this particular locality. It is probably always secondary to some pus formation elsewhere in the body. Some think it is absorbed from the alimentary tract, the bronchial mucous membrane, or other sources, and then finds its way into the bones—mostly young bones near the epiphyses. The disease is often difficult to diagnose. Holmes has said that a large number of these cases are diagnosed on the autopsy table. We have few definite symptoms to guide us. I do not think any doctor should feel very much chagrined if he should fail to diagnose osteomyelitis in such a case as the present one. It is probable that many cases die under our care that we have diagnosed as something else. I have seen but three cases, two I recognized at once, the third only after the death of the child. The only distinctive symptom was intense pain at one point. By pressing over the bone, if the individual is not thoroughly affected by the septic condition, you can find tenderness.

The prognosis is bad. Multiple cases are very little modified by medical or surgical treatment. Where only one bone is involved, if we recognize it or suspect it, I should not hesitate to trephine. We can in this way save a number of lives or a good deal of destruction of tissue. I would not have any more hesitation in boring into a pus cavity in bone than in opening an abscess in the soft tissue. In multiple cases the

sepsis is so great that there is scarcely anything to be done either by surgeon or physician. Under these circumstances, I would not hesitate to give relief to tension.

Dr. W. S. Thayer: I saw, some three years ago, at the Massachusetts General Hospital, a case very similar to the one reported, except that the bone was the femur. A boy of 14 was admitted to the medical side, with a diagnosis of sciatica. He had been treated by a reputable physician for ten days with this diagnosis. For a week before entrance had had occasional chilly sensations, but no actual chill. He was in a typhoid condition; dry, brown tongue, and high fever. I found upon examination that the upper part of the thigh on one side was distinctly larger than that on the other side, somewhat tense to feel, and rather hot. He was immediately transferred to the surgical side, an opening was made, and a large quantity of pus was found. The boy was in a state of septicæmia, from which he did not recover.

Dr. S. T. Earle reviewed the literature of osteomyelitis with especial reference to causation.

Dr. J. M. T. Finney: This disease, in a certain number of cases, is difficult to diagnose; in certain other cases it is not. I happen to have seen two or three of the latter class. As far as the pathology is concerned, I think it is simply a bone abscess. The treatment is like the treatment of a like condition in other tissues, viz., where there is pus, evacuate it.

The resemblance of this disease to appendicitis is very marked. It gets well in many cases and will return again. As we are coming more and more to operate in appendicitis, so we ought more and more to operate in myelitis.

There is one point in diagnosis which Dr. Chambers has not referred to, and which seems to me a most important one, viz., local œdema.

Local œdema seems to me to be the most characteristic sign of pus deeply seated. Dr. Finney related three cases operated upon by himself, all making good recovery. The staphylococcus pyogenes aureus was found present in all these cases.

Dr. Chambers: As to œdema, a good many cases may die from sepsis before œdema is present. If you get pain and œdema, then the diagnosis is more sure.

Dr. S. T. Earle: I saw the case reported in an early stage. There was no point of localized tenderness. He was tender from the knee down, with no point worse than another. In about two days after the onset there was just as much tenderness over the right limb as over the left, and this hyper-æsthetic condition soon became general. As to œdema, the limb was only a trifle larger in the whole extent from the knee down.

Dr. J. M. T. Finney then read an exhaustive paper on "Appendicitis."

Dr. W. S. Thayer: A number of men in Munich have collected 1000 cases of appendicitis in the Munich hospitals. A German doctor has analyzed these cases, and arrives at the conclusion that appendicitis is fully as common in females as in males; if indeed it is not more common. As to age, he finds the proportion almost exactly the same in old age as in youth.

Operation must be governed by surroundings. In a large city, where we have good surgical skill, I believe that where the symptoms progress 24 hours the case should be handed over to the surgeon. I believe the majority of these cases belong to the surgeon.

Dr. J. D. Blake: There is no doubt but that under proper conditions an early operation is advisable. To induce the patient's family to permit the operation to be done at his home, or at a hospital, is often impossible.

I was rather struck with Dr. Finney's idea of combining all these conditions—typhlitis, perityphlitis and appendicitis—under the same head, because it is a difficult thing to know just which you have.

I remember that Dr. Chew once said that at a meeting of the American Medical Association, the physicians were discussing appendicitis on the medical side, and concluded that at a very early day such cases should be handed over to the surgeon for operation. At the same time the surgical section were discussing the same thing, and concluded that an operation should not be performed too early; that it was better to wait.

I have seen two cases where an early operation showed that the trouble was located in the appendix, which was removed. In two other cases that I have seen there was so much adhesion that it was difficult to determine where the trouble began.

I remember one case, in a young man, where the aspirator was used to determine the presence of pus. Three and one-half ounces of pus, with distinct odor, was drawn. It was thought better not to withdraw it all, as the walls of the abscess might collapse—and there would be a tear into the abdominal cavity. The patient has since had no further trouble. Eight months ago I was called to a young man with appendicitis. I advised operation, which was declined. Five days later I aspirated him and drew nearly four ounces of pus. The next day I drew away a little over two ounces of pus. On the 10th day I removed about one ounce of very thick tenacious

pus. This patient has never had any trouble since. I had a similar case six months ago, in which I aspirated twice. He has since complained of pain about that region, and I have recommended an operation. Certainly, where the diagnosis is not plain, an aspirator rarely jeopardizes the case, and very often throws some light upon the trouble. In another case in which I used an aspirator I got about three ounces of blood, and the symptoms all disappeared.

Dr. J. F. Martenet: I am distinctly a medical man, but I have been converted through personal experience to the belief that appendicitis is distinctly a surgical trouble. The cases which I have attended have come on abruptly with acute pain. I have had four cases in my practice within twelve months. Two of the cases Dr. Chambers saw with me. An operation was advised, but in neither of the cases would the family consent. My habit, at present, in every case I meet with, is to state that it is a distinctly surgical trouble, and refer it to the surgeon. One of my cases, who refused operation, secured relief by suppuration through the bowel. This was a year ago. In July last she passed through another attack safely. Lately she was operated upon by Prof. Kelly, and is now well.

Dr. J. W. Chambers: The statistics from the medical side seem to be faulty. A person may have three or four attacks, and they are reported as four cases cured. A surgeon operates on a case, and reports one case cured.

As to women having it as frequently as men, I have, under my own observation, known of three women upon whom the gynecologists had diagnosed pelvic cellulitis and salpingitis, and removed the tube, which proved to be the appendix. In a large number of cases the appendix is really a pelvic organ, and if inflamed it will certainly be a case of salpingitis with some gynecologists. Such errors may have something to do with statistics. There is no reason in the world why women should escape more than men; certainly they are just as liable to catarrhal affections.

Referring to aspiration, I think Dr. Blake's patients are relieved rather than cured. I should hesitate to use the needle. If I should find pus with the aspirator, I should never feel that I had done my duty unless I had cut down and removed all the pus. It would not be good treatment to aspirate an abscess of the thigh, and it is also not good treatment for an abscess in the iliac region.

Dr. Ingle: I believe the sooner we place these cases in the hands of the surgeon, the better. When the family would not consent to an operation, I have treated these cases with salines and enemata, without any relief whatever.

Dr. Thayer—In the Munich statistics it was said that undoubtedly cases of appendicitis had been called salpingitis and pelvic cellulitis, and many cases in the female were doubtless missed in this way.

Dr. Martenet—Two of my cases occurred in females, one only 5 years, the other only 10 years of age.

Dr. Blake—There are certain cases where I can find no distinct indication of what my patient has, whether it is typhlitis, perityphlitis, or appendicitis, and when I have waited long enough I put in an aspirator to find out if there is pus, and in no case have I seen bad symptoms follow, and in some there was distinct benefit. I think we are thoroughly justified in using an aspirator to make a diagnosis.

Dr. Finney—As these are pus cases, the operation can be done as well at the patient's home as in an hospital.

As to aspiration, I agree entirely with Dr. Chambers. Where there are sufficient indications for aspiration, there are still more indications for the use of the knife.

Dr. W. T. Watson, *Secretary.*

NEW YORK ACADEMY OF MEDICINE.

SECTION ON PEDIATRICS.

Dr. Wm. P. Northrup, Chairman. Meeting of February 11, 1892.

A case of spina bifida was presented by Dr. A. Jacobi. The patient was two months of age, and the tumor, which was present at birth, was growing rapidly. The wall was becoming thin over the central portion, and without operation would soon burst and the child die. There was also talipes valgus, and the sutures and fontanelles were very large.

A demonstration was given by Dr. M. Putnam Jacobi, to prove the fact that when the lung is collapsed percussion yields tympanitic resonance, but when extremely inflated, exaggerated pulmonary resonance.

DISCUSSION ON DIPHTHERIA.

Dr. Joseph E. Winters read a paper entitled the Best Apparatus and Best Disinfectant for Use in Mouth and Nose. The author assumed that the disease is caused by the Klebs-Loeffler bacillus; that it is primarily a local disease, the microbe elaborating in the exudate a poison which is absorbed and carried into the circulation, the germ itself not being found in the blood or tissues. A point of vast importance in treatment is the fact that the specific germ on a perfectly healthy membrane does not provoke diphtheria. The primary indica-

tion, then, is not only to cleanse and disinfect the parts, but to destroy the germs *in situ*.

The activity of the Klebs-Loeffler bacillus is impaired by even weak solutions of carbolic or boracic acids. The practical deduction from this is that at the outset we should attack the exudate or culture soil in order to prevent the microbic products from producing constitutional results. It is never safe, however, to employ means that will irritate the surrounding parts, for fresh points of infection are thus made. The only means of successfully disinfecting the throat and preventing sepsis is by irrigation.

For this purpose the child should be placed on the side of the crib, and a rubber sheet arranged to catch the drippings, but he should under no circumstances be lifted from the horizontal position. If a Davidson syringe be used, the cleansing will be more complete, and will meet with less resistance than with any other apparatus. The irrigating should be done through the nostrils, for they can not be tightly closed like the mouth, and with the first flow of fluid from the nose into the throat, the mouth is opened and everything is discharged through the nostrils and mouth.

It is occasionally necessary to syringe through the mouth. In this case the tip should be removed, and the tube passed along the inner side of the cheek behind the last molar to the pharynx. In ordinary cases irrigation every two hours is sufficient; in severe cases it must be practiced every hour, day and night.

For this irrigation nothing has proved as satisfactory as a ten per cent. solution of peroxide of hydrogen, or a saturated solution of boracic acid. The passages must be thoroughly cleansed at each washing, and one half to one pint of solution will be required.

In the local treatment of diphtheria is included medicated steam from a croup kettle, and the inhalation of sulphurous acid gas through the burning of sulphur candles. For medicating the water in the croup kettle, add to one pint of water, one ounce of spirits of turpentine and two drachms of oil of eucalyptus. In the use of the kettle plenty of rubber tubing is necessary, and a gas stove is the best means of generating the heat.

Dr. H. D. Chapin read a paper on Quarantine and Disinfection in Limited Apartments. The management of diphtheria in tenement houses formed the chief subject of consideration. The furniture should be removed as far as possible. The mother, if she must also attend the rest of the family, should wear a wrapper which can be removed on leaving the

room. The area of contagion, when ventilation is good, is small, probably but a few feet. If the germs can all be destroyed *in situ*, there will be no contagion. Old cloth, or pieces of cheese cloth, should be used about the patient, and burned as soon as soiled. All articles of bedding should be shaken on the roof and exposed for a considerable time to sunlight and air, the two most powerful antiseptics at our command. The walls should be washed down with a sublimate solution, 1 to 1000, and the same should be used in sinks and closets. Papered walls may be cleaned with stale bread crumbs. The burning of sulphur, while it may not be of great efficacy, is undoubtedly of some value. It leads to thorough subsequent ventilation, at least. The throat and nasal passages of the other children of the family should be frequently sprayed with mild antiseptic solutions.

Dr. L. Emmett Holt read a paper upon Feeding in Diphtheria: Methods of Forced Feeding. In a disease like diphtheria, where the principal cause of death is asthenia, or exhaustion, no question can exceed in importance that of nutrition and stimulation. The most common error in this direction is over-feeding and over-stimulation during the first few days. It too often happens that when the critical period arrives the overburdened stomach refuses to do its work. The subject may be considered under three heads: 1, Character of food and stimulants; 2, Frequency of administration; 3, Forced feeding.

As to character of food, little need be said, except to condemn two articles frequently allowed—ice cream and jellies—which interfere with taking more valuable food. The main reliance must be upon milk, diluted according to the age of the child. Next to milk, beef broth, mutton broth, expressed beef juice, soft boiled eggs, milk toast, wine whey, oat meal or barley gruel. Junket, with a little wine added, and kumyss, when the child will take it, are valuable additions to the list.

In regard to the stimulants, brandy is best, but we must be guided by the child's whims, and give what he will take best.

Experiments with stomach washing show that the stomach is rarely empty sooner than two hours after a meal. It is a safe rule never to give food requiring digestion oftener than this. Stimulants and predigested food may be allowed at shorter intervals. The quantity of food given should be somewhat less than the child would take in health. It is best not to begin stimulants until they are indicated by the pulse, or prostration, but they should then be pushed until the desired effect is produced, the only limit, in many cases, being the tolerance

of the stomach. Unlike food, they should be given in frequently repeated doses. A careful record of the exact amount of food taken and retained should always be kept, that we may know where we stand.

It sometimes happens that the child absolutely refuses all nourishment and stimulants. Coaxing, threats and commands are alike futile. Efforts to compel the child to take milk in teaspoonful doses results in the wasting of an immense amount of strength, while little or nothing is accomplished. It is at this juncture that the question of forced feeding arises. Rectal feeding in young children, owing to irritability of the sphincter, is almost impossible. Much more efficacious, and with far less disturbance to the patient, is forced feeding by the mouth or nose. The difficulties are surprisingly small. The ordinary apparatus for stomach washing is all that is required, the method of procedure being the same as in that process. Unless there is much resistance, the mouth is to be chosen. Completely peptonized milk is to be preferred. The operation should be repeated once in four hours. In this way a proper amount of nutriment can be introduced with far less worry and resistance than by the spoon method.

The operation was demonstrated upon a child of ten months, a sufficient amount of milk being introduced in about ten seconds.

Dr. A. Jacobi spoke upon the subject of Constitutional Treatment in Diphtheria. He has been convinced of the value of bichloride of mercury in all forms of the disease, especially the laryngeal. He gives it in large doses: a child of six months will take a quarter of a grain a day with no untoward symptoms. Diarrhœa is rare and is quickly checked by a few drops of paregoric. Stimulants should not be delayed until signs of heart failure appear, for when that condition has once developed the patient is certainly lost. Very large doses are sometimes required, and they should be increased until an effect is produced. The doses of digitalis, camphor and alcohol, as stated in the text books, are no guide whatever. If rejected by the stomach, they should be given hyperdomically. One part of camphor dissolved in four parts of sweet almond oil may be given hypodermically with but slight local disturbance.

Dr. August Seibert demonstrated his method of Submendranous Antiseptic Injections. If the Klebs-Loeffler bacillus generates a poison within and underneath the pseudo-membrane, that is the place to attack it. He has, therefore, devised an implement, consisting of a number of hypodermic points, set closely together on a small disc, by which an anti-

septic may be injected beneath the membrane. As an antiseptic, he employs very strong chlorine water. The method has now been in use eighteen months, with strikingly surprising results. It is designed to supplement, not to displace, other local treatment, the injection being made but once a day, one or two, as a rule, being sufficient.

Dr. Beverly Robinson inquired if fluid, introduced into one nostril, did not usually pass out by the other. Dr. Winters replied that in young children a portion passes by the mouth.

Dr. Vineberg approved of sulphurous acid gas, as it gives marked relief to the patient.

Dr. J. Lewis Smith said that he used a stronger solution of peroxide of hydrogen than that proposed by Dr. Winters. Stronger solutions can be used in the throat than in the nose.

Dr. Stowell said that the strength of the solution must be graded to suit the case. Peroxide of hydrogen, if too strong, will cause irritation.

Dr. Holt said that in a personal trial he had found a ten per cent. solution too strong for comfort.

Dr. C. W. Allen described a screen of plain glass which he had seen used in Germany. It is held before the face of the patient during the examination of the throat. It does not obstruct the view, and is an admirable protection to the physician if the patient coughs.

The chairman urged that inasmuch as we now know the specific germ which causes diphtheria and its habitat, that we definitely consider what remedies are for its destruction, and what are for the simple comfort of the patient; that the physician spend his time destroying the germs which are thrown off directly from the patient's mouth, and less to blaming sewer gas and germs constantly floating in the air.

Dr. Fischer had made a series of examinations in tenement houses, and had found the specific bacillus in the air in a number of instances. In one house four cases developed on different floors along the same line of pipes.

Dr. Floyd M. Crandall, *Secretary.*

SECTION ON ORTHOPÆDIC SURGERY.

Stated meeting, Feb. 19, 1892, Henry Ling Taylor, M. D., chairman.

Dr. V. R. Townsend presented a girl, 14 years of age, with rotary lateral curvature. At the age of 3 years, and after whooping cough, she developed an empyema on the left side, which opened spontaneously. These sinuses continued to dis-

charge for five years, and the three cicatrices, one to the left of the nipple, and two slightly below and to the right, show the points where the openings occurred. When 5 years old, it was noticed one morning that there was a complete loss of power in the left upper extremity. The mother said that there had never been any curvature of the spine before the attack of paralysis, although the child always slept on the left side, and that the curvature has been steadily increasing since then. The circumference of the chest at the nipples is twenty-four inches, the right side measuring fifteen, and the left nine inches. There is a very marked lateral rotary deviation of the spinal column to the right, extending from the seventh cervical to the tenth dorsal, with compensating curves above and below. There is no torticollis. The breathing space is good, considering the amount of the deformity. The heart is not displaced. There is complete loss of reaction to faradism in the left supra and intrespinatus, and in the doltoid, and a reversal of the formula with the galvanic current. There is no anæsthesia, but marked atrophy of the shoulder and upper left arm. There is a partial loss of reaction in the pectoral, but the biceps, triceps, and forearm muscles react well.

The interesting feature was the relation of the rotary curvature to the empyema and the poliomyelitis. His own opinion was, that the empyema probably caused a slight curvature, and that the paralysis had helped to increase it, but that there was no connection between the empyema and the paralysis; in other words, the paralysis was not produced by the scoliosis, but was separate and distinct, and due to a poliomyelitis. He had presented the case chiefly because it was of interest in connection with the first paper announced for the evening.

Dr. Royal Whitman also presented a little girl as an illustration of a pure rotary lateral curvature caused by anterior poliomyelitis.

Dr. H. W. Berg said that he had had an opportunity of seeing this patient, and had obtained a somewhat different history. According to his version, the patient was still in bed with the empyema when the family first noticed that she was lying more on the left side. The occurrence of the paralysis was sudden, and the attending physician allowed her to get out of bed, and at this time the extreme lateral curvature was first noticed. If this curvature were the result of the poliomyelitis, it would not have been so extreme at this early stage, for it takes time for muscles to contract and cause deformity. In this case the paralyzed muscles are on the left side of the body, and the primary curve toward the right, while in cases of lateral curvature, due to paralysis, the healthy muscles must

necessarily be on the concave side of the deformity. The only way in which poliomyelitis could possibly produce a curvature on the concave side of the deformity, would be in the third stage of this disease, i. e., in the third or fourth year after the paralysis, when the muscles begin to contract into firm, fibrous cords.

Dr. Royal Whitman thought if the long supporting muscles were paralyzed, it might be as the previous speaker had said, but in these cases where only the muscles supplying the shoulder were paralyzed, one would expect the curvature to be toward the opposite side.

Dr. Berg replied, that the intrinsic muscles are not alone paralyzed in this case. Lateral curvature must follow contraction of the intrinsic muscles of the spine, and not of the long muscles.

Dr. R. H. Sayre had seen a number of cases of lateral curvature dependent upon poliomyelitis, with paralysis of the external muscles on the concave side, and hence, he thought, the statement that the convexity is always on the side of the paralyzed muscles, could not be accepted without qualification. He had been surprised that German writers took it for granted that empyema curves are not rotary.

Dr. S. Ketch was not prepared to endorse the view that the curvature was mainly due to the empyema; on the contrary, he thought the patient had that form of curvature usually found as a result of anterior poliomyelitis. Undoubtedly the empyema tended to exaggerate this curvature.

Dr. N. M. Shaffer said that, so far as he knew, the first reported case of lateral curvature due to poliomyelitis had been published in his book, in 1876 or 1878. That case had been examined by Dr. Seguin, Dr. Draper and himself, and they had found the paralysis on the hollow side. On general principles, he believed that Dr. Berg was correct in his statement. In 1881 he had called attention to the fact that a rotary element existed in empyemic curves. It was exceptional for him to find a lateral curvature of the spine, due to empyema, which was not associated with a greater or less degree of rotation. The error probably arose from the fact that Dr. W. J. Little, of London, who first described it, made this mistake, and other writers had perpetuated the error.

Dr. Mary Putnam Jacobi called attention to the monograph by Eulenberg on lateral curvature of the spine, in which he states very categorically that in ordinary typical cases of lateral curvature the muscles on the concave side are necessarily the stronger, and explains on this principle the mechanism of the production of lateral curvature. His idea is that it is

due to a disturbance in the balance of the muscles of the two sides, whether extrinsic or intrinsic.

Dr. A. B. Judson said that in his earlier studies of lateral curvature he had adopted, without due verification, the statement of foreign observers that rotation is absent from the curvature caused by pleural disease. At present, he believed that it does occur but in a very modified and unimportant degree. The collapse of the chest wall would weaken the action of some of the muscular and fibrous structures which cause rotation by holding the spinous processes nearer the median line than the bodies of the vertebræ. For this reason we may well expect the rotation to be less marked. In the case shown there is little difference in the diagonal diameters, which is the chief feature of rotation, and is caused, in an ordinary case, by the prominence, posteriorly, of the right back of the chest and the complementary prominence, anteriorly, of the left front of the chest. Here we have prominence, front and back, on the right side, and depression, front and back, on the left side, with but little difference in the diagonal diameters, a condition very unlike the effect of rotation. Still there may be, and probably is, some rotation in the vertebral column of this patient, although its effect on the deformity is not easily recognizable.

Dr. Townsend said, that owing to the fact that in this case one was compelled to rely wholly upon the varying statements of the parents of the child, who were not very close observers, it would be well to be cautious in drawing conclusions from a study of this case alone. He did not agree with Dr. Berg as to the relation of the paralyzed muscles to the concave side.

VOLUNTARY SUBLUXATION OF THE KNEE PRODUCED BY MUSCULAR ACTION.

Dr. R. H. Sayre showed a child of fourteen months presenting this condition. The mother first noticed this condition when the child was eight months old. When he was excited, the right knee is pushed in and out with a distinct click. The child was born after a normal labor, and there was no history of injury. He proposed to apply a splint, in order to retain the knee in position.

AN APPLIANCE FOR THE PREVENTION OF DEFORMITY IN HIP DISEASE.

Dr. Whitman presented a case illustrating this appliance. He believed that the long traction brace was the most useful appliance in these cases, for it assured, as a perineal crutch, a protection which could not be removed by the patient. This was the principal objection to any brace which depended on

axillary crutches for its usefulness. Simple fixation of the joint, allowing the patient to walk about on the affected limb, as practiced by Thomas and others, did not afford this protection, which he considered the most important element in the treatment of any joint affection. On the other hand, with the simple long traction brace, gradual and increasing flexion of the leg was a very common and troublesome complication. This was the weak point of the brace, and the one most constantly attacked by its opponents. He had therefore attempted to combine the merits of two braces as follows: The limb having been brought into perfet position, a slender steel bar attached above to an encircling thoracic band, and terminating just above the knee in a thigh band, was closely applied along the posterior aspect of the joint, after the manner of Thomas. The long traction brace was then applied, as usual. Thus flexion was prevented, additional fixation assured, combined with effective protection. By dividing the function of the two braces, the posterior or miniature Thomas brace, could be made very tight and comfortable; it, however, was not to be used as a lever to correct deformity. This should first be overcome by traction in bed or otherwise. He believed this division of labor to be more practicable than the addition of perineal bands and traction to the ordinary Thomas brace, as suggested by Lovett and De Pass.

Dr. Judson commended the use of one apparatus, the hip splint, to protect the joint, and another, the antero-posterior lever, if apparatus is necessary for this purpose, to oppose flexion. In general, it is better not to attempt too many things by one and the same apparatus. He thought the antero-posterior lever, for combating flexion and maintaining fixation, was the essential element of the Thomas splint.

Dr. Shaffer said, that where supplementary apparatus is employed to limit the motion of the dorso-lumbar spine, and the motion on the acetebulum, unnecessary traumatism was inflicted upon the acetebulum. He had studied this subject quite closely, and,in his opinion, this motion of the dorso-lumbar spine is one of the greatest aids in the treatment of this condition. It was better to treat flexion by recumbency and rest until the flexion is overcome than to apply an apparatus which antagonizes the very strong action of the flexor muscles.

Dr. Whitman said he recognized the force of what Dr. Shaffer had said about the flexibility of the lumbar spine, but he was inclined to think that the motion of the diseased joint which the simple traction brace permitted, and the deformity which it did not prevent, were more important considerations than the theoretical objection which Dr. Shaffer had pre-

sented. This fixation apparatus was applied before there was any flexion, and in the case presented there was no spasm of any of the muscles.

"DOES SCOLIOSIS EVER GIVE RISE TO PRESSURE MYELITIS?"

Dr. H. W. Berg read a paper with the above title.

DISCUSSION.

Dr. R. H. Sayre thought there was no doubt that the differences in mammary development observed in cases of rotary lateral curvature were the result of trophic change, but the cause of this disturbance was still uncertain. In advanced cases he had been inclined to attribute this disturbance to pressure on the nerves at their exit from the bony canal. Pathological specimens showed not only a narrowing of the bony canal, but also large exostoses at the points where the vertebræ join; it was quite possible that these might project inward as well as outward.

The case described in the paper had at one time been under his care, and he had considered it as closely resembling disseminated sclerosis, although it was not typical of any diseased condition with which he was familiar. Dr. Spitzka had held the same position. The case had been diagnosticated as lateral sclerosis by one neurologist, and as hysteria by another eminent neurologist, who had employed hypnotism upon the patient, though unsuccessfully. She had been referred to the speaker with the idea that there was some pressure on the cord at about the tenth dorsal vertebra, which might possibly be relieved by a surgical operation. He had been unable, however, to detect any mass pressing upon the cord, and from the effects of momentary suspension, he did not think this method of treatment would prove beneficial. He did not associate the cord lesion with the lateral curvature. The trophic changes were probably due to disturbance of nutrition external to the cord.

Dr. Shaffer considered that the author's case of lateral curvature differed only in degree from almost every case of this condition. It was rare to find lateral curvature without an exaggerated tendon reflex, a non-deforming club foot, or various trophic changes, and the latter occur in incipient cases before there can be any pressure on the cord. Girls suffering from lateral curvature are usually peculiarly nervous, and oftentimes seem to assume the responsibilities of their entire family. This is the direct result of the central nervous lesion, one which pertains more to the psychical condition than to the spinal cord condition. Our clinical studies drive us, by analogy, to look in the motor tract of the brain for the cause of the condition.

Dr. Ketch looked upon the trophic changes as an element in the otiology of lateral curvature, rather than the result of this condition. It was probable that at a very early period in life there was a disturbance of the nervous system, most probably of the brain, which produced the lateral curvature. Boys having lateral curvature show atrophy of the limbs, but the general nervousness is not so marked. For example, he had at present under observation a robust boy, fifteen years old, with lateral curvature, who was supernaturally strong, and supernaturally slow and apathetic. He thought it highly improbable that pressure myelitis ever occurred in these cases.

Dr. L. W. Hubbard could not understand how the paraplegia of Pott's disease could be said to be due to cord pressure from change of position, as clinically it seemed to bear no relation to the amount of curvature, or the situation of the lesion, and it was present when there was no curvature; and, moreover, recovery took place without any change in the curve of the spine. He saw nothing in the case reported analagous to the myelitis of Pott's disease.

Dr. Judson would eliminate muscular contraction as a factor in the causation of lateral curvature, believing that rotation and the curvatures, primary and secondary, are only the mechanical result of muscular failure to sustain the weight of the trunk. He would welcome, with extreme pleasure, any advance in our exact knowledge of the etiology of lateral curvature.

Dr. V. P. Gibney had never seen pressure myelitis in an uncomplicated case of rotary lateral curvature.

The Chairman agreed with Dr. Hubbard that the analogy of the case under discussion to the myelitis of Pott's disease was not very strong, as, according to the view advanced by Dr. Hoffa, at the last meeting of the American Orthopedic Association, and generally accepted by those present, the paraplegia is due to the pressure of inflammatory products. Personally, he had never seen a case of lateral curvature complicated by paraplegia or symptoms of lateral sclerosis. Last fall he had had a case of very moderate curvature with a very peculiar ataxic gait, but a careful examination excluded organic disease of the spinal cord, and it was decided to be a case of functional nervous disturbance, possibly produced by masturbation. It seemed strange that such a mild case as the one described in the paper should produce such marked nervous symptoms, while the much more severe cases, so often seen, have no analogous symptoms. He looked upon the cord lesion as merely a coincidence.

Dr. Berg, in closing the discussion, said that he thought the diagnosis of disseminated sclerosis very improbable, and this diagnosis had probably been made because a primary sclerosis of the cord is such a rare condition that whenever a neurologist sees a spastic paralysis in an adult, and can find no cerebral symptoms, or symptoms of pressure upon the cord, he makes a diagnosis of disseminated sclerosis. Dr. S. Weir Mitchell had given it as his opinion that the case was one of primary lateral sclerosis. There was no doubt as to the sclerosis and the lateral curvature; the only doubt is as to the connection between the lateral curvature and the sclerosis. Pott's paraplegia is caused by a variety of conditions, but he believed that in nearly seventy-five per cent. of the cases the paraplegia was due to pressure resulting from flexion of the cord at the angle of the curve. He had no doubt that hundreds of cases had been seen where the lateral curvature had been considered the result of paralysis, where it was really the cause.

FEMORAL ABDUCTION, ADDUCTION AND FLEXION.

Dr. Judson presented a convenient method of observing the degrees of motion in cured and convalescing cases of hip disease. The subject was illustrated by boards, on which dolls were fixed, the centre of motion at the hip in each case being surrounded by a graduated arc, with the degrees numbered from zero, in the natural position of supine recumbency, with a slight lordosis, up to the widest limit of normal motion. In practice, the region of motion is first to be found, and then the extent to which it may be pushed, without disturbing the natural and symmetrical position of the lumbar vertebræ and the iliac spines, is to be noted on the goniometer. The degrees of motion in flexion and laterally may thus be readily recorded.

The presence of considerable motion warrants a serious effort to reduce whatever deformity may exist. He cited two cases in which the patients, being considered cured, relief had been sought for the deformity. Enough motion was found to encourage hope, and good results were recorded in a few months in each case, after the application of a hip splint, and later, a simple ischiatic crutch, and the return of the patient, by instruction and drill, to the natural rhythm of walking. The improvement was readily measured in degrees, from time to time, and the deformity was almost completely reduced.

A NEW METHOD OF MAKING PLASTER CASTS OF THE THORAX IN CASES OF ROTARY LATERAL CURVATURE.

Dr. Mary Putnam Jacobi exhibited a series of models which she had prepared by an original method. It had been suggested to her by observations made with the cyrtometer

upon the condition of the thorax after empyema. An outline of the thorax at the desired level is first taken with a cyrtometer, which is an instrument consisting of two soft strips of lead united by a hinge, which is placed over the vertebral column, and the lead strips closely applied to the chest walls. The lead is next placed upon a slab of marble, where it serves as a sort of shallow frame, into which the plaster of Paris cream is poured and allowed to set. This gives practically a thin plaster cast representing a section of the thorax.

She called attention to the ease with which the diagonal diameter could be obtained, and also to the way in which these casts brought out small degrees of curvature.

[Discussion on the papers of Drs. Judson and Jacobi postponed.]

SECOND ANNUAL REPORT OF THE NEW YORK PASTEUR INSTITUTE, APRIL, 1892.

Dr. Paul Gibier, Director of the New York Pasteur Institute, reports the results of the preventive inoculations against hydrophobia performed at this institute during the second year of its existence (February 18, 1891, to February 18, 1892). During this time 574 persons who were bitten by dogs, cats and other animals, applied for treatment. These patients may be divided into two categories:

1. In the case of 461 of these persons it was demonstrated that the animals attacking them were not mad. Consequently the patients were sent back after having had their wounds attended to during the proper length of time.

2. In 113 cases the anti-hydrophobic treatment was applied, hydrophobia of the animals inflicting bites having been evidenced clinically, or by inoculation at the laboratory, and in many cases by the death of some other persons or animals bitten by the same dogs.

Indigents have been treated free of charge.

The persons treated were: 36 from New Jersey, 22 from New York, 12 from Massachusetts, 8 from Connecticut, 6 from South Carolina, 5 from Texas, 4 from Maryland, 3 from North Carolina, 2 from Missouri, 2 from Ohio, 2 from Pennsylvania, 2 from Arkansas, 1 from Alabama, 1 from Georgia, 1 from Iowa, 1 from Louisiana, 1 from Michigan, 1 from Rhode Island, 1 from Virginia, 1 from Mexico and 1 from West Indies (Curaçoa).

GENERAL REPORT.

The following table, based upon a similar one published every month by the Pasteur Institute of Paris (France), shows

synoptically the work of the New York Pasteur Institute since its opening, which took place two years ago.

NEW YORK PASTEUR INSTITUTE.*

Statistics of the Preventive Treatment against Hydrophobia Since Its Opening—From February 18, 1890, to February 18, 1892 (two years).

	A		B		C	
Bites inflicted on the head and on the face { simple	4	8	3	3	11	19
{ multiple	4				8	
Cauterizations { efficacious						
{ non-efficacious	3				3	
No cauterization	5		3		16	
Bites inflicted on the hands { simple	35	54	41	58	40	66
{ multiple	19		17		26	
Cauterizations { efficacious	1					
{ non-efficacious	22		19		22	
No cauterization	31		39		44	
Bites inflicted on the limbs and on the body { simple	9	14	18	25	24	28
{ multiple	5		7		4	
Cauterizations { efficacious					1	
{ non-efficacious	6		9		6	
No cauterization	8		16		21	
Clothes torn	4		9		1	
Bites inflicted on bare parts	1		8		2	
Bites inflicted on different parts of the body		6		9		8
Cauterizations { efficacious					1	
{ non-efficacious	1		4		2	
No cauterization	5		5		5	
Clothes torn	1		1		3	
Bites inflicted on bare parts	3		3		1	
Amounts		82		95		121
General total		298				

* The column A refers to persons bitten by animals in which hydrophobia has been evidenced by experimentation or by the death of some other persons or animals bitten by them; column B to persons who have been wounded by dogs having been recognized mad by the clinical or veterinary examination; and column C to cases in which hydrophobia could only be suspected, as the animals had disappeared or were killed instantly and their bodies thrown away.

These 298 persons treated, came: 103 from New York, 63 from New Jersey, 28 from Massachusetts, 19 from Connecticut, 9 from Illinois, 8 from North Carolina, 7 from South Carolina, 7 from Texas, 7 from Maryland, 7 from Pennsylvania, 6 from Georgia, 5 from Missouri, 4 from Ohio, 3 from Arkansas, 2 from Kentucky, 2 from New Hampshire, 2 from Iowa, 2 from Louisiana, 2 from Virginia, 2 from Rhode Island, 1 from Maine, 1 from Michigan, 1 from Arizona, 1 from Nebraska, 1 from Minnesota, 1 from Alabama, 1 from Indian Territory, 1 from Ontario (Canada), 1 from Mexico, 1 from Curaçoa (West Indies).

In addition to these 298 inoculated after they had been bitten, we may mention that eleven persons have been submitted to the prophylactic treatment in order to prevent some fatal inoculation during the accomplishment of their duty. These eleven persons are the servants, the assistant and the Director of the Institute.

Deaths by Hydrophobia After Treatment.—Miram Edwards, five years old, of South Framingham, Mass. Badly bitten July 14th, 1891, in nineteen places by a dog recognized to be mad. Treated from July 15th to August 1st. Symptoms of hydrophobia appeared six days later (August 6th). Died August 9th, 1891.

Three other persons (two sisters of the patient and a man), bitten by the same dog, who received the same course of treatment, are now enjoying good health.

R. D. Morton, thirty-five years old, of Columbia, S. C., engineer. Two days before commencing his treatment (August 5th, 1891), he had been severely bitten by a rabid dog on the right hand and wrist, and was treated from the 5th to the 22d of August, 1891. Died of hydrophobia two months and two days after (October 24).

J. S. T. Earl, 42 years old, of Turners, N. Y., farmer. On September 20 he was severely bitten by a wandering dog on the right forearm, on which were twelve deep cuts and five abrasions of the integument. Seven small pigs and their sow, bitten by the same dog, died of hydrophobia between the 5th and 10th of October. Earl applied for treatment only four days after the accident, and was treated from September 24th to October 10th. He died of hydrophobia on the 1st of January, 1892. He complained chiefly, at first, of his right arm "hurting by spells."

Persons Who Died of Some Intercurrent Diseases During or After Treatment.—H. W. Stevens, 33 years old, physician, of Brooklyn. He came on January 26, 1891, to the Institute, together with John Carroll, pathological janitor at New York Hospital. Both of them had some cuts or sores on the fingers, and were afraid that they had inoculated themselves with the virus of hydrophobia in performing the post mortem examination of a man who died of this disease, the 22d of January, in Chambers Street Hospital. When Dr. Stevens commenced his treatment, which was of an ordinary intensity, he was already ill; three weeks previously he cut himself on the left forefinger while making an autopsy. This wound was followed by a lymphangitis of the hand and arm, and suppuration.* Before this was healed up he made many

* Report given in writing by the patient himself.

necropsies. He inquired at first whether sulphate of quinine would interfere with the treatment, *as he had chills.* He grew weaker every day, and kept on his duty, though he was advised to take a rest. Two days before the end of the treatment he felt very feeble, and the last day he was still worse. A polymyelitis developed, and he died on February 23d.

Frank McCoy, thirty-one years old, of Port Jervis, N. Y., barber. On March 7, 1891, he was bitten on the lower lip by his own dog, which was recognized to be affected with hydrophobia. The wound was large and bled considerably; it was cauterized about twenty minutes afterwards with nitrate of silver (inefficacious). McCoy applied for treatment only five days later (March 12). His treatment was not half completed when he went to Liberty Island on a cold and rainy day. On returning home he went to bed with chills and fever, the effect of a penetrating cold so contracted. He was attended by Dr. R. W. Buchanan, of New York, who shortly after cupped his left side; the patient was then suffering from pneumonia of an infectuous form. On the 3d of April he seemed somewhat better, and his relatives took him to Port Jervis, where he died on April 8, 1891.

Jonathan Knowles, sixty-three years old, of Taylorsville, Pa., farmer, came for treatment on Dec. 12, 1891. Was affected with bronchitis and kidney trouble. He was obliged to keep in bed a few days after, as he had contracted the grippe, complicated with pulmonary œdema. He died on December 24.

By the examination of the figures above, one may see that the results obtained at the New York Pasteur Institute are about the same as those reported by the kindred institutions. It is unnecessary to comment upon them, as they will be well appreciated by any unprejudiced mind.

Let us remember that last year 42 deaths caused by hydrophobia have been formally reported of persons bitten by rabid animals, and who were not submitted to the inoculation. This makes about 80 deaths for the period included in our statistics, during which three persons died despite of the treatment. And without taking an exception for the patient (Earl), who came only four days after his terrible fight with the dog, if we consider, as they do abroad, that this treatment has produced its full effects only fifteen days after it has been completed, we see that the percentage of those who died after the fifteen days following the inoculation has been only 2 out of 298, or 0.66 per cent.

Among the 298 persons treated, 177 have been attacked by animals undoubtedly rabid. If we consider, again, that statistics indicate 25 per cent. as a low per centage of deaths

after bites inflicted by hydrophobic dogs, and then counting only 177 instead of 298 persons bitten, we ought to have had not two or three cases of death, but at least 44. Moreover, 123 persons among the 177 bitten by hydrophobic animals had their wounds inflicted on the face, the head or the hands. We know that bites of this nature are followed by hydrophobia in a much larger proportion, say at least 40 per cent. The number of deaths ought to be, then, no less than *seventy* among the persons so bitten, who came from the different parts of the country to submit themselves to the Pasteur treatment.

ULTIMATE RESULTS OF REMOVAL OF UTERINE APPENDAGES.

St. Louis Medical and Surgical Journal, December, 1891.

Dr. Charles Carroll Lee read a paper on this subject before the New York Obstetrical Society (*Amer. Jour. Obst.*). He did not think that in the selection of cases for operation, general considerations were entitled to much weight. The question as to the results of laporotomy in unsexing patients was of very little moment, and should have very little or no weight. Patients with tubes and ovaries sufficiently diseased to require removal were already sterile by reason of that fact; and sexual desire, through painful coition and local suffering, was, in many instances, utterly extinguished. He thought that a decision in any case rested upon two questions and their answers: 1. Is removal really necessary in this case? 2. Will the ultimate result prove beneficial to the patient? Individuals of a distinctly neurotic temperament, particularly hysterial and epileptic patients, with so few exceptions as only to prove the rule more emphatically true, were decidedly *not* benefited by laporotomy. He acknowledged that many cases of epilepsy, the attacks occurring at the menstrual period, and associated with symptoms of various derangement, afforded apparently the strongest indications that benefit would result from operation, in that there seemed to exist a relationship of cause and effect, but did not think such case appropriate. He did not believe statistics would show a half dozen such cases with authenticated cures.

One of the factors he thought responsible for the disappointment attendant upon laporotomy at times, and bringing discredit upon the operation, was to be found in the fact that many men were better operators than diagnosticians.

The relief from laporotomy was often only experienced by the patient one or two years after the operation. P. M.

N. O. Medical and Surgical Journal,

ESTABLISHED IN 1844.

PUBLISHED MONTHLY, $2.00 A YEAR.

Articles from physicians are respectfully solicited. All articles, news and exchanges, and books for review, should be sent to the EDITOR, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL. Business communications should be addressed to the BUSINESS MANAGER, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

EDITED AND PUBLISHED BY

AUGUSTUS McSHANE, M. D.

COLLABORATORS:

DR. F. W. PARHAM. DR. H. W. BLANC. DR. A. W. De ROALDES.
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Editorial Articles.

THE STATE MEDICAL SOCIETY.

The meeting of the Louisiana State Medical Society, which takes place in New Orleans on April 26, is well worthy of the attention of the profession throughout the State. Through the zealous work of the officers and members of the organization, a very large increase in membership is promised, and matters are to be discussed, and finally acted upon, which involve the good of the profession for the years to come. The larger the attendance at this meeting, the more potent will be the voice with which the State Society can bespeak help for its efforts in behalf of the public good, and the greater the weight which its members can bring to bear upon our legislators for safeguard against fraud and imposition perpetrated in the name of the medical profession.

The presence of every regular member is earnestly desired, and those not yet enrolled as members are assured that by seeking membership and coming to the meeting on the 26th of April, they will very materially advance the good work which the State Medical Society of Louisiana is laboring to accomplish.

TREATMENT OF TRAUMATIC TETANUS.

In a previous number of THE JOURNAL, there appeared an article on the rational treatment of tetanus, based on the researches of bacteriologists and the results of the empirical treatment of two cases by Dr. Pavlini.

The British Medical Journal, March 12, 1892, contains a short article on the treatment of tetanus by injection of corrosive sublimate. The article is condensed from a paper by Celli, in *The Archivio Italiano di Pediatria*, November, 1891. Celli's case was a child in whom tetanus appeared after a wound in the sole of the foot. The incision and antiseptic dressings were first tried, but with no result; the symptoms continued to grow more grave. The plan, first practiced, by Baccelli (according to Celli), of injecting corrosive sublimate was tried. Nine hypodermic injections (around the wound presumably) were given in the course of seven days; each injection contained one-twelfth of a grain of bichloride, dissolved in water. Improvement set in at the very beginning of this treatment, and on the eighth day the patient was completely cured. As a direct result of the injections, there were noticed progressive fall of temperature and pulse rate, with gradual increase in diuresis.

In Pavlini's two cases, an aqueous solution of carbolic (about two per cent.) was injected into the tissues around the wound. The action, however, is similar to that of the bichloride—it destroys the bacilli that multiply in the vicinity of their point of entrance. The peculiar habits of the tetanus bacillus render it very easy of destruction by means of the ordinary safe germicides. The bacilli are confined to a small zone around the focus of infection; and it does not require a very large amount of an antiseptic solution to soak into the infected tissues and destroy the germs. When these are killed they no longer generate the ptomaines, which, circulating in the blood, cause the convulsive phenomena; and the ptomaines that are already in the blood when the bacilli are destroyed are gradually eliminated by the emunctories; hence the necessity of keeping all the excreting organs in an active state. If the treatment be instituted early enough, the chances would seem to be

in favor of the patient; but if delayed too long, the same rule applies here as in all other diseases.

The striking results obtained by the two Italian physicians seem to us to settle, once for all, the proper and rational treatment of traumatic tetanus; and with the lights before us, we can not but feel that the physician or surgeon who fails to apply the simple, yet effective, treatment outlined above, does not do his whole duty to his patients, and thoughtlessly disregards the agency that holds out the best chance of warding off death.

HYPODERMIC INJECTIONS OF GLANDULAR SOLUTIONS.

We all remember the excitement, sensation, or what you will, that seized the people (especially the male portion) of civilized countries when Brown-Séquard announced that many of the annoyances incident to old age could be materially diminished by the hypodermic injection of an extract of sheep's or goat's testicle. In Europe, scientific men merely considered Brown-Séquard's communication on the subject in the calm manner habitual to them; but in this country the people made themselves and Brown-Séquard's "Elixir" ridiculous; and that caused testicle-extract to be permanently shelved as a therapeutic agent.

The general idea, however, of injections of glandular solutions did not die out; and although Brown-Séquard's first expectations were not realized, his experiments left a residue of good seed, which, falling upon good ground, has borne fruit.

At a meeting of the Paris Academy of Medicine, Dr. Constantin Paul discoursed upon a method of treating neurasthenia based upon Brown-Séquard's researches (*Journal de Médecine et Chirurgies Pratique*, March 10, 1892). Dr. Paul takes a certain quantity of sheep's brain, from an animal recently killed, and macerates it in glycerine; the mixture is then filtered through d'Arsonval's apparatus; that is, through a hard porcelain filter under a pressure of forty or fifty atmospheres obtained by means of carbonic acid. The liquid thus obtained is a 10 per cent. solution of nervous substance, which

can be kept for ten days without changing; it contains no organized elements. The injections are made hypodermically, each consisting of from three to five cubic centimeters of the solution; the injections are repeated every four or five days. They are perfectly well borne, and never give rise to abscess. The method has been employed in chloroanemic neurasthenia, in true neurasthenia, and in locomotor ataxia. The first are completely cured. Tabetic patients are improved; their lightning-like pains are very much relieved; walking is restored; in one of them the patellar reflex returned, and the improvement was considerable.

Another and still more striking case is reported in *The British Medical Journal*, March 12, 1892, by Dr. Wallace Beatty, of Dublin, Ireland. Dr. Beatty's case was one of myxœdema in a married lady, aged 45 years, whose health had been growing worse for five or six years, when she came under his observation. It was then evident that she was suffering from myxœdema. She had been treated with tonics, etc., for a long time, and she had almost given up hope. Dr. Beatty did not expect much from treatment; but, having read that massage had done good in several instances, he determined to try it. For five weeks massage was systematically applied. At the beginning of the treatment, the amount of hæmoglobin was 70 per cent. of the normal; at the end of five weeks it was 75 per cent. The patient's general condition was somewhat better, but the improvement was not great enough to permit Dr. Beatty to expect that it would persist after cessation of treatment. He decided, in consultation, to adopt the method used by Dr. Geo. R. Murray, of Newcastle-on-Tyne, with considerable success, namely, the hypodermic injection of an extract of the thyroid gland of a sheep. The extract was made by Dr. Purser, who gave the first injection on the fifty-first day of the massage treatment. The thyroid extract was, with few modifications, made according to Dr. Murray's plan, as follows: The lobes of the thyroid gland of a sheep were removed immediately after it was killed, the instruments used having been rendered aseptic. The gland was cleared of adhering fat and connective tissue. Each lobe was cut up into small pieces on an aseptic glass dish. The pieces were put

into two sterilized test-tubes, one for each lobe, and over them was poured, in sufficient quantity to cover them, a solution containing glycerine and one-half per cent. solution of carbolic acid in equal parts. The test-tubes were left in a cold place for twenty-four hours. The contents were then strained through fine muslin into a glass-stoppered bottle, and the muslin squeezed so as to express as much liquid as possible; the muslin had been previously placed for a few minutes in boiling distilled water, and the bottle was also previously disinfected.

The extract thus made from the two lobes was given in three parts, with two days' interval between. No unpleasant sensations were caused by the injections. The injections were continued until February 13, 1892; in all, the extract five thyroid glands was given. The extract of each gland was given in three injections, within a week after the animal was killed.

The effect of the injections was marvellous. Within one week the patient's condition had noticeably improved; and the improvement continued steadily until it would be impossible for a physician, seeing her for the first time, to say that she had had myxœdema.

The results obtained in the two cases mentioned above open a new avenue to therapeutics. It is not too much to deduce that general diseases arising from imperfect or altered glandular action can be relieved or cured by the introduction into the system of the materials normally elaborated by the glands. It remains for experimental physiology to say how the good effects are produced, and what is the probable limit of the new method of treating disease which we owe primarily to Brown-Séquard.

State News and Medical Items.

[Communications from Physicians of Louisiana are solicited for this Department. News of personal interest is especially desired.]

Dr. I. J. Newton, of Bastrop, La., ex-President of the State Medical Society, has removed to Monroe, La., where he will engage in the practice of medicine.

Dr. John Casson, who died February 4th, in Alexandria, La., aged 83 years, was probably the oldest subscriber to The Journal. Dr. Casson had been ill for several weeks. The cause of death was pneumonia. He was probably the oldest native citizen of Rapides parish, where he lived all his long and useful life. He was a man of irreproachable character, kind and good to everybody, white and black. In his death this community has lost one of its best citizens, and hundreds of people their best friend. He was a very charitable man; no one ever called on Dr. Casson for assistance but what they were relieved, if within his power to give relief.

Dr. A. A. Forsythe, of Troyville, La., has moved to Monroe, to practice medicine. In connection with Dr. Hilton, he has established a free clinic for the deserving poor.

Dr. Bourgeois, of St. James, has become a resident of Plaquemines.

Dr. J. A. Boyd, who was the first mayor of Breaux Bridge, died recently, aged 87 years.

Dr. W. B. Miller, who has resided near Monroe for several years, has moved into the town.

Dr. S. E. Murphy has returned to Monroe to resume the practice of his profession.

Dr. C. D. Simmons, of Dutch Town, La., paid The Journal a pleasant call recently.

Dr. J. J. Scott, of Shreveport, was in the city recently.

Dr. G. Armstrong, who formerly practiced at Boyce, died recently at Tampa, Fla.

Kennedy—Buce.—At the residence of the bride, in Farmerville, La., on Tuesday, February 9, 1892, Dr. E. J. Kennedy to Mrs. Ida Buce, Elder J. U. Wharton officiating.

Dr. Frances D. Young.—Died, at his residence in Rayne, La., on Sunday, February 14, 1892, at 10 o'clock A. M. Dr. Young's age was 56 years, 11 months and 14 days.

Dr. J. S. Wilkinson, of Pass Christian, favored The Journal with a letter lately. He has been a reader of The Journal since 1844.

Dr. Chas. Stuart Cowle, formerly of Washington, D. C., has located in Monroe, La.

Dr. J. E. Shute has moved to Opelousas, La.

Dr. T. O. Brewer, of Monroe, has gone to New York to take a post-graduate course. He will be gone about three months.

MORTUARY REPORT OF NEW ORLEANS.

For February, 1892.

CAUSE.	*White*	*Colored*	*Male*	*Female*	*Adults*	*Children.*	*Total*
Fever, Yellow							
" Malarial (unclassified)	3	2	1	4	2	3	5
" Intermittent							
" Remittent	1	2	2	1	3		3
" Congestive	4	1	1	4	3	2	5
" Typho	1	1	2		1	1	2
" Typhoid or Enteric		1		1		1	1
" Puerperal	2			2	2		2
Influenza	26	14	20	20	32	8	40
Scarlatina							
Measles		1		1		1	1
Diphtheria	1			1		1	1
Whooping Cough							
Meningitis	4	4	3	5		8	8
Pneumonia	46	45	53	38	60	31	91
Bronchitis	13	11	13	11	9	15	24
Consumption	33	34	45	22	65	2	67
Cancer	7	5	5	7	12		12
Congestion of Brain	8	4	8	4	9	3	12
Bright's Disease (Nephritis)	15	6	13	8	21		21
Diarrhœa (Enteritis)	9	3	8	4	10	2	12
Cholera Infantum	1	1	1	1		2	2
Dysentery	4	2	4	2	5	1	6
Debility, General	1	1	1	1	2		2
" Senile	12	13	12	13	25		25
" Infantile	10	4	6	8		14	14
All other causes	202	92	166	128	191	103	294
TOTAL	403	247	364	286	452	198	650

Still-born Children—White, 24; colored, 21; total, 45.

Population of City—White, 184,500; colored, 69,500; total, 254,000.

Death Rate per 1000 per annum for city—White, 26.21; colored, 42.65; total, 30.71.

F. W. PARHAM, M. D.,
Chief Sanitary Inspector.

METEOROLOGICAL SUMMARY—FEBRUARY.

STATION—NEW ORLEANS.

Date.....	TEMPERATURE. Mean	Max...	Min...	Precipn. in inches and hundr'ths...
1	57	68	46	0
2	61	72	50	0
3	64	74	55	0
4	62	72	51	0
5	66	74	59	0
6	64	76	59	T
7	68	77	59	T
8	72	80	65	T
9	58	62	53	0
10	60	68	52	T
11	60	68	52	0
12	50	55	45	0
13	52	62	43	T
14	65	74	56	T
15	62	70	55	0
16	56	65	47	0
17	56	65	48	0
18	60	69	52	T
19	66	74	59	0
20	69	74	64	T
21	64	70	59	.01
22	64	72	57	.03
23	61	65	57	0
24	60	69	51	0
25	59	64	54	0
26	52	55	49	0
27	52	60	45	0
28	58	69	48	T
29	54	60	49	0
30	....	....	....	....
31	....	....	....	....

SUMMARY.

Mean barometer, 30.12.
Highest barometer, 30.41, 17th.
Lowest barometer, 29.85, 10th.
Mean temperature, 61.
Highest temp., 80, 8th; lowest, 43, 13th.
Greatest daily range of temperature, 22, 1 and 2
Least daily range of temperature, 6, 26th.

MEAN TEMPERATURE FOR THIS MONTH IN—

1871.....60.0	1877.....56.0	1883.....63.0	1889.....53.0
1872.....55.0	1878.....55.0	1884.....61.0	1890.....64.0
1873.....60.0	1879.....56.0	1885.....53.0	1891.....63.0
1874.....59.0	1880.....60.0	1886.....53.0	1892.....61.0
1875.....56.0	1881.....56.0	1887.....65.0	
1876.....59.0	1882.....62.0	1888.....59.0	

Total excess in temp'ture during month, 53.
Total deficiency in temp'ture since Jan. 1, 88.
Prevailing direction of wind, N.
Total movement of wind, 5991 miles.
*Maximum velocity of wind, direction and date, 29 miles, from S. E., 6th.
Total precipitation, 0.04 inches.
Number of days on which .01 inch or more of precipitation fell, 2.

TOTAL PRECIPITATION (IN INCHES AND HUNDREDTHS) FOR THIS MONTH IN—

1871..... 1.59	1877..... 0.98	1883.... 1.59	1889..... 2.78
1872..... 4.77	1878..... 3.50	1884..... 3.16	1890..... 2.27
1873..... 1.92	1879..... 2.13	1885..... 2 39	1891..... 7.42
1874..... 3 68	1880..... 4.62	1886..... 1.06	1892..... 0.04
1875.....13.85	1881..... 5.80	1887 ... 5.58	
1876..... 8.20	1882.....4.04	1888.....11.21	

Total deficiency in precip'n during month, 4.42.
Total deficiency in precip'n since Jan. 1, 3.95.
Number of cloudless days, 8; partly cloudy days, 11; cloudy days, 10.
Dates of frost, —
Mean maximum temperature, 68.
Mean minimum temperature, 53.

NOTE.—Barometer reduced to sea level. The T indicates trace of precipitation.
* To be taken from any five-minute record.

G. E. HUNT, *Local Forecast Official.*

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XIX. MAY, 1892. No. 11.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the first day of the month preceding that in which they are expected to appear. A complimentary edition of twenty-five reprints of his article will be furnished each contributor should he so desire. Any number of reprints may be had at reasonable rates if a *written* order for the same accompany the paper.]

PRESIDENT'S ADDRESS.*

BY J. B. ELLIOTT, M. D.

Gentlemen of the Louisiana State Medical Society: It becomes my duty to report upon the work of the past year, and to address you upon certain specified topics which in their entirety represent the purpose of our embodiment into a State society.

I shall detain you but briefly in relation to the work done. First permit me to explain that this meeting has been postponed from the 12th to the 26th of April, because in my judgment no meeting could have been gathered from our parishes just one week *prior* to the State elections. Political questions have so deeply absorbed our people during the past year that matters of lesser import have been in great measure laid aside. It seemed best to me under the circumstances to postpone our meeting until the political issues had been decided. I laid my views before the vice president, the treasurer and the secretary of the society, and they unanimously agreeing that the postponement would be for the best interests of the society, the change was made. By fixing the time of meeting for the 26th, we still have opportunity to complete such measures as we

* Read at the Thirteenth Annual Meeting.

desire to bring before the General Assembly which convenes on May 10.

During the year efforts have been made to arouse interest among our members in this meeting, and also to stimulate the members of the profession in the State to come forward and unite themselves with us. To this end 600 circular letters have been distributed and a great deal of personal correspondence performed.

My thanks are due to our able vice presidents, who have cordially seconded my efforts in arousing interest, and whose work will bear fruit in the future, if not in the immediate present. Through my work experience has been gained which gives shape to some suggestions, to be offered later on, and through which, it is hoped, better results can be accomplished.

Before passing to the immediate subject of my address, it is incumbent upon me to draw the attention of the society to the meeting of the Pan-American Medical Congress, which meets in Washington in September, 1893. On that occasion all the nations of the western world send their representatives to consider the great medical problems which have become truly international in their bearings, and which need such study and discussion as only an international association can give them.

This is a notable event in the medical history of our hemisphere, one in which our profession, rising above the barriers of national, political and commercial differences unites upon the higher plane of a common humanity for the abating of human suffering and the saving of life. All honor to the promoters of a meeting which so nobly vindicates and illustrates the civilization of the nineteenth century.

For those who desire further particulars concerning the congress, its plans, purposes, and a knowledge of the steps necessary to aid in the effort to make it a success, I will state that Prof. Stanford E. Chaillé, M. D., is the member for the State of Louisiana upon the Committee on Permanent Organization.

Passing to the specified topics upon which the constitution orders that I shall address you, we find for our consideration

the great central purposes which represent the causes of our existence. If we can vividly realize that our corporate life and usefulness depends upon the faithful fulfilling of these ideals; if we can bring it home to our consciousness that these formulated purposes are not mere empty and ornamental phrases, but the deliberate pledges of our profession to the people of our State, I am confident that a deeper enthusiasm will be kindled and new life awakened for the future.

Co-operation through union is the first design of such an organization as ours; and our purpose is to bring to bear upon public opinion and upon legislative deliberations the united and formulated convictions of a body of men educated to one end, and upon whom, whether they will it or not, rests the responsibility of thinking and acting for the public welfare. Each one of us, when we accepted from our State the authority to practise medicine, virtually accepted the responsibility for the public welfare in its medical aspects. We committed ourselves to preach the gospel of health as solemnly as we did to meet the invasions of disease. We pledged ourselves to the public welfare, and to that end pledged ourselves to maintain a high plane of medical character and culture; to increase medical knowledge to the full extent of our ability and opportunity, and to teach the people how to guard themselves against disease. Our responsibility is a moral one. It can not be exacted of us by any process of law; nor is there any human penalty affixed for its neglect. Nevertheless, the true man feels its weight and tries to meet it in his daily life. It is the sacred religion of our profession.

These pledges we can make good only through united action, and this necessity for united action is too great a truth to be undervalued and neglected. Let us remember that no matter how great he may be, the isolated individual stands powerless in this world for the accomplishment of permanent effects. Select any individual life you may whose work has left a permanent impress upon the legislation of his time, and it will be found that such effect has been produced through a social mechanism of one sort or another; through organization of effort; through many working unitedly to one end. The ideal purpose must be given visible expression before it can

live. The thought must be embodied to be comprehended and become effective.

Our ideals, the advancement of State medicine, the increase of medical knowledge and of professional worth, and the promotion of the public welfare, are high and worthy aims, yet are they but vague and empty dreams so long as they lie unuttered and disembodied in the brain of the enthusiast. Even though they find expression in the burning words of the individual their sound is lost in the bustle of a busy world which decrees that nothing shall live save that which can conquer a place in the world's regard, and force recognition for itself through a demonstrated life and utility. We may go further than this and say, that even though our idea is acknowledged to be thoroughly practical and useful, yet it can have no life or effect until it finds for itself an organized body which shall be to the world its manifestation and evidence of vital power. The expressed thought of the individual will have its effect only upon the individual, and not until these individuals write as the living embodiment of the thought can it become an effective power among men.

This truth has been recognized wherever civilization exists, and through its application newer and higher ideals advance the world. In religion, in politics, in commerce, the new ideal born in the brain of the individual becomes effective and fruitful only when through, a visible embodiment it begins to demonstrate that it has within it a power of life and development—and so through the slow years grows to its full fruition.

Our predecessors in medicine have recognized this, and our State society is the result. We may well ask ourselves, then, since our ideals have found an organized embodiment what can we point to as realized results?

Let us reply just here that we are young yet. We have organized with a definite purpose, and to achieve that purpose we have to educate an entire State to our way of thinking. We must make the State see first that we are at unity among ourselves in our purposes, and, secondly, that these purposes are for their benefit—to raise the plane of the medical profession, and to protect them in their life and property by preventing disease. To do all this requires time. The education of a

people to a given idea can not be done in a year, nor even in a decade.

We may pass laws for the realizing of our ideals, but these laws will remain dead and useless enactments if they are not in accord with the desires of the people. Laws are effective, not because they have been successfully guided through the departments of government, but because the people see in the laws that which they need and will have. In this matter of education lies our great work. In our especial case we are compelled first to educate our brother physicians of the State, in order that we may have a representative body. We have to awaken in them the necessity of union in order that our ideals may be properly embodied.

In 1879 we had 106 members upon our roll. To-day, 1892, we have 198. We have not doubled our number in twelve years. This shows where our effort must first be made. We must bring our brothers into union with us before we can legislate successfully. A few of us can not, by passing laws, ensure the enaction of those laws.

Examine this body of ours and let us see how we stand.

This society was organized in 1878. Upon our roll we have 198 members. In the State there are, according to the official list of 1891, 1076 registered physicians who have diplomas. To this number we may add, without much error, 15 per cent. for regular physicians who have never registered. This would give 1237 as the number of practitioners registered and with diplomas. We may assume again without much error that out of this total number 1100 possess the official requisites for membership, and that of this 1100, 300 are residents of New Orleans.

Of our membership of 198, 53 are residents of this city and 145 belong to the State at large, showing that 18 per cent. of the profession of the State are members, while in the city and the country, respectively, the proportion is, for the city, a fraction below, and for the country, a fraction above, 18 per cent. of the practitioners.

Of the 59 parishes in the State, 20 are unrepresented in our society, while 10 others have one representative each, telling us that more than one-half of the State gives us a total

of 10 members. The proper method of reaching and arousing our brother practitioners has not *yet*, it seems, been adopted.

These figures prove that our ideals, while embodied, are very insufficiently embodied when contrasted with the total number of physicians in the State. In other words, our profession itself needs education as to the duty of organization.

From my own personal observation I am convinced that this failure of our brothers to unite with us does not come from any opposition to our purposes, nor even from indifference. It comes rather from the fact that no systematic steps have ever been taken to excite or keep alive the interest of the profession at large in the State society and its purposes.

Nevertheless, if our State society is to be a true embodiment of our medical ideals and is to be effective for good, it should embrace at least 66 per cent. of the profession of the State. In brief, we should have over 700 members upon our rolls. Until this is accomplished we should never be satisfied.

The first practical question before us, therefore, is: How can we increase our membership to its proper proportions?

I may begin my answer to this question by saying experience has taught me that very small results can be expected from printed letters, circulars, postal cards and all such efforts through the mails. The universal use of the mails for advertising purposes makes each one of us immediately discount the importance of communications received in this way. Our daily mail brings us numbers of circulars of this nature which are speedily cast aside and forgotten, simply because they are general circulars. We have grown into the idea that nothing treated of in this general way can be of much importance, or that which is intended for a thousand others can not suffer much through my individual neglect.

The personal method seems to be the only successful one, and some efforts made by members of our body in the past year prove its utility and suggest a feasible plan.

Dr. W. G. Owen, of White Castle, La., undertook to make a personal canvass among the physicians of his parish for membership and has met with a success which deserves this public mention, and for his personal sacrifice and his devotion to the interests of this society has earned our applause.

He has likewise induced others to try the same method in other localities with encouraging success. This practical test warrants me in making the following suggestion for your consideration, namely:

That this society shall appoint in each parish one of its members as a committee on new members, and that it shall be the duty of this committeeman to present personally the claims of this society to each regular and reputable physician in his parish, and to report the work accomplished to the vice president for his congressional district by March 1 of each year.

If the selection of the right man in each parish can be accomplished I feel convinced that our membership can be rapidly increased. Some plan of this nature I regard as necessary for our effective union, and I urge it upon this society as second to no other work before us.

While laying before you this suggestion of a definite method for the working up of our membership, let me urge upon you that individual zeal which will make each one of you, without appointment, act as a special committeeman upon membership. Those who have the interest of the society at heart sufficiently to bring them here will need, I trust, no word of mine to quicken them in this all-important matter.

When we turn from our society itself to the results which have been realized in the past, we are practically asking what encouragement can we hold out to our brothers to join us through any good accomplished for them or for the public by our efforts?

Through the kindness of my colleague, Prof. Stanford E. Chaillé, M. D., who was chairman of the committee on State medicine of this society from 1878 to 1886, I can answer this question very explicitly, and in a manner that will convince our brothers of the importance of our organization.

The work accomplished through the efforts of our society since 1878 is as follows:

1. ART. 178 of the Constitution of 1879: "The General Assembly *shall* provide for the interest of State medicine in all its departments, for the protection of the people from unqualified practitioners of medicine; for protecting confidential communications made to medical men by their patients while

under professional treatment and for the purpose of such treatment; for the establishment and maintenance of a State Board of Health."

This enactment, it is seen, is mandatory, and affords a constitutional basis upon which we can claim the attention of the General Assembly to any question deemed by us of importance to the general welfare.

2. ART. 176 of the Constitution of 1879, in which practitioners of medicine are given a privilege on property for the medical expenses of a last illness.

3. ACT No. 31 of 1882, regulating the practice of medicine, being the law of registration as now carried out in Louisiana.

4. ACT No. 82 of 1882, defining and punishing the adulteration of drugs, foods and drinks.

5. ACT No. 92 of 1882, providing for the organization of local boards of health throughout the State.

6. ACT No. 19 of 1884, ordering compensation to medical experts.

7. An act compelling the teaching of physiology and hygiene in the public schools of the State.

8. ACT 66, of 1888, Pharmacy law.

All of the above were advocated by the Louisiana State Medical Society, but the passage of the two last were also due to additional influences.

This is not an empty record in the short period of our existence, and denotes an activity and energy in the past which should stimulate us for the future.

The slight appreciable effect of this legislation, so far, only emphasizes what I have said above—the body of our profession needs education in order to attain legislation through union; the mass of our people need education in order to make our legislation effective.

Without going further into our record than the last meeting, I would say that the bill which lies before us for final action, it passed by our coming Legislature, will in itself be a worthy result for even twelve years of labor. It possesses a far-reaching power for good both in elevating our professional standard and in promoting the public welfare. A glance at its chief provisions will make manifest its importance.

Its first benefit is to give our State society legislative recognition. If it is enacted, the State society becomes a vital part of our State life. It is recognized as an authority in the selection of a board of examiners whose duty it will be to guarantee the professional fitness of all who hereafter practise medicine within the State's boundaries. To have this power conferred upon us is to place upon us a responsibility which will serve to vivify us in every particular, and will render membership with us desirable to every practitioner who has the welfare of the profession or the welfare of the public at heart. This will draw more closely the bonds of union in the profession throughout the State, and will enable us the more surely to realize the ideals which are the motives of our organization.

That such a board of examiners is necessary for the protection of the public is patent to every one. Without it our State becomes a waste heap for the rejected practitioners of all other States which have protected their people by the appointment of such boards. At present a practitioner rejected by the examining board of Mississippi has only to cross the boundary line of Louisiana to have all of his rights restored and a career opened for the exercise of his incompetence. Surely our legislators should protect our people against such imposition, and our profession should never cease its efforts until some such protection is afforded. The present bill has also the great merit of creating a board not subject to the fluctuating waves of political opinion in the State, and chosen, at least one-half of them, simply because of their fitness for the position. The provision that each member shall hold his position for twelve years, and that all vacancies caused by death or resignation shall be filled by the board itself, protects the board still more completely from political influences.

The objections brought forward at our last meeting against the bill have all been removed. These objections were:

1. That it would be retroactive.

This has been met by a section declaring that it shall *not* be retroactive.

2. That it would operate against the Medical Department of Tulane University.

As a professor of the Tulane Medical School, I would say, that if our diploma rights can not stand the test of such an examining board, then it is time indeed that we had one. In this my colleagues agree with me.

3. That too much power was placed in the hands of the Governor. This objection can hardly be advanced against the bill as it now stands.

4. That too much power was granted to a few physicians.

The answer to this is that such boards have been eminently satisfactory and just in every State in which they have been tried, and that we have no right to suppose that our medical examiners will be any less just than those of other States. This bill, then, gentleman, is the final utterance of our society after two years of mature thought and discussion, and it now only remains for us to use our united influence in the coming Legislature to have it enacted and added to our list of achievements toward the public good.

From the above review of what has been done, it is seen that we have an organized and potent body for the advancement of our ends, but its potency can be many times increased if we can bring into our ranks the very many who, although sympathizing with us, fail to join us. Let us strive onward, nevertheless, convinced that we shall succeed in the end, and shall at last make membership with us an envied privilege, sought for by every reputable physician in the State.

The strictly medical purpose of our organization remains to be spoken of. The constitution cites as the third object of our union, "The cultivation of medical knowledge, and particularly of such parts thereof as may be of special importance to this State."

I am ignorant of any systematic steps which may have been taken in this direction. The geographical position and the topographical peculiarities of Louisiana make it eminently an area within which any disease due to such conditions should exhibit its typical forms. Of all diseases the most common are those due to malarial poison, and of these there are some which need more systematic study.

That malaria is a true germ disease has at last been put beyond doubt. Opposition to the claim of Laveran that the

malarial germ had been identified has gradually given way before further study and its cumulative proofs. It is now generally agreed among the laborers in this direction that Laveran's was a true discovery, but whether there is one germ polymorphous in its development, or many germs corresponding to the many forms assumed by malarial disease, is still under discussion. The discoverer, I believe, still contends for the polymorphous devolopment of one germ. It would be a most laudable undertaking if some of our younger members could devote attention to this aspect of our indigenous poison and discover for us the variant forms of this germ as manifested in our malarial diseases. The diagnostic value of such evidence in doubtful cases is a matter not only of local but of national importance, and the thorough study of the subject is very much needed.

While such expert work must be always a possibility only for a few individuals, and can hardly be assigned as a duty to any one, yet I suggest that a section on Bacteriology be recognized that this subject may be kept before our notice and afford a proper opportunity for any worker in this field to offer his contributions.

The malarial diseases are readily divisible into four groups:

1. The non-febrile intermittent, or latent intermittent.
2. The simple febrile intermittent—acute and chronic.
3. The remittent forms.
4. The pernicious or malignant forms.

Concerning the first group, the non-febrile intermittent, it may be said that the treatment of them has been reduced to a routine certainty, although a complete study and grouping of the many forms is still lacking. I will only notice, in passing, that my experience enables me to make two classes of these non-febrile cases. 1. Those affecting the nervous system alone, and taking the form of periodic neuralgia. 2. Those affecting the functions of some organ and causing periodic disturbances which are very apt to be misinterpreted. This class needs some attention and a more systematic tabulation of its forms.

The second group, the simple intermittent, needs no com-

ment. When once recognized their treatment has been reduced to the certainty of a routine.

The third group, the simple remittents, still need collective study. Under this group three types can be recognized:

1. Remittent fevers, upon which quinine has its specific anti-periodic effect.

2. Remittent fevers, upon which quinine has no effect.

3. Remittent fevers, which assume typhoid characteristics.

The first type is strictly simple and responds to a well-recognized treatment. In regard to the second, the question arises: Are we dealing with the same or another poison? This is a question which may receive answer from careful microscopic study, and I can see for it solution in no other way. The third type may be either a combination of true malarial poison and true typhoid poison, or very often may be simple, neglected remittent, which takes on adynamic form. In this group there is much room for careful work. The letters which I receive from medical friends presenting problems from this group tell me there is much uncertainty in our ranks about these forms and much interest concerning a proper solution. Here the microscope must be our final resort.

The third group, the pernicious or malignant fevers, have a singularly scanty literature. The most sudden and fatal of all our indigenous diseases, we know less about them than of any other disease we are called upon to treat. From the infrequency of post-mortem researches we are singularly ignorant of the true pathological conditions—some practitioners even doubt the true malarial nature of one of the forms, the hemorrhagic. Throughout the Gulf States the profession seems to be widely at variance in regard to the best treatment. I have studied such literature upon the subject as is available and know of only one recorded effort made for the systematic collection of statistics. This was undertaken by Dr. Jerome Cochran, of Alabama, who succeeded in obtaining replies to his inquiry from forty-one physicians of Alabama, giving a summary from all these sources of 642 cases. Occasional articles have appeared concerning this group in our journals, but the subject is too great to be settled by the experience of an observer here

and there. What we need is the widest collection of statistics from every parish in the State, and even from our neighboring States, concerning symptoms, forms, course and treatment, and from these, in time, reliable truth can be extracted.

There are five forms assumed by the pernicious fevers:

1. The congestive.
2. The hemorrhagic.
3. The gastro-intestinal.
4. The comatose.
5. The deliriant.

Dr. Cochran's investigations related only to the hemorrhagic form, which is the most common and the most fatal of the group.

As the representative body of the medical profession in Louisiana, it is our duty as I conceive it to begin a systematic collection of statistics of the diseases of this group that we may be enabled to speak with authority upon that which is so immediately about us. This collection should not be a mere enumeration of cases, but should be as well a collating of the various methods of treatment adopted in different portions of the State. Only by carefully comparing such records can we arrive at that practical knowledge which will secure the best treatment. Since these forms occur in isolated and remote country districts, and no opportunity is afforded for the study of them in central hospitals where consecutive records could be kept, we are necessarily dependent upon the observations of our country practitioners for information and instruction. Knowing the exigencies of country practice, and the physical demands made upon each observer, case taking can scarcely be expected of them as an additional burden. Nevertheless, the expression by this society of its desire for accurate records of these forms, in order that the best treatment may be made known, will stimulate, I am sure, the recording of facts in such cases and aid any statistical records of facts that this society may undertake to gather.

As far as my personal inquiries have gone there is but one drug, the use of which the profession seems agreed upon, and this is calomel. The free use of calomel at the onset of the attack is an almost invariable practice which experience has

endorsed. After this, the practice is most variable, and especially so in regard to the use of quinine. Some regard quinine as the sheet anchor in the treatment. Some assert that no benefit is derived from its free use. Others again, and this is a large group, assert their convictions, based on wide experience, that quinine is positively injurious. Such varying conclusions from equally intelligent and careful observers drive us to the conclusion that the types of the Hemorrhagic form differ in different localities, and thus respond favorably or unfavorably to quinine. The study of these types and their response to treatment is very much needed. Other drugs than calomel and quinine have strong advocates in the profession. The alkaline salts of hypophosphorous and hyposulphurous acids are claimed by some to be curative after the free use of calomel.

I dwell somewhat at length upon the pernicious malarial fevers because only through the influence of some such representative body as this society can this subject be from year to year systematically studied. During the coming year it is my intention to undertake the collection of statistics upon this important subject, and I trust that what I have presented may awaken the interest of my medical brothers to the point of sympathy and assistance.

I would suggest that a committee upon the *collective investigation of disease* be appointed annually for the keeping alive of this important subject.

In closing this formal presentation of the objects of our society, I wish it were in my power to instil into your minds the importance of our successful life and progress as it has grown upon me through the past year. Our life and our purposes are not simple matters of sentiment to be dismissed each year with rhetorical phrases and glittering generalities. Our life *must* grow until it becomes a recognized part of the life of State. Our complete union must be realized as a pledged necessity. We must, if it requires another decade of persistent work, compel our brothers to join us, that we may have the power to discharge properly the responsibilities we have assumed. This is our first and great duty. All else is secondary. Without this we can not speak with authoritative voice in

the councils of the State; without this we miss that dignity and power which wins respect at home and honor abroad; without this we are convicted of slothfulness and indifference in the judgment of a nation where these terms are regarded as badges of contempt.

Let us strive, then, to complete our union and perfect our medical knowledge. When these two ends shall have been faithfully followed, we will find that we have been led of necessity to the elevation of professional standards and the welfare of the public.

CASES FROM PRIVATE PRACTICE.

By G. FRANK LYDSTON, M. D., Chicago, Professor of the Surgical Diseases of the Genito-Urinary Organs and Syphilology in the Chicago College of Physicians and Surgeons.

Acute Thyroiditis, with Abscess.—In view of the extreme rarity of acute inflammation of the thyroid gland, the following case is of considerable interest. The patient, a young man 24 years of age, consulted me a few weeks since for pulmonary trouble. On examination, I found that he was suffering from incipient pulmonary tuberculosis, which bade fair to take a very rapid course. His appetite was almost *nil;* night sweats were profuse and exhausting; there was more or less diarrhœa, and the cough was almost constant and very irritating, so much so that his rest was greatly broken. Temperature, 102½ F. I put him upon the Shurly-Gibbes treatment, and, to my great gratification, he improved very rapidly. The diarrhœa and night sweats were checked; the patient developed a keen appetite and the cough gave very little annoyance, and the temperature became normal within ten days after beginning treatment. The progress of the case was very favorable. There was a marked gain in weight and strength for about three weeks, when suddenly, without any known cause, a painful swelling appeared upon the right side of the neck.

The rapidity of development will be readily understood when I state that he was in my office one afternoon and made no complaint of any trouble. Swelling began that evening, and the next afternoon when he again presented himself to me I found the right lobe of the thyroid gland swollen to the size of

a small orange. It was exquisitely painful and tender upon pressure. Deglutition was decidedly difficult, and there was a constant rasping cough with considerable hoarseness, indicative of pressure upon the recurrent laryngeal. Respiration was somewhat stridulous, but the patient for some reason complained very little of dyspnœa. Temperature, 103½ F.; pulse, 130. Within the following three days—hot poultices being meanwhile assiduously applied—the swelling and pain had considerably increased, and the patient suffered a great deal. On the fourth day, suspecting the presence of pus, although there were no constitutional or local evidences of purulent formation, the tumor being very hard and tense, I performed aspiration and drew off a small quantity of pus. I then tapped the abscess by a small incision with straight bistoury and drew off about three ounces of a peculiar looking fluid, which on standing deposited about two-thirds of its bulk of pure pus. The supernatant fluid was of a serous character and of a peculiar chocolate color. The cavity of the abscess was irrigated with peroxide of hydrogen, this being repeated daily since the operation. The gland is still enlarged, but pus is no longer formed, and there has been very little formed at any time since the abscess was evacuated.

It has been my fortune to see one other case of thyroiditis with abscess. In this case also I was unable to determine the cause of the difficulty. The case at present under consideration was certainly not due to traumatism or to exposure. It was due undoubtedly to some form of infection, but what, I am unable to say. The case was certainly one involving some little nicety of diagnostic discrimination. Both of the cases which I have seen illustrate the fact that pus is formed very rapidly in these cases of acute thyroiditis, and that it is not good practice to wait for fluctuation, as the capsule and tissues of the thyroid are so dense that serious trouble might ensue long before the pus approached suffciently near the surface to give a distinct sense of fluctuation. As might be imagined, pain in such cases is disproportionately severe as compared with abscess of similar severity in other situations. The depressing effect of the affection is very striking, as might be expected from the the intimate association of the nerve supply of

thyroid gland with the sympathetic nervous system. The rapid course of the affection is noteworthy, suppuration being established within a few days and the symptoms completely subsiding upon evacuation of the pus. It would appear that there is less tendency to prolonged suppuration in these cases than in those of abscess in other situations, probably because of the resiliency of the gland tissues and its capsule, which tends to close the cavity rapidly. The reason for making a small punctured incision rather than a free one is obvious.

The thyroid gland is so abundantly supplied with blood vessels that free incision into it, when in a state of inflammation, should be avoided if possible, as hemorrhage might be difficult to check. I think, moreover, that a free incision is not as necessary here, judging by the rapidity with which the gland shrinks after evacuation of the pus, as in other situations. In cases in which the entire gland is infected the surgeon should hold himself in readiness to perform a tracheotomy. The manner in which pathological processes—both acute and chronic—of the thyroid gland will limit themselves to a single lobe is by no means an uninteresting feature of the pathology of the thyroid. In so acute a process of an apparently infectious character as that which existed in the case herein recorded, an extension to the opposite side was to have been expected.

Strangulated Femoral Hernia.—The patient, a previously healthy woman of 50 years of age, housewife, was unaware that she had ever had anything in the nature of a hernia. Ten days before I saw her she had gone to one of the hospitals of this city to visit a sick friend. She had had some cough for a few days and had quite a violent attack of coughing while ascending the hospital stairs. She was immediately taken with a sharp pain, as she expressed it, "in the lower part of the abdomen," which was attended with great nausea and faintness. No examination was made at the hospital. She was given stimulants and sent home. Her family physician was called and made an examination, and found what he pronounced a femoral hernia. Another physician was called in consultation and an attempt was made at reduction by taxis, which attempt both physicians claim was successful. I was sent for

four or five days after the patient's trouble began, but as I was out of the city I did not hear from her until the tenth day after the hernia appeared and became strangulated. The husband informed me, when he requested me to come to see the case that his wife was in a desperately bad condition and was expected to die at any moment.

I nevertheless went prepared to operate. When I arrived at the house I found the woman greatly prostrated—in short, in a typhoid state, with a temperature of 102, dry, brown tongue, the pulse, however, being 100 and fairly good considering the condition of prostration. She was vomiting stercoraceous matter, but complained of little or no pain in the abdomen, and was evidently under the influence of an opiate. On inquiry, I found the vomiting had persisted ever since the supposed reduction of the hernia by taxis. On examination, I found a tumor in the femoral region about the size of a pigeon's egg. Although the case did not appear very promising I immediately proceeded to operate, expecting to find the intestine in a gangrenous condition. I found the sac of the hernia greatly thickened, and containing a very small quantity of serous fluid with flocculi of lymph. A small knuckle of the ileum was involved in the strangulation, and although it was deeply congested there were no indications of gangrene. After freeing the constriction the circulation became restored in the strangulated bowel, and I therefore restored it to the abdominal cavity. I stitched up the ring with juniperized silk and put on the usual antiseptic dressing. The vomiting began again as soon as the patient came out from under the chloroform, and evidences of very profound shock were manifest. Death occurred about four hours after the operation.

This case is a very pertinent illustration of the beauties of so-called conservatism in cases of this kind. A properly performed operation at the onset of the strangulation would have saved a very valuable life. I am inclined to think, however, that the physicians were correct regarding the subsidence of the hernial tumor under the taxis which was primarily employed. My view of the case is that there were adhesions which continued the strangulation after the intestine was returned to the abdomen. The knuckle of bowel which I lib-

erated was probably more recently extruded. I do not believe that it could have been strangulated for ten days in the manner in which I found it without having undergone gangrene. There was a question in my mind at the time of my operation as to whether laparotomy rather than simple herniotomy was not indicated; but it was plain to be seen that a laparotomy could only result fatally, and under the circumstances the operation which I performed seemed to be the wisest course to pursue. Had the patient been in a fairly good physical condition I certainly should have performed an exploratory laparotomy.

I might state in connection with the history of this case that the constipation, which was the natural result of the nipping of the bowel, was vigorously combated by the physician in attendance by active cathartics. There is a time for catharsis and a time for opiates in abdominal affections, but there was hardly a time for them in this particular case. The practice of indiscriminate administration of cathartics in abdominal affections involving bowel obstruction can not be too strongly condemned, but as between active catharsis in a hit or miss fashion and the routine administration of opiates, the average patient is safer in the hands of the purger. There is too much of a tendency on the part of the general practitioner to smother symptoms which he does not understand clearly, and cover up conditions which he has failed to perfectly diagnose by that death-dealing comforter—opium.

With the active symptoms lulled and the complaints of the patient checked by the liberal administration of narcotics, the practitioner can very much more complacently trust to luck than he could under other circumstances, for patients who are in pain are very apt to change doctors. It is to be hoped that the time will come when the pernicious theory of the opium splint will no longer pervade the profession to the extent that it does at present. The ostrich, when pursued by his enemies, sticks his head in the sand. Some practitioners smother annoyances of abdominal affections and lull themselves into a mistaken sense of security by the free administration of opium, a proceeding sufficiently ostrich-like to justify the analogy.

STAINING TUBERCLE BACILLI IN SECTIONS.

W C. BORDEN, M. D., U. S. Army.

The method of staining the bacillus tuberculosis, which is hereinafter given, is not original with the writer, but on account of its certainty and comparative ease of working, it is thought worthy of record. It is the method now used in the Army Medical Museum at Washington, D. C., having been adopted by Dr. Wm. M. Gray, the microscopist of that institution, after exhaustive trials of other methods; first, on account of its certainty, and second, from its allowing of all the manipulation being made with the sections cemented to the slides, so avoiding the tedious and oftentimes damaging handling of the sections with section-lifters.

Certainly a method which insures certainty of result, and provides for the handling of the sections cemented to the slides so that no part of them can be torn or lost, offers most obvious advantages—advantages which will at once be appreciated by workers conversant with modern methods of imbedding and sectioning.

In practice, the tissue to be stained should be hardened, preferably in alcohol, in pieces not exceeding ¾ by ¾ by ⅜ inch in size, though tissues hardened by any of the regular methods can be stained. Alcohol is to be preferred, however, as after its use the bacilli stain more quickly and brilliantly than when one of the other hardening fluids, Müller's, for instance, is employed. If it is desired to examine the tissue elements, it is well to harden pieces of the same tissue in Müller's fluid, and after sectioning, to stain the sections in suitable dyes for comparison with the sections hardened in alcohol and stained for bacilli. This would, of course, only be necessary when critical examination of cellular form was to be made, as the contrast stain employed in the bacilli staining process differentiates the tissue elements with all the distinctness necessary for locating the relation of the bacilli to the cells.

After the tissue has been hardened, it is imbedded in *paraffine*, and sectioned in the usual manner. The sections are then cemented to the slides with a ½ per cent. solution of gold label gelatine, made by dissolving 14½ grains of the gela-

tine in six ounces of warm water, then adding 30 grains of chloral hydrate as preservative, and filtering. Several drops of this are placed on a slide, a section laid on top, and the slide placed in a warming oven, kept at a temperature slightly *below* the melting point of the paraffine. In about five minutes all wrinkles will have been taken out of the section, which will lie perfectly flat and smooth on the surface of the gelatine solution. The slide is then removed from the oven and the surplus fluid poured from it, so bringing the section down into contact with its surface, after which it is set aside in a place protected from dust, to remain until the section is firmly cemented to it by the drying of the gelatine solution. The drying may be hastened by keeping the slides in an oven below the melting point of the paraffine, but it is best to set the slides aside until the next day, when the sections will be found to be perfectly cemented to them. The paraffine is then removed from the section by turpentine, the turpentine by absolute alcohol, the absolute alcohol by 50 per cent. alcohol, and this by water, after which the slides are placed in a 5 per cent. aqueous solution of potassium bichromate for five minutes. This renders the gelatine insoluble, and prevents the sections from leaving the slides during their necessarily more or less prolonged immersion in the fuchsin stain. The potassium bichromate is washed out with water, and the slides are then placed in a fuchsin stain, which is prepared as follows:

Fuchsin	1.5 grammes.
Absolute alcohol	14.0 c. c.
Carbolic acid crystals, pure	6.0 grammes.
Water	100 c. c.

Dissolve the fuchsin in the alcohol and the carbolic acid in the water. Mix the two solutions and let stand for twelve hours, with occasional shaking or stirring, then filter.

The slides are left in this solution a *sufficient* length of time. In tissues properly hardened in alcohol the tubercle bacilli stain very quickly, generally five minutes being sufficient to stain them deeply, but in tissues not specially prepared by proper hardening, a longer time will be necessary. For such tissues, or where absolute certainty of staining is desired, the sections should be left in the stain twenty-four hours. *Prolonged immersion* in the *fuchsin* stain does no harm and in-

sures certainty of results. After a section has been in the stain a sufficient length of time it, with the slides to which it is cemented, is washed in water (under a tap if desired) until the surplus stain is removed, it is then plunged into the combined decolorizer and contrast stain, made as follows:

Methyl blue	2.25 grammes.
Absolute alcohol	30 c. c.
Sulphuric acid	12 c. c.
Water	100 c. c.

Dissolve the methyl blue in the alcohol, add the acid, mix the two solutions, and let stand, with occasional shaking, or stirring, for twelve hours, then filter.

The slide is moved up and down in this solution for a few seconds, and the section then viewed by transmitted light by holding the slide up between the operater and the sky. As soon as the blue coloration from the methyl blue solution predominates over the red color of the fuchsin stain, the section is *immediately* washed in water.

Generally, the red color will at once return, and, if it does, the section and slide must be again plunged into the methyl blue solution, and again washed.

This alternate immersion in the methyl blue stain, and washing in water, should be continued until, when washed in water, the red fuchsin color scarcely returns, and it is seen that the red stain has been permanently nearly replaced by the blue.

This part of the process is the most difficult, and can only be mastered by successive trials. Generally, it is the tendency of a beginner to not sufficiently replace the fuchsin with the methyl blue, in which case, the red color of the bacilli will so blend with that of the tissues as to render them invisible. Once, however, the operator has acquired the proper experience, he will have no further trouble. When the section is sufficiently decolorized and stained in the methyl blue, it is thoroughly washed in water to remove all traces of the acid, for upon this depends the permanency of the stain. It is then, at once, dehydrated with *absolute* alcohol. The section should not be passed through diluted alcohol, but, after wiping the surplus water from the slide, it should be at once plunged into absolute alcohol, or else enough of the alcohol should be poured

over it to entirely and speedily dehydrate it. The alcohol is removed with *turpentine*, and the process completed by mounting in balsam thinned with xylol.

In case it is desired to stain sections cut by the freezing method, they are placed upon a slide on which a few drops of the gelatine fixative have been placed, and after about five minutes, during which the fixative will have penetrated the section, the surplus is poured from beneath the section. The slides are then set aside for the gelatine to harden by drying, and after drying they are placed in bichromate fluid to render the gelatine insoluble. They are then manipulated in exactly the same manner as the sections cut by the paraffine method.

The process thus given in detail appears formidable, but, in fact, is easily carried out by one conversant with laboratory methods.

The details have been carefully given, for it is by attention to them that the desired result of certain and clear staining of the bacilli is obtained. In this method, and especially after paraffine embedding, the section being firmly cemented to the slide, no part of it is lost or torn, as is usual when handling by the method generally described. In the case of pulmonary tuberculosis, even the cells, from the accompanying catarrhal pneumonia, which lie loose in the alveoli, are shown in place, and the bacilli, which some of them contain, are clearly demonstrated.

The stains given are also most excellent for staining sputa, and are to be particularly recommended on account of their certainty. With them sputa can easily be stained in five minutes. The sputa must be dried and flamed on the cover glass as usual, and a few drops of the fuchsin stain applied, and the cover heated until steam is given off.

After washing in water immersion for a second in the acid methyl blue solution, and again washing in water, microscopic examination can be at once made by wiping the clean side of the cover, and placing the still wet sputa side down on a slide. If bacilli are found, and it is desired to preserve the specimen, the cover is removed and allowed to dry, after which it is mounted with xylol balsam.

The method for sections is also applicable for tissues con-

taining the lepra bacillus, they being stained with as much certainty and brilliancy as are the tuberculosis bacilli in tissues containing the latter.

MOLLUSCUM FIBROSUM.

A paper prepared for the Tennessee State Medical Society, meeting at Knoxville, April 12 and 14, 1892.

By E. A. COBLEIGH, M. D., of Chattanooga, Tenn.

My subject for to-day is one of much clinical rarity. No one man *can* have very large observation or experience with this affection. Hardaway, of St. Louis, has seen but three cases of it in his special practice covering 6724 dermal cases of all kinds. Anderson, of England, has seen but one out of a total of 24,891 in hospital practice. Duhring is authority for the statement that the annals of the American Dermatological Association gave but nine cases in their total of 16,833, and Morrow, mentioning the same statistics when they had swelled to a total of 112,863, gives only 86 cases of molluscum of all kinds.

So it may seem a little out of the usual line to bring such a subject here, but possibly it may, by reason of its departure from the routine, likewise prove refreshing; and certainly to me it has had an interest from the fact of one of these very cases falling under my rather recent observation, it being the second I have seen in a practice of about a score of years. Furthermore, the patient resides within the bounds of your immediate territory, lending further interest.

The affection has been variously designated at different periods since its first recognition as a separate disease and by different writers. Its several names are Molluscum Fibrosum, Fibroma Molluscum, Molluscum Pendulum, Molluscum Simplex, Molluscum Albuminosum, and by Fox, referring to its single lesions, Polypus of the Skin. The name I have here used comes from Mollis, "soft, resembling mollusks"—and Fibra, "fibre."

Generally speaking, the term is applied to a generalized dermal fibromata. Van Harlingen divides it further into the multiple or small tumor form and the single or s arse

variety. All other authors state that these patients—referring to the generalized kind—are liable to coincident dermatolysis, pachydermatocele or cutis pendulum, as they variously designate the accompanying manifestations. Fox likewise refers to a fungating form, with rapid development and evolution, which differs from any described by other writers, and seems to border rather on dermal sarcoma than true molluscum, as the term is limited of late years.

Bateman was the first observer to accurately describe this affection. It is most common in the East and Orient—also to dark-skinned races, as the negro, therein resembling keloid, but is by no means absolutely confined to them. Some authorities aver that females are the most frequently affected, while others declare that the sexes are about equally liable.

The disease consists, in its generalized form, of pea to egg sized superficial and integumentary neoplasmic nodules, more or less firm in consistency, well circumscribed, occurring singly or but few in number; these are mostly found on nose or cheeks, and regarded by their possessors as moles or warts. Occasionally met with on the hairy scalp, they are there designated nævi pilosi. Soft, filamentous warts of old people are a species of new growths, bordering, at least, on molluscum, into which it is not unusual for them to actually develop as growths, manifesting all the true characteristics of those tumors, and indistinguishable from such as are common to that affection. Berry-like nævi materni are also regarded by some competent observers as closely allied to molluscum. All move with the derma, and are confined to it.

In the multiple form, as already stated, the tumors show varying dimensions and forms, from a small pea up to an egg, or even larger. Later I shall speak briefly of a still larger variety. These nodules are roundish, button or plaque shaped, embedded or seemingly subcutaneous, pyriform or polypoid, when pendulous, generally pedunculated, but sometimes sessile. In consistence they are either firm, fibrous and tense, or gelatinous, flaccid and flabby, most commonly the former at first, and later becoming soft by absorption of the contents of their alveoli. The larger ones are frequently glistening and show a tense surface, as if œdematous. Their overlying in-

tegumentary layer is mostly of normal hue, but may be pinkish or purplish. Hairs and comedones sometimes occupy the surface, particularly of the larger ones. Their general consistence is like that of a mammary gland, but firm pressure always yields a harder, vaguely defined central core, over which the walls roll under the finger and give the peculiar condition variously denominated "empty purse," "scrotum without testicles," "seedless raisins," "loose bag." Virchow alleges that the small growths are sometimes protruded from the superficies of the larger.

In special situations we find the favorite sites of predilection of the circumscribed molluscum at the last cervical vertebræ, on the chest under the breasts, on the temples, the upper eyelid, behind the ears, on the hips, and the labia majora, and when found in these situations it is rare for more than two or three tumors to exist. In the generalized form—which is the most classical, and the one specially dealt with in this paper—the neoplasms present in numbers from a few to thousands, and up to large size, for among the majority of minute cases a few quite extensive of area are usually found. These show a preference for the trunkal surface, where they are occasionally more or less confluent, but the face does not often wholly escape, nor the extremities. And they have been found in rare cases on the palms and soles, as well as in the internal organs of the body.

Regarding subjective symptoms, the affection is utterly devoid of inconvenience other than from the size, appearance, numbers or location of the nodules. They show not the least contractile tendency such as marks the kindred neoplasm keloid. They are indolent generally and of remarkably tardy growth. Dr. Hashimoto, of Japan, exhibited before the Medical Society at Tokio a case of forty-two years' standing, wherein the patient carried on his person a counted total of 4503 tumors of various sizes. Rarely the growths degenerate into carcinomatous conditions or sarcoma or epithelioma. Marasmus and tuberculosis are sometimes coincident states, and Hebra observed that persons affected with molluscum were uniformly stunted in their physical and mental growth, though not imbeciles. Hebra's observation has been confirmed by

most later dermatologists, though the general health of these unfortunates is not commonly impaired to any marked degree.

Authorities mention true fibromata, myxo-fibromata, nævi, keloid and dermatolysis as kindred formations, if not simply differing varieties of similar pathological processes, and I confess that it seems to me as if all properly belong in the molluscous group as overgrowths of connective tissue of the dermal structures. And I do not know but Elephantiasis Arabum should share the same classification, just as eczema, in its diverse forms, was formerly confused by undue refinement of classification.

The commoner variety of molluscum, consisting of one or few growths, deserves passing mention; I refer to the form showing very *large* tumors, not the small nodules with facial predilection. This variety is generally called fibroma pendulum pachydermata, dermal hypertrophy, etc. These neoplasms attain sometimes enormous proportions, as shown by the weights of some removed by various surgeons, notably one of thirty-two and one-half pounds taken off by Heyland. Most molluscum growths show a tendency after attaining certain indefinite size to cease growing further, merely remaining thereafter as cumbrous bodies without growth. This is likewise true of the vast majority even of the smaller tumors of the generalized variety. And as bearing on the probable unity of the forms of skin hypertrophy already mentioned, Anderson figures, in his excellent work on dermatology, a striking case of a collier in the old country, who manifested, simultaneously in his person, all of the allied forms, even to a leg-like elephantiasis, the left being seven inches larger in circumference than its fellow, and the affection having been in progress from childhood. It seems as if persons with a dermal tendency to fibrous neoplasms may manifest it either by an extensive and almost universally existent energy of production in the way of multiple tumors, or conversely by an absorption of the dormant powers of systemic overgrowth in one locality by the evolution of one or two enormous dermatolyses. And in these latter cases, as pointed out specially by Wilson, vascular increase or enlargement goes hand in hand with the fibrous hypertrophy, giving venous dilatation to prodigious ex-

tent and rendering operative procedures for their removal particularly bloody.

The etiology and pathology of this disease can be considered here jointly. With regard to the former, little seems to be known. It is generally thought to be either an hereditary affection or at least one of congenital beginning. Certain it is that all authors are agreed that it usually commences to manifest itself in childhood, though this is not an invariable rule if the histories of these patients can be given credence, as my own case shows. Virchow cites a case where a man suffering from molluscum had a grandfather, a father and brothers and sisters, all of whom were likewise affected. It is said never to have been seen among the higher classes by clinicians or private practitioners so far as recorded evidence goes. The true cause is unknown.

There is a difference among pathologists as to whether the beginning of the neoplasms is in the connective-tissue of the corium in the connective-tissue frame-work of the fatty subcutaneous structures, or the connective-tissue of the walls of the hair follicles. Von Recklinghausen regards it as a fibro-neuromata, developed from connective-tissue *surrounding* the fasciculi of the nerve fibres (the endoneurium) and the neurilemma as only secondarily implicated. Hardaway confirmed this by one necropsy, and others allege that this condition is always found *post mortem*. The nerve-fibres themselves are unaffected save by pressure, and are never degenerated. Smaller tumors of the skin sometimes show nerve fibrils running through them while the larger ones do not, and it is reasoned that this is because in the ones of older growth absorption has caused disappearance, and connective-tissue (fibrous) predominates then. Minutely the stroma of these neoplasms shows intimately interlacing fibres, holding in their interstices a whitish or yellowish semi-fluid material which can be squeezed out by firm pressure, and it is the final absorption of this material which gives the soft consistence and empty-purse feel to the individual tumors.

Dr. Taylor, of New York, directs attention to an occasional manifestation of molluscum following injuries, which has likewise been noticed by other writers, and which he ex-

plains on the hypothesis of nerve injury, thus corroborating and emphasizing Atkinson and Von Recklinghausen in their neurotic theory of the origin of all molluscous growths.

As to the tendency of these tumors, it is worthy of note that spontaneous involution has happened in rare cases, but so infrequently as to be more a matter of curiosity than of clinical moment. Generally the prognosis involves a gradual increase in size up to the uncertain limit already referred to, and numerically they multiply slowly from time to time. This increase is particularly liable to be hastened about the periods of puberty, pregnancy and the attainment of adult age.

Diagnostically the affection is one easy of discrimination, even by the novice. Its multiple tumors of indolent character and without special subjective annoyance, of long persistence as a general thing when first presenting before the physician, often dating back to very early life, its peculiar flabby "empty-bag" feel and the pedunculated aspect of some or all the numerous tumors mark it distinct from all other skin affections. From Molluscum Epithiale it is known by the absence of a characteristic central depression inseparable from that disease, or if there be a central comedo it is readily expressed; such neoplasms are in or on the skin, which is tightly stretched over them, not subcutaneous as is fibroma. Then, too, in fibroma the integument seldom presents any abnormal hue. Multiple sarcoma is sudden in its onset, generally in adult life, and often pigmented. Lipomata are flatter, almost never pedunculated, and lobulated distinctly, as well as numerically, not multiple. In sebaceous cysts the contents are easily squeezed out, leaving them entirely empty. Multiple true neuromata are exquisitely painful and hyperæsthetic.

The treatment is simple to consider. It is practically wholly operative, notwithstanding that Fox advises, and avers his own success with, acid nitrate of mercury to the small tumors and this combined with the use of the ligature to larger growths. But the kinfe or galvanic therapeusis are really all we have to aid us of reliable measures. Electrolysis sometimes succeeds, if perseveringly resorted to, and is specially applicable to the facial region, where cicatrices are undesirable, the cathode being used to the growths. In larger tumors, galvano-cautery,

is desirable when applicable at all, by reason of their excessive vascularity and resultant hæmorrhage under the knife. Other plans of treatment have proved utterly useless, and mean only a waste of time with ultimate disappointment.

Now, briefly, the salient points regarding our case. It is not such a startling one as to its array of great numbers of neoplasms as many others which have been pictured by various writers of text books on skin affections, but it is a well marked one even in this particular, and the photographs will speak for themselves. The patient, J. B., hails from Bledsoe county, this State. He is 5 feet 2 inches high; stunted in stature, as most of these patients are. Weighs 115 pounds. Age, 53 years, Spare of build and dirty in appearance. Skin abnormally oily with tendency to seborrhœa oleosa. Flesh firm and natural. Palms of hands show that he labors hard and continuously. Certainly is not an invalid as to his general health if present physical appearances count for anything. Mentally, he seemed to be a fair average of his class, though not by any means bright.

The history given by this party must be taken with a grain of allowance because of the fact that he is earnestly desirous of securing a pension from the Government on account of his affection, and therefore the date of appearance of this eruption is given as 28 years ago—at the age of 25, you see—and while he was a prisoner in Andersonville. He attributes it to a precedent attack of scurvy, and alleges that the tumors appeared in large numbers all at once, which is hardly credible in the light of the common history of these attacks. He is likewise emphatic in his averment that it produces great, even excessive, discomfort by pruritus, which is not the rule in such cases. The tumors are not very large, but numerous, though not nearly so much so as many of the figured plates exhibit in the works already mentioned. The reliability of his statements you can form your own conclusions upon when you allow for his relation to the prosecution of a pension claim based on disabilities caused by army service. Further than his picture and history I can give you no light touching the case, as it has had no treatment from me nor is it now under my observation. But applying to it the general rules governing these manifesta-

tions, we should conclude as a reasonable probability that his dermal trouble began in early life—likely in childhood—and will continue with possible slow increase as long as he lives, without great inconvenience except as regards its cosmetic effect, which to him, I presume, is not a factor that would count very far. He denied its existence, of course, in any other member of his family of the present or past generations, and I had no way to verify his assertions.

Proceedings of Societies.

ALLEGHENY COUNTY MEDICAL SOCIETY.

Scientific Meeting, March 22, 1892. J. C. LANGE, M. D., President, in the Chair.

Dr. F. H. Edsall read the paper announced for the evening, entitled

REFLEX HEADACHE.

Mr. President and Gentlemen: In presenting for your consideration this evening the subject of "Reflex headache," I feel almost as though an apology were necessary for occupying your time with a subject apparently so time-worn and threadbare; yet so pregnant with interest for the general practitioner, as well as for the ophthalmologist, is the subject that I feel confident you will grant me your indulgence for having selected it as my paper this evening.

I am sure that if the physician in general practice could but go over the cases he is called upon to treat, he would find that his aid is more often sought for the relief of headache than for any one ill to which flesh is heir, and I am equally sure he will as often be "put to his trumps" in finding a means of accomplishing this relief as in any disorder of the human economy other than the one under consideration. This arises from an easily understood cause. Headache is such a commonly occurring symptom of many deep-seated and obscure affections that be he ever so skilful a diagnostician the physician is many a time and oft compelled to grope blindly in search of the

cause, and in consequence his thrusts at the peace-destroying demon of headache must now and again be wildly delivered. Remedies there are without number for headache; the doctor, and the druggist as well, is never at a loss for a drug or prescription to relieve the throbs of pain which rack the sufferer's brain, but he who makes drugs his staff upon which to lean will find too often that he has but a broken reed for his support. It is not, I think, a rash statement, nor one not warranted by statistics, that the majority of recurring, or of persistent headaches, are reflex in character, due to some abnormality in the refractive state of the patient's eyes, or to an imperfectly maintained muscular balance between the sets of little muscles which regulate the motions of the eyes—the much talked about heterophorias of the present day, the muscular insufficiencies of the past, and this being the case, the most that can be hoped for from medical treatment is a temporary obtunding of the pain for which the sufferer seeks relief.

The busy practitioner of general medicine is unable to spare the time to go into a prolonged examination of the refractive state of the patient's eyes; in fact, it may not occur to him to do so, or he may not have the means at hand to accomplish it were he able to spare the time. Naturally, therefore, his mind turns to the pharmacopœia for something with which to relieve his patient, and he has recourse to one or the other of the prescriptions he has found useful in similar cases. This may, if the case be not of reflex origin, end the matter, but if it be due to eye strain, it will prove of temporary benefit at best, and the patient returns so often to the doctor that the case becomes a bugbear, and at last, discouraged and despairing of being able to further aid him, the physician bethinks himself of his friend, the oculist, and to him the patient is forthwith dispatched. If it be eye-strain that has caused the suffering, it is soon determined and quickly relieved.

Now, as to the character of headache due to eye-strain. What is there in the structure of the eyes that should cause them to give so much offence in so many of our fellow-men? And why is it that drugs have no power to relieve the aching brain where the eyes are at fault, or at best give but temporary relief? In answering the question may I beg your indulgence in advance if I trespass so far upon your good nature as to cite some points in the anatomy of the eye which it is necessary for you to bear in mind in order to appreciate the causative action of the eyes in producing headache?

The eye proper is, as you know, a spheroidal body, which may be compared to a miniature photographic camera, the retina representing the sensitive plate. The distance between the

sensitive plate and the dioptric apparatus of the eye is a fixed distance; that is to say, the distance between the retina and the back of the crystalline lens is so related that when the eye is at rest and normal in structure, the focal point for light coming from a distant object will be exactly upon the surface of this sensitive plate, known as the retina. Suppose now, however, that this relationship is destroyed through the retina being situated in advance of the point where it should be; that is to say, through the antero-posterior diameter of the eye being shorter than normal, as not infrequently happens. The refractive power, the ability of the optical system to focus the light, is an invariable power; thus, then, we have a condition in which the optical system is called upon to focus the image of the object observed upon a sensitive plate in advance of the point at which the system is adjusted to focus it. One of two things must then happen—either we must get but a blurred and indistinct image of what we look at, or else the focusing power of the eye must be increased.

The eyes have an inborn abhorrence for blurred images, and in a case like the one cited, unknown to their possessor, set about remedying the indistinctness of outline. By means of the mechanism with which the eyes are provided to enable them to see objects close at hand, the mechanism of accommodation, the refractive power of the lens of the eye can be increased by making it more convex. Now, in an abnormal eye, such as I have mentioned, this mechanism is brought into play. The need is for a stronger lens, to make up for the diminished distance between lens and retina, and it is thus met. In doing this, however, the eyes part with a portion of their power of accommodation. It would be a work of supererogation for me to describe minutely the mechanism by which this ability to alter the focal adjustment of the eye is accomplished. I will merely recall to you what you already know, that the ciliary muscle, by contracting or relaxing, increases or diminishes the convexity of the lens which is attached to it, thereby shortening or lengthening its focal distance. In normal eyes this mechanism is only called upon to enable the individual to see objects close at hand. In eyes that are too short this demand is constant and great in proportion to the amount of shortening.

Now, in eyes of this character the eyes are constantly doing, as I have said, a certain amount of the work that normal eyes are only called upon to do at intervals, and if we have superadded upon this, the work necessitated in accomodation, there comes a time when the tired muscle begins to send out plainly-felt reminders of this overtaxed state. So nicely are the

eyes adjusted to their work that for a long time they can accommodate for close work and make no complaint, if light and other conditions be favorable, but if the amount of work be exceeded for any considerable time, as in the case where, in addition to the work of accomodating for near objects, they must cover up the blurring which would be caused by the shortening of the globe, it will not be long before the demand for aid will be felt. It is not so much the continuous work which the eyes are called upon to do which makes the need for assistance felt; that is to say, it is not the work of compensation for the defect in structure, unless this be high in degree, for this would doubtless be unnoticed were it not for the additional demands which civilization makes upon the eyes in the way of close work that gives the fillip which causes the eyes to break down, because the ciliary muscle is doing more work than it is capable of doing for any length of time.

In the normal eye there is rest from work when the eyes are fixed upon some distant object, for then the light falls upon the retina focused by the lens at its least convexity. In the shortened eye there is no rest except during sleep, for if the eye is to see clearly at any time the surface of the lens must be to a certain degree more convex than when the eye is normal, which means a demand upon the ciliary muscle. With the intimate nervous connection between the eye and the general nervous system it is not difficult to understand that the constant irritability thus necessitated should communicate itself to the more distant parts and produce the continuous pain which is noticeable in such cases. I have thus far mentioned only hypermetropia as a condition inducing reflex headache from eye-strain. As a matter of fact, any of the refractive errors are equally capable of producing this condition, and astigmatism more often even than simple hypermetropia is the cause of cephalalgia. This condition is one in which the cornea, instead of being regularly curved throughout its entire extent, is in one meridian in consequence of congenital defect, of disease, injury, or from operation become differently curved from the other.

Thus, to roughly illustrate, it is as though a ridge traversed it from one side to the other. In consequence of this, there is never any distinct retinal image so long as the defect remains uncorrected, for there being different focal distances for the light coming through the different meridians of the cornea, there is no possibility of focusing both sets upon the same point. The effect of this is to keep the accommodative apparatus in a continuous struggle to bring both sets of rays to a focus, and from the constant struggle weariness soon ensues—

sooner, indeed, than in single hypermetropia, and the headaches follow. This condition may be of a variety of characters. There may be a hypermetropia in only one meridian, or there may be an all round hypermetropia with one meridian more hypermetropic than the other, or the eye may be near-sighted, myopic, in the corresponding way, or lastly, one meridian may be near-sighted, the other far-sighted. Myopia or near-sight may also cause headache, not through its action on the ciliary muscle, for in myopia there is less than the usual demand upon this in using the eyes. The eye is longer than it should be, and the lens needs less convexity than it normally would.

It is probable that the headache and other symptoms traceable to myopia are dependent upon the disturbance in the relationship which exists between the convergence and the accommodation. To look at an object close by, the eyes have to converge in order to bring the image upon the yellow spot. Ordinarily this is associated with a considerable degree of accommodative action on the part of the ciliary muscle; however, in a myope much less use of the accommodation is necessary than normally to see objects close at hand, while there is still need for the same amount of convergence. It is this condition of disturbance which is doubtless responsible for headaches due to myopia. Still another abnormal condition of affairs in the eyes may cause reflex headache; this was formerly known as muscular insufficiency. It is a lack of balance between the external and internal recti muscles. In converging to look at objects close at hand, there is a good deal of effort put forth by the internal recti muscles. If, as often happens, the internal recti muscles chance to be weaker than normal, the extra effort required to overcome the antagonistic pair of muscles soon causes fatigue, which very quickly produces nervous disturbance.

Having briefly called your attention to the conditions of the eyes which cause headache, I beg leave to consider the signs by which we should be led to suspect the existence of eye defect.

If the patient complains of increased headache whenever his eyes are used for reading, or if the headache only appears after such use of the eyes; and if the headaches are localized about the temporal or frontal regions, the eyes should be looked to for an explanation, particularly if vision is faulty. So, too, if eyes become reddened easily, or the patient shows a disposition to grow sleepy over his reading, be his book never so interesting, careful examination of the eyes with proper appliances will generally clear up the diagnosis.

As to treatment, there are but a few words necessary. Correction of the refractive error by proper glasses will usually give marked and quick relief. This correction should be done under a mydriatic, as without this, much of the defect will doubtless be overlooked. Protean nervous symptoms will oft-times disappear like magic after proper glasses are adjusted, and the sufferer experiences a relief before unknown.

If muscular insufficiency exist, this should be corrected by prisms, or by operation, and some attention to the general health is also demanded, as not rarely this is also at fault, and plenty of open air exercise is to be commended. I regret that the short time that has been given me in which to prepare this paper has prevented my making it more thorough and more interesting, but if I have succeeded in pointing out to you the road to relief for any sufferer who may be in your charge, and for whom medicine offers little hope of relief, I shall feel that it has amply repaid me for the work of writing it.

Dr. Davis—Taking the subject of reflex headache as a whole, the paper touched on but a very slight cause of reflex headaches, compared to the many other reflex headaches. Indeed, I am not certain if you eliminate neuralgia and organic troubles, such as tumors and the like, that produce pain in the head, if there is any headache that is not reflex. We know the stomach when disordered will produce headache, and many different organs in the body will produce headache; possibly many of the headaches we can not trace to the exact organs which are affected are reflex. No doubt, the eye in its impaired refraction causes many headaches. On the other hand, there are many defects of the eye, even those mentioned in the paper to-night, which will not cause headache, if the general system is in perfect order. I recall very distinctly a case that came under my observation. A patient of mine suffered very considerably with headache. I believed the liver was the source of these headaches, along with the fact that she resided in a malarial country.

The patient visited a neighboring city, was taken with the headache, was sent to an oculist, who found what is present in almost every eye, a slight degree of astigmatism; indeed, it is an exception for an eye not to be astigmatic; but this in the course of nature, in a healthy body, can be accommodated, so that it really produces no trouble until the system is out of order in some other way; hence, in the case I speak of, they went to an oculist, who found there was some astigmatism, put on a glass which thoroughly overcame this, but the headaches persisted. The patient returned and came under my care, and was put under treatment to relieve the liver and the bad diges-

tion, and she never put the glasses on again until another attack of the liver would occur. There was marked astigmatism, but it would not cause the headache.

The natural mechanism was perfectly able to overcome it until the system was out of order in other ways. And so it is in many of the forms of refractions of the eye, not only when the general health is impaired, but as you advance in age, as you grow older and can not overcome it, it will give rise to difficulties which you never knew you had. If we would just simply stop at the thought of reflex headaches and stop at the eye, I claim we would stop at a very small proportion of the headaches that are caused from reflexed action, and many of the so-called headaches from eye-strain are also caused by a disordered system, that, if corrected, the eye-strain itself would not amount to as much as sometimes we are wont to find in that respect. I would call attention to the fact that it has also been my misfortune to meet with a number of reflex headaches that were caused by the glasses the patients wore, sometimes a perfectly fitted glass. In a very short time the patient, getting rid of whatever trouble existed, finds that the glasses which were fitted at first are entirely too strong, with the old accustomed power of accommodation, and really finds these glasses producing headaches. In quite a number of cases I have had patients remove glasses which at one time fitted them very nicely, and after being removed their headaches were benefited. Of course, this is not to be blamed on the oculist, but certainly there is a necessity for the patient going frequently to see that the glasses are perfectly adjusted, and not depend on the fact that he went once and had them fitted.

Dr. Grube—I am one of those who believe the oculist finds defects in a great many eyes, and I am also one of those who believe the defects are there. It is but a part of our life that we have defective eyes. The defects are there, and are to be met and recognized, and these defects cause headaches in a great many more cases than we have any idea. We sometimes fail to remember that we are only a link of a long chain of man's history, and forget that the man's eye, like the eye of the lower animals, is built for long range. Man used his eye for long range for many years, and it is only in the last few generations, since the introduction of printing, that man has taken short range for his eyes. We find our eyes are not built for that purpose. A child is sent to school, and if hypermetropia is not there already it is soon developed by the close work, and I think an investigation would show a large percentage of these eye defects to be in school children, showing the necessity of their being corrected, and I would

never undertake to treat a case of chronic headache until I had that element eliminated, until I had the patient examined by an oculist, and that part corrected. We have other reflex headaches besides these. We have others which are not reflex, and when the physician has fitted glasses on his patient and dismisses him he has not done his whole duty. One other great element of these headaches, while it is not exactly reflex, is generally blamable on our civilized life, and that is the defective elimination of the uric acid. The great amount of meat diet, of nitrogenous food, must be eliminated from our system, and when the kidneys fail to eliminate this we have the troublesome headaches, which are so very persistent, and which will persist as long as we have the nitrogenized food there.

Dr. Allyn—In regard to the correction of the eye for the relief of headaches, we all recognize, of course, that we have a high degree of hypermetropia, or astigmatism. When a person gets to be 20 or 25 years of age, daily accommodations make glasses necessary. Many times that degree of hypermetropia, or astigmatism, may be in the eyes of a patient without producing the headache of which we are speaking to-night. There is another fault in which our work is employed. It is in the correction of low errors in the hypermetropia, especially such errors as the optician ordinarily overlooks. If you will notice a paper published in the journals recently you will see that there is an array of cases of headaches where there is the slightest degree of astigmatism. There is one point I might add, that even if the glasses are found unnecessary after the health has been restored, there is yet a field for their employment. If a person has a headache without the glasses every week, but with the glasses, once in two or three weeks, their use is valuable as far as any other remedy. A glass that may not fit perfectly, may not restore perfectly, but oftentimes has its use as a remedy.

Dr. Edsall—In reply to Dr. Davis' first point, I beg to state that I had originally intended to make the paper wider than it proved to be, but I found it getting beyond me in point of time which I had to complete it, and although I had hoped to touch on the other headaches, which I am perfectly well aware exist, I found it would be impossible for me to do so and make the paper at all worth reading. I had good authority for stating that there are but few causes of headaches in children at least. The authority to which I refer is Dr. Seguin's article in "Keating's Encyclopedia of Diseases of Children."

In that, if my memory serves me right, he states specifically that there are but two causes of headaches in children—one is eye-strain and the other presbyopia. As to Dr. Davis'

point in regard to the universality of astigmatism, this is well taken, and I will state that but few cases are on record in which the eyes were not to a degree at least astigmatic. The degree of astigmatism which causes trouble varies very much in different patients. In one patient it will cause a great deal of trouble, while in another patient it will be overlooked for a long time. I have been surprised to find the amount of astigmatism in existence, and work comparatively comfortably carried on. I have a case under my care at the present time, and the patient for years has been able to carry on all the duties of life, and has suffered comparatively little until the age when the hardening of the lens made the astigmatism uncomfortably apparent. Presbyopia always brings out defects of this character, and hypermetropia as well, and if the defect is not felt early in life, it will be felt after presbyopia intervenes.

As to glasses causing headaches, here again I will agree with Dr. Davis. These glasses prescribed under mydriatics, in all existing defects of the eye, do for a time almost invariably when first put on cause discomfort to the patient. There are also some patients who are able to adapt themselves with little or no trouble, but if the glasses are not put on until after this effect has disappeared, the difficulty of accommodating them is felt much more severely than it would be otherwise, and this difficulty is sometimes so very apparent as to cause headache in itself; but if the patient persists he will find that this factor in causing headaches will shortly disappear.

Dr. Allyn brought up some very interesting points. The low grades of astigmatism sometimes cause more suffering than higher degrees do, largely because, as Dr. Allyn says, they are overlooked. Higher degrees produce so much discomfort that recourse is soon had to the ophthalmologist for relief, but the low grades, unless careful examination is made, are overlooked time and time again, and the patient suffers without relief until by chance he falls into the hands of some one who recognizes it, and the defect is corrected. Dr. Chisholm, of Baltimore, before the American Medical Association, said that all cases of astigmatism should be corrected. In some cases in my experience, astigmatism will cause no discomfort for at least some time, but in other cases it causes considerable discomfort. It is no quick or easy matter to correct these defects even when time and patience are both unlimited. I am well aware that eye-strain is not the only cause of reflex headaches, but I still stand by the assertion that it is the most common cause.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

A SUCCESSFUL CASE OF LATERAL ANASTOMOSIS OF THE ILEUM FOR MALIGNANT STRICTURE, WITH A DISCUSSION OF THE OPERATIVE TECHNIQUE.

By William Easterly Ashton, M. D., Gynecologist to the Philadelphia Hospital, Read March 9, 1892.

I saw the patient, Mrs. E. C., for the first time on November 28, 1891, in consultation with her physician, Dr. Thomas Curry, of this city. She gave the following history: Twenty-eight years of age, and married nine years. She had had five children at term and two miscarriages. Three years ago, when five months pregnant, she fell from the window of the second story of her house, striking with her back and occiput upon the pavement below. This accident resulted in a slight uterine hemorrhage, but the pregnancy was not interrupted, and she went to full term. Shortly afterward, however, she began to suffer from epileptic attacks. These continued up to eighteen months ago, since which time she has been entirely free from them. On August 20, 1891, she was delivered of a hydrocephalic child. The labor was natural, and was not followed by any puerperal complications. At this time she was in excellent health, and weighed 185 pounds. Shortly after getting up, however, her health began to rapidly fail. She began to have frequent attacks of violent abdominal and pelvic pain, preceded by the movement of gas in the intestines. Her abdomen was always greatly distended, which added to her discomfort. There was obstinate constipation, and the bowel movements could only be induced by purgatives and rectal injections. These movements were always small in amount, and caused a great increase in the abdominal pain and tenderness. She had constant nausea and vomiting, and the abdominal distention was increased after taking food. She continued to lose weight and strength, and suffered from night-sweats. Seven weeks after her confinement her menstruation appeared, but it has not recurred since. Her weight at the time I first saw her had been reduced to 115 pounds.

On examination, I found the abdomen distended below the umbilicus. It had the appearance of a round tumor, filling up the lower part of the abdominal cavity. The abdomen above the umbilicus, though distended, was not greatly so. Percussion gave a tympanitic note over the entire abdomen. No tumor could be felt on palpation. Indigation gave negative results. As I was unable to demonstrate by my examination the existence of a new growth, I looked upon the cause of the chronic obstruction as being due to intestinal adhesions, the result of a

localized peritonitis. Cœliotomy was, therefore, urged, and consented to by the patient.

Operation. Cœliotomy was performed at the Polyclinic Hospital on November 30, 1891, Dr. J. H. Gibbon, senior resident of the hospital, and Mr. Louis J. Borsch assisting in the operation.

Upon opening the abdomen, which was done in the median line below the umbilicus, the omentum was found adherent to and blocking up the entrance of the pelvic cavity. After freeing these adhesions, the pelvis was examined, and its organs found to be in a normal condition. The small intestines were greatly distended and adherent to each other at several points. These were then carefully separated. Up to this stage of the operation the conditions found seemed to confirm the diagnosis of an old peritonitis, resulting in intestinal adhesion. The existence, however, of the distention indicated a stricture at some point in the bowel, due either to additional adhesions or a new growth. With this view of the case in mind, the examination was carried still further, and resulted in finding a large cancerous mass situated in the ileum and involving the mesenteric glands. At this point the stenosis of the gut was so marked that it was with difficulty the gas could be pushed through it. As the cancerous involvement was extensive, any attempt at resection would have dangerously prolonged the operation without giving the patient the slightest chance of permanent relief. It was therefore decided to perform a simple lateral anastomosis without resection. Ten inches of the ileum on each side of the stricture were stripped of their contents, and a ligature of soft rubber tubing passed through the mesentery and tied around the gut at each end, to prevent the regurgitation of the intestinal fluids. The field of operation was then protected by packing carefully with gauze pads. Two openings into the intestine were then made, one upon each side of the stricture, and both about three inches distant. The excluded portion of the gut was then thoroughly irrigated through these openings. In making the anastomotic communication I used the solid rubber rings, and, to add further to the security of the parts, "the right-angle continuous suture" was carried entirely around the anastomosis. No irrigation of the abdominal cavity was employed, and the abdomen was closed without drainage. The entire operation lasted twenty-five minutes, and the patient was placed in bed with a good pulse and normal temperature.

After history. The patient made an uninterrupted recovery, and was discharged from the hospital in twenty-eight days. The temperature was normal throughout her conva-

lescence, except on the day following operation, when it reached 100.4 deg. F.; the pulse on the same day was 100 per minute—the highest number of beats during her stay at the hospital. A hypodermatic injection of morphine and atropine was given immediately after the operation, and repeated on the second and third days, as the patient was somewhat restless. The patient for the first three days was nourished with nutrient enemas, and then food was given by the stomach. The bowels were freely moved on the fourth day, following the administration of calomel. There was no tendency to constipation at any time. The rings were passed on the eighteenth day. They were discharged whole, their segments not having become separated.

Immediately after operation the abdominal pain and distention entirely disappeared and remained absent throughout her stay at the hospital. The patient vomited only once, and then on the twelfth day following the administration of salts. At the time of her discharge she had gained decidedly in weight and strength, and was free from all her previous symptoms.

The patient was seen by Dr. Curry on the 24th of last February, three months after the operation. She had improved steadily in health; her bowels had moved naturally every day; there had been no vomiting, and the abdominal pain and distention had not returned. She had gained thirty-five pounds in weight since the operation. On the 10th of February her menses returned, after an absence of four months.

I shall pass at once to the discussion of some points of importance in the technique of lateral anastomosis.

The rings employed. Those used in this operation were made of solid rubber cording, and were devised by Dr. Baldy and myself, and employed by us in our experiments upon dogs. The advantages of these rings have been fully discussed in our paper upon "Experimental Studies in Intestinal Surgery"* and I shall not refer to them here. Recently I have modified these approximation rings, doing away, I believe, with the only real objection that could be advanced against them, namely, that they allowed too small an opening between the intestines. As I now make them they are oval in shape instead of being round, as they were originally. This is accomplished by means of a strand of catgut fastened across the ring at each end. They have six ligatures attached, in place of four; and the segments of which the ring is composed, as well as the threads, are held by means of catgut. With a ring of this kind an anastomotic opening may be made in the intestine, oval in

* Proceedings of the County Med. Soc. (Phila.). Vol. XII, 1891.

shape, and having the following dimensions: 1¾ inches long, ½ of an inch wide at the centre, ¼ of an inch wide at either end.

Additional sutures about the anastomosis. It is now generally held by operators that additional sutures about the seat of operation give greater security to the parts and lessen materially the dangers of leaking. For this purpose I employ the "right-angle continuous suture" of Cushing, using a simple knot for its beginning and ending, as advised by Keen, instead of the original complicated method. This suture may be introduced with great rapidity, and holds the serous surfaces together with accuracy. It is good practice to carry this suture completely around the anastomosis in order to be sure that there will be no leaking at any point.

Cleanliness during the operation. It is impossible to do an ideal aseptic operation where the intestines have been opened. If, however, the parts be kept carefully cleaned, there will be practically but little danger of septic infection following. Those of us who do abdominal work must have frequently observed how quickly a blood clot or other foreign material becomes adherent to the serous surfaces of the intestines, and with what comparative diffiulty it is removed. No amount of subsequent irrigation will suffice to detach some of these adherent particles, and it is necessary to pick them off with the fingers. How easily, under these circumstances, a small particle of septic material may be overlooked and become the centre of an infection can be readily understood. To prevent danger of this source of infection the seat of operation should be frequently douched, during the operation, with warm sterilized water. This I believe to be a most important point in the technique of these cases. It certainly can do no harm, and it not only keeps the parts clean, but it at the same time lessens the dangers of shock by keeping the intestines warm.

Rapidity in operating. In no field of surgery is time as important a factor for success as in abdominal operations. A surgeon may have the most profound knowledge of the subject, he may deal with all the accidents and complications which may arise with rare judgment and decision, and yet his results will be bad unless his operations are rapidly performed. Good results in abdominal surgery mean rapid work—that is, no shock, no ether-saturation. Park,* in discussing those sources of septic infection not concerned in the wound itself, throws out a most valuable hint bearing upon this subject. He says: "There is good reason to think that chloroform and ether administered for some time may produce such changes

* "Wound Infection," etc., American Journal of the Med. Sciences, Nov. 1891.

in the blood and tissues that vital processes of repair, cell-resistance, and chemotaxis may be so far interfered with as to facilitate subsequent infection."

Feeding after operation. The tendency of most surgeons to delay giving food by the mouth, and their reliance upon rectal feeding are, I am convinced, mistakes in the early after-treatment of cases of anastomosis. If we employ, in our operations, rings which closely approximate the surfaces of the viscera and use additional sutures around the seat of anastomosis there can be no reason to doubt the security of the parts. It seems improbable, under these conditions, that the natural peristaltic action of the intestines would be sufficient to cause leakage. To throw light upon the question of early feeding after intestinal anastomosis, I shall refer to the following cases of gastro-enterostomy. Brookhouse and Taylor* report seven cases, with three recoveries and four deaths. In the cases which recovered, feeding by the mouth was begun on the second day. They considered early feeding as a most important factor in their successful cases. Page† reported a series of thirty-six cases with fifteen deaths, which were in most instances due to exhaustion. Beaston ‡ reports two cases of very great interest as bearing upon the necessity for early feeding by the mouth. The first case did well immediately after the operation, but died on the fourth day from asthenia; food and stimulants were not given by the mouth until a few hours before death. The second case was extremely weak and exhausted at the time of operation, but, nevertheless, made a good recovery. This patient was given thirty drops of brandy every hour by the mouth as soon as he came out of ether, and next morning feeding by the stomach was begun. In his remarks upon these cases he says: "Do not place too much reliance upon rectal feeding. Food in small quantity should be given early by the mouth, for in this way only can the tendency of death from asthenia be successfully combated." Jessett,‖ in speaking of the report of seven cases with two deaths, one of which was on the sixth day and the other on the seventh, both being due to exhaustion, says: "Both would have recovered if fed earlier."

There can be no doubt that exhaustion is the cause of death in a large number of these cases as well as in anastomotic operations in other portions of the intestinal tract, and it is impossible, with rectal feeding alone, to prevent the fatal issue. In those cases which are seen early by the surgeon and

* *Lond. Lancet*, 1891, Vol. I, p. 718.
† *Lond. Lancet*, 1889, Vol. II.
‡ *Lond. Lancet*, 1890, Vol. II, p. 761.
‖ *Lond. Lancet*, 1890, Vol. II, p. 68.

are not exhausted, the question of early feeding by the mouth is not of first importance. On the other hand, however, cases which are weakened by their disease should be given food and stlmulants by the stomach at the earliest possible moment after operation.

Closure of the anastomotic opening. One of the gravest questions in intestinal surgery is the danger of subsequent closure of the artificial communication. This question can not be settled until we have examined the seat of operation in a large number of cases which have recovered from the operation, but who have died subsequently at various periods of time. Although, as yet, but little has been done in this direction, still there have been a few such examinations made which may be referred to with advantage. Larkin* reported the results of a post-mortem examination upon a patient of his own who died five months after he had performed a gastro-enterostomy for malignant disease. He found upon filling the stomach with water that it passed into the duodenum through the pylorus, but would not pass into the intestine through the artificial communication. After opening the stomach he failed to detect any trace of the anastomosis. He then opened that portion of the jejunum which had been attached to the stomach, and was able, with a fine probe, to pass into the latter.

The malignant disease had not involved the seat of operation. Jesset† lost a case on the fifth day after performing a gastro-enterostomy, and found upon post mortem examination that the artificial opening was quite patent and healthy, and that the bone plates were nearly digested. Sainsbury‡ lost a case on the second day after performing a gastro-enterostomy. The examination of the stomach after death showed a closure of the opening. He says: "The opening into the jejunum was patent when probed by the finger; but that there was an impediment, which must have been valve-like, is proved by the distended stomach, and the fact that water injected into the stomach before dissection did not escape into the jejunum." In this case rings or plates were not used, the anastomosis being made by a double row of sutures. Beaston‖ reports two cases upon whom he made post-mortem examinations following gastro-enterostomy. One of these patients died on the fourth day following operation.

He found the bone plates "greatly acted on by the digestive fluids, being reduced to the thickness of the thumb-nail and broken up into small pieces, both in the stomach and

* Lond. Lancet, 1891, Vol. II.
† Lond. Lancet, 1890, Vol. II, p. 68.
‡ Lond. Lancet, 1891, Vol., pp. 18-20.
‖ Lond. Lancet, 1890, Vol. II, pp. 761-764.

bowel. The knots of the uppermost lateral threads were plainly visible, owing to the serous surfaces having fallen apart, probably on losing the support of the bone plates." The artificial opening he found would admit the forefinger. The second case died in four weeks after section from acute lung trouble. The artificial opening was found to be oval in shape, with smooth and regular borders, and barely admitting the index finger. Keen,* in referring to a case operated upon by Dr. Abbe, in which a lateral anastomosis was made, says: "The opening was large, and seemed ample. The patient died some months later, and it was found that the opening had narrowed and contracted so that ultimately there would have been complete obstruction."

In all of the cases just mentioned the incisions into the intestine and stomach were ample, measuring from one inch to one inch and a half in length. With the exception of Dr. Abbe's case the bone plates were used in all of them.

There are several factors concerned in causing a narrowing of the artificial communication following lateral anastomosis. First, the natural tendency of the tissues themselves to retract; second, the contraction of the cicatrix following the healing of the incision; third, the direct union of a part of the incision due to the immediate contact of its edges, and fourth, the opening into the bowel not being sufficiently large or of a proper shape.

The first of these causes can not be avoided, as contractility and retractility are inherent properties of these structures. To prevent the contraction of the cicatricial tissue, Jessett† and Clarke‡ advise sewing together by a continuous suture, either of silk or catgut, the cut edges of the serous and mucous coats of the incised viscera. This brings the raw surfaces together, and is followed by direct union—an important fact, as it does away, to a great extent, with the formation of a cicatrix. This method of dealing with the edges of the incision will also prevent the danger of union from direct contact. Direct union of the cut edges of the bowel, as a cause of closure of the opening, has, I believe, been overlooked by surgeons. Its importance, however, can hardly be questioned. For instance, the case of Larkins, quoted in this paper, goes a long way toward the support of this theory. For how else could we explain the fact that five months after section the opening only admitted a fine probe, unless we admit that in the beginning the edges became in part united? Again, Mr. Larkins performed a

* Proceedings Phila County Med. Soc., 1891, Vol. XII, p. 93
† Brit. Med. Jour. Lond., 1891, Vol. I, p. 1377.
‡ Brit. Med. Jour. Lond., 1891, Vol. I, p. 798.

jejunostomy upon this very patient nine weeks after the gastro-enterostomy, on account of symptoms of closure of the artificial opening, and she was then kept alive by feeding directly into the jejunum. It is hardly likely that a large incision in nine weeks could become closed by the retraction of tissues and the contraction of the cicatrix alone.

Furthermore, Beaston's two cases both point in the same direction—one dying on the fourth day, and the opening only admitting the forefinger, while the other barely admitting the index finger at the end of one month. In all of these cases long incisions were made, and their rapid narrowing certainly teaches us a lesson. I do not for one moment wish to be understood as stating that direct union of the edges is the only factor in the case, but I do wish to emphasize its importance as a cause. Dr. Keen* has made a suggestion of great practical value in the technique of lateral anastomosis. He advises, instead of making a simple slit, to pinch up the bowel and remove an oval piece. This plan, he believes, would lessen the danger of contraction taking place. While I do not believe that this suggestion would in any way lessen the amount of contraction, I do believe that it would, by lessening the danger of direct union of the cut edges, prevent to a great extent the tendency to closure. Another point of importance is, as suggested by Jessett, to pass the lateral sutures of the ring as close to the edges of the opening as is consistent with safety. In this way the edges of the incision are kept wide apart. The length of the incision for an anastomosis should be from one and a half to one and three-quarters of an inch. An opening of this size, made oval in shape and having its mucous and serous edges united by a continuous suture, offers, I believe the best chance of remaining permanently patent.

My experience has been that it is extremely difficult to cut out an oval piece of gut with scissors, as the opening is apt to be irregular or larger than we desire. I saw a well known operator make this mistake, and he was obliged to narrow the opening by stitching it across with catgut. To overcome this difficulty I have devised a steel punch for the purpose. With this instrument we are able to make the opening of a definite size and its borders clean and sharp—factors of great importance. The incision is oval in shape, one and three-quarters of an inch long, one-half of an inch wide at its centre, and one-quarter of an inch across at each end. By having the ends of the opening abrupt instead of tapering, there is less danger of direct union.

* Proceedings Phila. County Med. Soc., 1891. Vol. XII. p. 93.

In conclusion, I desire to call attention to the following points:

1. The necessity of frequently douching the seat of operation with warm sterilized water to prevent the dangers of infection and shock.

2. That rapidity in operating is of great importance for success.

3. That early feeding by the mouth should be employed in all cases, especially in those which are weak and exhausted.

4. That early feeding by the stomach does not add to the dangers of leaking, as the parts are perfectly secure, if proper rings and additional sutures are employed.

5. That an important factor in causing subsequent closure of the anastomotic opening is a direct union between the edges of the incision.

6. That the danger of subsequent closure of the artificial communication is materially lessened by using a steel punch in making the opening, by stitching the edges of the serous and mucous coats of the bowel together, by placing the lateral sutures of the ring as close as possible to the margins of the incision, and lastly, by making the anastomotic opening sufficiently long and of an oval shape.

DISCUSSION.

Dr. J. M. Barton—I agree with what Dr. Ashton has said in almost every particular. There are one or two points, however, to which I would like to call attention.

The doctor has spoken of the importance of keeping the abdomen open for the shortest possible time during an operation. I fully agree with him in this, and in my own abdominal operations I often sacrifice something to secure brevity of operation.

To make the operation as short as possible it would be very convenient for us to know, before opening the abdomen, exactly what we have to do. With our present knowledge this is impossible, but the history, even now, will often throw some light on the nature and seat of the obstruction.

Under all circumstances, the history in each reported case ought to be carefully recorded, not omitting apparently unimportant details, so that in the future, in similar cases, the diagnosis may be fairly accurate before surgical interference.

The vomiting in this case, unaccompanied by any tenesmus, was rather unusual. Where the obstruction is so low, tenesmus is more apt to be a permanent symptom than vomiting. The rapid emaciation would point to malignant disease.

The sweating also would be suggestive of a far-advanced malignant growth or encysted pus.

I fully agree that the feeding should be begun early In my stomach cases, where the danger of giving food early is greater than in intestinal injuries, I have found that where I was compelled by the condition of the patient to give food at once, it was well borne. Examining the literature of the subject, I found that the cases that were fed early did not seem to suffer thereby. Where the operation is some distance from the stomach, there is no reason why food that should be absorbed by the stomach should not be used at once.

The doctor has suggested that the narrowing of the opening may possibly be due to immediate union. In the history of the cases that were examined a few days after operation it does not appear that the opening was materially contracted, while in those examined some months after operation it was found firmly contracted. Where the operation is performed for non-malignant disease, and the patient is expected to live for some time, this contraction of the opening is of the utmost importance. I doubt whether the removal of an oval piece will prevent it. I am not prepared to make any suggestions, but this is one of the difficulties which I fear we shall find trouble in overcoming.

Dr. B. T. Shimwell—Reference has been made to the use of sutures around the point of anastomosis. I have had considerable experience experimentally with operations on the bowels, and I find that the moment you interfere with the bowel paralysis occurs. In the paralyzed portion of the bowel no gas or fecal matter will enter. I therefore can not see the necessity for sutures. When perfect coaptation with the rings is made, one or two additional sutures is all that is needed, and I can not understand why we should spend time in putting in these extra sutures, for it requires some time for the bowel to regain its normal tone. If the sutures are well applied and are well tied you have close coaptation, and adhesion is so rapid that there is firm union by the time the tone of the bowel is regained.

Dr. Joseph Hoffman—I have often heard those gentlemen who do anastomosis talk about paralysis of the bowel as a necessary sequelæ to interference with the intestine. In ordinary abdominal surgery, where adhesions to the bowels are often extensive, we do not get paralysis even when we had to stitch down to the mucous coat. I have seen cases where it was necessary to stitch up six or eight inches of the bowel down to the mucous coat, and the patient has recovered without paralysis of the bowel. I should like to know what the inter-

ference is which is supposed always to cause paralysis of the bowel.

Dr. J. Price—This matter of paralysis is an interesting one, and I am inclined to ask the same question that Dr. Hoffman asked. Paresis of the bowel requires something more than local interference. If simple anastomosis with a few sutures is responsible for the paresis it is surprising that we do not have this condition in those extensive lesions of the bowel which we often have to deal with in suppurative and extensive disease. We often have to separate many inches of the bowel, and often have to stitch up lesions, but we do not see the least paresis. There is no perceptible distention. I am therefore surprised to hear gentlemen speak of paresis of the bowel following a few fortifying stitches in resection or in anastomotic work. It never occurred in my work, and I no longer look for it if the cases have been carefully prepared.

There is just one point in connection with anastomosis—not that I wish to criticise enthusiastic investigators or experimenters, but I desire to call attention to one very important point in intestinal surgery. If you can possibly get along without resection or anastomosis, always do so. You will find that men like Martin, Lawson Tait, Bantock, and Thornton make a resection or an anastomosis only exceptionally. Some years ago I did more resection and anastomosis than I do at present. I constantly finish an operation with the bowel with a lumen not larger than a crayon. I do not hesitate to reduce the bowel in its normal axis. I have never had any obstruction follow anastomosis. The results have been most satisfactory, and some of the cases are of three or four years' standing.

I might allude to one case: Last summer I operated upon a woman who was said to have rheumatism of the ovary. Her pelvis was simply full. It contained all the pus and viscera that you could get into it. One of the abscesses had perforated, causing a mesentery abscess which had perforated the bowel at two points, the two openings being four inches apart. The portion of the bowel between the opening was quite gangrenous. There I was driven to resection, and took out six inches of bowel and V-shaped a portion of mesentery. I found that the mesentery was too thick for inversion, and I therefore stitched the bowel carefully, and six inches above the resection made a lateral anastomosis, cutting out diamond-shaped pieces of bowel. This woman never had a bad symptom. She passed flatus in twenty-four hours. There was enormous distention at the band of the resection. She made a perfect recovery, and is now doing her domestic work.

Dr. M. Price—I think that the operation of anastomosis can

be materially shortened by using Mrs. Supplee's sewing machine needle, which I have suggested for passing the sutures. In this way the six sutures can be passed in a minute and a half. It obviates the entanglement of the sutures, which is apt to occur when the needles are threaded before the operation, and does away with the time used in threading them during the operation.

I congratulate Dr. Ashton on the recovery of the patient. I think that these are the most serious operations that we are called upon to do. In most cases the disease has already gone so far that resection is out of the question. By this operation he has unquestionably lengthened that woman's days and probably made her death much more comfortable. Some years ago I resected some six inches of the colon for epithelioma. The woman is still perfectly comfortable, and I have no doubt that her life has been prolonged several years. There is no doubt that if the operation is done by a man familiar with the work, 95 per cent. of recoveries can be counted on. Suture of the intestine is one of the safest procedures in surgery.

I think that Dr. Shimwell is probably wrong in regard to paresis. I think we are justified in using every precaution, and the introduction of the ring should be supplemented by a whipped suture and reinforced over all by a Lembert suture. I have no hesitation in saying that the operation is justifiable in cancer, and is the only one left for us to do.

Dr. Ashton—While an early exact diagnosis is of importance, yet it is impossible in the large proportion of cases to make it. Even if we do not make an exact diagnosis, the opening of the abdomen causes very little harm if done as an exploratory incision.

In regard to the closure of the opening, I would say that some of these cases were examined as early as three or four days after operation. I can not understand how an incision which was one and a half inches in length should in three or four days become so small that it would admit only the index finger, unless there had been primary contact and union.

I can not agree with Dr. Shimwell in reference to intestinal paresis. I have never seen the condition follow even extensive injuries of the intestines. There is more shock to the bowel in severe injuries to the intestines in some pelvic cases than in anastomosis. I agree with Dr. Joseph Price that we should not make an anastomosis if we can possibly avoid it. I never hesitate to narrow the calibre of the bowel provided I do it in the direction of its long axis.

A SCIENTIFIC CURE FOR HERNIA.

By Benjamin T. Shimwell, M. D., Lecturer on Surgery in the Medico-Chirurgical College.

All methods devised for the radical cure of hernia seek to reach their object by obliteration of the canal, and by this plan to retain the protruding gut. This is the treatment of effect, not of cause.

While fully recognizing the comparative frequency of this trouble, we must not overlook the fact that it is in the minority. As we are all subject to the same exciting causes, we should look for some anatomical reason that will explain its occurrence and non-occurrence, and why after operation, where fibrous tissue in apparent quantity existed, return was possible. There must be more than the production, or rather reproduction, of a canal from the abdomen to the scrotum to account for it.

The first thing, then, to consider is not the inguinal rings or canal, but the intestines, the prime factor in the case.

The intestines are not a tube lying perfectly free in the abdominal cavity to be pushed here or there, making pressure at this or that point. If they were attached but to the pyloric end of the stomach and to the anus, then it could readily be seen how intra-abdominal pressure could possibly rupture any weakened point in the belly wall, with consequent protrusion of the gut. Instead of being so arranged, their position and action are limited by the folding around them of the peritoneum forming the mesentery.

Careful examination of the body in the dead-room fixes a normal relative position for this limiting membrane. Its point of attachment to the parieties begins to the left of the second lumbar vertebra. Its insertion then follows a line obliquely downward and to the right, to attach itself on the right iliac fossa. Its average length is eight inches; an increase above this is an abnormal state, and on this increase in length depends the production of hernia. The examination of numbers of bodies has proved, beyond cavil, that when a normal condition of the mesentery exists, it is impossible to drag the gut into the inguinal or femoral rings.

Is it scientific to say it is chance that prevents the whole human race from having hernia? Also to lay it to the firmness of attachments of the opposing surfaces of the inguinal canal, or the structures that cover a present hernia? The pushing forward of the superimposing layers of tissue and separation of the obliterated canal speak ill for its preventive power. If they are preventive, then the sudden rupture would give us more serious consequences in primary protrusion than experience shows. The canal does not show the after-

conditions that follow usually from tearing which would be excessively marked here if strong union had taken place. Neither subjective nor objective symptoms are present. It is coaptation, not union with firm tissue formation.

It is clear to my mind that the normal length of the mesentery is the preventive factor in the non-production of hernia. If not so, then no one would escape. The exigencies of life and our surrounding conditions are such that all of us at times are subjected to violent strains, giving rise to intra-abdominal pressure sufficient to rupture the internal openings, and to allow the gut to enter the canal.

If these assertions are true, then any operation which has been suggested does not prevent, but modifies. Therefore, any procedure seeking to prevent hernia by obliteration of the sac does not cure. The possibility of return exists.

What is the rational treatment? The opening of the abdomen and shortening of the mesentery. The width of the mesentery does not increase in adult life, but the length is liable to.

The opening of the abdomen and shortening of the mesentery may be objected to on the ground of possible risks. The safety of the operation of abdominal section is settled. The shortening of the mesentery offers no objections. It may be said that the blood supply of the intestines may be interfered with. Careful experiments show the reverse.

Further, to prove that peritoneal inflammatory changes do not affect the blood supply, is instanced in the omentum after diffuse peritonitis. Operations during the acute stage and post-mortems have shown me conclusively the possibility of contraction occurring without strangulation. In every case of acute peritonitis, unless adhesions have taken place, or, in fact, any case where the omentum has been much handled, we always find it drawn up to its gastroduodenal attachment as a knotted mass. Still its vitality is maintained. Also, the invaginated mesentery into the divided bowel, in the operation of intestinal anastomosis, does not lose its vitality by contraction and inflammation. Here there is not only change by contraction due to the invagination, but also thickening from the inflammatory products thrown in and about its attachment. That this portion of the mesentery still supplies the bowel with blood is proven by the number of experiments I made, to show that division of the mesentery at the point of invagination caused gangrene. This proves that, though changed in its structure pathologically, it does not interfere with its nutritive function as a carrier of blood.

It is understood that the value of an operation lies as much in its freedom from risks as in its ability to maintain its advan-

tages when successful. The freedom from risk has been one of the so-called advantages claimed for the radical cure suggested. Can this be truly said of these methods? It is not always in the province of any operator to say when the operation is finished that he has not divided the spermatic duct. This is not recognized in unilateral operations, providing the other organ and duct are viable, but if not, or if in any subsequent time inflammatory change takes place, it is plainly seen the disadvantages that would arise. There is also the possible atrophy of the testicle from injury to its nerve supply. Then, again, sharp attacks of peritonitis have occurred, with consequent changes. There is a law of serous cavities that is definite: "Any inflammation, unless limited by adhesive contact, is diffused over the whole surface." This will hold as good here as in an operation done through section.

The longest part of the mesentery is usually confined to about five feet of the bowel included in a space beginning at a point six feet from the duodenum. If this is above the average length it is apt to hang into the pelvis, and is, in all probability, the portion protruded. It is but reasonable to suppose it is the same loop that is recurrent in its extrusion. There would be no difficulty in locating this portion, as the hernia would be present.

The shortening is done by folding the mesentery over on itself, and holding in this position by interrupted sutures. The intestine can be delivered, folded, sutured, and then replaced, and successive portions so operated upon. This is a step that of necessity requires expertness in handling the intestine that is only got by practice. The delicacy of the mesenteric tissue is understood. The union of the attached surfaces is rapid, and having been so shortened, there is no possibility of relengthening. Experiments, operations, and post-mortems in cases which had peritonitis show persistent shortening of the mesentery, the intestines being drawn nearer the spine.

The operation can be done perfectly aseptic, obviating risks. The bowel is not injured. It is done quickly, closure is made, and the patient out of bed in a few days.

DISCUSSION.

Dr. Joseph Hoffman—Dr. Shimwell's suggestion can certainly claim the merit of being new, but any procedure which strives to cure hernia by it must fail. If the portion of bowel that presented was always the same, the procedure might be logical. It is, however, founded upon a false conception of the condition present. These conditions probably do not ob-

tain in the greatest number of cases, and consequently the methods can not be really a cure for the condition. Other things besides the bowel may constitute the hernia. In woman, the ovary may be present. The appendix may get into the ring, and shortening of the mesentery will hardly cure that. Further than this, the omentum may constitute hernia. This is a prolific cause of hernia. It is probably at the bottom of most hernias primarily, and in many cases it precedes the bowel. We often find nothing in the ring. Strangulation has occurred and the gut slipped back, and the strangulation is back of the ring.

So far as considering shortening of the mesentery as a cure for hernia, we must understand what we mean by cure. Those who have done the most radical operations for hernia are not bold enough to say they have cured a case—that is to say, so cured it that it will not come back. It can not be held that such an operation will cure the predisposition for lengthening of the mesentery. So far as shortening of this tissue by inflammation is concerned, that is entirely theoretical. We can not say that because the mesentery is thickened, it is shortened. The suggestion, while it has apparently a foundation in fact, must be taken entirely as experimental, and experimental in the line that it is not likely to be followed by practical results.

Dr. George E. Shoemaker—It is easy to decry anything which is unusual, yet every method must stand on its own merits. No consideration of this subject is complete which ignores the congenital defects of the ring, since these are at the bottom of many hernias. We find congenital hernia in the very young. Later in life the rings may be too large and weak from congenital defect, although no hernia is present, but a strain is suddenly thrown upon the parts and a hernia is produced. Such a shortening of the mesentery as would draw the intestine away from the abdominal wall is inconceivable under the physical laws which control intra-abdominal pressure; and with the intestine in contact with a weakened point protrusion is always possible.

Dr. T. S. K. Morton—Several years ago, a London surgeon—I think Mr. Morris—wrote quite an elaborate thesis on the subject of the mesentery and its relation to hernia. He apparently demonstrated that in the cases of hernia which he had examined there was distinct lengthening of the mesentery, which seemed to be peculiar to such cases. He found this in the very young, and he urged that the lengthening of the mesentery had a great deal to do with the occurrence of the hernia. I have seen this statement incorporated in one or two

text-books, and it seems remarkable that no one has before this thought of suggesting the operation of doubling the mesentery on itself to prevent the occurrence of hernia. I understand that Dr. Shimwell has done this operation upon animals with satisfactory results.

In this connection the recent suggestion of Mr. Tait in regard to treatment of hernia by abdominal section comes up with special force. If, as Mr. Tait tells us, it is exceedingly easy to draw the hernia back even when tightly strangulated, and if, at the same time, we can shorten the mesentery and cure the hernia, and also deal with any prolapsed omentum, it would be a distinct advance in surgery. The method is not applicable to all cases of hernia. If the operation has any field it is in inguinal, and especially in femoral, hernia. Dr. Shimwell has thrown out a very valuable suggestion, and I should hesitate very much to condemn the method until I had heard more about it.

Dr. Shimwell—I did not attempt to apply this method to all hernias. I think that any case in which the hernia can be maintained by a truss should not be operated upon. The method was suggested for those cases in which a radical cure was indicated. The method, of course, is applicable only to intestinal hernia. When we find omentum in the sac we do not hesitate to remove it. In peritonitis the omentum is contracted, and is found high up in the peritoneal cavity, and is of no use. The occurrence of congenital hernia is no objection to the method. The difficulty may not be originally in the canal, but the lengthened mesentery may permit the bowel to so press upon the canal as to weaken it. It seems folly to tinker with the canal and not try to remove the cause.

INTERNATIONAL PERIODICAL CONGRESS OF GYNÆCOLOGY AND OBSTETRICS.

Brussels, Belgium, September 14 to 19, 1892.

Secretary General—Dr. Jacobs, 12 Rue des Petits-Carmes, Bruxelles.

American Secretary—Dr. F. Henrotin, 353 La Salle avenue, Chicago.

The Belgian Society of Gynæcology and Obstetrics, under the patronage of the Belgian government, has taken the initiative in organizing "The International Periodical Congress of Gynæcology and Obstetrics," the first session of which will

be held in Brussels, September 14 to 19 inclusive, 1892. Three leading questions will be offered for discussion:

1st. Pelvic Suppurations—Referee, Dr. Paul Segond, Paris.

2d. Extra-Uterine Pregnancy—Referee, Dr. A. Martin, Berlin.

3d. Placenta Prævia—Referee, Dr. Berry Hart, Edinburgh.

Fees: Members participating in first session, 30 francs. (This will entitle the holder to a copy of the proceedings of the Congress.)

Founders (Life Membership), 300 francs.

In connection with the congress there will be an International Exposition of instruments and appliances pertaining to Gynæcology and Obstetrics.

All communications pertaining to this congress should be mailed direct to the American Secretary, who will promptly furnish all information. All notifications to be forwarded should be received by August 1.

Everything points to a great success in this congress. Though notices concerning it have been rather late in this country, already men of celebrity have promised to visit and contribute papers. Among the many foreigners who have written to the Secretary General endorsing and promising support to the undertaking may be mentioned the following eminent men:

Belgium.—De Roubaix, Sacre, Mirriar, Pigeolot, Charles, Sanpart and others.

France.—Pean, Demous, Fochier, Auvard, Doleris, Pozzi, Tarnier, Budin, Terrillon, Terrier and others.

England.—Lawson Tait, Wm. Priestly, Champneys, G. Elder, J. White, Watt Black, Thornton, Doran, Spencer Wells, Bantock and others.

Germany.—Martin, Leopold, Sanger, Gusserow, Veit, Winckel, Hegar, Kaltenbach, Freund, Heyder and others.

Switzerland.—Reverdin, Vuillet.

Russia.—Slaviansky.

Sweden.—Saliss, Westernark.

Norway.—Statfeldt, Howitz, Meyer.

Italy.—Porro, La Torre, Mangiazalli, Bozzi, Morisain.

Turkey.—Chatazian.

Holland.—Stokvis, Treub, Nyhoff.

Austria.—Pawlik, Albert, Chrobuk.

Finland.—Engstrom, Heinricius, Pippingohold.

Further details will be furnished as soon as received.

CHICAGO, Ill., April 21, 1892.

The following named distinguished gentlemen have been delegated to represent the British Gynæcological Society at the International Congress of Gynæcology and Obstetrics, next September:

Robert Barnes, Granville Bantock, A. S. Simpson, Lawson Tait.

Great preparations are being made to entertain visiting physicians. His Majesty, King Leopold, will assist at the opening of the congress. There will be a grand reception by the Belgian Gynæcological Society; gala performance at the Grand Opera, also a banquet by the Belgian Gynæcological Society; garden party in the garden of the royal family, etc. For all information relating to the congress address

DR. F. HENROTIN,
353 LaSalle avenue, Chicago, Ill.

AMERICAN ACADEMY OF MEDICINE.

PRELIMINARY PROGRAMME.

The following topics are promised for discussion at the Seventeenth Annual Meeting of the American Academy of Medicine at the Cadillac Hotel, Detroit, Mich., on Saturday, June 4, and Monday, June 6, 1892:

1. "Essentials and Non-essentials in Medical Education," the address of the retiring president, Dr. P. S. Conner, of Cincinnati.

2. "The Value of the General Preparatory Training afforded by the College as compared with the Special Preparatory work suggested by the Medical School in the Preliminary Education of the Physician," a paper by Dr. T. F. Moses, of Urbana, O.

3. "Does a Classical Course Enable a Student to Shorten the Period of Professional Study," a paper by Dr. V. C. Vaughan, of Ann Arbor, Mich.

4. "The Value of a Collegiate Degree as an Evidence of Fitness for the Study of Medicine," a paper by Dr. L. H. Mellter, of Chicago.

5. "The Value of Academical Training Preparatory to the Study of Medicine," a symposium by Dr. H. B. Allyn, of Philadelphia, W. D. Bidwell, of Washington, and Elbert Wing, of Chicago.

6. "The Newer Medical Education in the United States,"

a symposium by Drs. W. J. Herdman, of Ann Arbor, Charles Jewett, of Brooklyn, and Elbert Wing, of Chicago.

7. A paper on some phase ofthe State Supervision of the Practice of Medicine, by Percy H. Millard, of St. Paul.

Some other papers are partially promised, and the usual reports may be expected from the committees.

Members of the profession are cordially invited to be present at the sessions of the academy.

IOWA STATE MEDICAL SOCIETY.

The Iowa State Medical Society will hold its forty-first annual session at Des Moines, Iowa, May 18, 19 and 20, 1892.

MISSISSIPPI STATE MEDICAL SOCIETY.

The Mississippi State Medical Society held its twenty-fifth annual meeting at Natchez, Miss., on April 20, 21 and 22, 1892, and adjourned to meet in Jackson, Miss., on the third Wednesday in April, 1893.

The following officers were elected for the ensuing year: President, Dr. W. G. Kiger, Vicksburg; first vice president, Dr. J. D. Smythe, Greenville; second vice president, Dr. A. J. Hall, Natchez; treasurer, Dr. J. F. Hunter, Jackson; recording secretary, H. H. Haralson, Forest; assistant secretary, Dr. W. R. Harper, Rolling Fork; corresponding secretary, Dr. P. A. Rowland, Coffeeville.

The committee appointed at the last meeting of the American Medical Association to consider the best means for promoting the prosperity of the sections of the association will hold an adjourned meeting in the Hotel Cadillac, Detroit, Mich., June 6, at 3 P. M.

Members of the committee are requested to notify the chairman of their intention to be present at this meeting.

The committee would esteem it a favor if each member of the association would communicate in writing his or her views concerning the best measures for promoting the development of the sections. Such communications may be sent to the chairman of the committee.

JOHN S. MARSHALL, M. D., *Chairman*,
9 Jackson street, Chicago.

DR. D. HAYES AGNEW.

Minute on the Death of Dr. D. Hayes Agnew—Adopted by the College of Physicians of Philadelphia, March 24, 1892. The death of Dr. D. Hayes Agnew, recently president of the college, in the seventy-fourth year of his age, and after a life crowned with honor and usefulness, calls for an expression of the sense entertained by the college of the gravity of the loss which it suffers, in common with the profession he adorned, the charitable institutions he served, and the community in which his skill did so much to lessen suffering and death.

He began his professional life with no adventitious aids; yet by incessant industry, indomitable perseverance, and singleness of purpose he attained to its highest rank. No temptation distracted his attention from the goal of his life; neither extraneous science, nor general literature, nor the allurements of art, nor the pleasures of society.

The undivided strength of his mind and his affections were devoted to enlarging the domain of surgery, not only in its operative methods, which he always subordinated to the welfare of his patients, but also in preparing for his profession a literary monument that might speak for him when his voice should be no longer heard.

His minute acquaintance with anatomy and his ambidextrous skill enabled him to perform, with ease to himself and safety to his patients, operations which less accomplished surgeons hesitated to undertake.

He possessed a certain magnetism of manner, quite independent of formality, that evidently proceeded from the heart and drew all hearts to himself. Never frivolous, but always cheerful, he was dignified, grave and earnest, making all who heard him as a teacher and speaker, or in familiar intercourse, recognize in him, above all other things, the upright man. For he possessed eloquence of conviction and the force of absolute honesty in all his statements, and thereby drew to himself, as enthusiastic admirers and disciples, the successive classes of students whom he taught.

The College, desiring to show respect for the purity, uprightness, unselfishness and modesty of Dr. Agnew's character; its admiration for the noble example of his life; and its sense of the value of his contributions to the science and art of surgery, directs that this minute shall be duly recorded, and a copy of it, signed by the president and secretary, be conveyed to Dr. Agnew's family. Also, that the College will attend the funeral in a body, and that the president be requested to appoint a Fellow to prepare a memoir of our late colleague.

Charles W. Dulles, M. D., *Secretary.*

N. O. Medical and Surgical Journal,

ESTABLISHED IN 1844.

PUBLISHED MONTHLY, $2.00 A YEAR.

Articles from physicians are respectfully solicited. All articles, news and exchanges, and books for review, should be sent to the EDITOR, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL. Business communications should be addressed to the BUSINESS MANAGER, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

EDITED AND PUBLISHED BY

AUGUSTUS McSHANE, M. D.

COLLABORATORS:

DR. F. W. PARHAM. DR. H. W. BLANC. DR. A. W. De ROALDES.

DR. R. MATAS. DR. JOHN DELL'ORTO.

Editorial Articles.

THE STATE MEDICAL SOCIETY.

The recent meeting of the Louisiana State Medical Society was a most gratifying success. The lukewarmness and lack of interest in medical organization on the part of Louisiana physicians have for a long time proved an almost inexhaustible subject for unfriendly critics, but we are proud to say that the old text will no longer serve for the preaching of long sermons from persons who, by their failure to contribute their share to organized medical effort, have materially retarded the progress of measures intended to promote the common welfare.

The attendance at the meeting was, with one exception, the largest in the history of the society since its reorganization in 1878. This fact, of itself, might be supposed merely to indicate that we are making a little progress; but when we recollect that we had to skip a meeting two years ago on account of disastrous floods, and that we had scarcely recovered last year, it will be apparent to all that there is a decided awakening on the part of our brethren—an awakening which gives promise of good things, and which, we hope, is but the

beginning of a long day of vigorous effort and lasting usefulness.

The work done at the meeting was of vast importance to the future of the profession. The chief feature, outside of the literary contributions, was the adoption of a bill to regulate medical practice, with amendments growing out of the unpleasant experience of two years ago. At the last session of the legislature, in 1890, a bill drawn up by a committee of the society was presented to the legislature for passage. The defeat of the bill is too recent and too well known to require more than a mere allusion. The lesson of adversity, however, was taken well to heart, and the society made such amendments in the bill as would overcome all reasonable hostility and remove all grounds for complaint. In its amended form, the bill will be presented to the legislature, and it will, in all probability, become a law. It is to be hoped that our legislators have become fully alive to the necessity of such a law.

The bill, if made a law, will prove a strong bond of union among the members of our profession. It will prove to them that the medical profession is a working factor in the social machinery; and that the humblest physician is of some importance to the world, and is entitled to such protection as is accorded to all of the useful members of society. How can a man, single-handed and unaided, enforce his rights? He may proclaim them, but he can not overcome the mountain of inertia or active opposition with which he will surely meet. The only way to accomplish definite, tangible and lasting results is to unite all of the men having the same interests, and get them to act unitedly in the pursuit of a clearly defined object. As the mouthpiece of the profession of Louisiana, the State society is engaged in the endeavor to secure the enactment of a law that will insure to our physicians the enjoyment of rights acknowledged in all civilized communities.

The re-election of our worthy president is a deserved compliment. Through his untiring efforts the meeting was a decided success, and his retention in office assures us of a continuance of valuable aggressive work in the way of increasing the membership of the society and extending its sphere of usefulness.

Abstracts, Extracts and Annotations.

MEDICINE.

WAYNE'S ELIXIR.

Dr. W. F. Glenn, Professor of Genito-Urinary Diseases, University of Tennessee, speaks as follows regarding the value of Wayne's Elixir:

No practitioner passes many days, or seldom many hours, without being called upon to prescribe for some real or imaginary disease of the kidneys. While such serious disorders as diabetes and Bright's disease, in which these organs are fatally involved, are occasionally met with, they are few as compared with the many minor affections, not only of the kidneys themselves, but of all parts of the genito-urinary tract. Catarrh of the kidneys, ureters, bladder or urethra, irritations and congestions of the various parts of the urinary apparatus, are as common as bad colds.

What is more frequent than patients complaining of pain in the back, in the region of the kidneys, with or without a scant flow of urine, or a burning sensation in the neck of the bladder or urethra on voiding urine, and numbers of other similar ailments? In all forms of functional derangement of these important excretory organs, the administration of a gentle but effective diuretic generally affords relief. Where an analysis of the urine proves the absence of elements that would indicate serious organic lesions, it is a safe, and in fact a proper course, to use a remedy that will stimulate to gentle action the cells of the kidneys, thereby increasing the watery portions of the urine. Such a course will rarely fail to effect a cure.

Some years since my attention was attracted to a remedy styled Wayne's Diuretic Elixir, which, upon examination, I found to be a combination of acetate of potash, juniper, buchu, etc., prepared in such a manner as not to be unpleasant, but rather agreeable to the taste, and accurate in its proportions. Being easier to prescribe and far more pleasant to the patient than the same remedies freshly mixed in the drug store, I began to use it in all irritations of the kidneys, bladder, urethra and prostate gland, and have found it to meet every indication. Now, when I desire a mild diuretic effect continued for some time, I rarely depart from this mixture. Prof. Deering J.

Roberts, Surgeon to the State Prison, has been using it largely of late at the hospital of that institution, and reports it perfectly satisfactory.

Case after case taken from my own and from other record books could be cited to show its satisfactory effects, but that is hardly necessary. And while I am not an advocate of the wholesale use of all the various preparations that are now crowded upon us, at the same time, thoroughly testing this one for years, I feel that it will not be amiss to present its virtues to the profession. Not for any new virtues that its ingredients may possess, for they have been understood for many years, but be cause of its careful preparation and pleasant taste, and thereby ready utility. From the very highly satisfactory results obtained by me for the past five years, I am sure its use will be attended with no disappointment or regret.

OBSTETRICS.

BORIC ACID IN NON-SURGICAL DISEASES OF WOMEN.

Dr. H. P. Wenzel, in a paper read before the Brainard Medical Society, of Wisconsin, maintains that hypertrophy and hyperplasia of the female pelvic organs are caused primarily by disturbed or impeded circulation of the nutrient pabulum in the pelvic vessels, and the symptoms result mainly from an œdematous condition of the sub-serous tissue, on the one hand, and supersaturation and apparent overgrowth of the tissue elements, on the other; and that the first step in rationally treating such conditions, where the tubes and ovaries are implicated, involving the peritoneum and other adjacent structures, is to free the tissue elements and interspaces from the exuded and diffused material.

To improve the circulation, favor absorption and elimination, and thus hasten the repair of the affected tissue, he uses *dry boric acid*.

The following is quoted from the Doctor's paper:

"When a little 'osmosis' is required, the finely-powdered boric acid is not useful. It induces a flow of serum from the tissues; it is also best to use it in the uterine cavity, either with or without curetting. The powdered acid packs tightly—it purifies the cavity and hastens repair.

"Around the cervix, in the vaginal vault and vagina, a re

crystallized boric acid, passed through a hair-sieve, having from thirty-six to fifty meshes to the inch, is the most useful; a coarser acid is too angular, does not pack tightly enough, and its sharp points injure the tissues.

"The quantity needed for one dressing to produce a free flow of liquid from the infiltrated tissues depends on the results needed, and upon the size of the cavity. I apply from six to fourteen fluid drachms usually, but have in some cases used four ounces or more at a single treatment. A speculum is necessary. The tissue must be freed from extraneous matter. It is to be packed gently, but firmly. Tampons should be placed to *retain the acid and to support the tissues.* There should be no pain when the dressing is completed and speculum removed. The tampans must be made of non-absorbent cotton, wool, jute, etc. Shortly after the dressing is completed, a flow of liquid begins from the affected organs and tissues, and continues for many hours, requiring the use of a napkin. The quantity of liquid drained off in twenty-four hours will vary from a few ounces to several pints. In one case the amount exceeded a gallon in the first twenty-four hours, and a total of six gallons was drained away in a fortnight, the acid being applied every third day, and from two to four ounces of acid used at each treatment."—*American Medical Journal of St. Louis*, December, 1891. P. M.

RETROVERSION WITH FIXATION.

The cause in the vast majority of cases is a badly managed confinement, or a neglected or improperly treated abortion. If the lying-in woman were properly treated, and all cases of abortion were seen early and properly handled, retroversion with fixation would be extremely rare. When the placenta is delivered and the uterus contracted, the woman should be permitted the freedom of the bed. The custom of physicians to keep their patients perfectly quiet, lying on their backs, is bad practice; for in this position, the uterus, on account of its weight at this time, has a tendency to fall backwards, with the cervix towards the symphisis, the secretions accumulating in the cavity of the uterus, rendering the uterus still more heavy. It is impossible for the lochia to escape through the cervix, on account of the position of the uterus. Leakage into the tubes, or possibly the peritoneal cavity, may occur, producing salpingitis, and, in many instances, peritonitis; and in nearly all cases more or less adhesions form and the uterus becomes fixed. All this can be prevented if we al-

low and insist upon our patient turning on her side, permitting her perfect freedom of the bed. After the first twenty-four hours, if she feels more comfortable, let her sit up in the bed occasionally. The fear of *post-partum* hæmorrhage, which is more or less of a bugbear, is doubtless one of the reasons, especially with young physicians, for keeping the patien tabsolutely quiet and flat on her back. I believe that instead of this position preventing *post-partum* hæmorrhage, it increases the liability. The use of the obstetric binder is a pernicious practice, and is an important factor in the production of retroversion. Never use it, especially with the abdominal pad.—Thomas Hawkins, M. D., Denver *Medical Times*, December, 1891. P. M.

Book Reviews and Notices.

Essentials of Bacteriology. By M. V. Bull, M. D. Philadelphia: W. B. Saunders. Pub. 1891, pp. 159, Figs. 79.

The author, who is assistant in microscopy at Niagara University, and who has studied in Berlin under Koch and Frunkel, has undertaken to compile a concise handbook upon Practical Bacteriology.

To this end, he has made use of the most important works on the subject, and by avoiding discussions on disputed points and by confining himself to facts and such theories as are generally accepted, he has succeeded in giving the substance of all that is thus far known about bacteria and their manipulations.

In the selection of formulas and methods of work he has shown the discrimination of a practical worker, and his descriptions of the different bacteria are models of accuracy and conciseness. The illustrations, which are excellent and well chosen, and the head lines add clearness to the subject. In fact the work is one which can be most heartily recommended both for practical use in the laboratory and for ready reference as an epitome of all the best works on bacteriology; while as a concise treatise to give the beginner or general medical reader a clear conception of bacteriology and bacteriological methods, and as a groundwork upon which to build by special reading and methods of study, it is unexcelled. Books of this

class of equal merit will tend to raise the generally accepted ideas regarding compends; and if all others of its class could equal it, the objections to this class of works would be largely removed. W. C. B.

The Physician as a Business Man; or, How to Obtain the Best Financial Results in the Practice of Medicine. By J. J. Taylor, M. D. Philadelphia: The Medical World, 1520 Chestnut street, 1891.

Doctors are proverbially poor business men. The commercial side of practice is too often neglected for want of definite knowledge to guide a man. The laborer is worthy of his hire, and he should know how to realize on his labor. Dr. Taylor has brought together in his practical little book bits of valuable information from many sources. Some years ago, Dr. Cathell wrote a similar book, "The Physician Himself." These two books give sound advice to young physicians on matters of practical importance, and they are worthy of careful perusal. A. McS.

Bacteriological Diagnosis: Tabular Aids for use in Practical Work. By James Eisenberg, Ph. D., M. D., Vienna. Translated by Norval H. Pierce, M. D. Philadelphia and London: The F. A. Davis Co. 1892.

Bacteriology has become so firmly fixed as a factor in daily medicine and surgery that the physician who neglects to call in its aid when practicable does not do full justice to his patients. The greatest number of examinations is made for the tubercle-bacillus, but the field is constantly enlarging, and the need of a safe and practical guide in making such examinations becomes felt more and more. Dr. Eisenberg has prepared such a guide for use in laboratories. Eisenberg describes the reactions, appearances and methods of differentiating 138 species of pathogenic and non-pathogenic bacteria, and fungi. His work is used in Prof. Cohn's laboratory, and is endorsed generally by practical workers.

His method of grouping the bacteria is somewhat arbitrary; but since they are arranged with regard to certain well marked tests, it is found that they conform to the needs of practical laboratory work rather than to the demands of a purely systematic treatise. As in tables for chemical analysis, a striking reaction is chosen as the differential characteristic of a group of bacteria. The non-pathogenic bacteria are subdivided into those that liquefy gelatine and those that do not. The pathogenic bacteria are subdivided into those that can be cul-

tivated outside the animal body and those that can not. The fungi (of which twenty are described) form a group by themselves.

A handy bibliography is given. At the end of the book, an appendix of about twenty pages is given, containing directions for cultivating and staining bacteria.

Eisenberg's work is one that is constantly needed in our laboratories, and it will doubtless become as thoroughly appreciated in this country as in Europe. A. McS.

State News and Medical Items.

[Communications from Physicians of Louisiana are solicited for this Department. News of personal interest is especially desired.]

The Journal is under obligations to Dr. R. B. S. Hargis, of Pensacola, Fla., and Dr. John P. Wall, of Tampa, Fla., for copies of their publications on yellow fever.

Dr. T. C. W. Ellis, of Scranton, Miss., visited his old home in Louisiana recently.

New Chairs and Professors at the Jefferson Medical College.—The board of trustees of the Jefferson Medical College at their meeting, April 7, 1892, instituted a chair of Clinical Gynæcology, with a seat in the faculty, and elected to the new chair Dr. E. E. Montgomery, who has been for a number of years professor of Gynæcology in the Medico-Chirurgical College. They also established the following clinical professorships, electing Dr. F. X. Dercum professor of nervous diseases; Dr. E. E. Graham, professor of children's diseases; Dr. H. Augustus Wilson, professor of orthopedic surgery; Dr. H. W. Stelwagon, professor of dermatology, and Dr. W. M. L. Coplin, adjunct professor of hygiene.

Constantinople is to have a medical faculty, the first in Turkey.

An enterprising physician in California advertises: "I will pay half of the funeral expenses in cases where I am not successful.

First Medical Journal Published in America.—Rev. Thomas Thacker, the first minister of the Old South Church, published a work entitled "A Brief Guide in the Small Pox and Measles," 1677.—*Thacker's History of Medicine in America*, Boston, 1828.

New Buildings for Jefferson Medical College, of Philadelphia.—The board of trustees and the faculty of the Jefferson Medical College have just completed the purchase of two large lots on Broad street, giving them a frontage of about 300 feet and a depth of 150 feet, upon which they will proceed to erect at once a handsome hospital, lecture hall and laboratory building. The estimated cost of the building is $500,000. The hospital will be built, not only as a suitable building in which to take care of the sick and injured, but also will be provided with a large amphitheatre for clinical lectures. The basement of the hospital will be given over to the various dispensaries, each of which will be provided with large waiting and physicians' rooms, as well as rooms for direct teaching of the students. The buildings will be absolutely fireproof and provided with patent sprinklers in case their contents catch fire.

By the erection of three commodious buildings, the laboratories where delicate work with the microscope or apparatus is carried on will be separated from the college hall where didactic lectures are given, and so will be free from any jarring produced by the movement of large classes. With the hospital on one side affording clinical facilities and the laboratory on the other side of the college for scientific research and training, the college will be most favorably situated for giving thorough instruction in medicine. Further than this, immediately across the street is the Howard Hospital; on the adjoining corner the Ridgway branch of the Philadelphia Library, which contains all the scientific works belonging to this wealthy cor-

poration. The new site is even more favorably situated in regard to the centre of the city than the old one at Tenth and Sansom streets. The move has been made necessary by the large number of students who are now being instructed in this institution and because the faculty desire to keep the school and hospital in the foremost rank of medical education in this country. The buildings will be ready for occupancy in the session of '93-'94.

The second annual meeting of the American Electro-Therapeutic Association will be held in New York October 4, 5 and 6, 1892, at the New York Academy of Medicine, 17 West Forty-third street.

Literary Note.—A German edition of the second revision of Gower's book on the nervous system has just been published by Cohen, of Bonn, and we understand that an Italian translation is nearly ready.

The Mississippi Valley Medical Association will hold its eighteenth annual session at Cincinnati, Wednesday, Thursday and Friday, October 12, 13 and 14, 1892. A large attendance and a valuable programme are expected.

Medical Properties of Vegetables.—Spinach has a direct effect upon the kidneys.

The common dandelion, used as greens, is excellent for the same trouble.

Asparagus purges the blood.

Celery acts admirably upon the nervous system, and is a cure for rheumatism and neuralgia.

Tomatoes act upon the liver.

Beets and turnips are excellent appetizers.

Lettuce and cucumbers are cooling in their effects upon the system.

Onions, garlic, leeks, olives, and shalots, all of which are similar, possess medicinal virtues of a marked character, stimulating the circulatory system, and the consequent increase of the saliva and the gastric juice, promoting digestion.

Red onions are an excellent diuretic, and the white ones are recommended to be eaten raw as a remedy for insomnia. They are a tonic and nutritious.

A soup made from onions is regarded by the French as an excellent restorative in debility of the digestive organs.—*Weekly Medical Review.*

A physician is an angel when employed, but a devil when one must pay him.—*From the German.*

Dr. Austin Flint has been decorated by Venezuela, and been accorded the order of the Liberator.

New York City has 62 dispensaries, 117 homes, and 73 hospitals.

Takesanip—"Is the Keeley cure a good thing?"

Col. Soaker—"Indeed it is; I have been cured three times."

The *Progrès Médical* announces the death at Bordeaux, of Dr. Stanislas Zalewski, a medical man of Polish origin, at the patriarchal age of nearly 111. Dr. Zalewski was born at Warsaw, on December 25, 1780.

The Spanish government has forbidden the Harvard Medical College from issuing diplomas. All students must go to Spain.

Dr. Piller—"I'd like to get a few mottoes to hang up in my reception-room. You know my patients sometimes have to wait quite a while for their turn, and they might as well be studying some improving sentiment."

Dealer—"Yes, sir. Would you like something like 'Prepare to meet thy God?'"

Doctor—"You must give up drinking and—"

Mr. Sickly—"I never touch a drop."

Doctor—"And stop smoking."

Mr. Sickly—"I don't smoke."

Doctor—"Humph! that's bad. If you haven't anything to give up I'm afraid I can't do much for you."

"Hay fever," said the Moderator at the Influenza Convention, "may be likened to a tie vote. The eyes and nose appear to have it."—*Ex.*

"Now, my little man, describe your symptoms." "I haven't dot any symptoms, I dot a pain."—*Harper's Bazar.*

"I see," said a large man to a doctor, "that you advertise to reduce fat men."

"Yes, sir. Do you mean physically or financially?"

EUROPEAN COLONIZATION OF CENTRAL AFRICA.

Sir William Moore, at a meeting of the Epidemiological Society of London, discussed the possibilities of Europeans as colonists in Central Africa, a question which has become prominent during the last few years in connection with the attempts of different European governments to develop that continent.

Africa lies almost entirely in the torrid zone, and is the hottest continent of all. So far as is known, for fifteen degrees north and south of the equator there is a mean temperature of from 80 deg. to 85 deg.; in some localities, according to Stanley, 87 deg. This is only equalled in Central Mexico, New Guinea, and the very north of Australia. Continued high temperature is the most important of adverse climatological factors, and next to this is humidity; the two combined as in equatorial tropical Africa being the acme of a climate inimical to the European constitution. The west coast of Africa is perhaps the most unhealthy climate in the world. The east coasts, from Cape Guardafui to Natal, present mangrove swamps and low-lying marsh lands more or less for the whole distance. As regards the interior of Africa, there is the Sahara Desert to the north, and the Kalapari sand tracks to the south of the equator, with an immense intervening more or less elevated region, much swamp land, and much forest land, supported by tropical rains, which, in most localities, endure during eight months of the year, there being two rainy seasons.

The climate of elevated regions of hot countries is really the climate of the plains, tempered by that diminution of heat consequent on elevation. There are the same seasonal changes on the mountains as on the plains, and there is the same vertical sun above. No doubt this reduction of heat is a great gain. But in Africa there are no elevated plateaus of sufficient height. To obtain a mean temperature of 51 deg., such as of London, it would be necessary to ascend 10,000 feet in any country where the mean temperature of the seacoast is 80 deg. Stanley was scarcely more than 2000 feet high during his whole journey, and this is not a sufficient height to afford the advantages of elevation. The lands most favorable to cultivation are the broad tracts which border the rivers and lakes, or, in other words, exactly the places which

are most malarious. We are certainly not very familiar with the diseases of Africa, but the following have been noticed: Asiatic cholera, on the coast at least; beri-beri; dengue; endemic hæmaturia; elephantiasis; guinea-worm; leprosy; malarious fevers; negro lethargy; oriental boil; plague; scurvy; small-pox; tænia; tropical dysentery; tropical diarrhœa; tropical liver abscess; yellow fever; ulcer. This is a formidable list for the European to face, in addition to that anæmia which predisposes him to any disease. There is no doubt that a European possessing the suitable constitution may live long in a tropical climate, and especially in a tropical hill climate, if he has no manual labor to perform, and if he takes care of himself. But this is not the question. The query is, can a locality be discovered, within the tropics, or even for a short distance without, where the European can live and labor, and get his bread as a colonist, and leave a healthy European stock? All experience and analogy tend to show this is impracticable. —*Boston Med. and Surg. Journal.*

Practical Notes and Miscellany.

CLASS-ROOM NOTES.

[From College and Clinical Record.]

Prof. Hare said that for *dysmenorrhœa*, due to contraction of the os uteri, the application of belladonna liniment will usually give relief.

Prof. Hare said that a very useful liniment for *muscular spasm* is the following:

℞. Tinct. belladonna.....f℥ss
M. Liniment. saponis.....f℥vj.

Prof. Hare recommended the use of arsenite of copper in doses of one-hundredth to one-fiftieth of a grain in the treatment of *pernicious anœmia*.

Prof. Keen said that in cases of *profound shock* the best drug that can be given is sulphate of strychnine. Give a hypodermic injection of one-thirtieth of a grain. Also give brandy.

Prof. Parvin said that for the treatment of *vaginismus* the use of a 6 per cent. solution of cocaine, penciled on the part before coition, usually is sufficient to cure the condition.

A favorite prescription for *conjunctivitis* in the eye department of the Jefferson Medical College Hospital is the following:

℞. Acidi tannici.....ʒss–j
M. Glycerini.....fʒj.
Sig.—Apply locally.

Prof. Keen said that he had almost entirely abandoned *subcutaneous operations*, as by the modern methods of aseptic and antiseptic surgery the open operation is as safe, or safer, for the reason that the surgeon is able to see what he is doing.

Do not use styptics to control *hemorrhage*, and, above all, do not use Monsel's solution (subsulphate of iron), as in case operation is necessary it obscures the field of operation. The use of hot water is very much better.—Prof. Keen.

Prof. Wilson said that it is just as important for the physician to order the discontinuance of the use of *alcohol*, *opium*, *chloral*, etc., at the termination of a disease as to order their administration, that the patient may be prevented from forming the habit of taking the drug.

Prof. Cohen says that after the *removal of polypi* from the nasal cavity by forceps or snare, the injection of distilled witchhazel, one part to water four parts, three or four times a day, is much better than the application of the galvanocautery.

For beginning *cerebral schlerosis*, of specific origin, Prof. Da Costa prescribed—

℞. Potassii iodidi.....gr. x
Hydrarg. bichloridi.....gr. ¹
Syrup. sarsaparillæ.....
M. Aquæ.....aa.....ad.....fʒj
Sig.—Three times a day.

For a *local anæsthetic*, in minor surgical operations, Dr. W. Joseph Hearn recommended the following freezing mixture as a very excellent one:

℞. Menthol.....fʒj
Chloroformi.....fʒss
M. Ætheris.....fʒj.
Sig.—Spray over the part.

Dr. Henry W. Stelwagon gave the following treatment for *favus:* Wash the head, using sapoviridis, and allow the lather

to remain on the head for ten to thirty minutes. Remove the hair from the affected area and apply the following ointment:

℞. Unguent. sulphuris.....℥iv
Unguent. picis liquid.....℥ij
Unguent. hydrarg. nitratis.....℥ij
M. Acid. carbolici.....f℥ss

For a case of *idiopathic epilepsy*, in a child three years of age, Dr. Edwin E. Graham said that the treatment by the mixed bromides was the best, and prescribed the following:

℞. Potassii bromid.....gr. iij
Sodii Bromid.....gr. ij
M. Ammonii bromid.....gr. j.
Sig.—Four times a day.

Prof. Parvin recommended to the class the following formula for making a *palatable preparation of cod liver oil*, which he had found that children would take very readily:

℞. Olei morrhuæ.....f℥viij
Olei gaultheriæ.....f℥j
Calcii phosphatis.....gr. cclvj
Pulv. acaciæ.....
Sacchari albi.....aa.....℥ij
M. Aquæ.....q. s.....ad.....Oj.

For a case of *pernicious anæmia* Prof. Da Costa prescribed—

℞. Phosphori.....gr. $\frac{1}{100}$
M. Olei morrhuæ.....f℥j.
Take in capsules three times a day.

The diet must be chiefly of animal food, with large inhalations of oxygen and gentle massage.

For a case of *acute catarrhal jaundice* Prof. Da Costa prescribed the following treatment:

An absolutely rigid diet, excluding starchy, fatty and oily foods. Give meats and green vegetables.

To stimulate the secretions: Sodii phosphatis, ℥j, daily in broken doses; also, potassii bitartras, ℥ss, daily in broken doses.

For *gonorrhœa*, Dr. A. Hewson, in the out-patient department of the Jefferson Hospital, prescribed the following treatment: Wash the penis in hot water every two or three hours, and take epsom salts ℥ij every morning to keep the bowels freely open. Also, gr. x of salol three times a day, the diet to

be almost exclusively of milk, especially avoiding meats, coffee, tea and all alcoholic stimulants.

For a case of *gastralgia*, in a man fifty-nine years of age, Prof. Da Costa prescribed tinct. cannabis indica, gtt. viij, three times a day, increasing the dose gradually to the point of tolerance. The diet should be of liquid or semi-solid food; and on the supposition that it was caused by lead, as the man was a painter, he prescribed also gr. v of potassii iodidum, three times a day, between meals.

Dr. Henry W. Stelwagon said that a very good application for *eczema* is the following ointment:

℞. Hydrargyri chlorid. mitis.....ʒj
M. Cosmoline .....ℨj.
To which, if there is much itching, there may be added—
Acid. carbolic.....gr. x
Thymol.....gr. j
M. Resorcin.....gr. x to xv.

Prof. Wilson said that the treatment of *scarlet fever* by the use of chloral has given him better results than any other; it seems to be almost a specific for the disease. From the beginning give chloral in doses of two to five grains, according to the age of the child, and at intervals sufficient to keep the patient constantly in a slightly somnolent condition. Give the chloral in syrup of lactucarium, and it will be taken very readily by the child.

For a case of *subacute entero-colitis* in a child eight months old, Dr. Edwin E. Graham prescribed—

℞. Sodii salicylatis.....gr. j
M. Aquæ.....fʒj
Sig.—Every three hours.

The child should be fed frequently and in small amounts. A good way to prepare its food is as follows: Milk fʒiij, cream fʒss, lime water fʒij, and sugar of milk ʒj.

For a case of *diabetes* of cerebral origin, in a man aged thirty-five years, with a history of having had a bullet wound in his head fifteen years ago from which the bullet was never extracted, Prof. Da Costa prescribed sodii salicylas, gr. xv, three times a day. The case was referred to the surgical department, to see if it was advisable to trephine the skull to discover the bullet, and whether that would give permanent relief.

For a case of *sciatica*, Dr. David D. Stewart gave a hypodermic injection of twenty minims of a 1 per cent. solution of arsenious acid. The injection was made deeply into the gluteal region at the point of greatest tenderness so as to get the solu-

tion about the sheath of the nerve. This caused the patient intense pain for a few minutes, but when the pain of the injection had passed away the sciatic pain had also gone with it. He said that he had had very good results from this treatment.

Prof. Keen gave the class the following formula for making a *preparation of milk and eggs* that is very light and delicious and palatable to a sick person: The whites of two eggs and lime water, f℥ij. Put this in a bottle and shake it for five minutes, then add one-half pint of milk and shake again for five minutes, then add a little sherry wine and a little sugar, according to the taste of the patient, and shake again. If the indication is to give stimulants, the amount of sherry wine can be increased to the desired quantity.

For a case of *chronic eczema*, in a child three years of age, Dr. Henry W. Stelwagon (clinical lecturer on skin diseases) prescribed the following:

℞. Unguent. picis liquid.....℥j
M. Unguent. zinci.....℥vj.
Apply locally.

The child must also be given cod liver oil, and its diet should be of plain, nourishing food.

For *cardiac dilatation*, with slight congestion of the lungs, due to rheumatism, in a man aged thirty-seven years, Prof. Da Costa gave the following treatment:

℞. Tinct. digitalis.....gtt. x
Tinct. capsici.....gtt. j
M. Tinct. cardamon.....f℥j.
Sig.—Three times a day.

And two or three times a week give calomel, gr. j, in the evening, followed by a saline cathartic in the morning. The diet is to be chiefly of meat, with the use of a moderate amount of alcoholic liquors.

His Pneumogastric Nerve.—The following verses, by Eugene Field, appeared in the Chicago *Daily News:*

Upon an average, twice a week,
When anguish clouds my brow,
My good physician friend I seek
To know "what ails me now."
He taps me on the back and chest
And scans my tongue for bile,
And lays an ear against my breast
And listens there awhile.

Then he is ready to admit
That all he can observe
Is something wrong inside, to-wit:
My pneumogastric nerve!

Now, when these Latin names within
Dyspeptic hulks like mine
Go wrong, a fellow should begin
To draw what's called a line.
It seems, however, that this same,
Which in my hulk abounds,
Is not, despite it's awful name,
So fatal as it sounds.
Yet of all torments known to me,
I'll say without reserve,
There is no torment like to thee,
Thou pneumogastric nerve!

This subtle envious foe appears
To be a patient foe—
It waited nearly forty years
Its chance to lay me low;
Then like some blithering blast of hell,
It struck this guileless bard,
And in that evil hour I fell
Prodigious far and hard.
Alas! what things I dearly love—
Pies, puddings and preserves—
Are sure to rouse the vengeance of
All pneumogastric nerves!

Oh, that I could remodel man!
I'd end these cruel pains,
By hitting on some different plan
From that which now obtains.
The stomach, greatly amplified,
Anon should occupy
The whole of that domain inside
Where heart and lungs now lie.
But, first of all, I should depose
That diabolic curve
And author of my thousand woes,
The pneumogastric nerve!

MORTUARY REPORT OF NEW ORLEANS.

For March, 1892.

CAUSE.	*White.....*	*Colored...*	*Male.....*	*Female....*	*Adults ....*	*Children.*	*Total .....*
Fever, Yellow							
" Malarial (unclassified)	3	2	4	1	4	1	5
" Intermittent							
" Remittent	2	1	3		2	1	3
" Congestive	4	2	4	2	2	4	6
" Typho	2	1	2	1	2	1	3
" Typhoid or Enteric	1		1		1		1
" Puerperal	1	1		2	2		2
Influenza	25	9	15	19	27	7	34
Scarlatina							
Measles	1			1		1	1
Diphtheria	6	1	5	2	1	6	7
Whooping Cough	1			1		1	1
Meningitis	15	2	10	7	3	14	17
Pneumonia	24	25	27	22	29	20	49
Bronchitis	17	10	19	8	11	16	27
Consumption	27	39	35	31	63	3	66
Cancer							
Congestion of Brain	1	5	5	1	4	2	6
Bright's Disease (Nephritis)	25	6	19	12	29	2	31
Diarrhœa (Enteritis)	15	7	14	8	13	9	22
Cholera Infantum	2	4	4	2		6	6
Dysentery	1	2	3		3		3
Debility, General	1	1		2	2		2
" Senile	17	4	9	12	21		21
" Infantile	4	3	6	1		7	7
All other causes	192	99	172	119	208	83	291
TOTAL	387	224	357	254	427	184	611

Still-born Children—White, 36; colored, 19; total, 55.

Population of City—White, 184,500; colored, 69,500; total, 254,000.

Death Rate per 1000 per annum for month—White, 25.17; colored, 38.67; total, 28.86.

F. W. PARHAM, M. D.,
Chief Sanitary Inspector.

METEOROLOGICAL SUMMARY—MARCH.

STATION—NEW ORLEANS.

Date.....	TEMPERATURE. Mean	Max...	Min...	Precipn. in inches and hund'ths..
1	50	56	43	0
2	50	60	40	0
3	54	64	44	0
4	56	69	44	0
5	62	72	52	0
6	69	76	62	.40
7	64	68	60	.44
8	51	52	50	.02
9	56	69	43	0
10	58	62	54	0
11	46	53	39	0
12	52	62	41	0
13	58	69	48	0
14	63	72	54	0
15	64	75	53	T
16	55	65	45	0
17	52	67	38	.62
18	41	48	34	0
19	42	54	31	0
20	50	60	39	0
21	58	66	50	0
22	64	69	58	.01
23	70	77	63	62
24	69	76	62	.61
25	70	74	67	.10
26	69	78	60	T
27	60	69	52	0
28	62	70	55	0
29	61	70	52	T
30	70	78	61	0
31	69	75	63	0

SUMMARY.

Mean barometer, 30.10.
Highest barometer, 30.47, 11th.
Lowest barometer, 29.63, 7th.
Mean temperature, 59.
Highest temp., 78, 30th; lowest, 31, 19th.
Greatest daily range of temperature, 29, 17th.
Least daily range of temperature, 2, 8th.

MEAN TEMPERATURE FOR THIS MONTH IN—

1871.....65.0	1877.....61.0	1883.....62.0	1889.....61.0
1872.....59.0	1878.....66.0	1884.....65.0	1890.....62.0
1873.....60.0	1879.....64.0	1885.....58.0	1891.....61.0
1874.....65.0	1880.....66.0	1886.....59.0	1892.....59.0
1875.....63.0	1881.....60.0	1887.....62.0	
1876.....60.0	1882.....68.0	1888.....60.0	

Total excess in temp'ture during month, 124.
Total excess in temp'ture since Jan. 1, 212.
Prevailing direction of wind, E.
Total movement of wind, 7068 miles.
*Maximum velocity of wind, direction and date, 40 miles, from S. E., 27th.
Total precipitation, 2.82 inches.
Number of days on which .01 inch or more of precipitation fell, --.

TOTAL PRECIPITATION (IN INCHES AND HUNDREDTHS) FOR THIS MONTH IN—

1871..... 4.47	1877..... 4.91	1883.... 5.01	1889..... 3.86
1872..... 9.18	1878..... 4.63	1884..... 8.24	1890..... 1.45
1873..... 5.10	1879..... 1.36	1885..... 6 99	1891..... 2.67
1874.....70 57	1880..... 6.66	1886..... 8.41	1892..... 2.82
1875.....10.84	1881..... 2.75	1887 ... 3.37	
1876.....11.32	1882..... 0.92	1888..... 6.45	

Total deficiency in precip'n during month, 2.86.
Total deficiency in precip'n since Jan. 1, 6.81.
Number of cloudless days, 13; partly cloudy days, 7; cloudy days, 11.
Dates of frost, 19th.
Mean maximum temperature, 67.
Mean minimum temperature, 50.

NOTE.—Barometer reduced to sea level. The T indicates trace of precipitation.
* To be taken from any five-minute record.

G. E. HUNT, *Local Forecast Official.*

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XIX. JUNE, 1892. No. 12.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the first day of the month preceding that in which they are expected to appear. A complimentary edition of twenty-five reprints of his article will be furnished each contributor should he so desire. Any number of reprints may be had at reasonable rates if a *written* order for the same accompany the paper.]

RETAINED PLACENTA.*

BY DR. P. MICHINARD, VISITING GYNECOLOGIST, CHARITY HOSPITAL, NEW ORLEANS, LA.

This paper is written in reply to the questions, "What is the Latest Treatment of Retained Placenta?" and "Which is the Best Method of Removing the Retained Placenta?" The first part of the paper is intended to deal with retained placenta following delivery at term, while the second part is confined to the treatment of the subject of retained placenta after abortions.

The literature on both points is very interesting, especially so on the question of the placenta in abortions.

Nearly all recent writers, when discoursing on the placenta at term, advise early removal, and strongly recommend the Credé method of expression—warning, at the same time, to make uniform pressure all about the uterus, to avoid causing inversion. Some of the advocates of this method contend that if it be practised shortly after the birth of the child the much dreaded hour-glass contraction will be avoided. Where failure follows this procedure, the majority of writers still suggest the well-known method of the introduction of the hand into the uterine cavity and the gradual but complete detachment of the

*Read before Louisiana State Medical Society April 27, 1892.

after-birth. Some of the leading men of Germany oppose the Credé method, contending that post-partum hæmorrhage, retention of the membranes, and puerperal fever are apt to follow its use. In Volume 2, *Sajous' Annual for 1891*, is the following passage: "Rodriguez explains a theory of P. Gavilan, of Durango, with regard to certain cases of retention of the placenta by atmospheric pressure. He, in such a case, having introduced the hand into the uterus, found it impossible to loosen the borders of the placenta; so, with his fingers, he pierced central part of it, when at once, before he had time to make traction, the afterbirth lay loose in his hand. He thinks that when the edges of the placenta adhere too firmly, and traction is made on the cord, a vacuum is formed at the centre; when air enters, by introducing the finger, the placenta is expelled."

Charpentier recommends the use of the curette in cases of total or partial adhesion of the placenta; while Pajot declares this advice perilous, claiming that while the instrument might be safely used in cases of abortion, it is dangerous at term. Budin (at the same meeting where this question was discussed) claimed that "careful kneading of the adherent placental tissues with the fingers" answered the purpose. Scheltsch, of Jena, and Pajot held that so intimate is the connection of the placenta with the uterus, in some cases, that nothing short of amputation of the uterus will answer. Recently an Italian writer strongly urges pumping water, hot or cold, into the umbilical vein to insure the safe removal of the attached afterbirth. While there is displayed such difference of opinion on this important subject, the majority advise Credé's method, etc.; if this should fail, a combination of it and Budin's careful "kneading of the adherent placental tissues with the fingers."

Turning to the treatment of the retained placenta after abortions, one finds a remarkable disposition to disagree. Most of the older physicians, and especially the general practitioners, are inclined to the policy of "letting nature have its course," while many specialists, particularly the active younger members, advocate early aggressive treatment. Again, a class, followers, perhaps, of A. Cordes, of Geneva, believe in the practice of "armed expectancy." In other

words, these gentlemen let affairs alone until such time that the symptoms (chill, fever, etc.,) demanding immediate removal present themselves. Prepared with all instruments necessary for prompt action, they wait.

They contend that frequently the uterus will, of its own accord, expel the placenta within a few days, and that too early interference is apt to be followed by serious trouble, the result of traumatism to the uterus.

There is another class, with Dr. Paul Mundé as leader, who advocate the removal of the placenta directly after abortion, and that removal with the curette. Then appears Dr. Wm. Goodell, who, while insisting on early removal, warns us *not* to use the curette, but to have recourse to the finger and the fenestrated forceps. Auvard, who advocates the early removal, uses neither curette nor forceps, having better results by packing the uterine cavity with strips of iodoform gauze. At the same time he packs the vagina. On removing the packing, twelve or fifteen hours later, the placenta follows. If the first trial fail, a second succeeds.

My own experience has been rather a mixed one. My first three cases of retained placenta following abortion did very well on the expectant plan, the placenta being expelled in forty-eight hours with no bad results. The next two cases, treated in the same manner, did badly, the finger and curette having to be used two days later to remove decomposing placenta. The convalescence in these cases was tedious. Four later cases were treated by the early use of the curette; and, although thorough antiseptic precautions were taken, the patients suffered from fever, and recovered slowly. I now have recourse to packing the uterus and vagina with long strips of 5 per cent. iodoform gauze, and I have no reason to complain of the method. My last case was treated by curetting and tamponade with the gauze, and she is doing badly. I really believe that had I refrained from using the curette the condition of the unfortunate woman would be different.

In two cases I teased out the placenta with the finger within two hours after the abortion and they did very well. I now use either the finger or the iodoform gauze. I certainly prefer "armed expectancy" to curetting.

As evidence against the too early use of the curette I will present Dr. Paul Mundé's own words: "A repeated introduction of the instrument (curette) is often necessary before piece after piece of the secundines is detached, etc.; the placental forceps is occasionally needed, either to grasp and withdraw already detached masses of secundines, or to nip off small nodules of still adherent placenta. Particularly difficult have I found the removal of residual fragments of placenta in either uterine horn, upon which the curette seemed powerless." He then warns us to make a careful survey for any overlooked fragments. Any procedure that may leave behind it bits of attached placenta can not be free from danger.

With the method used by Auvard the uterus is filled with a preparation (iodoform) that is a check to sepsis. The presence of the gauze keeps the cervix patulous, and excites uterine contractions which naturally detach and expel the placenta. When the gauze is removed the placenta follows. In such cases where the canal or os is not patulous the metal dilator is used.

With a description of the Auvard method this paper will be closed. The patient is brought to the edge of the bed, placed on her back, and the thighs flexed on the abdomen. The vulva and vagina are cleaned with carbolized water; the cervix is then hooked with a tenaculum. Should the os or canal not be sufficiently patulous a large metal dilator is used. Then a long strip of a 5 per cent. iodoform gauze, about ½ inch wide, is, by means of long, narrow forceps, carefully introduced into the uterine cavity, which is completely packed. The vagina is then packed with the same kind of gauze.

About fifteen hours later the packing is removed from both vagina and uterus. In nearly every instance the placenta soon follows. The uterine cavity is then douched with a 2 per cent. solution of carbolic acid. As a rule no further treatment is necessary.

THE VALUE OF RECTAL INJECTIONS IN THE TREATMENT OF DYSENTERY.*

By MILTON J. ROSENAU, A. M., M. D., UNITED STATES MARINE HOSPITAL SERVICE.

The rational treatment of dysentery depends upon a recognition of the fact that it is a local disease, the result of a specific cause.

The amœba coli of Lösch, or the amœba dysenterica, as it has been called by Councilman and Lafleur, has been proven to be a constant associate of the disease; and there is good reason to believe that it is responsible for at least one form of dysentery.

Both the active organism and its encysted form are readily found in the fresh dysenteric stool. I find them more numerous in and about the blood which streaks the pale, amber colored, jelly-like mucus.†

The amœba is recognized by its size; its characteristic movements; the presence of clear vacuoles; the massing and flowing of the granular matter into the projections or pseudopodia, which the organism sends out from its protoplasmic body; and the constant dancing of the granules.

But it is not the purpose, this evening, to enter into a discussion of the cause of dysentery, further than to emphasize the point that in this disease we have to deal with a localized inflammation, doubtless the result of an organism. The successful treatment must look to the cleansing and disinfection of the diseased area, upon the same principles that an inflamed, bleeding, ulcerated and infected mucous membrane in any other accessible portion of the body would be cared for. The inutility of the older methods of treatment in this disease must be patent to all who have had to deal with a number of cases, especially of the chronic and gangrenous varieties; and any method based on sound principles and attended with good results in practice must be hailed as a distinct advance in the management of this otherwise intractable malady.

*Read before the Orleans Parish Medical Society, April 30, 1892. For Discussion see Proceedings.

†Also Stengel (University Medical Magazine, January, 1892). The amœba is most readily found in the fresh mucous stools of dysentery, less readily in the somewhat old and cold ones, or when the mucus and blood have disappeared. They are most abundant in the yellowish and blood-streaked mucus particles; or, according to Osler, in the shreds of necrotic tissue seen in the stool.

"The use of clysters in the treatment of dysentery dates from the most ancient times, with the object, however, rather of medicating than of washing out the bowel. O'Beirne (1834) and Hare (1849) were the authors of the irrigation treatment, which they executed by means of a long tube, introduced into and beyond the sigmoid flexure. Since Hegar has recently shown how the whole tract of the large intestines can be thoroughly inundated and flushed with a common funnel and rectal tube, the practice has continually gained ground until it is now admitted as the most valuable method of treatment."*

Enemata can even be caused to pass the ilio-cœcal valve.†

It is, in fact, such an easy matter to cleanse out the lower bowel and apply directly our antiseptic, or astringent, or sedative, or stimulant, or whatever is desired, that the rationale of the treatment must appeal to all.

It is important to note that much of the success of treatment depends upon the care and thoroughness with which the method is carried out. This was well illustrated in a case of sub-acute amœbic dysentery in the wards of the Marine Hospital at New Orleans last January. Injections of one pint of a 10 per cent. solution of peroxide of hydrogen were given through an ordinary hand-bulb syringe once daily. This was continued almost a month. Improvement in all the symptoms followed, but no decided impression was made on the case until large injections were administered, high up, thoroughly flushing out the lower bowel.

After several trials, I have settled upon the following plan of procedure. No claim of originality is made:

The patient lies on his left side, thighs flexed, hips elevated. An ordinary soft rubber catheter is passed its full length into the rectum. The fluid is delivered from a fountain syringe, held from two to four feet above the body of the patient. The finger on the delivering tube acts as a governor to the amount of fluid which is allowed to flow. The lowering or raising of the reservoir determines the amount of pressure.

If the fluid is injected slowly, no pain is caused—except

* Whittaker in Pepper's System of Medicine, Vol. II, p. 809.
† Annual of the Univ. Med. Sciences, Sajons, Vol. I, p. 14.

the feeling of weight and tension in the abdomen. Sometimes patients complain of colicky pains about the umbilicus, which pass away after a few moments' interruption of the flow.

If there is much tenderness about the anus and rectum a cocaine suppository may be given ten minutes before the introducing the rectal tube.

The amount which different patients are able to retain varies considerably. Adults usually hold four or five pints without difficulty.

In some severe cases, where the patient's strength is exhausted and the parts are relaxed, the injection will run out alongside of the rectal tube at the same time that it is being forced in. In such cases I have used the longest rectal tube and continued the injection until the return flow is as clear as the fluid injected.

The relief afforded is prompt and decided, lasting from two to fourteen hours after the enema, the time lengthening as the case progresses favorably.

The solutions which have proven useful in my hands are the following:

Sterile water is efficient, especially in the milder cases. It is best given warm, about 38 deg. or 40 deg. C. If in addition a more stimulating and astringent action is looked for, the water may be given cool or iced.

As a cleanser and antiseptic peroxide of hydrogen has advantages not possessed by other articles of its class. It is not poisonous, seems not to irritate, dissolves pus and secretions and has antiseptic properties. It has given good results in from 10 to 25 per cent. solutions.

Salicylate of soda, 2 to 4 per cent., has given satisfaction.

When a decided astringent is wanted in cases of large and repeating hæmorrhage, alum in from 2 to 4 per cent. solutions has been found to act promptly.

We will now consider a few illustrative cases, accepting for this purpose the very practical classification of dysentery by Councilman and Lafleur* into its three clinical varieties:

1. Dysentery of moderate intensity.
2. Grave or gangrenous dysentery.

*Johns Hopkins Hospital Reports, Nos. 7, 8 and 9.

3. Chronic dysentery.

The results in some cases of chronic dysentery are most gratifying. The following is an eloquent witness of what may be accomplished in long standing cases which have shown themselves proof against medication by the mouth.

This man had dysentery for twelve years, was treated in various hospitals and by various physicians, with no effect except a temporary checking of the discharges, which would begin again with increased energy upon the cessation of treatment. The history speaks for itself.

D. G., white, age 47; sailor; born in Ohio. Was taken sick, suddenly, twelve years ago, with frequent, small, bloody passages, and tenesmus. This has continued since; sometimes a little better; again worse. He states that he does not remember having had a formed normal stool in all these years. General health fluctuated. On admission to hospital* he was weak; had nine dysenteric passages the first twenty-four hours. He was given large injections of a 2 per cent. salicylate of soda solution every twelve hours; absolute rest in bed, and an exclusive milk diet. The second day he had four passages; no straining. The third day, one. On the twelfth day the stool was formed and normal, and continued so with but an occasional intermission until his discharge, January 4, 1892.

He gained sixteen pounds in as many days, and showed remarkable improvement in all respects. He has since returned to work as a roustabout, eating all sorts of food and working hard. Under date of January 21, 1892, he writes me that his bowels continue to move once daily and natural, and continuing, says: "You would hardly know me, the way I have fleshed up. I am all right now."

Later, on April 12, 1892, which is three months and eight days after his discharge, he writes: "I am in the Marine Hospital (Cairo) with a broken leg, but my bowels are all right and as sound as can be."

In this connection, it is well to observe that "the thickening of the mucous and sub-mucous coat in chronic dysentery is due partly to infiltration with new cells and partly to new formation of connective tissue. There is, however, less ten-

* U. S. Marine Hospital, New Orleans, La.

dency to the development of new fibrillated connective tissue in chronic dysentery than in the chronic inflammation of most mucous membranes; hence, complete recovery is possible after long duration of the disease."*

It is remarkable, too, how long a time these chronic discharges may continue and be compatible with working health. In my notes, I find the case of a deep-water sailor who applied for treatment at the marine office, Chicago, Ill., and who gave a history of diarrhœa for twenty-eight years. Usually eight to ten stools a day. He stated that in all this time it had never eased up as much as a month at a time. For all this, he was fairly well preserved and continued at hard work.

It is proper to state that much of the success of the treatment in these chronic cases depends on the absolute rest in bed and the careful regimen which is insisted upon.

That injections alone will not always cure was demonstrated in the case of a negro steamboatman who was allowed to be up and about during the treatment. A cure was not effected until the rest treatment was combined with the local applications.

An exclusive milk diet is preferred. The milk is peptonized when considered necessary. If there is exhaustion or much weakness a generous diet must be allowed. The hygienic surroundings should be the best obtainable.

In the grave or gangrenous form of the disease, injections are only palliative in their effects. The following is a case:

R. C., a negro riverman, born in Texas, 47 years old. Admitted to the U. S. Marine Hospital, New Orleans, La., March 14, 1892, too weak to stand. Died in three days.

He was taken sick rather suddenly eight days prior to admission, with a chill, pain in the abdomen, vomiting and diarrhœa. The passages became more frequent, tenesmus increased. All the stools contained blood. Patient received no care nor medical attention previous to admission, at which time he was feeble and much emaciated.

He did not rally at all under active treatment; took no nourishment; passed into a condition resembling the algid stage of cholera and died in extreme exhaustion.

*Flint's Practice of Medicine, p. 425 (1884).

A 4 per cent. alum solution was found efficient in stopping the rather large and frequent hæmorrhage, there being from thirty to forty bowel movements, each containing blood, every twenty-four hours. The injections rendered the discharges less foul and offensive, and were a considerable comfort to the patient, as they stopped all straining at stool and always afforded an hour or two of rest.

The autopsy disclosed the whole extent of large intestine from the ileo-cœcal valve to the anus in a condition of violent inflammation, œdematous, and in places gangrenous. There were many irregular ulcerations, with raised edges extending through the muscular coat; and bases so thin and friable that the finger could be pushed through with the exercise of very little force. The entire gut was softened, and was torn in many places in the attempt to take it out. No ante-mortem perforation. Peritoneum, as all the other tissues, was dry and avascular. No complications.

It is of practical interest to note that, although this man was in articulo mortis from the day of entrance into hospital, these large injections were given without any disturbance to the patient and without any interference with other adjuncts to treatment.

He was placed on a bed, with a perforation in the mattress to receive the evacuations, and the injections were given as the patient lay on his side, with buttocks over the perforation. He always said they felt good.

The clysters brought away, in the return flow, much greenish, gangrenous matter and foul smelling pus; the flow being continued until the returning fluid was clear and free from detritus.

The case brings forward the fact that much pressure might have ruptured the thinned, rotting walls of the bowel.

The dysenteries of moderate intensity are the last class of cases to be considered. Here the results are uniformly good, as observed in the sporadic cases common to this country. The injections cause an almost immediate cessation of straining, and blood in the dejecta. The evacuations remain fluid for a few days, when they resume their normal consistence

and appearance, and the complete and rapid restoration to health ensues.

The following is a typical case:

R. S., a negro steamboatman, 21 years old, born in Louisiana, was taken sick five days previous to admission to hospital* with frequent, small, bloody passages, straining, vomiting and considerable prostration. In the twenty-four hours after admission, during which time treatment was withheld, he had eight characteristic dysenteric movements. Microsopical examination found active amœbæ and several encysted forms.

The lower bowel was flushed with hot, sterile water, from four to six pints being used, every twelve hours. There was a prompt cessation of all desire to strain. The subsequent bowel movements were soft and passed without pain. On the third day no more amœba could be found, and on the fourth day the bowel movements became normal. The injections were then discontinued, and the patient made a rapid and uninterrupted convalescence.

But satisfactory as the method is, too much enthusiasm must not be displayed in vaunting the results in this class of cases, for as Flint† has pointed out, sporadic dysentery of moderate intensity has an intrinsic tendency to recovery, is self-limiting, and ends spontaneously; but judicious measures may relieve the distressing symptoms and abridge the duration of the disease. Injections do all this.

One case of subacute amœbic dysentery under treatment a few weeks last February showed that injections—as might be supposed—do not render immunity against subsequent attacks. This patient had a return of all symptoms within a month after leaving hospital, apparently cured. In how far the treatment prevents complications and sequelæ can not be concluded from a limited number of cases, although all the cases under my care have been peculiarly free from complications.

The experimental researches of Veronine‡ show that rectal

* U. S. Marine Hospital, New Orleans, La.
† Flint's Practice of Medicine, p. 415 (1884).
‡ Annual of the Univ. Med. Sciences. Sajons, Vol. I, p. 14.

douches are of service as anti-phlogistics, sedatives and excitants.

He finds that injections of cool or cold water produce an increase in tactile sensibility, muscular force, a lowering of body temperature and lessening of arterial pressure, with a modification of pulse tracing. This is experimental proof of the clinical observation of the systemic as well as the local action of injections.

Finally, a word concerning medication by the mouth. Astringents lock up the bowels. They do not cure. Medicines by the mouth can not be given in sufficient amounts to reach the seat of the disease, some twenty or twenty-five feet away, in appreciable quantity, and besides may irritate and prove injurious to the upper portion of the alimentary canal. Opium and sedatives paralyze and render the bowels insensitive and mask symptoms. Both of these classes of drugs have their proper place, but they must be employed with caution and with a clear idea as to what is going on underneath their effects. Anti-ferments, such as creosote or salol, given by the mouth, are valuable adjuncts to treatment, though frequently unnecessary. They prevent decomposition of the chyle and render it less irritating than it otherwise might be to the inflamed mucous membrane with which it comes in contact.

DRINKING-WATER A SOURCE OF MALARIA.

THE GRADUATION THESIS OF RICHARD WAGGENER, M. D. (1892), OF PENSACOLA, FLA.

Dr. Chaillé, Professor of Hygiene, Medical Department, Tulane University of Louisiana, stated in one of his lectures that although sanitarians generally admitted that malarial fever might be caused by drinking water contaminated with the poison, yet any evidence bearing on the subject ought to be published.

I have been struck so forcibly, time and again, during the past five years, with instances where the water supply was obviously the source of malaria, that I have concluded to write my thesis upon this subject. Not being on the

ground I will have to dispense with many valuable data and much information I could otherwise obtain, and will therefore confine myself to relating the three most important facts coming under my observation.

The writer has resided, during the past five years, on the Naval Reservation, near Pensacola, Fla., serving as Apothecary U. S. N., at the Pensacola Naval Hospital, and assisting Surgeon John W. Ross, U. S. N., in a very large practice. The Naval and Army Reservations are situated on the north side of Pensacola Bay, about seven miles southwest of the city of Pensacola, and about one and one-half miles from the gulf. The Navy Yard, the villages of Warrington and Woolsey (combined population about 1200), lying just without its walls, and the Naval Hospital, three-quarters of a mile west, are situated on the Naval Reservation, and Fort Barrancas, Army Barracks, etc., are situated on the Army Reservation, one mile west of the Navy Yard.

The villages of Warrington and Woolsey are at the present day extremely unhealthful places, being strongly malarious throughout the whole year, and especially so during the summer and autumn. This condition of affairs has existed during the whole period of my residence there, and certainly for some years previous, but the older inhabitants, many of whom have lived in the place since years before the war, all unite in declaring that previous to about the year 1872 the place was considered very healthful, that chills and fever were unknown, and that people from the interior would locate there for a time to recuperate from malarial troubles.

Having satisfied myself that the above was true, it was but natural for me to wonder why such a change had occurred in the healthfulness of the place, and to try to ascertain the cause. After carefully investigating the matter, I have concluded that the water supply of the villages in question is the source of the greater part of the malarial poison with which the inhabitants are afflicted, because the only change of a sanitary nature which has occurred to them since the time of their comparative healthfulness to the present day consists in their water supply, and in this they have made a very decided change, as I shall proceed briefly to relate.

The point of land upon which the villages of Warrington and Woolsey are situated is a low, sandy beach, about six feet above sea-level, the soil consisting of a layer of sand, mixed with organic material, overlying a swampy and marly subsoil. Water is found in the driest season at an average depth of three and one-half feet. Back of the villages there is a further rise of about forty feet, consisting of sand and clay. The villages are the offspring of the Navy Yard, upon the location of which potable water was sought and evidently found, consisting of two springs at the foot of the rise alluded to above, which boiled up out of the pure white sand, clear and cool even during the hottest part of the summer. The authorities in the yard, having at that time no reservoirs for collecting rain water, caused these two springs to be curbed in with brick for their own supply. These springs are still in existence, and are known as the "Commodore's Springs." This source supplied most of the drinking water to families residing in the villages, a small portion of them possessing cisterns, but preferring this water in summer on account of its coolness, until about the year 1872. About that time *driven wells* were introduced to them, and these being cheap, quickly put in operation and convenient, it was not long before almost every household had one or more of them in the back yard. The wells are driven, as a rule, only about twelve feet deep, some of them half that depth, and constitute the present water supply of the villages.

Another fact: In January, 1886, a marine guard, numbering about forty men, arrived at the Pensacola Navy Yard for duty at that station. These men came directly from the north, and were in fine physical condition. During their first year on the station they began to have frank attacks of remittent and intermittent fever; during their second year there was a much larger proportion of them on the sick list, and between the 1st of July and the 15th of August of their third year (1888) every man in the guard had an attack of either intermittent or remittent fever, twenty-five of the forty being in the hospital at one time. They were sent north to Norfolk, Va., on the 15th of August, many of them far from well, but their improvement was steady after leaving. On account of this circumstance,

the department has not seen fit to send another marine guard to Pensacola. Surgeon John W. Ross, U. S. N., in his annual report to the Surgeon General for the year 1888, says: "The health of the marine guard grew worse almost steadily during their stay here [Pensacola] until in the early part of August, 1888, before the sickly season had reached its height, they broke down completely, and had to be carried away bag and baggage."

The marines during their stay at Pensacola, with the exception of a few months, occupied new cottage barracks built on the pavillion style, well ventilated, cool in the summer, and having their floors three and a half feet above the ground, open and well aired underneath.

The water supply of the Navy Yard consists in a brick cistern for each of the officer's quarters, and three large cisterns, with a combined capacity of 500,000 gallons, affording the general supply. The marines were supposed to get their drinking water from one of the large cisterns, the nearest of which is about 200 yards from the barracks, but unfortunately for them there was a driven well very near their barracks, from which, for obvious reasons, they derived the greater part of their drinking water.

On the other hand, the officers and their families residing in the yard used cistern water only, and they were entirely exempt from malarial diseases during the season of so much sickness among the marines, as they also had been before and have been since, sickness of any kind among them being little or none. At Fort Barrancas, only a mile from the Navy Yard, the enlisted men, more than double the number of the marine guard, used cistern water exclusively, and their health during the period of so much sickness among the marines, was as Post Surgeon M. C. Wyeth, U. S. A., at the time expressed it, "excellent."

The third fact is as follows: The present Naval Hospital buildings were constructed in 1875, on the foundations of the old hospital destroyed by fire during the civil war. The water supply consisted until the early spring, 1890, of two driven wells eighteen feet deep. During the whole time this water was used the place was very unhealthful, the attendants having

attacks of malarial fever every year, and patients admitted with other diseases would often develop malarial manifestations while at the hospital.

During my first year at the hospital I apparently escaped the poison, but during the two succeeding years, 1888 and 1889, I had several attacks of malarial fever, my wife suffered from it even more than I, and our little girl, during her first and second summers, had typical paroxysms of intermittent fever. In the spring of 1890 an old brick cistern, a relic of the old hospital, was repaired and put in use, since which time we have used cistern water only at the hospital for drinking purposes, and although two very sickly seasons have passed, there has not been the slightest evidence of malarial trouble of any kind in my family.

In conclusion, I will mention that the atmosphere of the locality of which I have written is probably, to a great extent, deprived of malarial poison by a strong south or southwest breeze, which prevails during the entire summer; coming immediately from the gulf it is perfectly free from malaria when it arrives, but when it departs carries with it, no doubt, the morbific agent almost as fast as it springs from its mother earth.

LAPAROTOMY FOR GUNSHOT AND OTHER INJURIES TO INTESTINAL TRACT.

By Dr. E. M. ROBINSON, Bessemer, Alabama.

The operation of laparotomy for intestinal injuries, when the injury has been produced from without, as a bullet shot, a knife, or perforation (no matter the cause), has been so unsuccessful as to make the surgeon feel that a funeral is being hastened when it is attempted; but there is no doubt in my mind that where all antiseptic precautions are taken, and the bowels kept warm and exposed but a short time, we should not have so great a mortality.

The great drawback is getting the consent to an early operation; in other words, the great disrepute this operation has fallen into is due to too great procrastination in surgical inter-

ference. I believe that no surgeon should undertake this operation upon a human subject until he has done it a number of times upon lower animals, successfully. When I am sure the cavity has been entered I would always do the exploratory operation, and do it early. The chances are much better, even if the bowels are not touched; we remove blood clots and stop hæmorrhage, and thereby lessen the chances of peritonitis; and if the gut is perforated, we have taken time by the forelock.

CASE I.—Frank Hall, a colored bar tender, was shot in the belly, August 25, 1891, at 8 o'clock P. M.; ball entered one inch below and one inch to left of umbilicus. I saw him soon after receipt of injury; was in splendid condition, pulse and temperature about normal, and remained so for several hours. We could not enter cavity with probe while he was not under the influence of anæsthetic, but I was of the opinion that cavity had been entered by the ball and the gut probably wounded, and advised an exploratory operation. But the patient and his friends objected, and another surgeon, who had seen the case first, thought owing to his good condition we had best wait, and so we did to our regret. About 16 hours after accident, temperature run up to 103 degrees, his pulse to 120 or more, respiration quick.

His friends now became alarmed and besought us to do something for him. Twenty hours after injury I opened cavity, assisted by Drs. Price, Chapman, Curry and my brother. The incision was carried along the median line, from one inch above to two inches below umbilicus. The intestines were drawn out and a very large quantity of blood clots removed. A search was instituted and seven perforations found, which were closed by the Lembert suture, silk sutures being used, the bowels being kept warm by towels wrung out of hot water, and no part of bowels were allowed to remain exposed but a few minutes at one time. The cavity was then flushed with water which had been boiled and allowed to cool to a temperature of 112 deg. This was then sponged out. The abdominal wound was closed by silk-worm gut sutures and dressed. A large rubber drainage tube was left in. Forty-five minutes were required on this operation. The peritonitis

was intense; the intestines would adhere when placed in contact with one another. This patient never completely rallied, and died twenty-seven hours after injury and seven hours after operation.

Case II.—Coleman Tucker (col.) was shot at John's Ala., November 15, 1891, at 10 o'clock P. M. Ten hours later Dr. J. C. Jones, who was attending the case, telegraphed for me to come prepared for laparotomy. I arrived twelve hours after accident. Upon examination found patient in a fairly good condition. Ball had entered just below and to the right of umbilicus. He was given anæsthetic and probe passed straight in. Assisted by Drs. Chapman, of Bessemer, Jones, of John's, and Tucker, of Sumter, I opened the cavity by a median incision from umbilicus to three inches below; there had been considerable hæmorrhage, but this had been checked. Intestines were drawn out, inspected and returned as fast as withdrawn. Four holes were found and closed by Lembert suture (silk). Clots sponged out and cavity flushed and sponged out, as in case No. I. Wound closed and dressed, leaving rubber drainage tube in place, which was removed on the third day. Wound perfectly clean. Silk worm gut had been used to close abdominal wound. Patient rallied promptly after operation; in 3½ hours temperature had been reduced from 101 to 99 degrees; pulse from 104 to 85; perfectly comfortable, cheerful and hopeful. Temperature, pulse and respiration remained about normal until the sixth day. He had natural action from bowels on fourth day.

He was attended by a colored nurse, who left him alone on the sixth day. He got up and walked about the house and ate something, we know not what, and died ten hours later. I did not hold an autopsy, being so far away. It is impossible to say that the gut is not perforated because the patient's condition is good soon after and for four or five hours after accident. The above patients were perfectly comfortable for six or eight hours after accident, notwithstanding the internal hæmorrhage. Upon the other hand, I have seen patients shot in abdomen, not touching the gut, give evidence of much more shock, pain, etc.

Case III.—January 8, 1892, I received a telegram from a

conductor of passenger train on B. M. R. R., asking me to meet his train at depot upon arrival. He had a man on board who had been accidentally shot by colored porter of his train. I found patient (Horace McNeal) almost pulseless. I conveyed him at once to my office, and, as soon as preparations could be made, had him anæsthetized for operation. The ball had entered upon left side, and about one and a half or two inches above Poupart's ligament. It passed upward and inward. Probe passed into cavity readily.

I thought at first the bladder had been wounded, but the use of catheter showed no blood. I opened abdomen, assisted by Drs. Chapman and my brother; incision made from entrance of bullet and extended upward to median line, three inches in length. The belly was full of fresh blood and wounds in mesentery still bleeding. We stopped bleeding and found two holes in gut, closed them, cleansed cavity, closed and dressed external wound, as in previous cases. Patient rallied slowly; temperature remained below normal for twenty-four hours. Pulse 140 and almost imperceptible; 36 hours after accident temperature run up a little. Pulse faster and weaker; in fact it could not be felt more than half the time. He died sixty hours after accident. My opinion is that he died from loss of blood, as the circulation never improved.

CASE IV.—Thos. Sims (col.) was stabbed in the abdomen June 20, 1892. A knife had penetrated the cavity and made an incision three-quarters of an inch long, two inches to left of umbilicus. The intestines were protruding through the small opening when I saw him, which was two hours after accident. Assisted by Dr. E. P. Lacey, I at once enlarged opening and began to search for hole in gut. I was rewarded by finding three, which I closed with Lembert suture (silk), washed and reduced intestines, and flushed cavity with hot water. Was about thirty minutes doing this operation. Patient soon rallied and I had him at once conveyed to Hospital of United Charities. His temperature never went above 102 deg. Reduced to normal on the fourth day. Had a normal action from bowels on fourth and sixth days. Did not act any more until tenth day, when an enema was given; bowels acted well and continued regular until February 18, when he was dis-

charged, cured, and resumed his occupation as coke drawer six weeks after operation.

This report shows a mortality of 75 per cent. in cases who were not operated on until late. Cases Nos. I and II, twenty and sixteen hours, respectively, after accident. Case No. III, three hours after injury, but had bled almost to death. Case No. IV looked very unfavorable, from the fact that it had bled considerably, and part of the intestines had been exposed for quite a while; I do not know how long before I saw him. Could all these cases have been operated on at once, and in all cases had an experienced nurse, I believe the mortality would have been lowered to 50 and probably 25 per cent. I regret that I did not have an autopsy in Case No. II, for he was the only one that lived long enough for any structural changes to have been seen. My cases were all fed upon milk diet principally. I have never opened the cavity where the gu was not wounded; though as before said, had I done so I would have given a better chance for recovery. As a given rule there should be no excuse for opening the cavity if ball had not entered, for by placing patient under anæsthetic we can usually enter cavity with a probe if the ball has gone through, but if a probe can not be introduced and we are still led to believe that the cavity has been entered, we may dissect down, following the course of the bullet. All bruised and torn edges should be pared off from around the hole made by the bullet, edges inverted, bringing the serous coats in contact, and united by a fine silk suture, using a long but small curved needle. I have never done an anastomosis upon the human subject, and have not used the tubes, mats, plates, etc., upon the human subject, that are used in this operation, but have done the operation successfully upon the dog. I have been partial to the rubber tube as used by Robinson, of Toledo, with some modifications.

I have invaginated both ends of the gut, drawing them over the tube to approximate the serous coats. I have here for your inspection this evening a section of gut obtained from a dog upon which I operated eleven days ago, removing two inches of the gut. After killing the dog this P. M. I was surprised to find the tube in place, but a heavier tube had been used than in former operations. I used a very fine silk thread, and now in

eleven days there is not the least sign of the thread left; it has been completely absorbed, and by splitting the section open we find here the inverted edges to be atrophied.

THE HELIOSTAT IN EXAMINATIONS OF THE EAR, NOSE AND THROAT.

By W. SCHEPPEGRELL, A. M., M. D., NEW ORLEANS, LA.

In the first reported case of a laryngoscopical examination, the sun was used as a source of light. Garcia allowed the rays of the sun to strike a dental mirror held back in the fauces, and thus made the examination of the larynx. Owing to the want of proper apparatus for controlling the rays of the sun, this method was abandoned when Czermak introduced artificial light in his laryngoscopical examinations. Although it is generally acknowledged that the sun is the ideal source of illumination in examinations of the ear, nose and throat, we are still so much hampered by the want of proper apparatus for utilizing it that we rarely see this effective agent used at present.

Our usual sources of illumination are the coal oil lamp, gas burner and the incandescent electric light. Occasionally, also, we have the calcium light, which requires special apparatus, and is expensive on account of the necessity of using oxygen and hydrogen. In addition to this we have various means of condensing the light. With all our apparatus we rarely have a light of more than 100 candle power, and the usual range is from 15 to 75 candle power.

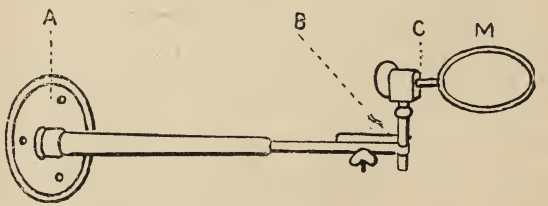
Owing to the divergence of the luminous rays from these sources the intensity of the light decreases rapidly as we recede from the source of illumination. Without a condenser this decrease is as the square of the distance. If, then, an incandescent lamp gives an intensity of 100 candle power at a distance of one foot, it will give 25 candle power at two feet and only 4 candle power at five feet. Although we recover a portion of this intensity by means of our head mirrors—as, for instance, an increase of four times the intensity, which, in

the case of the 100 candle power incandescent at five feet, would give 16 candle power intensity. As, however, this increase is always a fixed multiple, we really utilize but a small fractional portion of our source of illumination.

Now, the luminous rays from the sun have an intensity of 5500 candle power. In addition to this, the rays, owing to the great distance of the sun, are practically parallel, so that we utilize the full intensity of the sun's rays at whatever point we receive them. The superiority of the sun's light is therefore obvious. An advantage of some importance, also, is that it does not require a gas or electric light plant, and that it has no meter attached.

The drawbacks to using the sunlight are that the day may be cloudy, and the difficulty in reflecting the rays conveniently into our offices. In the former this is, of course, inevitable; but, as we advocate the use of this light principally in diagnosing the cases and in delicate operations and manipulations, in which a good illumination is required, and as, moreover, the days on which the sunlight can not be used are comparatively few, this will not be a great hardship.

In regard to reflecting the sunlight conveniently into an apartment, we have constructed a Heliostat, whose general outline will be seen in the accompanying wood cut. M is a circular mirror about four inches in diameter which revolves on a horizontal pivot at C. It is connected with an upright piece which moves on a vertical pivot at B. This is attached to a horizontal arm which rotates out on a pivot at A, being connected with a plate which is fastened by screens to the side of the window.



The horizontal arm should be made strong so as to avoid vibrations, which would prove annoying to the examiner. The arm should be eighteen inches long, and rotate outward so

that the sun's rays may be received at some distance from the window. The pivots at B and C allow the mirror to follow the vertical and horizontal motions of the sun respectively. The upright piece, with the mirror attached, is clamped at B so that the mirror can be removed when the instrument is not in use.

The Heliostat may be fastened at any height to the side of the window, although forty-eight inches will be found a convenient height, as the rays may then be thrown horizontally across the room, and used as if issuing from an ordinary lamp. The Heliostat should be adjusted occasionally, as the rays of light recede from the point at which they are used. A plain (not concave) head mirror should be used.

The instrument described is inexpensive, is easily made, and does not get out of order. The brilliancy of the illumination and the clearness of outline obtained in this manner will be a revelation to those who are accustomed only to artificial sources of illumination.

ALBUMINURIA OF PREGNANCY.*

By DR. C. J. BICKHAM.

Mr. President, and Gentlemen of the Louisiana State Medical Society—I beg pardon for having no interesting paper on the subject you did me the honor of making me chairman, namely, that of the section on obstetrics, but, with your permission, I will offer a few observations and notes of a case of albuminuria in pregnancy, being related to the subject of obstetrics.

I was called not long since to see Mrs. I——. On seeing her I was profoundly impressed at her appearance, and at once judged the trouble was of renal origin. She was anasarcous, puffed and swollen from the crown of her head to her feet from serous effusion. She was slightly feverish at times, restless and nervous, slept badly, and very cumbersome to herself. The heart appeared sound; there was no abnormal

*Read before the Louisiana State Medical Society, April 27, 1892.

sound on listening, but the strokes were more frequent than natural, and the respiration was somewhat labored and accelerated. On listening carefully there were moist râles; especially inferiorly, indicating effusion in the bronchi and air-cells. It was also ascertained that there was considerable effusion in the peritoneum. I at once ordered salines pretty freely, and tried gently to stimulate the kidneys to act, as the urine was scant, not much more than a pint in the twenty-four hours. On examining this, I found that it solidified on testing for albumen, containing hyaline casts and renal epi-epithelium; there was absolutely no fluid after being tested, but was all solid, like the white of an egg coagulated. She was then a little over six months advanced in pregnancy. Such was the fearful state that I advised trying to push her along, improving her condition if possible, until she reached the end of the seventh month, and then to use gentle but effectual means to bring on premature labor, and empty the womb of its contents. I advised this as the only means to possibly save her life, and explained that in doing this there was great danger to her life. However, I told her husband that such was the gravity of the case that I would prefer his not taking my view of the matter alone, but to have other counsel.

He did so. He sent for Dr. A. W. Smythe, and after thoroughly testing the urine chemically and microscopically, and examining her condition otherwise minutely, he advised the same course as being the only rational one. I would here further state, however, that *three* of the most urgent and alarming symptoms in these cases were absent, or nearly so, in hers, namely, severe headaches or erratic neuralgias, irritability of stomach and defective vision.

With saline purgatives, gently stimulating diuretics, and encouragement of the action of the skin, she progressed to what we thought was the full end of the seventh month, and then means were instituted in the gentlest way possible to relax the mouth and neck of the womb and bring on labor. The means used were Barnes' dilators. At first a large one was disinfected and well prepared, and this was inserted into the vagina and gently but slowly filled with warm water, its fundus resting well against the os. This was repeated several times, and in the course of two days the os became considerably re-

laxed and patulous. Then a smalier Barnes dilator was prepared in the same way, and the fundus or upper part being folded on itself into the smallest compass, was gently insinuated through the os, in part, with a uterine sound, and slowly filled with warm water with a Davidson syringe. This acted admirably in dilating the womb, and intermittent labor pains soon came on. In these cases, if we can accomplish our purpose of dilatations slowly and without violence, we avoid undue reflex irritability and make it safer and better.

In the course of five or six hours after inserting the smaller Barnes dilator partly into the womb, the labor was completed, but instead of one child there were two, a son and a daughter, both alive. Soon afterward the placenta came, being common, as both cords entered it.

There was no undue hæmorrhage, and for the circumstances she stood the ordeal well without eclampsia. We had scarcely expected the child, or children, to live. They were both very feeble. The daughter lived about sixteen hours, and the son nearly four days.

They were not able to nourish sufficiently to keep up vitality. Had there been but one the chance would have been better for life, as then all the maternal nutrition would have gone to that one. After the birth was over and the mother had rested and regained composure, she seemed better, and the urine increased to a gallon or more in the twenty-four hours, and of course the albumen was relatively less. At this time we felt greatly encouraged, but this lasted only two or three days, as the kidneys measurably stopped secreting, and fell back to a pint or pint and a half in twenty-four hours, and the amount of moist albumen recurred to and remained at from 50 to 75 per cent. The general effusion lessened after the birth, in the lower limbs, and in fact generally, but never markedly in the peritoneum, lungs, upper extremities and face. Soon a new and serious complication arose in the form of endocarditis.

This greatly distressed her, and embarrassed much more the respiration, and greatly enhanced the restlessness and inability to rest and sleep. Her respirations were often sixty and more to the minute, with increased effusion, especially into the lungs. There was more or less hebetude and drowsiness from the effects of the retained urea and want of oxygenation and

decarbonization of the blood, but never coma or convulsions. She was never irrational when aroused, but would often lose consciousness in sleep while talking to her, and wander and talk much in her sleep. In the fourth week after delivery another complication arose in the form of phlegmasia alba dolens in the left arm and shoulder.

This was identical with those cases occurring in the leg after childbirth. She had no metritis or signs of septicæmia at all, but all of her serious complications appeared to arise wholly from the nephritis and its far-reaching effects. We hoped this was an acute case, incident to and produced by the pregnant state, and would get well after giving birth, but it proved not so. She died when about completing her sixth week after delivery.

From some facts connected with her more recent history we believe there must have been the beginning of chronic nephritis before, and the pregnancy served to rapidly fan the flames of the previous trouble.

The absence of neuralgias, sick stomach and defective vision, notwithstanding the great gravity of the case and unusual amount of albumen, made us hopeful that it was acute and of recent origin, but it could not have been so. Some 5 to 6 per cent., it is estimated, of those who bear children have albuminuria during pregnancy, but most of them get well when it is produced by the pregnant state with timely and judicious management. The great mass of them rapidly improve after the uterus is emptied of its contents, but not so generally with those who have this form of renal trouble before.

This case is interesting in a medical point of view for many reasons, but especially from the fact of such an abundance of albumen so long a time and the absence of some of the most urgent and distressing symptoms already mentioned, which are almost always present in chronic nephritis; and also from the fact that she lived so long under such alarming symptoms and serious complications.

There are various theories, as all know, of the cause of albuminuria, when it is the result of the pregnancy itself, and this leads into an expansive and obscure field, as yet not understood, and which we will not presume to enter, but it

would seem rational to attribute the production of these cases to impaired nutrition, superinduced, in some systems, by the pregnant state, independent of mechanical pressure. Nature does her work well, and bearing children is a natural and physiological process. Such are the environments of the womb, and such is the adaptability and elasticity of the pelvis, abdominal walls, and other contiguous soft structures, that there can not be much pressure upon the renal veins or any other structure, at least, so much as to seriously obstruct the venous return for any length of time.

When we come to consider that the womb is very soft and ovoidal and sustains equilateral pressure from its surrounding soft walls, pressure from one direction being thus counterbalanced by pressure from the opposite direction, and so from all directions; and also the important fact that various other tumors within the abdomen and often much larger than the gravid uterus at term are rarely, if ever, the cause of albuminuria, it would seem that the theory of pressure upon the renal veins can not account for it, but that the ulterior cause must be looked for elsewhere, and it is most probable it will ultimately be found to be due wholly to deranged maternal nutrition, resulting from the pregnant state, and cropping out in some peculiarly susceptible systems only. An important question arises here: When should we interfere in these cases and advise abortion or premature delivery?

It is a very grave question—none more so. We have often seen cases with a great serous effusion and a large quantity of albumen, but with no untoward symptoms, go to full term safely to mother and child, and this would seem to indicate the course of the attendant. Where no urgent symptoms arise let them alone, but be near by and watchful.

In the latter class of cases it would seem to be wise to temporize and wait.

The great safety valves are the efficient functions of the emunctories, the skin, the bowels, and the kidneys, in order to hold in check and balance, as it were, the deleterious effects of the retained urea; but these failing to give relief, with all the aid that can be brought to bear, the only rational thing left to do is to bring about in as quiet a way as possible either abortion or premature delivery, as the case may be.

PERINEAL SECTION, OR COCK'S OPERATION FOR IMPERVIOUS URETHRA.

By DR. ST. CLOUD COOPER, JEFFERSON, TEXAS.

In the last eighteen months I have had the occasion to treat two cases of impervious stricture of urethra with perineal fistulæ.

It is a well known fact that in the negro the surgeon meets with the most desperate cases of urethral stricture.

Case I.—Gilbert Gill, æt. 56, mulatto, was seen March 1, 1891. Had been a sufferer from urethral stricture for over twenty years; ten years ago was treated by the passage of instruments, and, obtaining partial relief, discontinued treatment.

For the past three years has had frequent and difficult urination, taking half an hour to perform the act. Sometimes the urine only comes as "fast drops."

Present condition—Two days ago rupture of urethra and extravasation of urine in perineum, scrotum and right groin.

Has some rigors followed by profuse sweat—temperature 105, tongue foul. An incision made along the perineal raphe, liberated a quantity of foul smelling pus. Free openings were also made in scrotum and groin. Antiseptic douche and dressings, iron, quinine and stimulants were administered.

March 4.—Large quantities of necrosed tissue cut away, leaving testicles bare. Condition better; passes no urine by urethra; has great difficulty in emptying bladder through perineal opening. It is impossible to pass the smallest folifirm bougie into bladder.

March 12.—Scrotum healing nicely; still unable to enter bladder.

April 5.—Under chloroform an attempt was made by cutting in the median line from the base of scrotum to within an inch of anus to strike the urethra. After considerable dissection through indurated tissue it was seen that it would be difficult, if not impossible, to re-establish the canal. The left forefinger was then introduced into the anus and prostate felt for; the knife was then made to tap the dilated portion of urethra behind the stricture, and on passing a catheter urine flowed freely and in a large quantity.

No. XX female catheter ordered to be passed every day.

April 15.—Perineal cut closing rapidly; passes urine freely through artificial opening; rapidly gaining strength. In three months after operation gained thirty pounds. It is now over a year since the operation. He still urinates through the artificial opening. Passes his catheter three times a week. Feels better than he has for the last ten years. Works constantly at his trade. Has sexual desire and intercourse. Is thoroughly satisfied with his condition.

Case II.—Nelse Coleman, mulatto, æt. 62. Has had stricture of urethra for over twenty years. Eight years ago was treated by dilatation with but little relief.

In January, 1891, had extravasation of urine, followed by usual perineal fistulæ. Since that time has dragged out a miserable existence. Has had various kinds of treatment.

April 4, 1892.—Present Condition.—Has been confined to bed for three months. Very weak and nervous. Features pinched, showing the effect of constant suffering. Various attempts at instrumentation failed to enter the bladder. Urethra seems to be one mass of strictures. Same operation was performed as in Case I. It is now over a month since the operation and he has been up and going about. Is beginning to do light work and, in fact, feels like a new man. He also has a No. XX female catheter that he passes through the artificial opening.

Mr. Bryant speaks very highly of this operation, and says that it is not sufficiently known.

The operations described are virtually the same as Mr. Cock's operation, with the exception that I first tried to find the urethra, and failing, finished by tapping the urethra as it emerges from the prostate, as in Cock's operation.

Of course these men will have to micturate through perineum the rest of life.

From depending on the charity of the world, and suffering the agony of a distended bladder, they are now earning their own living and all parties concerned are happy.

I will say that I tried to pass instruments into the urethra of Case I some months after operation, but failed. As he and Case II are satisfied as they now are, I certainly am.

Original Lectures.

HYDROTHORAX—LEAD POISONING.

Clinical Lecture Delivered by Dr. Jas. M. Anders, Professor of Medicine, Medico-Chirurgical College, Philadelphia.

Some four or five weeks ago I brought this patient before you, but did not finish the description of the case for lack of time. R. C., aged 66; occupation, book-binder; birth-place, Philadelphia. Family history, negative. One half-sister died of phthisis. He was well until the year '75, when he was troubled with a hacking cough accompanied with some expectoration. The following year he had three hæmorrhages, and during same year had articular rheumatism. He was afterward apparently well until three years ago, when he began to suffer from dyspnœa, which continued to increase up to time of admission. When admitted on the 28th of November, 1891, his face was quite cyanotic; more or less purulent discharge from the eyelids; not only the eyes and lips were cyanotic, but the whole face; the breathing quite rapid and very labored. The physical examination of his chest showed slight bulging on the left side; in addition, absence of vocal fremitus, and upon auscultation nothing was heard of natural respiratory murmur excepting over the scapula, where we heard a very feeble murmur followed by prolonged expiration accompanied by a wheezing râle.

Over the lower portion of the left axillary space, tympanitic resonance instead of flatness, as we would expect where the chest is nearly filled with liquid. This tympanitic resonance is due to the presence of the stomach, which remains there as long as the diaphragm keeps a natural position. We find tympanitic resonance beginning at the front and extending to the back, but not covering a space more than two inches in longitudinal diameter. Now, this resonant space is the so-called semi-lunar space of Traube. Remember that it is this natural elasticity of the lungs that keeps the diaphragm so long in natural position; and as long as it does you have this semi-lumar space of Traube demonstrable. It begins in front usually, in the fifth in-

terspace, sometimes in the sixth, and extends backward and terminates at the lower border of the ninth or tenth rib posteriorly—the lower boundary line is the free border of the ribs. Now about half of that space is obliterated in this case. This shows that while we had a great deal of liquid in the pleural cavity it was not full, because then we should have had depression of the diaphragm and obliteration of this semi-lunar space. The same thing was shown by the breathing as heard over the scapular region posteriorly; this showed that air was entering and passing out of the lungs regularly, and that the natural elasticity of the lung had not been entirely overcome.

Now the interesting part is this, that we withdrew sixty ounces of sero-fibrinous fluid, and that we had this space present before operating. The diagnosis in a case of this kind was not difficult, for we had displacement of the apex beat of the heart to a point near the right edge of the sternum in connection with flatness on percussion, physical signs that left no doubt in our minds that this was a case of pleurisy with effusion. The only disease with which we might confound this is pneumonia—not a case of pleurisy that comes on insidiously, but the cases that come on with well marked ushering-in symptoms. You should never give a favorable prognosis in this disease on your first visit. We found after the operation in this case, by which sixty ounces of fluid were withdrawn, a tendency on the part of the fluid to accumulate again, which led to another tapping, at which time seventy ounces were withdrawn. Subsequently there was very little tendency to return, and yet what fluid remained did not show any signs of declining—hence a third operation was performed, the aspirator withdrawing only eight ounces. Since then there has been steady improvement in the physical signs; we have now clear percussion resonance, beginning above at the clavicle, down to the base of the lung anteriorly and laterally. There is still dullness over the left lung posteriorly. You must never expect the lung to re-expand as thoroughly as the natural expansion for a long time, owing to the adhesions. The prognosis could not be said to be favorable yet. Why? We have as we know in many of these cases subsequently the development of tuberculosis. I can not take time to discuss the ques-

tion whether all cases of pleurisy are due to tuberculosis, but we know to a certainty that in a great many instances pleurisy with effusion is the first step in this grave disease. And hence, until some time has elapsed you can not be certain of the absence of this tendency. I find here no evident disease of the lung, and yet the trouble may develop, and all in consequence of this attack.

Now the treatment of this case was very different from what will be demanded by many that you will meet with.

There are two classes of cases of pleurisy with effusion. On the one hand the cases that develop insidiously as here, neither the physician's or patient's attention is called to them until there is great dyspnœa. On the other hand, cases begin with sharp pain in the side, full tense pulse, in short all the symptoms of active febrile movement. Your treatment must be governed according to the condition of the individual cases. In nearly all instances that come on insidiously there has been a previous low state of the system—a feeble constitution. In these cases you should never give anything to further deplete the system; you should give nothing in the way of medicine that would tend to depress the circulation any more than it has been by the disease. In the beginning it is well to give quinine; then, in addition, support well the system by means of proper diet given at regular intervals, bearing in mind that unless you assist nutrition you can not promote absorption in these cases. On the other hand, we give medicines with a view to promoting absorption, but it is a great question whether these are of much service in this class of cases. One thing is certain, the class of remedies that are of any value is very limited. It is probably true that no class of remedies save the iodides have any effect. The iodide of potassium is at times serviceable, also the iodide of iron. Compound syrup of iodide of iron with manganese is probably even better. The old habit of using purgative diuretics, etc., has been superseded by these remedies and justly. I would like to lay stress on this point, viz., that the administration of purgatives is sometimes followed by dangerous collapse. Not only have you in these cases a very low blood pressure, but an especially feeble condition of the lesser circulation, and under the cir-

cumstances a purgative is sometimes disastrous in its consequence.

Now, when you have a temperature of 103 degs., and the pleural cavity partly filled with liquid, what are you to do? It might be advisable to give antipyretics, but only for a short time. If there be no decided effect in thirty-six hours it will be of no avail to continue them. On the other hand, I think as a rule it is far safer to give these patients at the beginning one large dose of quinine with a moderate dose of antifebrin. This will sometimes produce abortion of the attack. Quinine given subsequently in full doses will support the powers of the system and control the inflammation in the pleuræ. In many cases you will find the pleural cavity remains as well filled as previously, with a tendency to increase. Now, under these circumstances, we have found it necessary to resort to mechanical means to get rid of the liquid. And this leads me to say a few words regarding the operation of thoracentesis.

One of the most difficult questions is how soon shall we operate in these cases? And what are the indications? There can be no doubt but that a great many cases were formerly sacrificed because this operation was not done sufficiently early. In the first place, I will go as briefly as possible and only give what I regard as the leading indications for the operation. Whenever you find the pleural cavity entirely filled you should not delay the operation. Under these circumstances the life of the patient is always in danger. You can do no harm by operating judiciously.

Again, when the pleural cavity is almost filled with the liquid, and determine this fact by percussing just underneath the clavicle of the side affected, and if along these surfaces we find the so-called tympanitic resonance of Skoda, we may know the cavity can not be quite filled. Sometimes this skodaic resonance extends down as far as the fourth rib while the patient is in a sitting position; again as low as the third rib. Under these circumstances you very often see developing symptoms that threaten life, more especially a tendency to syncope dyspnœa, threatening asphyxiation. When any of these symtoms arise you are called upon to make the operation at once. We find that, as a rule, when the effusion is on the

left hand side, that the indications for the operation are likely to be met with much earlier than when the effusion occurs on the right side. Now, the reason for that fact is that effusion on the left side is apt to compress some of the large vessels as they pass through the quadrilateral foramen. This impedes the return current of blood to the heart, and you get very early, sometimes long before the pleural cavity is filled, those symptoms which indicate danger to life. Again, you may have effusion on either right or left side, and evidence of trouble on the opposite side.

You may have evidences of congestion, as shown by the crepitant rale and slight dullness on percussion, or a plastic pleurisy, and if so, you have a condition which demands surgical interference at once Again, if you have pleural effusion in patients who are known to have chronic disease of the heart, operate at once.

Again, the question arises, shall we operate on these cases during the febrile stage or wait until that is over? Now, there are authorities that tell us that it is dangerous to operate during the febrile stage—that in this way you increase the inflammation, cause trouble in the lungs, and do much more harm than good. There can be no doubt that when this operation is properly done no harm arises. And if the symptoms should indicate danger you should operate, no matter how high the temperature and or what the evidences of inflammation.

On the other hand, I think it should be a cardinal rule not to operate when you know the temperature to be high unless imperatively demanded. No doubt, as long as no dangerous symptoms arise, liquid in the pleural cavity is beneficial during the stage of inflammation.

How long is it advisable to wait after the febrile stage is over? The febrile stage lasts two or three weeks. No doubt the longer the effusion remains there, the greater the tendency for it to become purulent, thus leading to a most dangerous condition. It is important, in the first place, to note carefully whether there be any decline in the fluid or not. If you can convince yourself that there be no declination, I would advise thoracentesis in the course of one week from the time the temperature has become normal, removing a small amount, suffi-

cient to stimulate absorption. Repeat the operation every few days if necessary.

Then, in the next place, there are a great many little points about the mode of operation that are very important to remember. Very rarely do physicians think of the necessity of ventilating the room, attending to the body and clothing of the patient before operating. Often the physician does not pay any attention to the instrument, and he fails because the instrument does not act properly. After you have the aspirator in good order, and you should use some instrument of modern manufacture, all of which work on the same principle, you should wash your patient's side with a disinfectant, also the instrument. It is not safe to operate on the right side under the fifth interspace; the diaphragm has been injured by operating in the sixth interspace, the liver by operating in the seventh. Then aspirate high up. On the left side you can go further down; it is safe to enter between the sixth and seventh ribs; it is just as safe when the pleural cavity is filled to enter the eighth interspace. On either side it is not necessary to enter low down, since we do not want to take away all the fluid at once. In making the puncture, take the finger and push the skin, some say, up so as to make it tense, but I am in the habit of pulling the skin down. The index finger of the left hand can be placed on the rib where you desire to enter, then pass yonr needle in above the rib, taking care, of course, not to injure the cartilage. You should pass the needle with a quick, sharp plunge to 1½ inches, or where you have to deal with a chronic case, deeper, according to the adhesions that have formed. Now, the question arises, how much fluid should we take at one sitting? That will depend in the first place upon the way in which the patient bears the operation after you begin. In the second place, upon the length of time the effusion has lasted. The longer the effusion the less liable is the lung to expand readily with safety if the liquid has been removed. In the majority of cases I should say be governed, too, by the amount of inflammation present. Let us bear in mind that the effusion in this case is not a mere transudation, but a result of active inflammation. So in these cases when we aspirate

we recommend taking only a small amount of fluid, and you can do no harm in operating upon the case again in a few days. When, however, you know the case to be acute and without febrile action you can withdraw a large amount of liquid without danger, because the lung can re-expand without any danger—without evil results.

In the next place, you meet with cases that have been neglected upon which you were not required to operate during the febrile stage and have waited for a week after the temperature became normal—how much liquid are you to take away? A pint or one and a half pint may be taken. You gain nothing by emptying the cavity at once; you may lose a great deal. I think in all such cases it is necessary to operate in a few days again. There is no question in my mind that those cases which have been operated on repeatedly, taking a small amount at each sitting, are the ones in which the best results have been obtained, and just because, under these circumstances, the lung is allowed to re-expand slowly.

Now, in a case such as we have here, in which the lung did not seem to be much compressed, larger amounts were taken without any detriment to the patient, but if the condition had lasted for a long time, then we would not have been justified in taking away as much.

In the third place, what are the dangers to be guarded against?

Bear in mind, that where a lung has been compressed for a long time the blood vessels have also been compressed, and when you relieve the pressure suddenly you are apt to have a congestion set up. So, one of the things to be feared is congestion, leading to œdema and eventually to complete asphyxiation. This has happened time and time again. On the other hand, œdema may follow suddenly, which may lead to fatal results. Again, œdema is sometimes accompanied by a peculiar albuminoid expectoration. This is not always an unfavorable symptom, because in the more favorable cases of this class the symptom disappears and the patient gets on nicely. In a great many cases, however, where you have albuminoid expectoration it does not stop until you have the life of the patient threatened or death as the result, and so when this symp-

tom sets in while you are operating it is well to stop at once and to stimulate your patient. We have dangers too, that have their origin in the heart itself. Death is sometimes due to syncope. * * * * * *

I wish to show you in the next place a few interesting cases of lead poisoning. We have here a patient, male, 28 years of age, born in Philadelphia, worked in Harrison's Paint Works prior to January 1. During the first few weeks of his employment he worked at mixing paints; during the last month or six weeks he packed barrels, and during this time was much exposed to the dust of lead. He had worked then but four months until he noticed the first characteristic symptom of lead poisoning, namely, lead colic. He began to have pains in the region of the umbilicus, and it passed from side to side. The pain was rather relieved on pressure and seemed to be of the nature of true colic. Then again we should not fail to mention that before he had this attack of colic he was decidedly constipated, dyspeptic, and his friends noticed that he was growing pale. Thus we find in all cases of chronic lead poisoning a history of nutritional disturbances antedating the more characteristic symptoms. Notice that he has a slight yellow tinge of skin, which is very common. Very often you have associated an earthen hue, which always gives way to the evidences of profound anemia. This yellowness of the skin is not due to deposit of bile pigment, but to some other cause, of which we have no definite knowledge. Now, in this man's case he had almost, from the time when he first began to work in lead, presence of anemia. A careful blood count by my resident, Dr. Janney, showed 3,850,000 red blood corpuscles to the cubic millimetre.

There is a blue line upon the gums to which I wish to call special attention. That blue mark is usually well marked early. The blue line belongs to the symptoms that are due to the disturbances of nutrition, though itself produced by chemical interchange. You usually see it well marked in the upper gum, and more marked when the teeth have been neglected. With this single characteristic symptom, namely, the colic and the blue line marked along the gum, we have no difficulty in making the diagnosis of chronic lead poisoning. But, gentle-

men, you should be prepared to make the diagnosis in cases in which you have no blue line along the gum. So that I should say in the absence of this blue line, with the presence of the pain, which comes and goes like true colic and is relieved, together with the history of exposure to the action of lead, by pressure, you could make the diagnosis of lead poisoning without the blue line, and you should treat such cases accordingly. Indeed, you are very often called upon to make the diagnosis of lead poisoning without a history pointing to lead toxemia. Now the prognosis is favorable in this case, if the patient does not expose himself further to the action of lead. Youcan not assure him that he will not have attacks of colic, but he will not have the same tendency to a chronic condition of this kind that he would have if he continued to work in this metal.

The treatment in this case has been the treatment usual in cases of lead colic, viz.: the sulphate of magnesium, in order to carry off the lead in insoluble form, and iodide of potassium, with a view of separating the lead from the tissues. How far these things are serviceable is a great question.

Case II.—We have here another interesting case of chronic lead poisoning which I am enabled to show you through the courtesy of my colleague, Dr. Hughes. Family history, negative. We have the patient's previous history, which is without interest, save that he worked two years in Whetherill's Paint Works, and had no trouble for the first eight months, and yet all the time surrounded by lead dust. Bear in mind, if you please, he did not suffer early, which he accounts for by the fact that he wore a respirator. The onset of the present trouble was about sixteen months ago, marked by weakness in legs, and weariness. He vomited food for a couple of days and was afterward obliged to give up work. He suffered from pain around the umbilicus, constipation; he also had wrist drop, and on this account was unable to work for three months. When not fully recovered he went to work in Baldwin's Locomotive Works for six months, but returned to Whetherill's Paint Works in May, 1891. He was admitted to this hospital on the 29th of December, 1891. He was vomiting at the time of admission, had wrist drop, and the blue line on the gums was

marked, the pupils were dilated and there was presence of mitral murmur. Now, no doubt his nutritive functions were very much affected by the lead poisoning before he had any of the more characteristic symptoms of this affection. It is surprising that he worked all of eight months and the other man only four months before becoming affected by the lead. It shows that the susceptibility of persons is widely different. He had, too, from the date of his admission this strikingly anemic appearance. Bear in mind, if you please, that it is not as yet a settled question how to account for this marked appearance of anemia which we find in cases of chronic lead poisoning. It is very interesting to inquire why we should have a marked saturnine before the other symptoms are developed. No doubt it is true that we have here very often the direct influence of the lead upon the blood, which may go on for a long time before the other organs are affected, but it can not be the only cause of it. Remember, we had in this case before the developing of lead poison, marked symptoms of dyspepsia, so marked that he vomited all the food he took.

That points to a condition of the stomach and bowels. We find, from discoveries made at autopsies in persons who have died of this affection, that in some of the worst cases the lymph apparatus of the stomach and intestines is the seat of degenerative changes. Hence we can not ascribe the anemia solely to the local action of the lead upon the blood. In this case we notice that wrist drop came on at the time the patient was seized with colic. This is rather unusual. The wrist is still very weak. Whenever you find a condition ot this kind, by making pressure over the wrist you will assist them very much in extending the hand. You have, in not a few cases, certain fingers of one hand affected, the corresponding fingers of the other hand remaining unaffected.

It is interesting to inquire what causes this peculiar paralysis in cases of lead poisoning. Doubtless, it is due in part to the action of the lead upon the motor nerve fibres and to the local action of the lead upon the muscular tissue, but why it should affect the arm more readily than other portions is not easily understood. Possibly, because the hands are more exposed and are constantly near the lead itself, and we do know that

absorption through the skin can take place as well as through the lungs and alimentary canal. We have in this case another interesting feature to which Dr. Doan has called my attention, namely, the condition of the lower extremities. This man had no pain anywhere until after admission to the hospital. Since the 29th of December he developed great pain in the lower extremities. He tells me this pain is of a tearing, burning character. It is situated above the knee joint, rather than exactly in it. This pain is generally continuous, but is subject to marked exacerbations. Take the different conditions developed by lead poisoning as far as we have gone, and we have, first, the nutritional disturbances, then lead colic, myalgic symptoms, and finally the nervous manifestations.

The next feature of unusual interest in this man's case is the presence of a cardiac murmur, which is heard with the systole of the heart, and heard more especially near the apex beat. Is that due to organic disease, or is it due to the altered condition of the blood? If you will bear in mind that as a result of the blood count carefully made by Dr. Janney we have 3,850,000 red blood corpuscles instead of five millions to the cubic millimetres, and hence we have here a very pronounced degree of anemia. Let me say, in passing, we have all the changes in these cases that occur in the blood in cases of progressive pernicious anemia. Hence, it is not to be wondered at that we find lead in the marrow of the bones.

We have in this case a cardiac murmur heard over the apex beat of the heart, not attended by any enlargement of that organ, and hence we are compelled to ascribe it to the condition of the blood, though more frequent blood murmurs are heard at the base of the organ.

The treatment of this case has been rather peculiar. When admitted he vomited all food and was given sulphate of magnesium, but he could not bear this remedy and was put upon cocaine. He was also given five-grain doses of alum every three hours, with happy results. This is a good remedy, and seems to be of special use where the ordinary remedies fail. He was also bled, because Dr. Hughes, whose case it is, has found that bleeding in cases of chronic lead poisoning is attended with beneficial results. In this case

sixteen ounces of blood were removed. Now the case, after progressing favorably for five or six weeks, was again put on sulphate of magnesium and iodide of potassium, and he now bears these remedies very well, and he is gradually improving.

Bear in mind when you give these remedies that you give them when the stomach is comparatively empty, otherwise you do not get the best results that they are capable of producing.

Proceedings of Societies.

MINUTES OF THE THIRTEENTH ANNUAL SESSION OF THE LOUISIANA STATE MEDICAL SOCIETY.

First Day—Morning Session.

NEW ORLEANS, La., April 26, 1892.

The society was called to order at 11:30 by the president, Dr. J. B. Elliott, who introduced Rev. B. M. Palmer, D. D., who delivered an eloquent prayer, after which Mayor Fitzpatrick was introduced to the Society and delivered an address of welcome. The resignation of Dr. H. W. Blanc was read and accepted, the doctor having moved away from the State.

Proposals for membership—by Dr. W. G. Owen and Dr. Bruns: Drs. J. J. Doyle, J. S. Thibaut, Wm. McGalliard, J. D. Hanson, T. B. Rider, L. E. Duffel, J. C. Legare, E. C. McKowen, P. H. Jones, J. S. Jones, A. R. Holcombe; by Drs. Owen and Woolf: Dr. L. Sexton; by Drs. C. J. Ducote and J. L. Deslattes: Dr. Z. T. Gallion; by Drs. Chaissaignac and Archinard: W. E. Henkel; by Drs. Chaillé and Archinard: Dr. V. Lehmann; by Drs. Bickham and McCutchon: Drs. S. R. Olliphant, L. F. Salomon, H. S. Olliphant, A. R. Mattingly; by Drs. Bemiss and McCutchon: Dr. S. Theard; by Drs. Bemiss and McShane: Dr. Jno. N. Thomas of Port Eads; by Drs. McShane and McCutchon: Dr. Geo. R. Tolson; by Drs. E. M. Hooper and J. B. Shelmire: Dr. J. C. Allen; by Drs. J. S. Branch and W. G. Owen: Dr. J. A. Haas; by Drs. Chaillé and Souchon: Dr.

G. J. Sabatier; by Drs. McShane and McCutchon: Dr. A. E. Simonton; by Drs. McCutchon and Elliott: Drs. D. H. Stringfield, Wm. Thompson, W. Scheppegrell; by Drs. Chassaignac and Deslattes: Dr. O. Grube; by Drs. Kelly and McCutchon: Drs. T. J. Turpin, ——— Graves and J. O. Steger; by Drs. Souchon and McCutchon: Dr. T. C. W. Ellis; by Drs. Owen and Chaillé: Drs. W. A. Holloway, L. H. Viallon, O. G. Browne, C. M. Davis, A. A. Allain, L. T. Postell, F. J. Kearny, W. E. Barker; by Drs. Owens and Bruns: Drs. Numa Himel, P. F. Choppin, O. Gaudet; by Drs. Elliott and Bemiss: Drs. A. J. Bloch and H. S. Lewis; by Drs. Parker and McCutchon: Dr. O. Joachim; by Drs. Bruns and Archinard: Dr. Geo. Stumpf; by Drs. Perkins and Miles: Dr. D. S. Perkins; by Drs. Matas and McCutchon: A. F. Barrow, Jos. Leake, Wm. H. Taylor, L. T. Donaldson, L. D. Chauff, J. P. Elmore.

Proposed at meeting of 1891, to be voted on at this meeting: Drs. H. Bayon, R. U. Borde, J. M. Elliott, S. M. Fortier, J. B. Hargrove, T. Roy, C. L. Seaman.

Dr. Chassaignac asked if these names were to be elected now or referred to the Judiciary Committee. The chairman replied that he did not think it was necessary to refer them to the judiciary committee as they came properly recommended according to the constitution, but that at the request of any two members all names could be referred to the Judiciary Committee. Drs. Chassaignac and Owen requested that the above names be referred to the Judiciary Committee and that they report to-morrow morning. Dr. Chaillé moved as an amendment that the committee report this evening. Carried.

Dr. J. H. Bemiss, chairman of the Committee of Arrangements, submitted the programme as his report. Dr. DeRoaldes suggested that all members of the Polyclinic class be invited to attend our sessions. The secretary read a letter from Vice President F. S. Mudd regretting his inability to be present.

Reports of Officers.

Report of Committee on Necrology.

Dr. R. Matas, chairman, stated that he was glad to be able to report that no deaths had occurred during the past year. Received.

Report of Committee on Publication.

Dr. P. B. McCutchon, chairman, presented his report showing the transactions. Received.

Report of Committee on Organization.

Dr. J. B. Elliott, chairman, reported that his report would be embodied in his address.* Received.

The treasurer, Dr. R. H. Day, presented his report. The treasurer asked that a committee be appointed to examine his books and expunge from his books all the delinquent members.

Dr. Chassaignac moved that all members in arrears for more than two successive years be dropped from the roll; that they be notified of such action and also advised that they will be eligible for re-election provided they pay ten dollars ($10), the amount of arrears which can be claimed by this society. Duly seconded. Dr. Logan offered the following substitute:

Resolved, That hereafter the treasurer strictly enforce Sec. 4, Art. II, of the By-laws, and that he be authorized to use his discretion in arranging for payment of all past delinquencies. Duly seconded and carried by a vote of 12 to 6. Dr. Day said he only following the footsteps of his predecessors.

The meeting adjourned until 7:30 P. M.

NIGHT SESSION.

At 7:30 President Elliot called the society to order, Dr. McCutchon, secretary, at his post. The first order of business was the report of the Judiciary Committee on applications for membership. The committee reported favorably upon all the names that were proposed at the morning session, and under suspension of the rules they were unanimously elected.

President Elliott then calling Vice President Bickham to the chair, delivered his address.* Upon motion of Dr. Bickham the thanks of the society were tendered the president for his address. It was moved and seconded that a committee be appointed to report upon the suggestions recommended by the president.

The following committee was appointed: Drs. Bickham, Logan and Reynaud. Dr. Logan stated that in order that we might be thoroughly prepared to discuss the bill that will come up for final action to-morrow that the chairman be requested to now read the bill.

Upon motion the society adjourned to 11 A. M.

Second Day—Morning Session.

The president called the society to order at 11 o'clock. The minutes of the first day's sessions were read and adopted.

*The address is published in full in The N. O. Medical and Surgical Journal, May, 1892.

Proposals for membership: Drs. J. S. York, A. L. East, C. S. Stewart, O. Huard.

On motion, duly seconded, the rules were suspended and the above were unanimously elected, as they were properly endorsed.

Report of the State Medical Library.

Chairman Dr. J. W. Duprée stated that he had no report to make.

Report of Committee of State Medicine and Legislation.

Dr. A. B. Miles, chairman, presented the proposed "act to regulate the practice of medicine, etc.," as his report and requested the secretary to read it, section by section. Before reading it the secretary read a communication from the Orleans Parish Medical Society stating that it endorsed the bill.

Dr. Wm. Kelly, a delegate from Madison Parish Society, said that his society endorsed the bill and would endeavor to have it passed.

Dr. Woolf said the Attakapas Society endorsed the bill.

The secretary read the preamble and Section 1 of the act.

Upon the motion of Dr. Magruder, it was amended in line two to read, "except as dentists or as widwives." Adopted as read.

Section 2 was amended, on motion of Dr. Chaillé, by inserting in line five, after "standing," "said standing to be determined by said Board of Medical Examiners." By Dr. McCutchon, in the sixth line, erase "he," insert "said applicant," and after "himself" add "or herself." By Dr. Souchon, in line nine erase "and" and insert "obstetrics." By Dr. Kelly, in line nine insert "and hygiene;" in line ten, after "he" insert "or she;" same in line eleven. Adopted as read.

Section 3. By Dr. Bruns, in line three erase "six," insert "one;" erase "s" after physicians and "one." Adopted as amended.

Section 4, adopted as read.
Section 5, adopted as read.
Section 6, adopted as read.
Section 7, adopted as read.
By Dr. W. E. Parker—Transpose Section 6 and 7.
Section 8, adopted as read.
Section 9, adopted as read.
Section 10, adopted as read.
Section 11, adopted as read.
Section 12, adopted as read.
Section 13—Amended by erasing "or by fine and imprison

ment," in line 10, and inserting after "imprisonment" "for each offence" in line 11; omit lines 11 and 12 and omit "and" in line 13; make the sentence read: "It shall be," etc.; add after "act" in line 14 "before any court of competent jurisdiction." Adopted as amended.

Section 14—Amended by changing "when" to "whenever," omitting "upon satisfactory proof" in line 3; and "guilty" in line 4. Line 5 shall read: "Convicted of immoral conduct before a competent court." Adopted as amended.

Section 15—Amended by omitting "his" in line 5 and "he" in line 10. Adopted as amended.

Section 16, adopted as read.

Section 17, adopted as read.

Section 18, amended by inserting in line eleven, after "if," "at the end of the year;" in line twelve, after "sufficient," "to defray the expenses of the board at all its sessions for the year" and omit "to pay the members."

Adopted as amended.

Section 19, adopted as read.

Section 20, adopted as read.

Upon motion, the act was unanimously adopted as a whole. It reads as follows, as amended:

An Act

To regulate the practice of medicine; to create a State Board of Examiners, and to regulate the fees and emoluments thereof; to prevent the practice of medicine by unauthorized persons; and to provide for the trial and punishment of violators of the provisions of this act by fine or imprisonment; and to repeal all laws or parts of laws inconsistent herewith.

Section 1. *Be it enacted by the General Assembly of the State of Louisiana*, That no person shall practise medicine, in any of its departments, except as dentists or as midwives, within this State, unless such person possesses all the qualifications required by this act.

Sec. 2. *Be it further enacted, etc.*, That after the passage of this act any person before entering upon the practice of medicine, in any of its branches, except as dentists or as midwives, shall present to the Board of Medical Examiners a diploma from some medical college in good standing, said standing to be determined by said Board of Medical Examiners, and said applicant shall present himself or herself before the board for examination upon the following branches, viz.: anatomy, physiology, chemistry and the general principles of medicine, obstetrics, surgery and hygiene, but without reference to any sectarian school or special dogma or doctrine; and he shall satisfy the board, by evidence in writing, that he or she is

twenty-one years of age, of good moral character, and possesses at least a fair primary education. Then the said board shall issue a certificate, in his case, in accordance with the facts; and such certificate shall entitle the lawful holder thereof to all the privileges of this act.

SEC. 3. *Be it further enacted, etc.*, That immediately upon the passage of this act, the Governor shall appoint one graduated physician from each congressional district of the State, as a State Board of Medical Examiners, whose duty it shall be to examine into the qualifications of all applicants for permits to practise medicine in any of its departments, in accordance with the foregoing sections of this act. *Provided*, That at all times not less than one-half the members shall be appointed from a list of thrice as many names furnished to the Governor by the State Medical Society. Not less than four members of the board shall constitute a quorum, and a majority of those present shall be necessary to reject or accept any application, but such rejection shall not bar applicants against re-examination after the lapse of six months.

SEC. 4. *Be it further enacted, etc.*, That to prevent delay and inconvenience, two members of the board may grant a permit to any applicant, and must report thereon to the board at the next regular meeting; such temporary permit shall not continue in force longer than until the next regular meeting of the board; but such temporary permit shall, in no case, be granted within six months after the applicant has been refused a permit by the board.

SEC. 5. *Be it further enacted, etc.*, That the first Board of Medical Examiners shall meet and organize within thirty days from the day of their appointment, and shall name two members for the term of four years, two members for the term of eight years, and two members for the term of twelve years, deciding by lot or agreement among themselves as to their respective terms. At the expiration of the above terms each member shall be appointed by the Governor for twelve years. All vacancies occurring in the board, by death or resignation, shall be filled by the board itself for the remainder of such terms.

SEC. 6. *Be it further enacted, etc.*, That the Board of Medical Examiners are authorized to elect such officers and form such by-laws as may be necessary for the efficient operation of the board. The board shall have a common seal, and the president and secretary shall be empowered to administer oaths in the taking of testimony upon any matter pertaining to the duties of said board.

SEC. 7. *Be it further enacted, etc.*, That the regular meetings of the board shall be held at least twice a year, at such time and place as the board may decide, but the president of the board may call special meetings whenever it is demanded by public necessity; the call to be issued by the secretary and signed by the president.

SEC. 8. *Be it further enacted, etc.*, That the certificates issued in accordance with Section 2 of this act shall be recorded in the office of the clerk of the District Court of the parish, who shall make this recordation in a book to be kept for that purpose only, and also certify to such recordation by an indorsement on the original certificate, which the holder thereof shall transmit or deliver to the State Board of Health; and the clerk recording the same shall be entitled to a fee of one dollar. Such certificate, transmitted or delivered to the State Board of Health, shall entitle the holder to be placed on the list of registered physicians or surgeons, the publication of which is hereinafter provided for. Said Board of Health shall preserve such certificates, and a copy thereof, signed by its secretary, shall be received as evidence in the courts of this State: and for such copy a fee of fifty cents shall be paid. Until such recordation is made, the holder of such certificate shall not exercise any of the rights or privileges therein conferred to practise medicine.

SEC. 9. *Be it further enacted, etc.*, That it shall be the duty of the State Board of Health to publish annually in the official journal of the State (and if there be no such journal, in one of the daily newspapers published in the city of New Orleans) a list of the registered physicians and surgeons in the State and their residences; and such published list shall be received in evidence by the courts of this State as proof that the physicians and surgeons therein named are duly registered as required by law; and the said State Board of Health is hereby required to strike from said list the name of any person whose certificate may have been revoked by the State Board of Medical Examiners, as herein provided for.

SEC. 10. *Be it further enacted, etc.*, That the members of said board shall receive, as a compensation for their services, ten ($10) dollars per day during their session, and, in addition thereto, their hotel and traveling expenses by the most direct route to and from their respective places of residence, to be paid out of any moneys in the treasury of the board upon the certificate of the president and secretary. The board is empowered to demand a

fee of one ($1) dollar for the issuing of each certificate. The fee for examination shall be ten ($10) dollars. If the applicant fails to pass a satisfactory examination, and no certificate is issued to him or her, five ($5) dollars only of his or her fee is to be retained. The fee for certificate of temporary permit shall be one ($1) dollar, to be paid into the treasury of the board, said fee to be accredited to the applicant when he applies to the board for a permanent permit.

SEC. 11. *Be it further enacted, etc.*, That any itinerant vendor of any drug, nostrum, ointment, or application of any kind, intended for the treatment of disease or injury, or who may, by writing, print or other methods, profess to cure or treat disease or deformity by any drug, nostrum, manipulation, or other expedient in this State, shall, if found guilty, be fined in any sum not less than twenty-five ($25) dollars, and not exceeding one hundred ($100) dollars for each offence, to be recovered in an action of debt, before any court of competent jurisdiction, or shall be imprisoned for a term of not less than ten (10) days or more than thirty (30) days, or be both fined and imprisoned.

SEC. 12. *Be it further enacted, etc.*, That any person shall be regarded as practising medicine, in any of its departments, within the meaning of this act, who shall append the letters M. D. or M. B. to his or her name, or repeatedly prescribe or direct, for the use of any person or persons, any drug or medicine or other agency for the treatment, cure or relief of any bodily injury, infirmity or disease. This act shall not apply to dentists or midwives in the legitimate practice of these branches, nor to farmers and planters when exclusively practising, without compensation, on their employés in emergencies.

SEC. 13. *Be it further enacted, etc.*, That any person practising medicine, in any of its departments, in this State, without first having obtained the certificate herein provided for, or contrary to the provisions of this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than fifty ($50) dollars, or more than one hundred ($100) dollars, or by imprisonment in the parish jail for a period of not less then ten (10) days or more than ninety (90) days for each offence. It shall be the duty of the respective district attorneys to prosecute violations of the provisions of this act, before any court of competent jurisdiction.

SEC. 14. *Be it further enacted, etc.*, That the said board shall have power to revoke any permit or certificate

issued by them whenever it shall appear that the physician thus licensed has been convicted of immoral conduct before a competent court.

SEC. 15. *Be it further enacted, etc.*, That any practitioner of medicine, in any of its departments, failing to comply with the requirements of this act, shall not be exempt from jury or military duty, nor be permitted to collect any fees or charges for services rendered, nor be allowed to testify as a medical or surgical expert in any court in this State, nor execute any certificates as a physician or surgeon, nor to hold any medical office, nor to be recognized by the State or parish or municipal corporation as a physician or surgeon; nor shall be entitled to enjoy any of the privileges, rights or exemptions granted to physicians or surgeons by the laws of this State.

SEC. 16. *Be it further enacted, etc.*, That this act shall not apply to any commissioned surgeons of the United States army, navy, or marine hospital service; to physicians or surgeons from other States or territories in actual consultation with a registered physician of this State.

SEC. 17. *Be it further enacted, etc.*, That the said board shall report to the prosecuting officer of the State of Louisiana all persons violating the provisions of this act. It shall report, annually, to the Governor of the State upon the condition of the practice of medicine in the State, its recommendations for the improvement of the practice, as well as a record of the proceedings of the board during the year; together with the names of all physicians or surgeons to whom the said board shall have issued certificates during the year, in accordance with the provisions of Section 2 of this act.

SEC. 18. *Be it further enacted, etc.*, That it shall not be lawful for the State Board of Medical Examiners, or any member thereof, in any manner whatever, or for any purpose, to charge or obligate the State of Louisiana for the payment of any money; and the said board shall look alone to the revenue derived from the operation of this act for the compensation designated in Section 10 of this act. And if said revenue is not sufficient to pay each member in full, as per Section 2, then the amount thus received shall be pro-rated among the members. But if, at the end of the year, there should be a greater revenue derived than sufficient to defray the expenses of the board at all its sessions for the year, as provided in Section 10, such surplus shall be paid to the treasurer of the State, who shall receipt to the board for the amount received, and shall account for such money as other State revenue.

SEC. 19. *Be it further enacted, etc.*, That this act shall take effect thirty (30) days after its promulgation, and it shall not be retroactive.

SEC. 20. *Be it further enacted, etc.*, That all laws or parts of laws in conflict with this act be and the same are hereby repealed.

COMMITTEE ON STATE MEDICINE AND LEGISLATION.

DR. A. B. MILES, *Chairman.*

DR. R. MATAS,
DR. S. LOGAN,
DR. H. D. BRUNS,
DR. A. A. LYON,
DR. S. F. MEEKER,
DR. E. P. ARCHINARD,
DR. C. J. BICKHAM,
DR. J. H. BEMISS,
DR. T. J. BUFFINGTON,
DR. L. F. REYNAUD,
DR. I. J. NEWTON, JR.,
DR. J. E. EGAN,
DR. J. S. BRANCH,
DR. G. A. MARTIN.
DR. J. B. ELLIOTT, *President.*
DR. P. B. MCCUTCHON, *Recording Secretary.*

A communication from the Shreveport Medical Society was read, wherein it endorsed the bill.

The society adjourned to 7:30 P. M.

Second Day—Evening Session.

The society was called to order at 7:30 P. M. by the president.

The report of the special committee on president's address was read and adopted.

Reports on affiliated societies.

Dr. T. J. Wolf reported that the Attakapas Medical Society was in a flourishing condition.

Dr. Wm. Kelly said that the Madison Parish Medical Society was small but were increasing their membership.

Dr. J. S. Branch said the Avoyelles Parish Medical Society had been dead, as it were, for several years, but recently it had been reorganized and it was willing to pay whatever dues were just.

Dr. Chaillé moved that the Avoyelles Medical Society pay the constitutional fees from its reorganization, and that the fees be remitted during the time it was inactive. Carried.

Dr. Perkins said that the Calcasieu Medical Society was in good condition, and increasing its membership.

Dr. Day reported that the East Baton Rouge Medical So-

ciety was small, only six members, but they expected to form a district society.

Dr. Chaillé moved that the president and treasurer be authorized to arrange with delinquent affiliated societies, as to finances and whatever matters require adjustment, and thus have them restored to full affiliation. Carried.

Report of Chairman on Sections.

Section on General Medicine—No report, the chairman having resigned.

Section on Surgery—Dr. J. W. Allen. No report. Chairman absent.

Section on Obstetrics and Gynæcology—Dr. C. J. Bickham. *Report of a case of Albuminuria during Pregnancy*, read by the secretary.

Section on Materia Medica and Theurapeutics—Dr. T. J. Woolf, chairman, read his report.

Section on Ophthalmology—Dr. H. D. Bruns, chairman, made a verbal report and said that nothing particularly interesting had transpired during the past year.

Section on Otology, Laryngology and Rhinology—Dr. A. W. De Roaldes, chairman, read a paper on "Adenoid Growths of the naso-pharynx."

Section on Dermatology—No report, Chairman H. W. Blanc having moved from the State.

Section on Disease of Children—Dr. C. D. Owens, chairman. No report, chairman absent.

Section on Oral and Dental Surgery—Dr. A. G. Friedrichs, chairman, read his report.

Section on Quarantine—Dr. F. Formento, chairman, read his report.

Section on Medical Jurisprudence—Dr. Y. R. LeMonnier, chairman. No report.

Section on Anatomy and Physiology—Dr. G. R. Fox, chairman.

Adjourned to 11 o'clock, April 28.

Third Day—Morning Session.

The minutes of the previous day's session were read and adopted.

Proposals for Membership: C. S. Stewart, A. L. East, I. S. York and O. Huard. Under suspension of rules the above applicants were elected members.

Election of officers being next in order, Dr. Bruns moved that the election of officers be postponed until there was a larger attendance. Carried.

"Some Experimental Facts With Regard to Hydrophobia," by Dr. P. E. Archinard.

Dr. Parham read Dr. Michinard's paper on "Retained Placenta."

The secretary read by title Dr. J. W. Duprée's paper on "Infant Mortality in My Field of Observation and Some Suggestions for its Diminution."

Recess of ten minutes for formation of committee on elections for officers.

Society called to order by president, who called Dr. Day to the chair and made remarks on unusual conditions of lung developed in the course of the grip.

Dr. Souchon exhibited and explained the plans of the new medical college to be erected on Canal street.

Reading of voluntary papers.

Dr. T. J. Woolf reported two cases of umbilical hernia and a case of fibroma of uterus. Penetrating wound of abdomen.

Dr. Logan said he had more cases this year similar to purpura hæmorrhages. We have the following varieties of the grip: Febrile form; neuralgic; rheumatic; systemic; rheumatic forms, obstinate and long continued. Does not believe the usual remedies are of much value.

Dr. Formento said he had very little to add to the remarks of Dr. Elliott about the cases they had seen together.

First case—Sick for five months; he now expectorates bowls-full of muco-pus—condition is growing worse.

No medicine seems to affect the disease. Large doses of whiskey produce no symptoms of alcoholism—one quart whiskey for weeks. Dr. Reynaud said he had met with four cases identical with those of Dr. Logan—rheumatic and purpuric. Two cases of eye complications—iritis. Best results from salol and phenacetine.

Dr. DeRoaldes relates a case of rheumatoid arthritis complicating the grip. Suddenly the whole lung became solidified, which remained so for twenty-four days—when large quantities of pus were discharged, accompanied with incessant cough. Frequent complication of the throat and ear—with brain symptoms.

Dr. Miles said that la grippe prostrates the nervous system, and we see the effects of blood stasis. He said that the remedies that gave the best results are carbonate of ammonium, three to five grains every three hours; nux vomica produces good results—should be pushed for its full therapeutic effect, and digitalis is also beneficial. Alcoholic liquors, in full doses, militate against bronchitis. Instead uses stimulating foods.

Dr. Matas has obtained good results from peroxide of hydrogen. Gave at first a teaspoonful in water every hour, then one-half hour, then every fifteen minutes as difficulty in breathing increased; this condition was tided over, and they recovered.

Report of Nominating Committee.

To the President and Members of the State Medical Society:

The nominating committee, composed of delegates of the parishes of Orleans, Iberia, Vermilion, Madison, East Feliciana, Richland, East Baton Rouge, Tangipahoa, Calcasieu, Avoyelles, Natchitoches and Caddo, met in the library of Tulane Hall, and, after due consultation, unanimously recommended the following candidates for your consideration:

President.

J. B. Elliott, Orleans,

Vice Presidents.

First Congressional District—P. E. Archinard, Orleans.

Second Congressional District—A. W. DeRoaldes, Orleans.

Third Congressional District—A. J. Perkins, Calcasieu.

Fourth Congressional District—J. W. Allen, Caddo.

Fifth Congressional District—T. J. Turpin, Madison.

Sixth Congressional District—J. S. Branch, Avoyelles.

This committee recommends that New Orleans be made the permanent meeting place of the State Medical Society, and that the second Tuesday in May, 1893, be the date of meeting, and, furthermore, that the secretary and treasurer be paid an honorarium of $150 in recognition of their faithful services.

W. L. Dickson, *Chairman.*

A. J. Perkins, *Secretary.*

Dr. Day in the chair.

Dr. Elliott objected to his own renomination. He said that he was opposed to any one holding the office of president two terms.

Dr. Dickson said that the committee was unanimous in its selection.

Dr. Elliott said that he was profoundly moved by the expressions of confidence and would give his best energies to the society.

Dr. Chaillé moved that the president be authorized to appoint delegates to the American Medical Association. Carried.

Dr. Chaillé moved that Dr. T. J. Woolf be elected the orator for the next meeting. Unanimously carried.

Dr. Elliott extended an invitation to reception at his residence this evening at 7:30.

Adjourned to 3 P. M.

Chairmen of Sections.

General Medicine—Dr. W. G. Owen.
Surgery—Dr. A. L. East.
Obstetrics and Gynæcology—Dr. Wm. Kelly.
Materia Medica and Therapeutics—Dr. C. S. Stewart.
Ophthalmology—Dr. E. W. Jones.
Otology, Laryngology and Rhinology—Dr. A. McShane.
Dermatology—Dr. L. F. Solomon.
Diseases of Children—Dr. Z. T. Gallion.
Oral and Dental Surgery—Dr. G. J. Friedrichs.
Quarantine—Dr. S. R. Olliphant.
Medical Jurisprudence—Dr. J. W. Duprée.
Anatomy and Physiology—Dr. L. T. Donaldson.

AFTERNOON SESSION.

The society was called to order at 3:45 P. M.

Announcement of the chairmen of committees by the president:

Committee of Arrangements—Dr. J. H. Bemiss.
Committee on Necrology—Dr. P. E. Archinard.
Committee on Publication—Dr. P. B. McCutchon.
Committee on Organization—Dr. J. B. Elliott.
Committee on Judiciary—Dr. E. M. Hooper.
Committee on State Library—Dr. J. W. Duprée.
Committee on State Medicine and Legislation—Dr. A. B. Miles.

Dr. W. E. Parker reported a case of epithelioma in lip of colored woman—operation.

Dr. Sexton said he had during the past year three cases of grip followed by pneumonia. Application of large flax-seed poultices will liquefy the sputa and cause the glun to clear up. He spreads the poultice on the bed and allows the patient to lay on it. The best treatment of pneumonia is to combat symptoms. To relieve pain use a combination of opium and belladonna. Results of treatment not as successful as fifteen or twenty years ago. Allow the patient plenty of air. Does not approve of blistering.

Dr. F. W. Parham verbally reported a case of abscess of liver.

Dr. Matas said that in abscess of the liver he made large

opening, thoroughly cleansed the cavity, and packed it with iodoform gauze.

Dr. Sexton reported a case of abscess of liver. Aspirated the abscess; temperature rose to 103 deg.; incised the tumor and removed one pint of pus; used cocaine to prevent the pain in making opening. Preferable not to resect the rib; objection, two points of absorption. Washed out abscess with pure boiled water.

Dr. Parham said that he does not believe resection of rib increases the danger of absorption. The point is to have room to obtain free drainage.

Dr. Matas said the dysentery is the danger in these cases.

Dr. Bickham moved that the president be authorized to appoint an auxiliary committee to the standing committee on State Medicine and Legislation to further the passage of the "act to regulate the practice of medicine."

Dr. Parham said the only objection is that in appointing this committee we are not certain any of them will go to Baton Rouge, and we are putting aside the auxiliary committee that drew up this bill. Dr. Day said we had a delegation from New Orleans last year who did good work, and he thought they would do good work again.

Dr. Matas moved that the appointment of this committee be postponed until to-morrow. Carried.

Dr. Matas then said he would call upon Dr. Miles to make some remarks upon abscess of liver.

Dr. Miles said that he recalled the treatment of abscess of liver by Dr. D. Warren Brickell. He used a caustic paste; the cavity was not interfered with in any manner; never saw it used since. Now two methods are used—aspiration and incision; mode of treatment according to size, location and systemic condition. We are too prone to adopt heroic measures. We often gain time by aspiration and put patients in better condition for treatment by incision. A number of abscesses can only be treated by incision, where the necrotic tissues are in excess. Free incision and complete evacuation remove whatever interfere with it. He does not fill a cavity with antiseptics where the aspirator is used.

We should not approach a case with preconceived ideas as to treatment, but should be governed by conditions present.

Adjourned to 11 A. M.

Fourth Day—Morning Session.

The society was called to order at 11 o'clock.

The minutes of the previous day's sessions were read and corrected.

The president said he appointed a committee on State Medicine and Legislation—reappointed same committee as last year, except Dr. Jamison, who is incapacitated by sickness—Dr. Bickham in his place.

Dr. Miles moved that the names of all members of this society who are members of the Legislature be added to it. Carried.

Dr. Miles moved that there shall be a committee on legislation to act in concert with the committee on State Medicine and Legislation, to be composed of the president of the local society, of all members who are willing to go to the legislature, and one member from each parish represented in the society.

Dr. Elliott (Dr. Matas in chair) suggested that the last clause be withdrawn.

Dr. Perkins said he favored the clause that one member from each parish be added.

Dr. Miles said that his object in having the last clause was that it would produce more influence.

Dr. Chaillé said that according to the constitution we need only to appoint the chairmen of the committee.

Dr. Logan offered the following substitute to Dr. Miles' motion: That the president appoint the chairman of the committee on legislative action, and that they appoint the committee. Carried.

Dr. Miles moved that the secretary be authorized to have 500 copies of the act printed. Carried.

Dr. Chaillé explained the objects of the Pan-American Congress. He said a petition had been presented to Congress to establish a Secretary of Health, and that Senator Harris was in favor of revivifying the National Board of Health.

Dr. Logan moved that the society cordially approves the effort to secure Federal recognition in aid of public health. Carried.

Dr. Elliott said this society was intended to be made up of delegates from affiliated societies. (See constitution.) The original idea can not be carried out. Complaints are constantly coming in from members of affiliated societies about the dues. We should build up a powerful State society of permanent members and then build up the parish societies.

Dr. Magruder said that he did not think it would be well for us to remit the dues from the parish society, but leave it to the affiliated societies.

Dr. J. S. Branch, in behalf of Avoyelles Parish Medical Society, said that its members are willing and able to pay the fees exacted, and he does not believe the remission of the dues would have any effect upon the Avoyelles society.

Dr. Parham moved that action on this matter be deferred until the next meeting of the society, and that the secretary or proper officers be instructed to correspond with the officers of the affiliated societies to obtain an expression of their views. Carried.

Dr. LeMonnier said it is our duty to do anything to protect the public health. He refers to midwives. They cause more deaths to women and children than murderers. He had succeeded in bringing two midwives before the courts. They were liberated because there are no laws regulating the practice of midwives.

Dr. Elliott requested Dr. LeMonnier to prepare a bill on this subject.

Dr. Parham moved that the thanks of the society be extended to Dr. W. G. Owen for his success in causing such a large number of physicians to join our society.

Seconded by Dr. Chaillé.

Unanimously carried.

Dr. McCutchon read paper, "Three Successive Anencephalous Births."

Dr. Chaillé said he had received from Mississippi a double-headed calf, which is in the Tulane Museum.

Dr. Miles introduced Mr. Bohne, an interne of the Charity Hospital, who read notes on "A Fœtal Monstrosity."

The secretary read by title Dr. McShane's paper on "A Case of Enormous Hypertrophy of the Lingual Tonsil, with Chronic Interstitial Epiglottitis."

Resolutions of thanks were offered to Dr. and Mrs. J. B. Elliott for their delightful entertainment. Unanimously carried.

The thanks of the society were expressed to Col. W. P. Johnston for the use of Tulane Hall; to the officers of the society and to the members of the press, who had given such accurate account of our proceedings.

The members were reminded that the Orleans Parish Medical Society expected them at a banquet at 7:30 P. M.

Upon motion, the society adjourned to meet in New Orleans on the second Tuesday in May, 1893.

P. B. McCUTCHON, M. D.,
Recording Secretary.

ORLEANS PARISH MEDICAL SOCIETY.

Officers.

[Elected March 26, 1892.]

Chas. Chassaignac, M. D., president.

J. M. Gassoway, M. D., J. J. Castellanos, M. D., M. M Lowe, M. D., vice presidents.

M. J. Magruder, M. D., recording secretary and treasurer.

S. P. Delaup, M. D., corresponding secretary and librarian.

Committees.

[Appointed April 30, 1892.],

Organization (ex officio)—The president and vice presidents.

Judiciary—Drs. H. D. Bruns, S. R. Olliphant, A. W. DeRoaldes.

State Medicine and Legislation—Drs. P. E. Archinard, Hy. Bezou, A. G. Friedrichs, L. F. Reynaud.

Publication—Drs. A. McShane, L. F. Solomon, Y. R. LeMonnier.

Scientific Essays and Reports—Drs. M. J. Magruder, G. F. Patton and H. S. Cocram.

Conference—Drs. E. Souchon, G. J. Friedrichs, C. A. Gaudet.

Library—Drs. S. P. Delaup, R. Matas, F. Formento.

Building—Drs. C. Chassaignac, J. B. Elliott, F. W. Parham, E. D. Martin, P. Michinard.

Regular Meeting of April 30, 1892.

Dr. M. J. Rosenau read a paper on "The Value of Injection in the Treatment of Dysentery."*

Dr. J. B. Elliott, in opening the discussion, said the distinction Dr. Rosenau made between the different forms of dysentery is very concise. He had never had the misfortune to meet with a case of the gangrenous form. Previous to his residence in Louisiana he had met with simple cases only, which readily yielded to treatment. In hospital practice he has occasionally employed large doses of ipecac with good results. Here in this section of country, however, we meet the disease always complicated with malaria, if not actually caused by that poison. He regards the cold stage in malarial paroxysms as resulting from a paralysis of the vaso-motor

*See "Original Articles" in this number of The Journal.

centres, during which time there is comparatively little blood in the surface, while the lax abdominal viscera are engorged.

In chronic malarial poisoning there is permanent depression of the vaso-motor centres, causing chronic congestion of the abdominal viscera. Such chronic hyperæmia affords a basis for acute or subacute attacks on both the large and small bowel.

This hyperæmia may cause the large intestine to become thickened and contracted at various points, as the doctor has been able to demonstrate in the dead house. Thinks these cases might well be termed chronic malarial entero-colitis.

The plan of treatment suggested by the reader of the paper is most efficient, especially when combined with malarial remedies, which should always be given in conjunction with other treatment. Has often seen good results from injections of a 2 per cent. solution of nitrate of silver. Injections of alum have also proven beneficial in many cases. A good saline purge should always be the initial step in our treatment.

Dr. A. McShane had seen, several years since, a case of gangrenous dysentery in the Charity Hospital. Some time back a fellow-practitioner, Dr. Jos. Holt, of New Orleans, had suggested to him as a sure cure the following prescription: Pulv. ipecac gr. ½; resinæ podophyl gr. ¼; hydrarg. chlor. mit—and ext. colocynth co. aa gr. vii., this to be made into two pills and taken at once. Then give opiates in twenty-four hours if any should be needed. As formidable as it may seem, this pill has been employed by the speaker on several occasions with excellent results.

Dr. Elliott thought any good derived from this treatment could be attributed to depletion of the congested abdominal viscera, and for this purpose would prefer to use epsom salts or some other saline purgative.

Dr. Chas. Chassaignac called attention to one class of cases not yet touched upon, that is those he would call acute malarial dysentery. He had treated successfully a number of such cases with quinine alone, and believes many of them would yield to treatment with this drug if its use is begun before the disease goes too far. In ordinary cases of dysentery a favorite method among French physicians, with whom the saline treatment, he believed, originated is to begin with one large dose of one of the saline purgatives, reducing the dose say on e-half each succeeding day. Another remedy which acts most efficiently in chronic cases is simaruba. This drug, though fallen almost entirely into disuse, is one of the best agents we have in the treatment of dysentery, used either in powder or as an infusion.

Dr. R. Matas said the treatment of dysentery had been greatly facilitated by clearing up the etiology of disease with the aid of the microscope. In the amæbic form which prevails here, we find amæbæ coli in abundance, which have close affinities with the plasmodium malariæ. Has often employed irrigation of the bowels for the relief of this very troublesome malady, followed by the most gratifying results. The injections employed by him usually contain subnitrate of bismuth or nitrate of silver. It is always well to give a saline purgative before beginning irrigation. His attention had been called to a preparation of mercury called subnitrate of mercury, prepared and used by Dr. Hava, of this city. This preparation, which is almost tasteless, probably has no special advantages over the corrosive or mild chlorides of mercury which have long been used in the treatment of this disease and quite often with good results.

Another remedy which is most useful is bismuth subnitrate, in very large doses, giving as much as thirty drams per day, following the recommendation of Monneret. In the acute catarrhal type the doctor also extolled the benefits of simaruba infusion given after free purgation with castor oil or epsom salts.

Dr. R. J. Mainegra had prescribed teaspoonful doses of the subnitrate of bismuth every three hours for a most intractable case. The directions, however, were misunderstood and the patient took tablespoonful doses, which afforded immediate and permanent relief.

Dr. Elliott had known a physician who took daily four ounces of this drug, which not only afforded relief, but effected a cure, and this after many other plans of treatment had been tried in vain.

Dr. E. D. Martin had found a pill containing opium and ipecac in small doses quite satisfactory.

Dr. Luther Sexton mentioned an epidemic of dysentery caused by the supply of drinking water being contaminated with refuse from privies. Nearly every person who used this water suffered an attack of dysentery, while there was hardly a case among those who did not drink it. Thinks careful examination into the drinking water should always be made in cases of dysentery. He had used with satisfaction a prescription containing bismuth subnitrate, creosote and tincture of belladonna, with milk of magnesia or chalk mixture. Had also used injections containing boracic or salicylic acids. One of his patients had greatly facilitated the use of these injections by assuming the knee-elbow position.

Dr. Rosenau closed with the following remarks:

Whenever so many remedies are vaunted for a certain

disease or a particular symptom, it may be taken for granted that no one is entirely satisfactory.

Enteritis and entero-colitis are not dysentery. In the discussion, I think some of the members have confounded these diseases, as well as the choleraic diarrhœas and the diarrhœa resulting from the so-called malarial hyperæmia of the mucous membrane of the intestinal tract, with true dysentery.

The many drugs mentioned have all one central idea—cleansing out the alimentary canal. It must be plain that water can do this better and more effectually than drugs, many of which are irritating. It should be remembered that large enemas unload the upper as well as flush out the lower bowel.

M. J. MAGRUDER, M. D.,
Secretary.

NEW YORK ACADEMY OF MEDICINE.

SECTION IN PEDIATRICS.

Stated Meeting, March 10, 1892, W. P. Northrop, M. D., in the chair.

A case of Cyanosis was presented by D. A. Jacobi, the patient being fifteen months old. A systolic murmur was heard over the front of the chest and was conveyed along the abdominal aorta, but was not heard behind. Percussion detected marked cardiac enlargement toward the right. This indicated hypertrophy of the right ventricle, probably the result of obstruction in the pulmonary circulation. The probable diagnosis was partial stenosis of the pulmonary artery, with open ductus arteriosus. With complete contraction of the artery and open septum, the heart would not be as large.

Two cases of Imperforate Anus were reported by Dr. H. W. Berg, the rectal opening in each case being in the vagina. Operation was performed by making a long incision across the perineum, dissecting out the rectum, bringing it down to the natural position and stitching it in place. Both operations were successful, the patients having normal rectums with sphincters, which they would not have had if an opening had simply been made through the tissues.

Embolismal Apoplexy in a boy of of twelve years. The case was presented by Dr. J. Lewis Smith. The boy had had rheumatism, but there was no cardiac murmur. The disease is rare at this age.

"Empyema in Childhood. Is it ever Primary? Its Relations to Pneumonia and to Pleurisy with Serous Effusion." Dr. Henry Koplik read a paper on this subject. The etiology of pleurisies both serous and sero-purulent, has been

cleared up in many respects during the last decade, chiefly through bacterioscopic science. We know that children may develop an effusion in the chest, not as the result of constitutional causes alone, but causes to which we also trace the development of pneumonia.

The diagnosis of pleurisy as serous or purulent from simple inspection of the fluid without the microscope is highly unsatisfactory and may lead to grave error in diagnosis and treatment. Children are prone to develop sudden effusions in the pleural cavity, and we are struck with the overwhelming frequency with which such effusion is purulent. It often happens that a clear serous-looking effusion changes to a purulent one. This, however, is apparent rather than real. It was formerly thought that if fluid at the first exploratory puncture was clear and subsequently became purulent, some secondary infection had taken place. This we now know to be erroneous. All exudations apparently serous at first, which subsequently become purulent, do so from causes independent of external interference but inherent in themselves. Such a serous exudation if examined microscopically will be found to contain not only leucocytes and blood cells, but pus-producing micro-organisms. In children, acute exudations without these micro-organisms is the exception. Such fluid is but one step removed from actual pus. Moreover, the custom of refraining from informing ourselves as to the nature of fluid in the chest by puncture for fear of contaminating that fluid is untenable.

Another point of importance is the question as to whether in children empyema may be primary—*i. e.*, whether it may occur without any connection with external infection or processes in the lung. While cases have been reported in which no other diseased condition was detected upon autopsy, they are extreme rarities, so much so that the writer in a large experience has never seen one.

Can the effusion be purulent from the outset? Undoubtedly it may be and frequently is so. The connection between pleurisy and disease of the lung is thus seen to be very close. It often happens that the illness begins with high temperature and all the symptoms of pneumonia, but after a few days the condition changes, fluid is detected in the pleura, giving the impression that an error in diagnosis has been made. In such cases microscopical examination shows the same germ in the pus from the pleural cavity as is found in the lung—the pneumococcus of Frankel. The tendency of this germ to cause suppuration is well known and it is found in other complications of pneumonia marked by pus, as meningitis. Its presence in empyema renders the close relationship of that disease

to pneumonia very certain. They probably invade the pleura through the subpleural lymph spaces.

There are other exudations which still cause discussion in which we do not find the pneumococcus, but other germs of less marked selective tendencies, as the streptococcus and staphylococcus. There is reason to believe that these are also metapneumonic, though the specific germ does not appear.

There are other cases complicating the secondary pneumonia and occurring without pneumonia in the infectious diseases. These effusions usually show the presence of the streptococcus.

"The Diagnosis of Empyema" was the subject of a paper by Dr. J. W. Brannan. As symptoms are obscure, the diagnosis must rest chiefly on physical signs. It is easy when the classical signs are present—immobility of the affected side, loss of vocal frenitus, flatness on percussion and diminished respiratory sounds. In young children, however, these signs are rarely distinct, There may be no distention of the side whatever, and vocal fremitus, even if it can be obtained, is of no significance. Signs obtained by auscultation are often difficult to interpret. The normal respiratory sounds are so loud and the pleural cavity so small that a considerable collection of fluid may cause but little change. Displacement of the apex beat is a sign of the greatest value. It is caused by no other condition. The two most constant signs are percussion-dullness and displaced apex beat. Exploratory puncture affords the most positive and in many cases the only certain evidence of fluid. As to the character of the fluid, symptoms and signs are very uncertain guides. The needle is the only sure test. Pleurisy following pneumonia, or complicating the infectious diseases, and traumatic pleurisy, is apt to be purulent. Though the needle often fails to obtain fluid when present, its use when the fluid does not quickly disappear should never be omitted.

It has been alleged by Bacelli that the whispered voice is always present when the effusion is purely serous, but absent when sero-purulent or purulent.

This is explained on the ground that sound is more readily transmitted by a homogeneous medium like serum. The certainty of this sign is quite doubtful.

"Operation for empyema" was considered by Dr. J. H. Ripley in a brief paper. Operations should be performed as soon as a diagnosis has been made. Unless the amount of fluid is very great or the symptoms are urgent, a delay of a few days will do no harm. The location of the incision must depend largely upon the vocal conditions. It may usually be made in the seventh intercostal space below the angle of the

scapula. An incision an inch or more in length should be made down to the costal pleura, through which a small opening should be made. Through this a director should be passed and the incision enlarged with a blunt-pointed bistoury. A drainage tube of large size should then be passed several inches into the cavity, with a safety pin attached to the outer end to prevent its slipping out of sight. If there is not sufficient space for the tube between the ribs a portion should be removed sub-periosteally. The wound should be dressed with oakum, which should be changed every day.

"Expansion of the lungs in cases treated by incisional drainage" was discussed by Dr. J. West Roosevelt. The idea that fluid in the chest causes compression of the lung has been completely disproved. The lung tends to retract from the chest wall whenever fluid or air is present in the pleural cavity. It becomes retracted and condensed, but is compressed only when the amount of fluid is very large. Compression can only occur when the elastic recoil of the lung has been destroyed. Expansion of the lung to fill its normal position almost invariably follows early operation performed at the lowest part of the cavity where drainage can be free. The earlier the operation when pus is known to be present the better. The prognosis is far better with the chest full of air than with the chest full of pus.

Expansion is aided by the action of the other lung, especially when the glottis is closed, as in coughing. The air is forced by the sound lung into the contracted lung during expiration, and expansion will be seen at that time rather than during inspiration. Granulation tissue by contracting also aids in drawing the lung out to the chest wall.

Removal of sufficient rib to permit drainage is perfectly proper. Removal of rib for the purpose of causing contraction of the chest wall is almost criminal. It should not contract, and can only do so by interfering with the lung and obliterating space that the lung requires, and, if properly managed, would undoubtedly occupy.

Dr. Scharlau reported a case in which the chest was found full of pus on the third day after a sudden onset.

Dr. Caillé had seen a case of double primary empyema as proved by autopsy. The lung was perfectly healthy, and there was no lesion of the tonsils or other organs. Primary empyema is, however, extremely rare in children.

Dr. Koplik said that while primary empyema was a possibility, it was very rare.

Dr. Holt had never seen a case of primary empyema, nor one in which pure serum, without pus cells, had been trans-

formed into pus. Pleurisy accompanying pneumonia is usually distinctly purulent.

Dr. Putnam Jacobi had seen a case of primary empyema. The theory of lung compression was antiquated and untenable.

Dr. Ewart, of London, believed that while primary pleurisy might occur, it was very rare.

Dr. Ripley said that in a child dullness was not always present, and but little fluid was required to produce bronchial breathing. Displacement of the apex was a valuable sign, but it was very difficult in some cases to detect the apex beat.

Dr. Andrew H. Smith had often found a line of egophany just above the fluid, and regarded it as a valuable sign. He said that the lung in empyema was contracted, not compressed. He had many years ago proved the transference of impulse from the sound to the affected lung when the glottis was closed.

Dr. Holt referred to the absence of râles and friction sounds where they had previously been heard as a very valuable sign of fluid.

Dr. Ewart also referred to silence where there had before been crepitations as an important sign. He did not believe that Bacelli's sign was to be relied upon. Symptoms were sometimes of considerable importance. A high or oscillating temperature associated with a persistent dry cough for a long time was a suspicious symptom.

The chairman asked if it had been the experience of those present that aspiration was advantageous.

Dr. Roosevelt replied that aspiration with the idea of expanding the lung by the suction was foolish. At the best, it is a waste of time.

Dr. Dawbarn reported a case in which irrigation of the cavity with a warm one per cent. solution of carbolic acid had been followed by death from shock in four hours.

Dr. Caillé objected to irrigation, on the ground that it breaks up the adhesion, which we wish to avoid.

Dr. Berg advocated exsection of a rib to aid drainage.

Dr. Winters believed that most undiagnosticated cases died from exhaustion or tuberculosis, but encysted cases often recovered. He had never seen a case of pure serum change to pus. Serous effusions were not uncommon in connection with the infectious diseases. He had frequently seen cases of empyema in which a diagnosis of pneumonia had been made at the outset. He had formerly thought that an error in diagnosis had been made, but now believes that that was the usual way in which empyema developed.

STATED MEETING, APRIL 14, 1892, DR. W. P. NORTHRUP, CHAIRMAN.

Dr. Mary Putnam Jacobi reported a case of persistent ulcer in a girl of four years. Upon admission to the hospital there was an immense ulcer on the right thigh covering its entire anterior and external surfaces from the trochanter to the knee.

This had originated seventeen weeks before from a burn caused by matches which had taken fire in the child's pocket. It was extensive at first, but had steadily increased in size, except at the lower portion, where some reparative process had taken place. Owing to the irritability of the child it had been neglected, and on admission was covered with a thick grayish slough. There was considerable fever, the temperature ranging from 102 deg. to 103 deg.

Irrigation with a saturated solution of boracic acid and the use of zinc ointment, and a powder of salicylic and boracic acids, was followed by disappearance of the fever, the surface of the ulcer assuming a better character. A number of skin grafts were made, four of which were successful. Sponge grafts were applied unsuccessfully. After four weeks' treatment the ulcer measured 4½ inches by 3½ inches.

Although the grafts grew to be an inch in diameter, the ulcer steadily increased in size until it became 6½ inches long. At the same time it assumed a grayish look, the entire appearance being that of a syphilitic ulcer. Under a dressing of mercurial ointment it again became healthy. Iodide of potash was given internally and for a time apparently with the best results. Improvement then ceased and the ulcer again assumed an unhealthy look. Bichloride of mercury was then added to the treatment (two and one-half months after the date of admission), and from that time improvement continued without interruption and the ulcer had closed in six weeks, eight months from the date of injury.

The child showed no evidence whatever of syphilis, but there was no permanent improvement until anti-syphilitic treatment was instituted. The series of relapses was only arrested when the bichloride was added to the iodide of potash and iodide of iron.

It was suggested that this did not necessarily mean that the ulcer was syphilitic in character, for treatment by iodide failed. It is quite possible that the mercury administered with iron acted as a tonic. The obstinacy of the ulceration might be due to the fact that the original ulcer was caused by matches—burns by phosphorus being noted for their obstinate character.

A MEMBRANOUS CAST OF THE TRACHEA

Was presented by Dr. S. K. Brenner, resident physician of the New York Infant Asylum. The patient, a girl seventeen months old, had been suddenly seized with symptoms of laryngeal diphtheria, which had become progressively worse. Intubation was performed sixteen hours after the onset, dyspnœa being the most urgent symptom. A one-year tube was used, and was at once coughed out. Before another tube could be introduced, and during a violent paroxysm of coughing, a complete cast of the trachea was expelled. A three-year tube was then introduced, and all dyspnœa and cyanosis was at once relieved. Quiet sleep followed, the child took her nourishment and stimulant well, and at that time, twelve hours after the intubation, the symptoms were all improved.

A CASE OF SARCOMA OF THE KIDNEY.

Dr. Joseph O'Dwyer being unable to be present, presented through the chairman a case of supposed sarcoma of the kidney. The patient was a girl three years and ten months of age. She had been under observation but a short time and the history was uncertain. There were no symptoms referable to the growth and, as yet, no impairment of nutrition. A large firm mass could be felt in the left side of the abdomen just below the line of the umbilicus, and could be distinctly seen when the child was upon the back. Posteriorly it could be detected in the lumbar region, and upon making presure forward the whole mass could be felt to move freely.

It was slightly nodular, and hard and tense to the feel. It seemed to cause no discomfort or pain, and was not sensitive to pressure. The urine contained a few blood cells and broken granular and hyaline casts. It was beyond doubt a kidney tumor, possibly a carcinoma. Carcinoma is, however, rare at this age, while sarcoma, if not common, is the most frequent kidney growth.

The speaker referred to a specimen presented the night before at the New York Pathological Society by a member of this section (Dr. L. Emmett Holt.) The patient was two years of age. A tumor had been discovered in the right side five months before. There was but little impairment of nutrition and no definite symptoms. A diagnosis of sarcoma had been made and confirmed by operation. The growth weighed 2¼ pounds and was removed by lumbar incision. One week after the operation the child was doing well.

But one result could be expected in the present case without operation. The mass would increase in size and the child would waste and die.

THE PRACTITIONER'S ANATOMY OF THE RESPIRATORY PASSAGES AS APPLIED TO INTUBATION, LARYNGOTOMY, TRACHEOTOMY AND BRONCHOTOMY.

A paper with this title was read by Dr. James E. Kelly, and was illustrated by numerous charts and diagrams, and by several elaborate fresh dissections of the thorax and throat, both in children and adults, made especially for this occasion. These added greatly to the interest of the paper, which was designated as a practical application of the author's extensive experience and observation as an anatomist to the needs of the general practitioner. Especial attention was given to the mechanical view of the subject, as being of far more value then the vast amount of detail to which the student is treated without a clue to its practical application.

The anatomy of the child varies but little from that of the adult. The thymus is the only structure that causes important modification in the region under consideration. In operating low down in the pre-trachial space in young children it causes serious obstruction. It varies greatly in shape and is subject to numerous anomalies. It usually forms a body extending entirely across the space between the sterno-mastoid muscles. Two processes pass upward in close apposition to the tracheal fascia and terminate within half an inch of the isthmus of the thyroid, to which they are attached by two ligamentous bands. Hence, but a limited portion of the trachea is uncovered and available for operation below the isthmus of the thyroid. This latter body is occasionally absent and sometimes in an abnormal position, conditions which may be very puzzling to the operator.

It should be remembered that it is possible to make a dissection in this region as neatly and almost as bloodlessly in the living subject as in the cadaver. This is especially true in young patients. The more closely an operation resembles a dissection the more satisfactory it is to the surgeon and the safer for the patient. Haphazard surgery is a lottery in which fools play for their patients' lives.

In considering the anatomy of the region the relations of the osseous structure are of much importance. The posterior surface of the larynx and trachea corresponds and adapts itself very closely to the contour of the anterior surface of the spinal column. The œsophagus and lower portion of the pharynx, which occupy but little space, are the only structures between the trachea and the vertebræ. Thus the laryngo-tracheal tube passing downward and backward intersects the place of the sterno-mastoid muscles. This is a point of much practical importance in low tracheotomy.

Laryngotomy is an operation so undesirable that it merits

but litte attention. It opens the larynx just below the rima glottidis where the canal is narrowed into a wedge, the thin edge being anterior. The cartilage is rigid and of such low vitality that the injury resulting from the separation and the introduction of a tube is liable to be followed by necrosis. There being but little subcutaneous tissue an unsightly scar usually results, which lies so high that it can not be concealed.

The hybrid operation laryngo-tracheotomy is unjustifiable, as it destroys the continuity of the cricoid cartilage, upon which the larynx largely depends for its shape.

Much vaguenesss and uncertainty exist regarding the anatomy of this region. It should be remembered that all the external operations on the respiratory passages are performed between the hyoid bone and the sternum, in the mesial line between the sterno-hyoid and sterno-thyroid muscles, low tracheotomy alone being done below the isthmus of the thyroid.

Not an important structure lies above the isthmus, but below there are numerous important vessels. This lower space is analogous to a space just above the pubis. Two spaces are formed by two distinct layers of fascia, which are fused above the isthmus to form a single fascia. In the superficial space are the anterior and transverse jugular veins and a few small arteries. In the deep space are the left innominate, the inferior thyroid and a venous plexus.

Much interest has of late been aroused in the operation of bronchotomy for the removal of a foreign body from a bronchus. The author, after extensive investigation, is inclined to think that the operation is justifiable and that there is no insuperable anatomical difficulty in the way. The cordate shape of the chest places the root of the lung much nearer the surface than is usually supposed. A verticgl incision should be made through two or more costal cartilages, or through the ribs just internal to the mammary line. This readily brings the structures into view, the relations of which are very close and intricate. While the mechanical difficulties are great, a still more important question is the possible effects of interference with the heart and great vessels. Upon this point little or nothing is known.

While intubation requires but little anatomical knowledge there are certain points which are quite essential. The point of the tube may enter numerous depressions and fossæ preventing its introduction. The first are the glosso-epiglottic fossæ, separated from each other by the frenum of the epiglottis. The glottis itself is situated in the midst of soft yielding tissues, which are easily indented.

A slight depression exists just above the false vocal cords which may readily catch the tube. The ventricles of

the larynx are, however, the source of most serious trouble. These ventricles lie upon either side, between the true and false vocal cords. The true cords, especially in phonation or stridor, approach more closely to the mesial line than the false, thus forming a cavity with a concave floor, in which the end of the tube is very easily entangled. Just behind the glottis and separated from it by the arytenoid bodies is the lower portion of the pharynx, the most capacious snare set for the operator and the one into which he most frequently falls. This whole area in the infant is readily covered with the tip of the index finger. The surface of the glottis is, moreover, very oblique to the pharynx, so that the tube easily glides backward into that cavity. Unless the true cords are accurately reached, the point of the tube is deflected into the capacious and yielding ventricle.

The operation can, therefore, be performed with facility only when the tube is held parallel with the mesial line of the body, but obliquely to the long axis of the rima and with the point directed toward the inferior margin of the cricoid cartilage. This can be effected by introducing the instrument into the mouth with the handle over the bicuspid tooth, with the the point of the tube directed forward toward the glottis. The common error is thus avoided of passing *over* the epiglottis. Owing to the more extended area opposed to the ventricles, the tube is not so liable to be caught in them. As the surface of the larynx containing the glottis does not look upward, but almost directly backward, the handle of the introducer should be elevated to bring the point of the tube forward.

In young children the epiglottis is sometimes so soft and small as to be found with great difficulty. Pass the finger low into the pharynx until the resisting cricoid cartilage is felt, on the upper margin of which are situated two movable nodules, the arytenoid cartilages. Immediately above and in front of these in the mesial line is the epiglottis.

Dr. H. L. Chapin said that he had performed tracheotomy several times upon children under two years and had been surprised at the extreme obliquity of the trachea, which caused it to lie at great depth at the lower portion. This was a strong argument in favor of intubation in young children instead of tracheotomy.

The chairman asked Dr. Kelly what point he regarded as the narrowest in the respiratory tract.

Dr. Kelly replied that he believed it was at the true vocal cords.

The chairman referred to experiments upon the dead subject by Dr. O'Dwyer and himself, which proved that the narrowest point was not at the cords, but at the cricoid cartilage.

An intubation tube could frequently be drawn with the use of but little force downward past the cords, which could not be made to pass below the cricoid. A tube much smaller than the prescribed size might drop below the cords, but would not pass below the cricoid into the trachea. The most recent modification of the tube, approved by Dr. O'Dwyer, consisted in making the lower end bulbous in shape and equal in size to the largest part of the tube. This would prevent its entering the ventricle of the larynx, a very frequent source of failure.

Dr. Berg asked if the operation for bronchotomy could not be done to better advantage posteriorly.

Dr. Kelly replied that if the tube were turned to the side as far as possible during introduction it would bring the long diameter in position to act as effectually as the bulb described. The posterior operation was impossible because of the closer apposition and less yielding character of the ribs, requiring extensive resection. The trunks of the intercostal vessels were also met posteriorly instead of the branches.

THE LEGAL LIABILITY OF HOSPITALS.

On the 16th of last month the Court of Common Pleas of New York added another decision to the interesting question of the legal liability of hospitals. The question, in brief, is: Is a hospital corporation legally responsible for injury to a patient? In one case the suit was brought against the Manhattan Eye and Ear Hospital. The plaintiff's eye was operated upon at this institution, and he showed that the after-treatment was not of a proper character. As a result there was entire loss of sight from the eye. The first trial resulted in favor of the plaintiff; but the General Term of the Supreme Court reversed this decision, holding that no cause of action had been made out. The position of the court was this: Inasmuch as the corporation had exercised all proper care in the selection and appointment of the physicians of the institution, it, being a public charity, was not liable. To recover against the hospital it must be proved that there was an omission to exercise due care in the selection of the persons in its employment. In the case just decided, the plaintiff's son was treated for an injury to his thigh, and owing to the alleged negligence of the surgeons of the institution, the Society of the New York Hospital, there was not a good recovery. The hospital authorities simply showed that they were a public charity, and that they had used all possible care to select competent physicians and surgeons. Upon this showing alone the court dismissed the complaint.

N. O. Medical and Surgical Journal,

ESTABLISHED IN 1844.

PUBLISHED MONTHLY, $2.00 A YEAR.

Articles from physicians are respectfully solicited. All articles, news and exchanges, and books for review, should be sent to the EDITOR, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL. Business communications should be addressed to the BUSINESS MANAGER, NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

EDITED AND PUBLISHED BY

AUGUSTUS McSHANE, M. D.

COLLABORATORS:

DR. F. W. PARHAM. DR. H. W. BLANC. DR. A. W. De ROALDES.
DR. R. MATAS. DR. JOHN DELL'ORTO.

Editorial Articles.

DEATH OF DR. T. G. RICHARDSON.

On May 26, 1892, at 8:30 P. M., the spirit of a revered teacher and valued citizen passed away to its rest. While his death was not a surprise to those who knew of his long and painful illness, still it came as a shock to the many who owed a large part of their medical training to Dr. Richardson.

Dr. Richardson was born at Lexington, Ky., on January 3, 1827, and was the son of William Richardson, for many years before his death cashier of the Northern Bank of Kentucky, Louisville. His mother was Synia Higgins, whose father was a contemporary and personal friend of Daniel Boone.

In 1837 he removed with his parents to Louisville, and in 1845 matriculated in the medical department of the University of Louisville. In the same year he entered the office of Prof. S. D. Gross, M. D., as a private pupil, having as companion Dr. Nathan Bozeman, now of New York, who was also his classmate at the university. In 1847 he was appointed resident student of the Louisville marine hospital. He gradu-

TOBIAS GIBSON RICHARDSON

1827-1892.

ated at the university in the spring of 1848, and immemediately afterward was appointed by the faculty demonstrator of anatomy, which position he filled for eight years. During a large portion of this period he was engaged in anatomical investigations, and in 1853 published a large volume entitled "Elements of Human Anatomy," besides occasional contributions to the *Western Journal of Medicine.* This medical periodical being suspended in 1855, he founded the *Louisville Review* in connection with Prof. Gross.

Resigning the position of demonstrator of anatomy at Louisville in 1856, he was at once offered the chair of anatomy in the New York Medical College, that of surgery in the Kentucky School of Medicine, and that of anatomy in the medical departmeat of the Pennsylvania College at Philadelphia. He decided to accept the latter, and removed to Philadelphia in in the fall of 1856. While there he established in conjunction with Prof. Gross, who had accepted the chair of surgery in the Jefferson Medical College, the *North American Medico-Chirurgical Review*, and continued to act as junior editor until its suspension in 1862, although he had in the meantime removed to another field of duty. While at the Pennsylvania Medical College he was associated with Profs. Alfred Stille, Francis Gurney Smith and other gentlemen well known to the profession throughout the United States as teachers and authors.

In 1858 he was invited to the chair of anatomy in the medical department of the University of Louisiana to succeed Prof. Nott, and removed to New Orleans in the latter part of that year. This school was at that time one of the largest in the country, and, with such distinguished professors as the late Warren Stone, M. D., Thomas Hunt, M. D., and others of like distinction, attracted annually more than 400 students. He was at the same time appointed one of the attending surgeons to the Charity Hospital and lectured upon clinical surgery in addition to his didactic lectures upon anatomy in the medical college. He was the first to perform successfully the operation of vesico-vaginal fistula, after the method of Dr. Nathan Bozeman, which had then but recently been introduced to the profession. He soon became engaged in a large sur-

gical practice, which was only interrupted by the outbreak of the civil war.

Leaving New Orleans before its capture by the Federal forces in 1862, he joined the Confederate army of Tennessee, of which he was made practically, although not nominally, assistant medical director, and subsequently medical inspector on the staff of Major General Braxton Bragg. He was present on the field at the battles of Murfreesboro, Chickamauga and Missionary Ridge, in the second of which it became his melancholy duty to amputate the thigh of the gallant Major General Hood. He accompanied General Bragg, after the retirement of that distinguished officer from the army of Tennessee to Richmond, where he continued his duties as medical inspector during the summer of 1864, and by request of the surgeon in charge, Dr. Hancock, and the attending surgeons, Drs. Cabell, Hoyt, Tom and Welford, he performed a large part of the capital operations at the immense hospital after the battles of Rapidan, Spottsylvania Court House and Cold Harbor. He subsequently accompanied General Bragg to North Carolina as medical director of that department, and was present on the field at the battle of Averysboro, and also that of Bentonville, where a mere handful of Confederates under General J. E. Johnson made their last unsuccessful fight.

Still adhering to the fortunes of his friend and chief, General Bragg, he joined the retreating column of government officials, with President Davis at its head, and continued with them until the formal dissolution of the Confederate cabinet, at Washington, Ga., and the dispersion of its members.

He returned to New Orleans in the succeeding fall and resumed his position in the University of Louisiana, and was immediately chosen dean of the medical faculty. In 1873, upon the resignation of Prof. Warren Stone from the chair of surgery, he became his successor, and his ability as a director and teacher aided in elevating the college to its present high standing.

In 1877 he was elected president of the American Medical Association at its annual meeting in Chicago, and presided at the subsequent meeting in Buffalo, N. Y.

For a number of years he devoted the summer months to

travel. He traveled over all the ground usually covered by tourists, and besides a large amount of territory not often visited by them. He crossed the Atlantic many times; spent two summers in Mexico; ascended the Amazon; scaled the Andes; visited the Sandwich Islands, and went up and down his own country, until no place of importance had been left unseen. In all of his journeyings he was accompanied by his devoted wife; she was one of the three ladies who first looked down into the crater of Popocatapetl.

In addition to the literary productions mentioned, Dr. Richardson contributed a number of articles to THE NEW ORLEANS MEDICAL AND SURGICAL JOURNAL and the Medical News and Library of Philadelphia. He also wrote a life of the distinguished anatomist and naturalist, Professor John D. Godman. He was a corresponding member of the College of Physicians and Surgeons of Philadelphia and of the Academy of Natural Sciences, Philadelphia, and an active member of the Louisiana State and the Orleans Parish Medical Society. [Representative Men of the South.]

For many years Professor Richardson was a member and elder of the First Presbyterian church, counting its pastor, Dr. B. M. Palmer, among his most valued friends.

Dr. Richardson was married twice. His first wife was the daughter of Prof. Chas. W. Short, M. D., of Kentucky. Three children blessed this marriage. A tragic fate overtook the mother and children. They were on a steamboat, coming down the Mississippi to join him; the boat sank, and among the victims were Dr. Richardson's wife and children.

His second wife was Miss Ida Slocomb, daughter of Mrs. Cora A. Slocomb, who survives him.

Dr. Richardson's learning and progressiveness always made him one of the foremost medical men of the South. His death makes a gap which few men are qualified to fill.

The following is extracted from the records of the Medical Department of Tulane University of Louisiana:

Prof. T. G. Richardson, born in Lexington, Kentucky, 1827; died May 26, 1892, at residence, corner Prytania and Second streets, New Orleans, La. Professor of Anatomy April 19, 1858, to May 18, 1872; Dean October 6, 1865, to June 1,

1885 (resigned Deanship March 31, 1885); Professor Surgery May 18, 1872, to May 20, 1889; resigned.

Has resided at Lexington and Louisville, Ky., Philadelphia, Pa., and New Orleans, La.

Graduated M. D., Medical Department, University of Louisville, 1848; was Demonstrator of Anatomy, University of Louisville, Medical Department, 1848-56; Professor Anatomy, Pennsylvania Medical College, 1856-58; member "Academy Natural Sciences, Philadelphia," College of Physicians and Surgeons, etc.; editor "Louisville Review," and "North American Medico-Chirurgical Review;" author of "Richardson's Anatomy;" author of various contributions to "Western Journal of Medicine" and "New Orleans Medical and Surgical Journal;" Surgeon P. A. C. S.; Assistant Medical Director, Army Tennessee, 1862-3; Medical Inspector, staff of General Bragg,* 1863-65; Medical Director, Department North Carolina, 1865; President American Medical Association 1878.

The sentiments of the faculty of the Medical Department are expressed in the following:

"MEDICAL DEPARTMENT,
"TULANE UNIVERSITY OF LOUISIANA,
"NEW ORLEANS, La., May 30, 1892.

"The following resolutions were this day unanimously adopted by the faculty:

"WHEREAS, Prof. T. G. Richardson, M. D., was called to New Orleans as a citizen by the Medical Department of the Tulane University of Louisiana, and continued his connection therewith from April 19, 1858, until severed by death, May 26, 1892, and having given to the Medical Department thirty one years of active service, fourteen years as professor of anatomy, seventeen years as professor of surgery, and twenty of these years as dean; and having also given during the last three years of retirement from active service the most convincing proofs of his great devotion to the present and future welfare of the Medical Department.

"*Resolved*, That Prof. Richardson, endowed by nature with physical, mental and moral superiority, was preëminently

*In place of Medical Inspector S. E. Chaillé, Surgeon, P. A. C. S., who was, at his own solicitation, transferred in 1863 from the field to the hospital service, and urged the appointment of Surgeon T. G. Richardson as Surgeon Chaillé's substitute.

distinguished for his culture and skill as a surgeon and physician, which gained for him national reputation and rendered him one of the most instructive and popular of medical teachers; for exceptional scientific attainments, which, while broadening his views of nature's God, left him none the less firm in his Christian faith; for his courage and patriotism in war and his benevolence and philanthropy in peace; for his moderation and wisdom in council, and for his zeal and ability in executive administration; for his inflexible devotion to truth, honor and duty; for the strength of his friendships in adversity as in prosperity, and for the fidelity, tenderness and devotion given to his beloved and honored wife.

"*Resolved*, That by the death of this strong, wise and good man the medical department has lost its most valued friend and counselor; the medical profession its most honored representative in New Orleans; the State of Louisiana a citizen unsurpassed for patriotism and for worth; his friends a heart to love and a hand to help them, and his wife and family one who has left precious memories of a loving, virtuous and noble life.

"*Resolved*, That at the next annual commencement, April 5, 1893, memorial addresses upon the life and services of Prof. T. G. Richardson, M. D., shall be delivered.

"STANFORD E. CHAILLÉ, M. D., *Dean*."

State News and Medical Items.

[Communications from Physicians of Louisiana are solicited for this Department. News of personal interest is especially desired.]

CHARITY HOSPITAL—APRIL 5, 1892.

The Board of Admistrators of the Charity Hospital met in regular monthly session on April 5, 1892, with Dr. Bickham, the vice president, in the chair. Secretary Marks announced that he had received from the Governor the commissions of Dr. Bickham and Mr. Geo. Seaman, who had been appointed their own successors.

The report of the finance committee was as follows:

From payment of warrants of first quarter.....	$10,000 00
From ordinary sources.....	2,399 29
Disbursements—Insurance premiums for three years.....	1,664 25
Ordinary expenses.....	8,078 57
Cash balance on hand March 31, 1892.....	$32,472 84

Clerk J. C. De Mahy submitted the following report for March:

Number of patients remaining in hospital March 1, 1892, 696; number of patients admitted, 558; number discharged, 499; died, 95; number of patients remaining in hospital April 1, 640; daily average of patients during March, 670.

Financial report for March: Amount received from pay patients, $329; gate receipts, $542; other receipts, $15.

Report of ambulance service—Surgical 48, medical 7, dressed 14, conveyed 9, obstetrical 3, died 5, false 6, not needed 9, transfer calls 5, average time 33 minutes.

House Surgeon Miles read the following:

In compliance with the resolutions of the board, I have the honor to certify that the following named gentlemen have complied with the rules and regulations of the hospital during their respective terms of service, and, therefore, take pleasure in recommending them as candidates for the hospital diploma and ambulance certificate: Messrs. Black, Duson, Provosty, Lewis, Trahan, Fenner and Talley.

Dr. Miles also recommended the election of the following medical staff:

Outdoor Visiting Staff—Surgeons: Drs. Schmittle, Matas, Chassaignac, Parker, Delaup, Parham, Martin, Michinard, De Grange, Scherck, Lawrason, Borde.

Physicians—Drs. Bemiss, Archinard, Pothier, Lamb, Fortier, Brickell, Sexton, Kennedy, Cocram, Laurans, Provosty, Lewis, Soniat, Le Doux.

Visiting Specialists—Drs. Bruns, Jones, Joachim, Friedrichs, Robin.

Indoor Visiting Staff—Surgeons: Drs. Matas, Chassaignac, Parham, Lawrason, Borde, Schmittle, Parker, Michinard, Scherck, Laurans, Bergé.

Physicians—Drs. Archinard, Pothier, Bemis, Black, Lamb, De Grange, Brickell, Cocram, Kennedy, Provosty, Lewis, Soniat, Fortier, Le Doux, Sexton.

Visiting Specialists—Drs. Jones, Bruns, Robin, Joachim, Friedrichs.

The meeting then adjourned.—*Times-Democrat.*

MORTUARY REPORT OF NEW ORLEANS.

For April, 1892.

CAUSE.	*White*	*Colored*	*Male*	*Female*	*Adults*	*Children.*	*Total*
Fever, Yellow							
" Malarial (unclassified)	4	1	2	3	2	3	5
" Intermittent							
" Remittent							
" Congestive	10	6	6	10	7	9	16
" Typho	3	1	1	3	3	1	4
" Typhoid or Enteric	2		2		2		2
" Puerperal		1		1	1		1
Influenza	1	2	2	1	2	1	3
Scarlatina							
Measles	1	1	1	1		2	2
Diphtheria	4	1	3	2		5	5
Whooping Cough	2		1	1		2	2
Meningitis	10	5	7	8	5	10	15
Pneumonia	28	18	30	16	24	22	46
Bronchitis	10	5	8	7		15	15
Consumption	38	32	46	24	69	1	70
Cancer	6	2	1	7	8		8
Congestion of Brain	7	4	8	3	5	6	11
Bright's Disease (Nephritis)	27	3	16	14	29	1	30
Diarrhœa (Enteritis)	33	12	23	22	16	29	45
Cholera Infantum	26	2	15	13		28	28
Dysentery	3	2	3	2	5		5
Debility, General	3	1	3	1	3	1	4
" Senile	21	4	10	15	25		25
" Infantile	5	5	6	4		10	10
All other causes	170	102	163	109	158	114	272
TOTAL	414	210	357	267	364	260	624

Still-born Children—White, 23; colored, 11; total, 34.

Population of City—White, 184,500; colored, 69,500; total, 254,000.

Death Rate per 1000 per annum for month—White, 26.92; colored, 36.25; total, 29.48.

F. W. PARHAM, M. D.,
Chief Sanitary Inspector.

METEOROLOGICAL SUMMARY—APRIL.

STATION—NEW ORLEANS.

Date.....	TEMPERATURE. Mean	Max..	Min..	Precipn. in inches and hund'ths..
1	71	78	64	T
2	74	80	67	.02
3	72	78	67	0
4	72	77	68	0
5	77	82	72	0
6	76	82	71	0
7	64	68	60	.12
8	67	76	58	0
9	64	69	59	0
10	58	66	51	0
11	66	76	55	0
12	64	67	62	T
13	68	77	60	T
14	70	75	65	T
15	60	67	52	0
16	62	72	52	0
17	70	80	59	0
18	74	83	66	0
19	72	79	66	0
20	76	84	68	0
21	71	74	68	4.19
22	70	77	64	3.58
23	66	74	58	0
24	65	70	60	.62
25	62	67	57	1.54
26	71	79	63	0
27	70	78	63	T
28	73	80	66	.17
29	70	76	63	.20
30	72	79	66	T
31	--	--	--	—

SUMMARY.

Mean barometer, 30.08.
Highest barometer, 30.27, 15th.
Lowest barometer, 29.88, 18th.
Mean temperature, 69.
Highest temp., 84, 20th; lowest, 51, 10th.
Greatest daily range of temperature, 21, 17th
Least daily range of temperature, 5, 12th.

MEAN TEMPERATURE FOR THIS MONTH IN—

1871.....68.0	1877.....68.0	1883.....71.0	1889.....70.0
1872.....70.0	1878.....72.0	1884.....68.0	1890.....70.0
1873.....66.0	1879.....68.0	1885.....70.0	1891.....68.0
1874.....65.0	1880.....71.0	1886.....66.0	1892.....69.0
1875.....65.0	1881.....67.0	1887.....68.0	
1876.....69.0	1882.....72.0	1888.....70.0	

Total deficiency in temp'ture during month, 19.
Total deficiency in temp'ture since Jan. 1, 231.
Prevailing direction of wind, E.
Total movement of wind, 8645 miles.
*Maximum velocity of wind, direction and date, 40 miles, from E., 3d
Total precipitation, 10.44 inches.
Number of days on which .01 inch or more of precipitation fell, 7.

TOTAL PRECIPITATION (IN INCHES AND HUNDREDTHS) FOR THIS MONTH IN—

1871..... 2.29	1877..... 4.79	1883 ....14.20	1889..... 2.28
1872..... 5.01	1878..... 1.51	1884..... 6.48	1890..... 3.46
1873..... 1.74	1879..... 9.17	1885..... 3.67	1891..... 0.26
1874.....13 62	1880..... 6.88	1886..... 5.60	1892.....10.44
1875..... 8.05	1881..... 3.92	1887 ... 1.87	
1876..... 6.41	1882..... 4.83	1888..... 1.89	

Total excess in precip'n during month, 5.06.
Total deficiency in precip'n since Jan. 1, 1.75.
Number of cloudless days, 8; partly cloudy days, 10; cloudy days, 12.
Dates of frost, ——.
Mean maximum temperature, 76.
Mean minimum temperature, 62.

NOTE.—Barometer reduced to sea level. The T indicates trace of precipitation.
* To be taken from any five-minute record.

G. E. HUNT, *Local Forecast Official.*