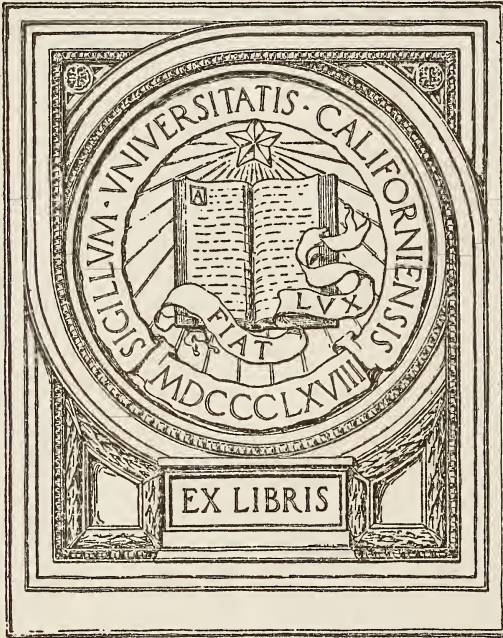
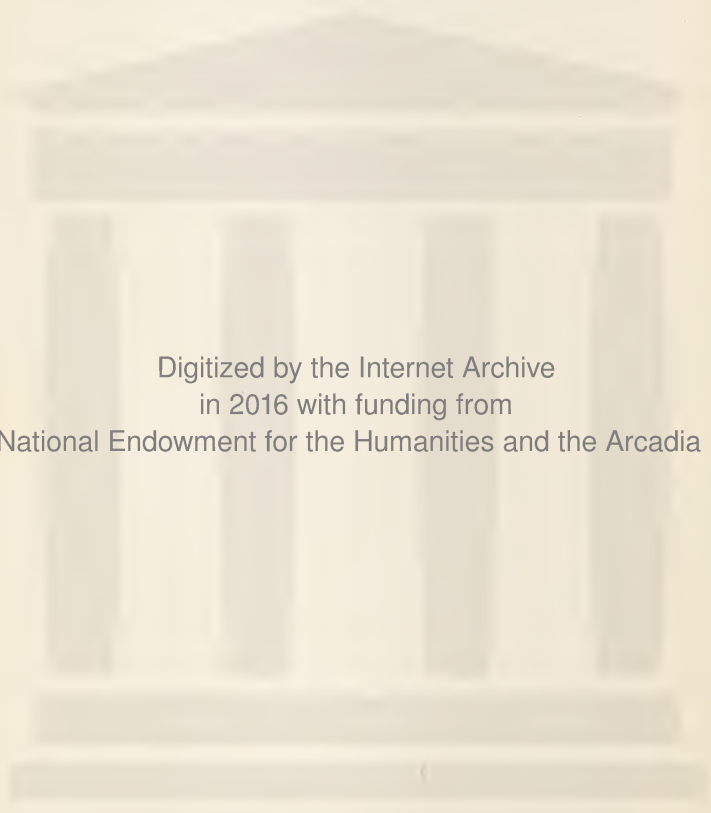


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NEW ORLEANS
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[NEW SERIES.]

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TO

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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.]

THE VOMITING OF PREGNANCY.

By GEO. H. LEE, M. D., GALVESTON, TEXAS.

The morning sickness, or usual slight vomiting of the pregnant woman, is a symptom of such constant occurrence, and generally produces so little disturbance of the physical forces, that it has come to be regarded by many in the profession as physiological.

There can be no doubt that the cause of this symptom is to be found in a consideration of the same facts and theories which are deduced from the study of the ætiology of that more serious condition—the pernicious vomiting of pregnancy.

The ordinary morning sickness needs very little in the way of treatment. The stomach usually shows decided intolerance of any kind of food or medicine during the forenoon.

Various remedies have been used in this condition and have, at times, given satisfactory results; but reliance upon any favorite measure which has served us well, will ever and anon be productive of disappointment. Consequently, when dealing with this symptom where it has become sufficiently aggravated to be annoying, in the absence of displacement of the uterus or other pelvic disease, for the relief of which special measures are indicated, I have come to rely upon a careful regulation of the diet and attention to the functions generally.

The patient usually vomits anything she takes in the morning, be it cocaine, ingluvin, oxalate of cerium, or one of the other vaunted specifics. She vomits food if taken during the early hours, or she vomits even when she takes absolutely nothing, usually in the latter case with greater distress than when the viscus contains some fluid or light food; consequently I usually advise my patients to drink freely of water, preferably hot or warm water, early in the day. This is thrown off with very little effort or distress, and shortly after the patient is able to take nourishment, the stomach being apparently benefited by the lavage.

Managed in this way the usual vomiting of this condition produces no constitutional disturbance and gradually subsides.

The pernicious vomiting of pregnancy presents an entirely different picture. Far from being physiological, it is a pathological condition of grave import, between which and the affection I have just described, there are various gradations and degrees.

It is, according to most authorities, comparatively a rare affection.* “Carl Braun in a fabulous experience of 150,000 obstetrical cases never observed a fatal termination.” So rare are the records of such an affection in German literature that one distinguished German author is disposed to deny its existence.

Robert Barnes has seen nine fatal cases. By collating the statistics of such English, American, French, Italian and Russian authors as were at my command, I was able to find the records of 172 fatal cases, including those of Barnes.

It is a striking fact that so few cases are reported by German writers as compared to those of other countries, a fact which can not be dismissed by a simple reference to climatic and social differences.

The affection is much more frequent in first pregnancies.

Probably I can not give a better picture of symptoms as presented than by describing the case which suggested this article.

On February 20, 1892, I was called to attend Mrs. T. C., age 23 years. She was a tall, slight, brown-eyed, brown-

* *Am. System Obs.*, Vol. 1, p. 411.

haired woman of rather delicate physique and nervous temperament. Had married late in the November or early in the December preceding. Had missed the menstrual flow in January and again at the expected time in February. Previous to this time the function had been entirely regular and unaccompanied by pain, and her general health fair. A week or ten days before I was called she had fainted in her husband's office. Since then she had been nauseated in the mornings, the nausea gradually growing worse, until when I was called she was vomiting everything that passed her lips; indeed, she vomited at intervals of half an hour or three-quarters continually during the day and most of the night, even when talking absolutely no food, with a distressing feeling of nausea between the paroxysms of emesis, as if there was something upon the stomach, the dislodgment of which would give immediate relief. The vomita consisted of any food or water that was taken, a glairy mucus, which in the latter days was occasionally streaked with blood and biliary matter. Thirst was intense all through the illness.

The pulse in the beginning was slightly accelerated, but good in other respects; but as days and weeks passed without improvement it gradually increased in frequency and lost in force and volume.

The elevation of temperature was very slight—99 to 100—throughout, sometimes even nearly to normal, until the last few days of the illness, when it reached 101.

The mouth and tongue quickly became dry and parched, and breath fetid. Sordes accumulated upon the teeth.

Salivation, as occurs in some cases, was never present. There was little or no tenderness about the abdomen.

The urine was scant after the first few days, but never contained either albumen or casts. It was examined almost daily, and had there been evidence of affection of the kidneys, as is described by some authorities, I held myself prepared to at once interfere with the course of the pregnancy. After the first few days the distressing nausea and vomiting, and the excessive thirst were so constant as utterly to prevent the patient from resting at all, except when under the influence of large doses of chloral and bromide by enema, or morphine hypoder-

mically. The picture of intense and unremitting suffering was one I have never seen surpassed.

The theories regarding the ætiology of this condition are numerous and interesting. It will reward us to pass some of them quickly in review.

The large majority of theories center around the idea which ascribes the pathogenesis of this affection to reflex phenomena, originating in conditions present in connection with the pregnant uterus. Nausea and vomiting are frequently seen in pathological conditions of the uterus not connected with pregnancy. Physiological gestation is accompanied by changes in every tissue of the woman; by a hydræmic condition of the blood, and heightened excitability of the nervous system, as well as other general alterations which predispose to reflex phenomena.

As to precisely how the conditions about the uterus give origin to the peripheral irritation the various theories differ.

Graily Hewitt believes that flexions and versions in the growing uterus, by irritating the nerves from the cervical ganglion, originate the peripheral impulses. He ascribed the more frequent occurrence of the symptom in the morning to the change of position on rising, when the superimposed viscera, by pressing upon the uterus, increase the flexion or displacement.

I would remark that in many cases, as in my own, there exists no flexion or displacement.

J. H. Bennett lays special stress on inflammatory conditions of the vaginal cervix, an abrasion, or ulcerated place, an old laceration, an adhesion of cervix to vaginal wall; and he relates cases occurring in multipara, as well as primipara, which have been relieved promptly by attention to these lesions.

Horwitz and Joulin advocate the causal relation of metritis and of inflammation of the cellular tissue of the pelvis.

Ebell and Veit dwell upon the importance of endometritis as an etiological factor.

Bretonneau suggested that the peripheral irritation was originated by the stretching of the fibres of the growing uterus and the pressure upon the nerves occasioned thereby. He

dwells upon the fact that the majority of cases occur in primigravidæ, and the large proportion in the first half of pregnancy; and that a similar reflex nausea has been recorded resulting from the presence of a hydatiform mole, and has been promptly relieved by emptying the uterine cavity.

In close connection with the teachings of Bretonneau is the experience of Dr. Copeman, of Norwich, England, which is familiar to the profession. Acting upon this experience, Dr. W. Gill Wylie has devised a dilator, with which he stretches the external os, and later on, if this stretching is not efficient, even the internal os, with very happy results in certain cases. The explanation of the relief which followed must be found in the over-distension of the fibres of the cervix and their subsequent paralysis.

The most interesting and probably what will prove the most prolific investigations in this connection are those of Tumas, since they carry our knowledge a step forward and enable us to understand how reflex waves originating in the genital organs can expend their force on the organs of digestion.

By experimentation, Tumas succeeded in locating and outlining a vomiting centre in the medulla, in close apposition to the centre which presides over the generative organs. When, then, the growing uterus is the starting point of numerous peripheral impulses, originating in physiological or pathological conditions, these impulses expend themselves in nerve waves, which virtually involve the centres adjacent to the generative centre in the disturbance. This involvement of the vomiting centre gives rise to efferent impulses along the pneumogastrics, which result in the persistent nausea.

The toxic theory of Hadra differs from the foregoing theories in that the vomiting is considered to be a reflex phenomenon, the result of different impulses, originating not in the generative organs but in the stomach itself. It is argued that in all cases of pernicious vomiting in the pregnant woman, there are septic foci about the cervix or in the uterus.

Prof. Edward Hitzig has shown that morphine injected subcutaneously in dogs is quickly forced out into the stomach, from which half the quantity injected can be washed during

the first hour. In this way the nausea after morphine injection is no doubt produced.

Now it is argued that the toxins elaborated by the septic focus in the generative organ are absorbed, and produce the distressing vomiting by being excreted into the stomach and acting upon that viscus in a way similar to morphine. In support of this theory it is shown that a number of cases have been promptly relieved by dilating the cervix thoroughly and washing it out with an antiseptic, thus destroying the focus, and then washing out the stomach with a tube to remove the septic matter which has been excreted into it.

The search for a cause in the conditions present about the generative organs in the case I have mentioned resulted in *nil*. There was no evidence of metritis, endometritis or pelvic cellulitis. The vaginal cervix was smooth, not reddened, with only a slight abrasion upon the os, which healed promptly after one application of nitrate of silver. There was no flexion or version of the uterine body or neck. The uterus was about the size of a uterus at two to two and a half months pregnancy and simply a little lower than usual. There was never any reason to suspect the presence of a septic focus.

Diagnosis—According to Guéniot, three distinct factors are necessary to a diagnosis: 1. That the patient is pregnant. My patient presented all the evidence which could be expected at this state.

2. The discovery of the morbid condition in connection with the pregnancy, which is responsible for the symptoms. In my case this was not possible, unless we include the idea of Breatonneau and Copeman—the distention of the uterine fibres and the pressure upon the nerves in consequence, together with the changes in vascular and nervous systems, the result of pregnancy.

3. The possible existence of another constitutional or local affection occupying a causal relation in the case must be carefully differentiated.

Trousseau induced an abortion in a case that subsequently proved to have a gastric cancer. Beau made a similar mistake in a case of meningitis complicating pregnancy. The history and a careful examination of my patient revealed not the

slightest evidence of any disturbing factor outside of the gravid uterus.

Prognosis.—In severe vomiting of pregnancy, there is always ground for apprehension.

In even uncomplicated cases, where the vomiting continues, where the nutrition of the patient is seriously interfered with, and where pain and discomfort cause continued suffering and loss of rest, where the strength and recuperative power of the patient are daily and hourly declining, the affection must be regarded as eminently dangerous.

When other diseases complicate its course, their presence add to the dangers and the risk.

TREATMENT.

Aside from the recognition of the actual determining cause and the complications with the proper attention to the indications which arise therefrom, the treatment of pernicious vomiting of pregnancy has been very rationally grouped under four heads :

1. Hygenic.
2. Medicinal.
3. Gynæcological.
4. Obstetrical.

Without undertaking to review the whole subject of treatment I shall return to my own case and seek by detailing her history to illustrate that portion of this paper.

When first called to this patient absolute rest in bed was ordered, with fluid food in small quantities and at frequent intervals. The bowels were gently, but thoroughly opened, and cocaine in $\frac{1}{4}$ grain doses given every four hours. At night, to promote sleep, bromide and chloral, guarded by digitalis, were administered by enema. The nausea continuing, all food by the mouth was withheld, and carefully prepared enemata of concentrated fluid foods were given every four or five hours. Oxalate of cerium, ingluvin, wine of ipecac, in minim doses, calomel and soda in grain doses, and several of the aromatic waters were all tried, one after the other. To this list also I should add soda, mint, bismuth, carbolic acid and aconite. Iced champagne was faithfully

tried. The suggestions of the patient's fancy as regards food was catered to in the hope that something would be found which would stay upon the stomach. I would particularly remark just here that I once had a most gratifying result from permitting a patient in a similar condition to take the scrapings of boiled fat-ham spread upon bread.

In addition to the measures mentioned above, the ether spray was faithfully applied to the epigastrium and along the pneumogastrics. Chapman's ice bag was kept to the back of the head and neck for days. Hypodermics of powerful doses of morphine with small quantities of atropia were given at short intervals during two or three days, and afforded only very temporary relief. Enemata of bromide, chloral, Battley's sedative and digitatis were used to produce rest.

Mustard plasters and blisters were applied to the epigastrium and along the pneumogastrics. Under the consideration of the gynæcological measures employed, I desire to repeat that there was no flexion or displacement of the uterus, no lesion of the vaginal cervix, and no evidence of metritis, endometritis, or endocervicitis. The cervix was softened, the fundus symmetrically enlarged, and the uterus simply a little lower in the pelvis, the usual sagging which occurs at this period. With the idea of lifting the uterus up, and in this way simulating a condition which would naturally come about later, a tampon was carefully placed, the patient being in Sim's position, behind the fundus. This latter was substituted by Hodge pessary. No relief following, the cervix was painted twice with a 10 per cent. solution of nitrate of silver, later with a 10 per cent. solution of the muriate cocaine, and later still with pure carbolic acid with no result.

Then a small laminaria tent was slipped through the external os up to the os internum, and left in place for twenty-four hours. The cervix below the internal os was then more fully dilated with a steel dilator, so as to easily admit the index finger. Some little improvement followed this procedure.

Finally, on March 16, the patient was very much prostrated and very weak. The temperature was running to 101 in the evenings, and pulse from 110 to 130, and so wanting in force as to be scarcely perceptible at the wrist when the hand

was held aloft. The patient had not retained the smallest quantity of food or water on the stomach since my first visit, February 20. Indeed, the vomiting and retching had occurred persistently at intervals of half an hour to an hour at all times, except when the patient was profoundly under the influence of bromide and chloral or opiates.

Fortunately, the bowels had behaved well, and it had been possible to nourish her by enemata. These were prepared with great care and administered every four or five hours. The patient had proven to be, in so far as conduct was concerned a most admirable patient, and had had excellent nursing.

At last, regarding the case as most desperate, after consultation with my friend, Dr. J. F. Y. Paine, I decided to empty the uterus.

A very little chloroform administered by Dr. Paine produced anæsthesia. With a Goodell dilator I opened up the cervix and extracted with my finger the *fœtus* and membranes entire (in which there was no evidence of disease).

The uterus was then carefully washed out with hot boiling water. There was no hæmorrhage, but the patient came very nearly dying from shock during the next two or three hours, and was in such a critical condition that I spent the night at her bedside. From this desperate state she rallied slowly, the nausea ceased, gradually she was able to take fluid food and shortly she recovered her health entirely, appearing fleshier and expressing herself as feeling as well or better than ever before in her memory. Just here it is interesting to review the opinions of the acknowledged authorities upon this operation.

Carl Braun declares he had never seen a case in which it was necessary.

Among men of large experience who have seldom, or never, been compelled to resort to this procedure, are also mentioned Kiwisch, Hohl, Ahlfeld, Hausman and Cazeaux.

Upon the other hand, I have already mentioned the records of 172 fatal cases.

Joulin reported 121 cases, with forty-nine deaths. With out treatment, twenty-eight cases out of fifty-seven were fatal. With treatment, abortion induced in thirty-one cases, only nine died.

The subsequent history of this patient furnishes food for serious thought in this connection.

She removed to a town in Northern Texas. Again became pregnant after a lapse of over a year, during which her health was excellent. The records of such cases would justify the opinion that in the absence of disease resulting from first illness, of which there is no evidence, there was every reason to expect that she would not be in so much danger from a subsequent pregnancy. But the nausea begun about the second month. A prominent physician of the place where she resided was called in, and he was furnished with a history of her former experience, and what had been found necessary to save her life, but did not hesitate to express himself as opposed to such a measure. The patient lingered along, passing through such an experience as when I treated her, gradually growing weaker, until her nausea seemed to subside (as usually occurs just before a fatal termination in these cases), and she was able to take a little fluid when she became comatose and died.

A CASE OF RABIES—HYDROPHOBIA.*

BY GEO. A. B. HAYES, M. D.

Monday morning, July 25, 1881, I received a message from Dr. N. M. Hébert, asking me to meet him at Pointe-à-la-Hache, in consultation.

Arriving there, I found Theodore M., white, aged 42, native of Alsace, Germany, suffering with an attack of rabies. About forty days previously he had been bitten by a dog, the teeth entering deeply in the thick, fleshy portions of the right hand, between the metacarpal bones of the thumb and index finger. The wounds were promptly cleansed and cauterized by Dr. Hébert. They healed nicely and left only the usual pale cicatrix to denote their location, and the incident received no further attention—the dog having been killed because of its viciousness. The patient continued his usual avocations as gardener and general utility man for Mr. Mevers, and remained in good health until Saturday, July 23, 1881. That morning

*Read before the Plaquemines Parish Medical and Surgical Association, April 29, 1895.

he felt a pain in the right arm, extending from the hand up to the biceps. That night it involved the shoulder and right breast, appearing to be entirely muscular in character. He had excessive thirst, and was covered with a cold, clammy sweat during Saturday night and Sunday, and was in that condition Monday morning when I first saw him. He breakfasted Sunday morning with but little appetite, and ate nothing more up to the time of his death, but he drank copiously of cold liquids, including, on Sunday evening, five or six large glasses of lemonade, two glasses of beer and some whiskey.

After Sunday evening nothing more passed his lips because of the spasm of the larynx, excited by each attempt to drink, which produced proxysms of suffocation. An attempt simply to moisten the lips produced the same result. At 11:30 A. M. Monday, July 25, his pulse was 55, temperature in axilla (it was impossible to place the thermometer in his mouth because of laryngeal spasm it produced) 100 1-5 deg., and his urine saffron colored and cloudy. Perspiration continued very profuse and the pain very intense, starting from the site of the wound in the hand, extending to and involving the entire right half of the thorax, impeding and embarrassing respiration. He expectorated frequently a thick, viscid mucus, small in quantity at first, very tenacious and difficult to dislodge from the throat. In his efforts to loosen it he would hawk harshly and repeatedly, making a noise in so doing that might be imagined to resemble the barking of a dog, something which, no doubt, gives rise to the popular superstition that victims of the disease always bark like dogs and even snap and bite at adjacent objects, thereby partaking of the nature of the dog by which the poison was inoculated. As, however, the disease is frequently communicated by cats and other animals that do not bark, it would puzzle the average medical mind, and is indeed past finding out by anyone but the omniscient layman why they should invariably bark.

The spasms of the larynx became more frequent and violent, and the intervals shorter as the disease progressed. There was frequent sighing, and an anxious, harrassed expression of countenance. The slightest current of air, contact with any cold substance, the splashing of a spoonful of water, purposely let fall, caused severe throat spasms and menacing suffoca-

tion. He was extremely courteous and polite, both in speech and demeanor, responding to questions with "Oui, Monsieur le Docteur," or "Non, Monsieur le Docteur," as the question might warrant, and his mind was perfectly clear. During the whole course of his illness the surface of his body presented the strongly marked *cutis anserina*, or "goose-skin" appearance. A very peculiar feature of the case was that he had no suspicion of the nature of his disease. Notwithstanding Drs. Hébert and J. B. Wilkinson, who was also present, as well as I, carefully examined the scar upon the hand, which was swollen, purplish in color, and presented an angry, inflamed appearance, and although the pain had its origin in that spot, and we questioned him regarding the date of and the circumstances attending the infliction of the wound, he did not attribute his then condition to anything more serious than suppressed *lichen tropicus*, "prickly heat," with which he had suffered before this attack, and he begged us for some remedy that would bring it out again. As will be well understood, we humored him in this belief. Gradually he lost his urbanity, became morose and sullen, assumed a forbidding scowl, and answered questions gruffly, in monosyllables. His pulse continued slow and hard. At 12:10 P. M. we gave, hypodermatically, one-third of a grain of sulphate of morphia, and later the pupils were much contracted, but responded well to light. At 1:40 P. M. pulse 52, respirations 33, and he dozed a little, having had no sleep the night before. At 4 P. M. all his symptoms were much exaggerated, expectorations much more copious and less tenacious. The patient had now lost all respect for persons or things, and was apparently oblivious of his surroundings, walking rapidly back and forth across the floor, and only responding, when spoken to, with a shake of the head and a savage grunt.

It is proper to state here, that from motives of humanity the patient had not been confined or placed under any kind of restraint while he retained possession of his mental faculties. It will be readily comprehended that the reason for so doing would have had to be explained to him, and it would have only served to add great mental anguish to the physical agony he was then enduring. To prevent accident or injury, a volun-

teer guard, composed of a half dozen brave young men who had cheerfully offered their services, was kept in readiness upon the gallery, near the door of the patient's room, ready to seize and secure him the moment he became dangerous. At 6 P. M. I was alone with him in his room, and it was then manifest that he was rapidly nearing the furious stage. He brushed rapidly past me in his quick walk across the floor, and only scowled and emitted hoarse grunts when I spoke to him. The floor was then completely covered with a slippery coating of viscid saliva. On leaving his room, I had only time to reach the other side of the building when I heard a crash of crockery at the front, and the sound of many feet in rapid flight. The guard had stampeded! The patient had emerged suddenly upon the gallery, and with an incoherent exclamation, hurled a basin upon the floor, smashing it into fragments. Fortunately he returned to his room, raving like a maniac, and the door was securely barred from the outside. Seen through the transom over the door, he wallowed upon the bed, on the floor, and under the bed in the mess of the poisonous saliva with which the floor was covered, in horrible paroxysms of rage and pain. At times he wept, then he would kneel and pray, and then again he would roll over the floor in incoherent agony. In his frenzy he attempted to force open the door and window; he foamed at the mouth, the accumulated phlegm almost choking him. About 8 P. M. an opening was sawed in the ceiling of his room (for it was unsafe to attempt to enter while he was unconfined), and a noose was slipped over his feet as he lay rolling upon the floor, and while he lay upon his back with his feet hoisted in the air, the room was entered, he was securely bound and placed in bed, and I injected a grain of morphiæ sulphas into the calf of the leg—it being impossible to approach the upper extremity without being deluged with hydrophobic saliva.

He was then struggling violently and strong muscular contractions, tetanic in character, convulsed his body. At no time did he seek to wilfully injure either himself or others. At 9 P. M. he became more quiet, ceased foaming at the mouth and his features became more composed, losing their hitherto characteristic anxious expression. In other words, the lethargic

stage was being assumed. He continued to clear his throat with some effort and the sighing and groaning were frequent. At 10 P. M. he was still quiet, hawking and expectorating quantities of this saliva. After that hour, as he began to have other severe paroxysms, another hypodermatic injection of one grain of morphiæ sulphas was given; pulse then 150. At 12:30 A. M., July 26, he became quiet, having had violent muscular contractions of the lower extremities for two hours previous, which had a very exhausting effect. At 12:45 A. M. he was pulseless at the wrist and his respirations were 28 to the minute. He sighed and ground his teeth frequently. Death occurred at 1:05 A. M., July 26, nearly three days after the first symptoms became manifest.

He died quietly, without a struggle, and apparently with his intellect clear, as he replied rationally to questions put to him just before his death. For the previous seven hours he had been wildly delirious.

This disease, in man, is misnamed hydrophobia, for with it he has no dread of or aversion to water. He only recoils from it when he has learned by dire experience the agony consequent upon an attempt to drink.

Of course, this case of hydrophobia, or rabies, was heralded abroad over the parish, and as a result I was, a few nights later, called upon to treat a simulated case, a lyssophobia, in the person of a highly hysterical woman who imagined she had been bitten by a little dog that had rushed at her, tearing her dress and frightening her upon the very day of her supposed attack of hydrophobia. The family and friends were much alarmed, being sure that she was "enragée," as they excitedly informed me. I found the woman, Mrs. S. M., aged about 50 years, apparently at her climacteric, tied securely in bed and snapping and biting savagely at everyone that approached, varying the performance with yelps and barks like a little cur dog. A careful examination failed to reveal any wound or abrasion of the skin where she was supposed to have been bitten.

I was kept at that house almost all that night, administering bromides and other sedatives to the patient, and consolation and encouragement to the other members of the family, who felt convinced she had "gone mad."

MEDICATED AIR IN THE TREATMENT OF GASTRIC DISEASES.*

J. A. STORCK, M. D., NEW ORLEANS.

The subject which I desire to bring before you is a new one, and as we are casting about for better means of applying medicinal substances to the gastric mucous membrane, the success of this mode of medication in my hands, I think sufficient excuse for this paper.

It is not a cure-all and not advocated as such.

The application of remedies by the means here described certainly deserves careful consideration.

The agents I have used, are menthol, thymic acid, cinnamon, clove oils, and creosote (beechwood).

The apparatus I use is the double bulb arrangement, with a stomach tube attached, at the end of which is a perforated hard rubber tip.

The medicament is placed in a bottle or flask. If mentholized or thymolized air is used, crystals of same are placed in a bottle; when oils of cinnamon, cloves or creosoted air is used, a warm aqueous solution consisting of 2 c. c. of the substance, water 30 c. c., is introduced into a florence flask of 120 c. c. capacity.

The bulb arrangement and tube attached, the apparatus is now ready for use.

After careful washing out of the stomach with plain sterilized water at a temperature of 40 deg. C., or with an antiseptic or alkaline solution of same temperature, as the case may require, as much of the water or solution as possible should be siphoned away. If antiseptic or alkaline solutions are used, it is best to use sterilized water after and carefully remove it.

The organ is now in a condition to receive the medicated air, the tube is dipped in warm water and introduced in the stomach, as much air as the stomach will hold is atomized into it; the patient will not fail to inform you when the time arrives.

In my cases the air was administered every other day.

The first case on which I used medicated air was Mrs. B., white, age 37; general health fair. Suffered with stomach troubles for two years. Her physicians treated her with hy-

*Read before the Louisiana State Medical Society, May 6, 1895.

drochloric acid, pepsin, tonics, and dieted her; lavage had also been practised in this case. No improvement was noticed.

One of my confrères sent this lady to me for treatment. A chemical examination of her stomach contents was made after the usual methods.

While fasting, the stomach contained only a small quantity of a watery, mucous fluid, tinged yellowish-green by bile; on standing, it deposited a sediment containing small quantities of remnants of food, some starch granules, epithelial cells and vegetable cellular tissue.

After the test breakfast, free HCl was present. Total acidity 40 per cent. Digestive power slightly impaired, but pepsin and rennet was present in sufficient quantity to form propeptone and peptone in the stomach; lactic and fatty acids present. Absorptive power of stomach diminished. Capacity of stomach 1500 cc.

A diagnosis of simple chronic gastritis was made. Treatment: Owing to the digestive power of the gastric juice being diminished, all food containing much albuminoid matter was reduced as far as possible; only stewed meats were allowed, and then in small quantities, and cold; peptone chocolate was also given. Vinegar, strong condiments and strong alcoholic drinks were forbidden. Starch preparations, fresh, ripe vegetables and fruits were allowed in moderation. Small quantities of milk were also given, but withdrawn when the slightest signs of disturbance to the digestive organs were shown.

Lavage was practised every other day, a 2 per cent. solution of boracic acid being used and washed away with plain sterilized water. *Nux vomica*, quassia and condurango were used at different times and in different doses, along with HCl. Menthol and creosote were given for their anti-fermentative action. The patient suffered from chronic constipation, which was relieved with podophyllin and rhubarb. At the end of forty days her condition was about the same.

I withdrew all drugs, used lavage and mentholized, alternating with creasoted air. After six applications the improvement was manifest. This treatment was continued, and in twenty days my patient was discharged cured.

CASE II.—Mrs. L., white, aged 40; general health bad,

anæmic. When first seen by me complained of severe stomach trouble, from which she had suffered a year or more.

I started treatment by giving her a preparation of peptonate of iron to improve her general health. After one month of such treatment her health was somewhat improved, but her stomach trouble persisted.

An examination of the stomach contents disclosed the fact that the fatty acids were present in large quantity. The digestive power was at a minimum. Free HCl. was present. Total acidity, 35 per cent. Absorptive power greatly diminished. Capacity of stomach, 1475 c. c.

A diagnosis of simple chronic gastritis was made. The same course of treatment was instituted as in case 1, with these exceptions, no purgative was given as the bowels acted well, and peptonate of iron was given for her anæmia.

After thirty days of such treatment little improvement was noticed. I now began the use of mentholized and creosoted air, the patient's condition soon changed for the better, and after thirty days of such treatment she left the city apparently cured.

CASE III.—Ellen G., aged 24 years, negress; general health fair. Came under my observation complaining of severe gastric symptoms; had been treated for three years at intervals with pepsin and other drugs.

I made examination of stomach contents, the result was practically the same as in case 1. Capacity of stomach, 1450 c. c. Absorptive power diminished. Total acidity, 42 per cent. The diagnosis was the same as in the previous cases.

Treatment: The same line was followed with the exception that I at once commenced the use of medicated air; in less than thirty days the patient was discharged cured.

The cases cited are only to illustrate my method and how to apply same, therefore I do not think it necessary to go into details.

The point I wish to make is that in my hands medicated air, along with other appropriate treatment, gives the quickest results. I have used this means of medication in chronic mucous catarrh and in dilatation with some benefit, but in other conditions the result was unsatisfactory.

HOT SPRINGS OF ARKANSAS.—SOME INTERESTING FACTS FOR PHYSICIANS AT A DISTANCE.

BY DRs. R. C. HOLLADAY AND O. H. BURTON, HOT SPRINGS, ARK.

While the Hot Springs of Arkansas are known in a general way to every physician in the United States, still, regarding this health resort, there is an indefinite knowledge among many practitioners of medicine which leads them into the mistake of sending improper cases here for treatment. Proper advice given to a patient which may lead to his recovery, like properly directed medical treatment, wins his gratitude and makes for the doctor a friend; but incompetent advice, like unskillful treatment, brings reproach upon the physician and suffering and expense to the patient. It can not be too strongly accentuated that Hot Springs is not the place for persons in advanced stages of phthisis. A few hot baths may induce pulmonary hæmorrhages. When the disease is in its incipiency and the object is to improve nutrition and endeavor to bring patients up to the normal plane of resistance, some benefit may possibly be derived from a visit here; but the broad rule will best serve the physician in his advice. Tuberculous subjects should be deterred from coming to Hot Springs. In this connection very important points in diagnosis will arise. Remembering that the lungs are not exempted from the ravages of syphilis, and with the microscope to settle the question of phthisis pulmonalis, the thoughtful physician should ever be on the alert for those obscure cases of tertiary syphilis, both inherited and acquired, involving the lungs, so closely simulating tuberculosis. These lesions are of the nature of diffuse intestinal chronic inflammation and gummy tumors, or the two combined.

As to these gummata; the tendency is to *break down into cavities*, as a result of cheesy degeneration—calcareous deposits occurring rarely. When these gummy masses degenerate, as they are prone to do, cavities result, the patient emaciates, has cough, not infrequently hæmoptysis, night sweats, and furnishes upon percussion and auscultation many of the physical signs of phthisis. These are proper cases to be directed to Hot Springs, for this class of patients can not stand at times a *sufficiently high degree of medication* to arrest the trouble. Fortunate is such a patient who has a painstaking medical advisor to detect the

cause underlying the malady, who sustains the sufferer with cod-liver oil or other nutritive preparations while resting his faith upon *specific treatment*. A point of interest claimed by syphilographers is that, contrary to involvement of the apices, as in phthisis pulmonalis, gummy masses have a predilection for the central areas of the lungs; and being usually unilateral are generally found in the middle lobe of the right lung, terminating in multiple cavities. Along the line of syphilis of the respiratory system, it is easy for the careless observer to mistake a case of tertiary ulcerations of the larynx for tubercular laryngitis. Such cases are amenable to treatment under a correct diagnosis, otherwise the patient is liable to pass from the hands of the physician into the the hands of the undertaker.

These hot baths are contraindicated in organic affections of the heart and large blood vessels. A considerable percentage of subjects with rheumatic diathesis, as well as patients in the throes of a rheumatic attack, furnish upon auscultation evidence of endocarditis. If these manifestations be mild and only detected upon auscultation, giving no other evidence of disturbed circulation, these baths can be taken with safety and benefit to the patient. The most dangerous subjects for the hot baths are those patients with aortic stenosis or aneurism of the large vessels; fatal results have followed in a few such cases, bathing here without a physician's advice. In high tension pulse, with hepatic cirrhosis or chronic interstitial nephritis, or pulmonary obstruction (not tuberculous), the over-worked heart is rested and recuperated under the baths; while in all stages of Bright's disease, the crippled kidneys are spared the effort at over-work, and uræmic poisoning forestalled by the actively excretory function of the average twenty-eight square feet of skin. In recent hemiplegia, whether due to cerebral hæmorrhage, embolic clot or endarteritis of peripheral vessels occluding their lumen, thus depriving a brain area of blood or diminishing the supply, and the object is to promote absorption, these baths are efficacious. In syphilitic endarteritis, causing so great a variety of cerebro-spinal lesions, the results are most gratifying under the high degree of medication so well tolerated by patients while bathing in these thermal waters.

The object of this article is not to set forth the advantages of Hot Springs as a health resort, but in a cursory manner to present to physicians abroad a few practical points for their consideration before directing patients here. Praise of "my home doctor" falls frequently from the lips of grateful patients who have been intelligently directed.

CASE OF CONGENITAL ELEPHANTIASIS ARABUM.*

By THOMAS L. TERRY, M. D., Jennings, La.

In August, 1894, there was brought to my office a French mulatress, about 11 years of age, with the following conditions:

Child very anæmic and very much emaciated; weight, 50 pounds; family history good, so far as we could ascertain. Left hand enormously increased in weight and consistence, middle finger $6\frac{1}{2}$ inches in length, $5\frac{1}{2}$ inches around the nail, $8\frac{1}{2}$ inches around the base of finger, $10\frac{1}{2}$ inches around palmar surface; index finger 4 inches in length and 2 inches thick, twisted and drawn; other fingers very much dwarfed. At birth, mother had noticed the unusual length of middle finger, and it has slowly, but gradually increased in size until it weighed $3\frac{1}{2}$ pounds. Being too heavy to hang at the side, the child carried it in the right hand. In elephantiasis the surface of the skin is usually much darker than natural, is fissured, grooved, nodulated or tuberculated, and completely deprived of its normal sensibility. In this case the skin was of normal hue, smooth and shiny, though deprived of its normal sensibility; the cellular tissue was changed in its character, the muscles in a complete state of fatty degeneration, reminding one of catfish flesh more than human muscles. Had the case been seen before the malady had attained such an extraordinary degree of development, or had the disease not, for eleven years, been progressively increasing, we would have ligated the principal arteries, so as to have enabled the parts to resume their primitive condition; but in this case Dr. Burke and I both concluded that such a procedure would

*Read before the Shreveport Medical Society, June 4, 1895.



CONGENITAL ELEPHANTIASIS.
PALMAR SURFACE.



CONGENITAL ELEPHANTIASIS.
DORSAL SURFACE.

have proved absolutely unavailing, for had ligation arrested the morbid growth, the hand would have still been useless and unsightly, with the middle finger $6\frac{1}{2}$ inches in length, the forefinger twisted and drawn, and the others badly dwarfed.

After carefully weighing all the factors in the case, we decided to amputate. After the amputation the stump healed nicely by first intention, to all appearances. On June 1, 1895, the child was brought to my office to be treated for malaria, and upon examination of the stump found two fistulous openings, from which exuded a dirty brown, sanious fluid, the fistulas being of recent origin. The child had gained in flesh, and seemed to have improved in general health since the operation.

I.—LACERATION OF THE KNEE JOINT. II.—TRANSVERSE FRACTURE OF THE PATELLA.*

By DR. L. SEXTON, NEW ORLEANS, LA.

On August 10, 1894, I was called to see Mr. L., æt 50, who was suffering from a lacerated wound, five inches in length, extending from near the front of patella, around to the tendon of the biceps muscle, opening up the knee joint.

Upon examination I found the synovial fluid escaping, and the joint, which could be easily explored with two fingers, was filled with clotted blood. The external condyle of the femur had two pieces of fractured bone, the size of the little finger, broken off and hanging by the lateral ligament; these two pieces could not be approximated, so were clipped off with scissors.

A gallon or two of 2 per cent. carbolized, sterilized water, was passed through the joint to wash out the clots, and arrest hæmorrhage. A counter opening was made in the popliteal space, a large rubber tube inserted for proper drainage, the external wound closed by interrupted sutures, the knee enveloped in 10 per cent. iodoform gauze and absorbent cotton, and the leg immovably fixed upon posterior splint, with large aperture for the heel. This dressing was changed every third day, the joint washed out from the posterior drainage tube. The patient

* Read before the Orleans Parish Medical Society.

made an uninterrupted recovery, without any suppuration or rise of temperature. I have never seen such extensive injury to the knee joint heal with such perfect use, as the patient now gets around comfortably.

Antiseptic, perfect drainage and immobility, brought about the rapid cure, thus demonstrating that the knee-joint, like the peritoneum, can be opened, if antiseptically treated, without permanent injury, or any losses.

On June 1, 1894, I was called to see F. C. æt, 22, who had fracture of patella, the result of fall from slipping on banana peel. Muscular action and direct violence both had their effect in producing the fracture, which was transverse and about the middle of the bone. The skin over the knee joint was not bruised or lacerated. The action of the quadriceps extensor muscle kept the fragments pulled far apart, and from this fact I judged the periosteum was ruptured, and feared, if it was, that the fragments might overlap the ends of broken patella, and thus interfere with bony union. The joint was considerably distended with synovial fluid, perhaps mixed with blood. The patient had lost all power of extending the leg; the index finger could be laid in the transverse gap.

First, approximation, and second, immobilization, were the two objects I had in view. To accomplish the first I applied two broad rubber plasters one inch wide, above and below the the fracture, in the shape of figure of eight, after the two bones had been placed end to end; over these I placed an oblong ivory ring, well padded with cotton, and over this the figure of eight domestic bandage, held in place by liquid silicates of soda. To immobilize, I had a posterior splint, 34 inches long, 5 inches at bottom, and 6 inches at upper end, with large oval hole, to let the heel pass through, and two notches on either side, one 5 inches above, the other below the knee joint; this was well padded and applied posteriorly, with moderately firm bandage held in place by the liquid glass. I kept the leg elevated on a pillow, to enforce extension. After the sixth week the patient could walk well with crutches, and two months after the accident he could walk as well as ever, getting in and out of high wagon with very little trouble.

The posterior splint and liquid glass bandage is much less

cumbersome and less hot and disagreeable than plaster paris, and renders the limb just as stationary. I have used it in four cases successfully, therefore think it preferable to the plaster,

If the above plan of treatment is carefully carried out there will rarely be any occasion for Malgaigne's hooks, suturing or laying the knee joint open; in fact the cases requiring such heroic treatment, where suppuration, loss of limb and of life have resulted, had best be left to ligamentous or no union at all, rather than take the risk of hurried sutures or open arthrotomy.

Proceedings of Societies.

ALLEGHENY COUNTY MEDICAL SOCIETY.

John Milton Duff, M. D., President, in the chair. Meeting held March 19, 1895.

Dr. W. T. English opened the discussion of the subject announced for the evening, entitled:

SHOULD THE CARDIOPATH MARRY?

Intimately associated with the physiological and pathological phases of this inquiry are those of a sentimental and ethical nature. While a brief study of the phenomena attending gestation under physiological conditions of the circulatory apparatus, and a comparison with the pathological modifications in the cardiopath, will subserve the paramount object of this paper, some other considerations are inseparably connected with a discussion of the subject. To the noblest and best woman there is something inestimable and beyond comparison on earth to the full, wide, spiritual mission of motherhood. Marriage is the only plane in which she can expect to attain the goal of all that is worldly and unworldly, and where she may acquaint herself with the mighty mystery which is the portal of the race.

This innate desire for motherhood must not be thoughtlessly denied. Especially is it desirable that we consider well any proscription that may give excuse to those who shirk maternal obligations. Many a strong woman of to-day prefers to storm the hitherto man-garrisoned citadels, instead of entering the holy-of-holies of wholesome motherhood, for which nature

has so loftily endowed her. Her dreams of home are yielding to lucid and verbose novels descriptive of neurotic frenzies and masculine decadence. Even her pen touches the pages with theoretic knowledge of heredity, pathology and diseased babies. But while the avenues of commercial and literary competition are choking, the holy realm of childbirth is left to those who are not always physically competent.

From whatsoever reason women miss their obvious destiny they are, from nature's point of view, failures. No single life can be a perfect life. On the other hand, no greater selfishness can be imagined than that which brings children into the world doomed to death, or to a life of immitigable misery. Each child has a right to know the life into which he is to be born. No human should have his pre-natal interests so far forgotten in this nineteenth century that he shall be forced to fight a losing battle against disease and death. Morbid courtships and hectic marriages belong to the time that is past. Physical considerations must, then, have somewhat to do with marriage and child-bearing. The social plane in which the prospective progenitor moves may have an important bearing and even sentiment be of utility, when we attempt to answer the query: "Should the cardiopath marry?"

Every physician knows the intimate association the womanly functions have with the circulatory apparatus, and the direct influence upon the heart demeanor of the disturbance of the menstrual flow. On the very threshold of conception there are evidences of perturbation as exemplified in palpitation, irregular rhythm of the heart, and respiratory limitations. As each month wheels its round, we watch with interest the increasing stress under which the heart labors, that it may hide its expenditure of energy on behalf of the developing fœtus from the various organs which have hitherto had sole claim upon its efficiency. Now it conceals unrest by an appeal to the vaso-motor center in the medulla, and anon it quiets a threatened tumult by recourse to its accelerator or inhibitory connections with the vagus and sympathetic supplies; holding in reserve for a more final appeal, its own ideo-motor capacities, controlled by intrinsic plexuses and ganglia. Meanwhile some rebellious organ, as the stomach, adds to the difficulties by mechanical, physiological or pathological mal-behavior. Even while these efforts are expended to control violations of cardiac calm, there is developing in the uterus, and its expanding vessels, an ever-widening circulatory area, over which the belabored heart must propel the blood; and, in consequence of the augmented volume of the circulating fluid, it is required to pump more blood in a given time. The task increases as

gestation progresses, not only because of the additional labor, but also on account of the perverted and weakened quality of the blood. The response to the demand for enlarged propulsive power is an hypertrophy of the left ventricle. The auditory evidences of these changes in the organ and the blood are in the increased heart sounds and murmurs at the cardiac base. Plethora exists as to quantity and enæmia as to quality. Pregnancy thus inaugurates heart injury that ultimates in degenerative changes which may continue to a fatal termination.

In the circulation of the pregnant woman there is need for extensive resiliency, and nature grants a capacity for tolerance of gastric caprice, renal aberrations, blood changes, respiratory embarrassment, neurosal deviations, and varied psychoses. In the presence of the morbid heart, any one of these manifestations is liable to pass beyond the lines of the physiological. Dangerous symptoms are extremely apt to arise when there is such a wide range in the vascular tonicity as is present where the heart is incapable or sluggish from disease. A fair adjustment may be achieved throughout all the details only to finally fail at the puerperium. For when the zenith point in the pregnancy and the circulatory distension is arrived at, the heart and the womb must expel their contents or serious dangers will arise. This depletion is sudden and effectual; but, nevertheless, it must also be succeeded by the lochial drain, continued in a gradual manner for weeks. The danger is imminent when there is pronounced interruption, and if there is impairment of any portion of the circulatory mechanism it will most likely prove fatal.

Nature enters her protest against all the acts associated with pregnancy, when attempted in the presence of cardiac disability. The excitement incident upon coition is in itself a trial to which the heart has succumbed when in all the ecstasy of sexual embrace. Notwithstanding that age, temperament and disposition has each its special coefficient of force, which may enter into the estimate for good or ill, the fact has been demonstrated that the heart has yielded regardless of each and every one when under the thralldom of sexual orgasm. Sterile cardiopaths can not be considered safely marriageable. The Malthusian practices, which are so common in France and have been suggested as a means of comparative protection to the cardiopath, are never safe in any respect. Moreover, any marriage which would thus tend to increase the number of Malthusian men, women and children in the world is a trespass upon the moral domain for social ends.

A rational conclusion from the facts already rehearsed would be, that the cardiopath would be greatly influenced by

her sphere in life or her social plane. A perfect estimate of the consequences would at least include a brief reference to those conditions for good and ill that constitute her environments. It is generally observed that those high in the social plane are not likely to precipitate themselves into the difficulties of marriage without deliberate thought. This gives opportunity to develop and detect impediment. A more general and probable access to the advice of a physician protects still further. Marriage is therefore less common among cardiopaths in the higher social planes. If marriage and pregnancy do occur, rest and ease are the daily portions of the woman. The surveillance of a physician is provided, and his advice carefully followed, often with the aid of efficient attendants. Pregnancies are rarely repeated.

Upon the other hand, there is a poverty of blood vouchsafed to her who never experienced, and therefore can not be expected to appreciate cleanliness, and for the same cause may not be emulous of bright surroundings. Food, air and temperature are elements which exert potency that is of vast importance in cardiopathic gestation. Constant and exacting drugery and toil are bad medicines for the injured heart. Upon the submerged class worry lays an awful hand, and among these, the calamitous sequelæ to emotional causes attain their zenith point. Urban life pre-supposes a denial of some of the advantages accorded to those in suburban or country districts. There is a sentimental shadow that steals over the heart burdened by pregnancy and disease that is unmeasured by those who feel only that which is real. It means poverty of home, poverty of blood, poverty of life, plus the anæmia and distress of pregnancy. To those low in the scale, the boundaries of difficulty geometrically expand. Their surroundings conspire to make greatest caution of paramount importance, and at the same time limit the possibility of its achievement.

Mortality statistics are not extensive, but the death rate to the cardiopath during gestation, and at puerperium, proves to be very high. Porak, of Paris, in 1880, reported 92 cases, with a death rate of 38.09 per cent.; Reny, of Nancy, 1880, 38.8 per cent. Wessner, of 77 cases by him collected, 37 per cent. died; Schlayer reports 25, with 10 deaths; Leyden, 20 with 11 deaths. Sears collected 30 cases in Boston last year with 10 deaths. These are the number of women, not their pregnancies, and are of cases where severe conditions arose.

Among the few experiences which have fallen to my lot in my earlier practices in this city, I recall one who has passed through repeated pregnancies with a grave mitral lesion, and it is the mitral lesion that is most commonly found in fatal

cases. The aortic is rarely present as a very dangerous complication. This is partly due to the general distribution of cardiac murmurs—those of the mitral being more common before middle life, and those of the aortic valves more frequent in later years.

If the cardiopath miscarry, which her heart lesion will probably guarantee, the history will be darkened with extreme danger. The necessity for abortion appears when there are grave symptoms in the early months. When necessary, it should be performed early. If the case is desperate, abortion may, in itself, add to the peril. Charpentier gives it as his experience and observation that among cardiopaths abortions are very common, and premature labor frequent, and children delivered at term do not have tenacity for life. Casanova states that in more than half the cases with marked symptoms, pregnancy never reaches a conclusion. Duroziez noted forty-one cases, with twenty-one miscarriages—five deliveries at six months. Of the thirty-seven children born alive only two lived to be five years old.

McDonald claims that the hopefulness of the pregnancy is increased if the stage of compensation is attained before conception; because, if the physiological hypertrophy and the uterine enlargement are combined, they include the possibilities of faulty heart nutrition. Degeneration usually begins about the fourth month. The heart has but little potency remaining if it occurs prior to that time. The degeneration and downward course for the woman is almost sure to follow delivery, and is usually speedy. A degree of conservatism has hitherto prevailed among medical men who have answered the question proposed in this paper. This is because some serious cases have succeeded in achieving a safe delivery, and the fact that the mother has merely escaped with her life is considered by some sufficient to commend matrimony.

Jaccound rather encourages the cardiopath to marry, and assumes that lesion of moderate extent might be consistent with a comparatively wholesome motherhood. If under thirty years of age, he assumes it should be encouraged. Sentimental and moral considerations are suggested as loudly demanding matrimony for the cardiopath.

There are sects and sticklers for creeds who regard those who oppose marriage for any cause as little better than atheistic. Standing upon their self-erected higher ethical plane, they ignore the physical plea that assumes it is always the greatest good of the largest number to have a small death rate.

On the other hand, Peter insists that under no circumstances should the cardiopath marry. To our mind this seems

the more logical conclusion. When we carefully review the the fatal possibilities linked inseparably with cardiopathic gestation, it seems too full of alarm to be dismissed without a most decisive denial. The woman who dares to plunge into such a fatal tide of probabilities can be compared to one who, infatuated by an access of fear while viewing a dizzy height, plunges into the awful chasm which excites her awe. The end does not appear in their selfish sacrifice, but they vouchsafe to the fruit of their wombs a legacy of death, and place a stumbling-block in the line of march of humanity toward perfection.

Every thought in the mind of the physician and economist should be directed toward the physical improvement of progeny. It is ours to teach the better doctrine and contemplate the loftiest and most inspiring spectacle of "federation of the world" on this point toward which medicine is surely feeling its way. Each new stride achieved, and every old barrier to their consummation beaten down, is a strong reason for optimism. However distant the achievement, it is much that it has not become the object of effort, not with the few, but with the many.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

Dr. Hugh N. Taylor read on the

SURGICAL TREATMENT OF SPINAL TRAUMATISMS.

It is necessary for us, first, to classify what we are going to treat, and then determine how to treat it. The classification I shall make is (1) anatomical, as traumatism of the cord, membranes, bony canal and ligaments; (2) clinical or pathological, as concussion of the spine, contusions, hæmorrhages, inflammatory deposits, cicatricial contraction and morbid changes incident to intra and extra-dural injuries, fractures, dislocations and the train of symptoms following injuries to the nerves after they have left the cord. In order to apply intelligent treatment, it is necessary to differentiate between the manifestations of the different varieties of traumatism. It must be kept clear that all the manifestations to treat are results of pressure, as from effusions of lymph, serum or blood-clot, bony fragments, cicatricial contraction, etc.

According to most authorities, concussion of the spine is a misnomer, as the cord is so well protected by a water bath, by being anchored by the nerves in the bony cavity, which is

situated deep, lying in a mass of muscular tissue, and held strongly together by ligaments. Injury while upright is rare, it occurring when the spine is flexed, as in the bending posture. It is hard to realize that with these natural protections there can be such a condition as concussion. It is really a part of shock. If the symptoms extend beyond the time in which shock should be recovered from, contusion is present.

Take into consideration the important part that the ligaments play in traumatism of the spine: compare sprain of the spine with those of other parts, and we must conclude that sprains of the spine are frequent. Many of the so-called injuries to the spine are ligamentous and not nervous. If a spinal ligament is torn or contused it must be repaired by new tissue formation, which may affect probably the nerves passing through, causing a neuritis and trophic, motor or sensory disturbances. The damage may be outside and yet be manifested as above, *e. g.*, long continued neuralgia. Many of the so-called railway spines are simply such.

We do not often have the opportunity of studying contusion of the cord by post-mortems. We must study them by analogy, knowing all the results due to pressure.

The most common morbid condition is hæmorrhage, the cord being richly supplied with blood vessels; and a contusion causing their rupture is not by any means rare.

It is important to differentiate pressure due to blood, serum or lymph. If the symptoms come on immediately, they are the result of fracture or dislocation; if in two or three hours, they are the result of pressure from hæmorrhage; if in a day or two, serum is the cause; and if the symptoms of compression occur after weeks, they are due to lymph effusion.

The manifestations of pressure are: (1) of the cord proper, depending on the part upon which pressure is exerted; (2) of the spinal nerves, as interference with or destruction of their functions, as spasmodic contraction of the muscles supplied, paresis, paralysis, anæsthesia, hyperæsthesia, formication, etc. The symptoms are not only local, but remote; not only immediate, but subsequent.

It is not easy to say that the damage to a nerve is within or without the cavity. The reflex effects of nerve irritation are manifested at times when no plain explanation can be given. Mitchell and others say they are due to paresis of the higher centres.

Treatment: The field of surgical treatment is limited, as when pressure from exudate exists traumatism of the ligaments are not within surgical limits. Massage and extension should be employed for these. For damage to the cord,

iodides, mercury, rest, douche, massage and moral treatment, which is important.

The only classes of injuries calling for surgical treatment are fractures and dislocations. Cut down on the spine to remove fragments and relieve pressure; but this is not an easy matter. It is advised to bite off the spinal, and then the transverse processes, until the cord is reached, and then be guided by indications as to the presence of clot or effusion by the bulging, discoloration, etc.

It is conceded that the danger from hæmorrhage or loss of spinal fluid is not as great as that of pressure.

Another method of treatment is that of absolute rest, extension to head and feet, and the use of sandbags.

The bladder must be cared for and bed sores prevented. The reduction of fracture before operation is debatable on account of the injury that may be inflicted in the process, and then it is doubtful if fracture or dislocation can be diagnosed without cutting down.

Dr. Mark W. Peyser reported the case of a man who, while mining, was struck on the back by a large mass of earth, resulting in dislocation of three vertebræ. Operation was of no benefit and the man succumbed. He also said that statistics show that tapping the cord for the relief of pressure was unavailing.

MARK W. PEYSER, M. D., *Secretary.*

THIRD INTERNATIONAL CONGRESS OF DERMATOLOGY.

The third Congress will be held in London, August 4th to 8th, inclusive, 1896.

PRESIDENT—Mr. Jonathan Hutchinson.

VICE PRESIDENTS—*British*—The president of the Royal College of Physicians, the president of the Royal College of Surgeons, the president of the Royal College of Physicians of Ireland, the director-general of the Medical Department of the Navy, the director-general of the Medical Department of the Army, Sir William H. Broadbent, Bart.; Sir Joseph Lister, Bart.; Sir James Paget, Bart.; Sir Richard Quain, Bart.; Sir Dyce Duckworth, Sir Douglas Maclagan, Sir Edward Sieveking, Dr. McCall Anderson, Dr. Alfred Cooper, Dr. G. F. Duffey, Dr. Hughlings Jackson, Dr. Allan Jamieson, Dr. Robert Diveing, Dr. Payne, Dr. Pye-Smith, Dr. Herman Weber, Dr. Wilks.

Foreign—France—Dr. Besnier, Prof. Fournier, Dr. Hallopeau, of Paris; Prof. Leloir, of Lille. Germany—Prof.

Köbner and Prof. Lassar; of Berlin; Dr. Unna, of Hamburg; Prof. Neisser, of Breslau; Dr. Veiel, of Canstadt. Austria—Prof. Kaposi, Prof. Feumann, Prof. Lang, Prof. Hans von Hebra, of Vienna; Prof. Schwimmer, of Buda-Pesth; Prof. Pick and Prof. Janovsky, of Prague; Prof. Jarisch, of Gratz. Russia—Prof. Peterson and Prof. Tarnowski, of St. Petersburg; Prof. Pospelow, of Moscow. Italy—Prof. de Amicis, of Naples; Prof. Pellizari, of Florence; Prof. Campana, of Rome. Norway—Prof. Boeck, of Christiana. Denmark—Prof. Haslund, of Copenhagen. Spain—Prof. Castelo and Prof. Olavide, of Madrid. Balkan States—Prof. Kalindero, of Bucharest. Turkey—Zambacho Pacha. Greece—Prof. Joannu, of Athens. United States—Dr. Duhring, of Philadelphia; Dr. White, of Boston; Dr. Nevins Hyde, of Chicago; Dr. Bulkley, Dr. Keyes and Dr. Fox, of New York. Canada—Dr. F. Shepherd, of Montreal; Dr. Graham, of Toronto.

TREASURER—Mr. Malcolm Morris.

EXECUTIVE COUNCIL—Chairman—Mr. Hutchinson. Vice Chairman—Dr. Colcott Fox. Members—Dr. McCall Anderson, Mr. William Anderson, Dr. Brooke, M. Alfred Cooper, Dr. Fitzgibbon, Dr. A. J. Harrison, Dr. Allen Jamieson, Mr. Ernest Lane, Dr. Payne, Dr. Perry, Dr. Sangster, Dr. Pye-Smith, Mr. Shield, Mr. Shillitoe, Dr. Simon, Dr. Walter G. Smith, Dr. Stowers, Mr. Warren Tay, Dr. Thin. Ex-Officio Members—Chairmen of Committees, the Treasurer, the Secretary General.

COMMITTEES: *Reception*—Chairman—Dr. Radcliffe Crocker. Members—Dr. Brooke, Dr. Colcott Fox, Dr. Keser, Mr. Lane, Dr. Bowles, Mr. Sheild.

Museum and Demonstration—Chairman—Dr. Stephen Mackenzie. Members—Dr. Abraham, Mr. William Anderson, Mr. Hutchinson, Jr.; Dr. Perry, Dr. Stowers, Mr. Tay.

Bacteriological—Chairman—Dr. Sims Woodhead. Members—Dr. Déiépine, Dr. Galloway, Dr. Manson, Mr. Andrew Pringle, Dr. Buffer, Dr. Thin.

Ex-Officio Members of all Committees—The President, the Treasurer, the Secretary-General.

SECRETARY TO SECTION FOR SYPHILIS—Mr. Ernest Lane.

FOREIGN SECRETARIES—France—Dr. Feulard, of Paris. Germany—Dr. Rosenthal, of Berlin; Dr. Taenzer, of Bremen. Austria—Dr. Riehl, of Vienna. Belgium—Dr. Dubois Havenith, of Brussels. Denmark—Dr. Nielsen, of Copenhagen. Hungary—Dr. Török, of Buda-Pesth. Portugal—Dr. Zeferino Falcao, of Lisbon. Holland—Dr. Van Haren Normann, of Amsterdam. Sweden—Dr. Welander, of Stockholm. Switzerland—Dr. Müller, of Zurich. Italy—Prof. Tommasoli, of

Modena. Spain—Dr. Padro, of Madrid. Roumania—Dr. Petrini de Galatz, of Bucharest. Argentina—Dr. Baldomero Sommer, of Buenos Ayres. Australia—Dr. Finch Noyes, of Melbourne. Egypt—Dr. Sandwich, of Cairo. United States—Dr. George T. Jackson, of New York. Brazil—Dr. Silva Araujo, of Rio de Janeiro. Chili—Dr. Valdés Morel, of Santiago. China—Dr. Neil Macleod, of Shanghai. West Indies—

SECRETARY-GENERAL—Dr. J. J. Pringle, 23 Lower Seymour street, London, W.

REGULATIONS.

1. All duly qualified medical men, British or foreign, or others interested in science, invited by the council, who shall have paid the fee of £1 sterling, and who shall have enrolled themselves, shall be members of the Congress and entitled to the Volume of Transactions.

2. The official languages of the Congress shall be English, French and German, but with the permission of the president members may express themselves in the language with which they are most familiar.

3. The proceedings of the Congress shall be embodied in a Volume of Transactions, edited by the executive council.

4. Communications relative to membership, papers or other matters connected with the Congress should be addressed to the Secretary-General, Dr. J. J. Pringle, 23 Lower Seymour street, London, W., or to one of the foreign secretaries.

5. The fee of membership shall be payable in London at or before the opening of the Congress.

It will greatly facilitate the work of the executive if the fee is forwarded as soon as possible after May 1, 1896.

6. Members who are unable to attend the Congress shall receive the Volume of Transactions.

7. The subjects treated of shall be of two orders:

(1) Those selected beforehand by the executive council and introduced by gentlemen chosen for that purpose by the council.

(2) Those selected by individual members themselves.

8. Subjects selected for debate by the council shall take precedence over those selected by the members.

9. The sittings of the Congress shall take place from 11 to 1 in the forenoon, and from 3 to 5 in the afternoon, of each day.

10. There shall be clinical demonstrations of patients every morning from 9 to 10:30, and every afternoon from 2 to 3.

11. Members contributing papers must submit an abstract of them to the Secretary-General on or before May 1, 1896, which will be printed, either in full or in part, and embodied in the general programme of the Congress, which will be distributed at its opening.

12. At every debate precedence will be given to gentlemen who have communicated beforehand their intention to take part in it.

13. No papers lasting more than twenty minutes will be permitted. Speeches will be strictly limited to ten minutes each. MSS. of the papers read must be left with the Secretary-General before the end of the sitting. The executive council shall decide as to the entire or partial publication of such papers in the Transactions of the Congress.

J. J. PRINGLE, *Secretary-General.*

THIRD INTERNATIONAL CONGRESS OF PHYSIOLOGISTS.

The Third International Congress of Physiologists will be held in September, 1895, from the 10th to the 14th of the month, at Bern, Switzerland. Professor Kronecker, director of the Physiological Institute of the University of Bern, has kindly expressed his readiness to afford to members of the Congress all facilities for demonstration and experiment, as well as for the exhibition of scientific apparatus. It is particularly desirable that those intending to avail themselves of Professor Kronecker's assistance should let him know what their requirements are not later than June 30.

In connection with the Congress, an exhibition of physiological apparatus will be held. Exhibits may be contributed by all members of the Congress, by the directors of physiological laboratories, and by makers recommended by any member of the Congress, or by the director of a physiological laboratory. The exhibition of apparatus will open two days before the Congress and will close two days after the Congress.

Titles of communications may be sent to Frederic S. Lee, secretary American Physiological Society, Columbia College, New York City.

Each member of the Congress is required to contribute the sum of ten francs toward defraying the expenses of the meetings. He will obtain in receipt from the president, Professor Kronecker, a card of membership of the Congress.

C. S. SHERRINGTON,

General Secretary, 27 St. George's Square, S. W., London.

PLAQUEMINES PARISH MEDICAL AND SURGICAL ASSOCIATION.

The association, pursuant to adjournment, met on April 29, 1895, at Mevers' Hall, Pointe-a-la-Hache.

Present: Drs. Geo. A. B. Hays, N. M. Hébert, G. R. Fox and James F. McCaleb.

The president, Dr. Geo. A. B. Hays, called the meeting to order.

The secretary read the minutes of the previous meeting, which were approved.

Letters were read from Drs. J. B. Wilkinson, Fred. J. Mayer and P. B. McCutcheon. It was moved that these communications be received and spread upon the minutes.

Dr. Hébert being called to the chair, Dr. Hays presented the following memorial resolutions on the late Drs. David R. Fox and Wm. B. Booth, and it was resolved that they be adopted and a page of the minute-book be dedicated to their memory:

WHEREAS, It has pleased Almighty God in His infinite wisdom to remove from his broad sphere of usefulness upon this earth our friend, former vice president and charter member of this association, Dr. David Raymond Fox,

Be it resolved, That in his death this association has lost one of its most zealous members and active workers for the welfare of the profession, one who was always in the van in the rapid march of medical progress, and one who unremittingly strove to maintain the high standard of the medical profession of which he was a valued ornament. Ethical to a degree, he maintained unsullied during his long medical career—extending over almost half a century—the spotless escutcheon bestowed upon him by his *alma mater*, the University of Louisiana, in 1845.

Resolved, That we extend our earnest sympathy to his family in their bereavement.

Resolved, That these resolutions be published in the *Plaquemine Protector* and the *NEW ORLEANS MEDICAL AND SURGICAL JOURNAL*, that the secretary forward a copy to the family of Dr. Fox, and that a page of our minutes be dedicated to his memory, and these resolutions be spread thereon.

GEO. A. B. HAYS, M. D.,

JAMES T. MCCALED, M. D., *Committee.*

WHEREAS, The Plaquemines Parish Medical and Surgical Association is again called upon to mourn the death of one of its charter members; one who—although for years past he was not actively engaged in the practice of medicine—was always

active and zealous in promoting the interests and elevating the standard of the medical profession, Dr. Wm. B. Booth, who died at his home in Buras, April 20, 1895,

Resolved, That by his death the community as well as the medical profession has sustained a great loss, and his intimates have been deprived of one of the noblest, truest friends it was ever the fortune of man to have. Of him it may be truly said, he was one of the noblest works of God, an honest man.

Resolved, That these resolutions be published in the *Plaquemines Protector* and the *NEW ORLEANS MEDICAL AND SURGICAL JOURNAL*, and be spread upon the minutes of this association.

Resolved, That the secretary forward a copy to the brother of Dr. Booth.

GEO. A. B. HAYS, M. D.,

JAMES F. McCALEB, M. D., *Committee.*

Dr. McCaleb moved that the rules be suspended, and to proceed to the election of new members.

Drs. Benj. S. Story and Gaston A. Hébert were unanimously elected as members of this association.

It was moved that, in order to be affiliated with the Louisiana State Medical Society, the secretary of this association be instructed to send two copies of the constitution and by-laws of the Plaquemines Parish Medical and Surgical Association to Dr. G. R. Fox, vice president of First Congressional District of the Louisiana State Medical Society.

Dr. N. M. Hébert was elected the delegate of this association to the annual meeting of the Louisiana State Medical Society on May 6, 7 and 8, 1895.

Dr. Fox read extracts from his essay on "Antitoxine Therapy," which, owing to press of time, was deferred to the next meeting. He was voted thanks for the interesting passages given.

Dr. McCaleb related a case of phimosis with reflex symptoms.

Dr. Fox in the chair, Dr. Hays reported a case of rabies—hydrophobia? He received a vote of thanks for this able paper, and it was moved that the same be sent to the *NEW ORLEANS MEDICAL AND SURGICAL JOURNAL* for publication.

It was ordered that these proceedings be published in the *Plaquemine Protector* and *NEW ORLEANS MEDICAL AND SURGICAL JOURNAL*. The meeting then adjourned, subject to the notice of the Secretary in July.

JAMES F. McCALEB, M. D.,

Secretary.

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EDITED AND PUBLISHED BY
AUGUSTUS McSHANE, M. D

COLLABORATORS:

DR. F. W. PARHAM.

DR. R. MATAS.

DR. A. W. De ROALDES.

DR. H. W. BLANC.

DR. WILL H. WOODS.

Editorial Articles.

THERAPEUTIC NOTES ON PHTHISIS PULMONALIS.

Pulmonary consumption still holds its unenviable fame as the greatest destroyer of the human race. About one-seventh of all of the deaths are due to the various forms of tuberculosis, the pulmonary form carrying off about five million people all over the earth annually. This appalling devastation has been going on, perhaps, as long as the human race began to be civilized and to live in crowded quarters, but it is silent and slow, and does not inspire us with horror as does a fearful accident to a handful of people. Thoughtful sanitarians and philanthropists generally, who inform themselves on the subject, are ever sensible of the ravages of consumption, and are keenly alive to any new thing that holds out even a faint hope of success against the destroyer. A more intimate knowledge of the disease than our predecessors possessed justifies us in saying that consumption, in its incipiency, is more frequently cured than was formerly believed. The advances in all branches of medical science have strengthened the hands of the physician, and emboldened him to look for a good result where formerly he would have closed his hands in mute despair. But we are still far from possessing an agent that will arrest the disease in its

advanced stages, when the patient bears in his face his tale of suffering, and becomes a burden to those around him.

The hopes raised by Koch's tuberculin were, unfortunately, doomed to speedy extinction; the pendulum swung the other way, and tuberculin received a large amount of unmerited execration before being consigned to the limbo of things tried and found wanting. Though not succeeding as he hoped, that great man pointed the way; the seed he planted did not fall among rocks, but on good ground, and is beginning to bear fruit. One of Koch's co-laborers in the field of bacteriology, Klebs, appreciated the value of tuberculin and its limitations also. He knew that it possessed some power for good, and wisely proceeded to analyze its action and develop it, instead of rejecting the agent when hope gave way to disappointment.

He worked along the lines laid down by Koch, and succeeded in obtaining a pure product of bacillary growth, which he calls *antiphthisin*. It may be said to represent tuberculin deprived of its noxious properties. The original tuberculin contained all of the bacillary products, the toxic part of which gave rise to the severe symptoms noted. Dr. Karl von Ruck, of Asheville, N. C., used tuberculin quite extensively, but only in cases that offered a reasonable chance of improvement; and he rarely failed to obtain some benefit, though not always as much as he desired. Encouraged by these results he continued to use modifications of tuberculin, and finally adopted that of Klebs, antiphthisin, which he now employs largely, and almost always with gratifying results in cases that are not too far advanced to be beyond the reach of any treatment.

Antiphthisin is prepared either from tuberculin or from the culture-fluid by precipitation of the toxalbumens; the filtrate is precipitated with absolute alcohol, and the precipitate, redissolved in distilled water to one-tenth of the original culture-fluid, represents antiphthisin. The toxalbumens, when injected experimentally, produce malaise, aching, fever and inflammation of tubercular deposits; no such effects follow the use of antiphthisin. This substance gave tuberculin whatever curative properties it possessed, and it is perfectly harmless, even in doses as high as ten cubic centimeters, hypodermically, per day. Under its use, in suitable cases, tubercular infiltrations

have cleared up and physical signs become normal; this, of course, in cases where there has not been any extensive necrosis of lung-tissue.

Antiphthisin is not put forward by Dr. von Ruck as a remedy that will make consumption a disease no more to be feared than a cold in the head. His wide experience in the treatment of this disease has given him an opportunity to gauge the powers and limitations of a given remedy. Antiphthisin has been tried for more than a year, and in more than one hundred cases experimentally. It causes the bacilli to disappear from living tubercular tissue, while the coagulation of the protoplasm disappears and the nuclei can be demonstrated by staining; when no mass of necrotic tissue exists, the tubercular tissue disappears, and an absolute cure results. When a cavity has formed, the remedy does not act upon the dead tissue, but when the case is not hopelessly advanced, it acts upon the outlying zone of infiltrated tissue in which the bacilli are found in greatest abundance and most active, and checks the growth of the cavity by inhibiting the development of the bacilli, and thus putting an end to their ravages. When putrefactive bacteria become firmly installed in a cavity, they give rise to sepsis, with its attendant fever, sweating, etc.; such cases are much less amenable to the influence of antiphthisin than those that are not the seat of a mixed infection. When there is enough lung-tissue left to carry on respiration, a permanent cure is practicable if the progress of the disease can be checked; any cheesy masses that may be present will, in the course of time, disintegrate and be coughed up, giving the cavity a chance to cicatrize.

In antiphthisin we have a remedy that is a specific in the treatment of lesions that are really tubercular; the complications will have to be treated on general principles. It is important to recognize the tubercular nature of a cough early in its history, for advanced cases, particularly when a mixed infection has taken place, do not readily respond to the remedy.

In incipient phthisis, Dr. von Ruck relies largely upon the previous history of the case when the physical signs are not conclusive; and when further confirmation is required, he injects a diagnostic dose of crude tuberculin, which enables him, in a few days, to say positively whether his patient is tuberculous or not.

While recommending antiphthisin as a valuable agent in phthisis, Dr. von Ruck does not lose sight of the aid furnished by climate and hygiene. He has arrested the disease in 44 per cent. of his cases, kept under observation in a sanitarium. Klebs has given the profession a valuable remedy, one which ought to be widely used in incipient cases.

*
* *

Recently there has been a new departure in serum-therapy. Dr. Paul Paquin, of St. Louis, Mo., has thrown on the market a preparation which he calls "antitubercular serum." It is now being tried in New Orleans and we will soon have facts enough to enable us to draw intelligent conclusions.

It may also interest our readers to learn that the business manager of the Amick Chemical Company, which manufactured Dr. Amick's (alleged) remedy for consumption, recently died of consumption out in New Mexico, whither he had gone, presumably, to get cured of his lung trouble.

Abstracts, Extracts and Annotations.

MEDICINE.

REMARKS ON THE CONTINUED FEVERS OF LOUISIANA.

By RUDOLPH MATAS, M. D., New Orleans, La.

In the nine years that have elapsed since the reading of my paper before this society on the "Long Continued Fevers of Louisiana that Resist Quinine" my opportunities for observation have greatly increased, and I feel that I have gathered sufficient evidence to permit me to formulate a few conclusions pointing to the real nature of these fevers. In the paper referred to I insisted upon the distinctive clinical type of our continued fevers, and emphasized its differential characteristics from malarial fevers and from typhoid. I also confirmed the careful observations of Dr. John Guitéras, who had studied this form of fever in Key West, and had described it as an independent morbid entity in a paper published March 10, 1885, in the *Therapeutic Gazette*, under the title "Continued Fever, or so-called Typhoid Fever of the Tropics, or Continued Thermic Fever." I believed with him then that it was neither malarial nor typhoid nor a hybrid combination of both, but the

result of some form of exhaustion of the heat-regulating apparatus.

It is now unnecessary to reproduce the clinical picture of the fever in question. We all know it, though we may call it by different names. I simply desire to supplement my paper of 1885 by expressing the opinion that the type of fever in question is not a new or independent morbid entity, but an atypical typhoid fever. This opinion is based upon the following conclusions derived from personal observation and experience and by clinical records which substantiate the facts:

1. The course of the long-continued fevers of Louisiana is not in the least altered or notably influenced by the cinchona alkaloids; *ergo*, it is not a malarial fever from the therapeutic standpoint.

2. That this fever occurs at all seasons of the year, though it is more prevalent during the summer months; *ergo*, it is not a "thermic" fever pure and simple.

3. That cases of the fever occur in groups (and probably in districts), several members of a household being attacked simultaneously or in rapid succession; *ergo*, infection from a common source.

4. That while the true classical and grave typhoid type of fever is exceptional and comparatively rare, it nevertheless exists in our midst in persons who are born in this city and who have never lived elsewhere; *ergo*, typical typhoid fever exists as an endemic in New Orleans.

5. That in the comparatively rare cases of typical typhoid fever all the essential characteristics of the typhoid state are present, viz.: long-continued fever, varying from four to six weeks, with typical chart; adynamic state, stupor, low muttering delirium, diarrhœa, intestinal hæmorrhage, perforation of the bowels and fatal peritonitis.

6. That in many other (less rare) cases the febrile movement, though long continued, presents few of the adynamic or ataxic characteristics of the typhoid state; the mental state is good, but diarrhœa and intestinal hæmorrhage are nevertheless present.

7. That in the majority of the cases the chief and apparently only characteristic of the fever is its persistence; its long duration and rebelliousness to antiperiodic or other medication. The only point of contact between this and the preceding types lies solely in the continued thermic movement.

8. In infected houses, where several cases are under treatment, it is not very rare to observe a fever of a most *typical* and grave typhoid type running through its course by the side of a benign *atypical* fever in which there are no adynamic symptoms, but a simple and uncomplicated thermic movement.

I would now also state, as a matter of pure personal impression and belief without a sufficient basis of statistical facts outside of general personal observation, that it is my impression that—

1. The true malarial type of fever—the strictly intermittent—is gradually disappearing from the city limits, and is now almost restricted in its prevalence to the swampy portion of our suburbs.

2. That the continued type of fever is gradually gaining the ascendancy, and the true typhoid type is yearly becoming more frequent.

3. That this gradual transition from the intermittent to the plain remittent continued, and, finally, to the continued typhoid type of fever, is a phenomenon that has been observed elsewhere, where the original conditions of nature gradually suffered profound alterations from the presence of a progressively increasing human population; that malarial fevers are the products of the unredeemed, uncultivated swampy lands, while the typhoid type is a product of human aggregation which usually follows in the wake of increased means of communication and other conditions inherent especially to metropolitan life.

4. That this transition in our fever-type is being effected gradually without any perceptible change in our water supply, milk supply, or food supply, or in our sewerage system, and that the only conditions that have changed have been the notable increase in the facilities for communication between this and other large Northern and Western metropolitan centres where the typhoid type of fever has long predominated and whence it could be readily imported.

* * * * *

Finally, a word as to treatment:

The vast majority of our cases are benign in their tendency, and require only symptomatic and hygienic treatment and careful nursing. The chief therapeutic indication is usually to control an excessive or hyperpyretic movement. In sthenic cases the antithermic remedies, especially phenacetin and antifebrin in small doses and in combination with some alcoholic, will meet the indication. My rule has been never to administer an antithermic dose (2 to 3 grs.) unless the temperature rises above 103 deg., and in the latter stages, when the patient is showing signs of exhaustion, never to give the dose until 104 deg. has been reached.

In the asthenic cases, stimulation, with proper nourishment, and the cold bath constitute my chief reliance. The method of Brand is far superior to all forms of antithermic

medication, but it is difficult to apply in the homes of the poor, who are without help and unable to pay for the services of a competent nurse.

In the asthenic cases in which the ordinary antithermics are badly tolerated, and in which for fear of hæmorrhages or other causes, it is impossible to move the patient to the bath, I believe that the epidermic use of guaiacol by Sciolla's method and Da Costa's directions is of service in combating hyperpyrexia. I had a typical case which occurred a few months ago in which guaiacol did good service. As an adjunct of great value in reducing fever and in diminishing the tendency to delirium, I always insist upon the use of the ice-bag or ice-pillow as a head-rest. All the other indications for complicating conditions should be met in the manner described in the classics.—*Medical News.*

AN EASY METHOD OF BATHING IN TYPHOID FEVER.

Every new medical text-book and periodical accumulates statistics testifying to the brilliant results following the use of cold baths in typhoid fever. The hospitals in which this method is chiefly carried on are almost, without exception, showing a higher percentage of recoveries than ever before under any other plan of treatment.

Why is it, then, that this method is not universally adopted and carried out in private practice? The answer is simple.

Easy as it is in a hospital with an abundance of skilled assistance, there is no method of treatment in use so difficult to carry out properly as tubbing in typhoid fever in private families.

As the family bath-room is generally out of the question, on account of its inconvenient location and use by others of the household, it becomes necessary to buy a large portable bath-tub.

Even in cases where there are two trained nurses it is necessary to call in the clumsy assistance of some members of the family to help in the lifting of the patient to and from the tub, and this is a strain on them, and not unattended with risk to the one who is sick.

There is undoubtedly still a widespread opposition among the laity, both educated and uneducated, to the use of "cold baths" in fever. A young physician must have a very strong hold on the family, and enjoy their most complete confidence, to take the risk of the responsibility, if the disease takes a bad turn later from any accidental complications, and even older men will sometimes hesitate.

A physician of high standing and extensive practice in the city recently said to me, "I do not find that tubbing is practicable in private families, much as I would like to make use of it. I have to content myself with sponging and packs, and have had some success with constant use of an ice-coil over the abdomen as a substitute. If the ice-coil acts so well in lesions of the peritoneal coat of the intestines, why should it not have a similar result in lesions of the mucous coat?"

But all these three methods, sponging, wet pack, or ice-coil, while they add to the comfort of the patient, do not cause very decided or long continued lowering of the temperature.

Again, one who has had bad results from necessary changing of the position of a patient in an advanced stage of typhoid to examine the back of the chest, or something equally simple, causing disagreeable heart symptoms, will rather dread the process of lifting a patient out of his bed for any reason whatever, especially if the patient is large and the bed a double one.

The following method, which I once saw used in a hospital in Buffalo, commends itself as a simple solution of the whole problem. I have never seen it published in any medical journal or work, and am sure that it has not often been tried.

It is a very easy thing to slip a rubber blanket under the patient, and raise the two sides and the ends at the foot and head of the bed, nine or ten inches, by a row of pillows, bolsters, sand-bags or simple boards.

The rubber blanket ought to be of double thickness, as large as can be purchased, and special care must be given to the arranging of the corners. When this is done you have the patient at the bottom of an impromptu bath-tub, into which you can pour water at any desired temperature, and in sufficient quantity to partially or entirely cover his body.

Only two inches of water would be enough to give a cool sponge-bath ten times as efficacious as the gingerly sponging possible under ordinary circumstances, and if the sides and corners are firmly fixed you can easily make this tub hold all the water you desire. The water may be run from the nearest faucet by a rubber tube. I have found it a simpler and equally successful method to carry it in pails and pour it over the patient, starting with tepid and gradually cooling it down to the desired temperature.

The neatest method I have found by experiment is to use a large "watering pot" with a sprinkler, such as is used for watering plants. This is a method which will not commend itself to those who dislike humble and commonplace methods to accomplish something that more complicated and more impressive methods might do.

I believe this kind of a bath will always be grateful to the patient, and if it is found necessary to use water at a decidedly low temperature, would give rise to less shock than a sudden plunge into a tub filled with very cold water. The effect on the temperature is the same as it would be under the other method with a stationary tub.

The water can be removed, without spilling a drop on the bed, by siphoning with a small pitcher or cup, or sponging. Then the blanket can be dried and left in place, covered by a clean sheet, or better yet, removed and dried in the sun.

All this needs a little care, for it would be a very serious and troublesome accident to soak the patient's bed clothing and mattress, but the difficulty and risk to the patient can not be compared with that attending the use of the ordinary tub. And best of all, in those cases where the family or friends must do the work, and the employment of trained nurses is impossible on account of the expense, this method can always be successfully used when tubbing would be out of the question.

I have not found one single objection to the employment of the method in private cases, and can not see why it could not be used in hospitals.—*Med. Rec.*

THE EFFECTS OF SMOKING UPON MUSCULAR WORK.

Prof. Vaughn Harley, M. D., M. C. P. and Grover Research Scholar, publishes in a recent number of the *Journal of Physiology* the results of an extended series of experiments in relation to causes which influence muscular work. Among the various experiments undertaken by Prof. Harley, some of the most interesting relate to the influence of tobacco smoking upon muscular work. The idea is generally prevalent among smokers that a larger amount of work can be accomplished under the influence of tobacco than without it—at any rate, that smoking, even if it does not increase muscular power, lessens the sense of fatigue, and thus enables the individual to continue working longer than he otherwise could do. Prof. Harley's experiments had relation to two points:

1. The amount of work which could be accomplished; and—
2. The length of time during which work could be performed before the point of absolute fatigue, with inability to continue work, was reached.

He found, as the result of his experiments, that even moderate smoking in a person accustomed to smoking so that

the primary toxic effects of the nicotine were eliminated, the amount of work which could be accomplished was not increased, and that the approach of fatigue was not retarded. Tobacco smoking, on the contrary, to use the words of Prof. Harley, "slightly diminishes muscular power and hastens the onset of fatigue."—*Med. and Surg. Reporter*.

MICROBICIDE PROPERTIES OF MUCUS.

The presence of vast numbers of microbes in those cavities of the body which are in communication with the air would doubtless be the occasion for frequent and fatal attacks of illness were it not for the fact that the mucus which covers these exposed surfaces is possessed of distinct bactericide properties. Even germs as virulent and tenacious of life as are the spores of the anthrax have been found to be killed after a few hours of exposure to nasal mucus. This product of gland-action is found to be capable of destroying all kinds of microbes. It is this protective action of mucus which prevents an enormous development of bacteria in the nose and other cavities of the body which are exposed to the air. This fact emphasizes the importance of preserving intact the much-neglected nasal mucous membrane, since it is evident that a state of disease capable of destroying the mucous glands, and hence vitiating the mucous secretion or causing its entire loss, must expose the body to attacks of disease from which it might otherwise escape.—*Modern Medicine*.

SEVERE HICCOUGH.

Heidenhain (*Berl. klin. Woch.*, June) remarks that this clonic convulsion of the diaphragm may be caused by direct or reflex irritation of the phrenic nerves. Reflex hiccough may be produced by diseases of the peritoneum, stomach, etc. Sometimes it is due to severe cerebral disease. It is observed before death from malignant disease of the intestine. A patient, aged 72, had a severe attack of hiccough five years ago, lasting five days, for which no cause could be found. In the present attack cocaine was given, with the best results, after other remedies had entirely failed. A few days after the attack all the symptoms of intestinal obstruction, including fæcal vomiting, appeared. Abdominal section was performed, and a large mass of growth was found arising from the tail of the pancreas, and surrounding the large intestine. An artificial anus was formed, but the patient soon died. In this case the

patient seemed to be in the best of health until he had a slight attack of bronchitis. Five days later the hiccough supervened, and lasted eleven days. Seven days after the cessation of the hiccough intestinal obstruction manifested itself. The author thinks that the hiccough was the precursor of death from intestinal carcinoma. This disease could not, of course, account for the attack five years previously. Attention is drawn to the value of cocaine in this affection.—*British Med. Jour.*

MOTION OF HUMAN SPERMATOZOA.

Various authorities state that the spermatozoa may continue to move during twenty-four to eighty-four hours after death in the fluids of the seminal tract. Outside the body the movement of spermatozoa has been observed for seventy-two hours by Hofmann and Mantegazza for four days at a suitable temperature. Mr. Piersoll now states that at a temperature of 8.5 deg. C. a few of the elements showed movement after being kept for nine days. These facts show that spermatozoa may long retain their vitality in the female generative tract and must receive in future due consideration in connection with certain medico-legal questions.—*Medical Record.*

SURGERY.

IN RE WHITE'S OPERATION FOR HYPERTROPHIED PROSTATE.

To the Editor of the Medical News:

SIR—Dr. Belfield, in the *Journal of the American Medical Association* for March 9, 1895, and Dr. Bangs, in the *Medical Record* for April 6, 1895, published under the heading "Warning against Castration for Prostatic Enlargement," communications which, while they express some views with which I am in entire accord, contain, on the other hand, statements that hardly seem justified by the facts now before the profession.

No one could deprecate more than I the indiscriminate performance of the operation. I suggested it with great caution, laying before the American Surgical Association the line of thought and experimental work that seemed to me to give the idea scientific standing. More recently I wrote (*British Medical Journal*, January 5, 1895; *Medical News*, December 22, 1894) that while the evidence then existing obviously and

amply justified the original suggestion, I desired to call attention to the fact that I had not made it without hesitation. I added that, "having observed with disapprobation the undiscriminating assaults of some extremists upon the urethra, the tubes, the ovaries, and more recently upon the appendix, I did not want to be responsible for a similar attack upon the testicles," and that I knew that "the step from experiment to operation is and should be a long one, and felt the responsibility involved in proposing a new operation, and especially one of this character—easy of performance, with a low mortality, and intended for the relief of a condition of enormous frequency."

I am still most desirous of having the operation confined within its proper limits, and to this extent am in sympathy with the gentlemen mentioned.

But when Dr. Belfield says that while it is admitted that "castration may cause atrophy of glands, subsidence of œdema and relief of distress, but that it will not reduce the hypertrophied connective tissue is *a priori* probable;" and Dr. Bangs writes that "a theoretical operation, based upon observations upon dogs and eunuchs, in whom physiological atrophy of the prostate is said to be induced by the abrogation of its sexual function, can not reasonably be applied with the expectation of getting the same results in elderly men in whose prostates hyperplasia has already taken place," and reiterates that the operation "is based on theory alone," they seem to ignore existing and conclusive evidence. This is now complete in every particular as regards the effect of bilateral castration on the majority of hypertrophied prostates. The experimental and theoretic stage has long since been passed. I have in my possession sections of a prostate taken from a patient that died after, but not because of the operation, which showed clearly that it *does* reduce the entire gland, and that the hypertrophied connective tissue shrinks and dwindles after the earlier disappearance of the glandular elements. But that this assertion may not rest on my statement, I would quote Mr. Joseph Griffiths, F. R. C. S., Hunterian Professor of Surgery and Pathology in the Royal College of Surgeons, England, who has recently reported on the condition of an enlarged prostate eighteen days after double castration. He describes in detail and figures (*British Medical Journal*, March 16, 1895) the changes which had taken place, summing up as follows: "In short, the cell-elements, first proliferate, and ultimately disappear, leaving a comparatively small amount of fibrous connective tissue in their place. The gland, whether enlarged or normal, undergoes certain degenerative changes after removal of the testicles, which lead to its conversion into a small, tough and fibrous mass

in which there are only remains of the glandular tubules and ducts."

As to the clinical evidence, Dr. Bangs urges that, to test the results of the operation, "the size of the prostate should be determined by three examiners, and the examinations repeated with sufficient frequency to determine positively the size of the organ." These conditions, which are somewhat rigid, have been complied with in all my own cases, in one of which the estimated shrinkage of the size of the prostate from that of a small orange to that of a walnut took place in a week. A half-dozen examiners confirmed this, and several hundred medical students saw the patient and learned directly from him of the concomitant and remarkable improvement in his symptoms. Dr. Lilienthal, of New York, two weeks after the publication of Dr. Bangs' letter, published the report of a case (*The Medical Record*, April 20, 1895), which so completely answers all Dr. Bangs' theoretic objections as to be conclusive in itself. I may add, however, that I have now notes of similar cases to the number of nearly one hundred, in most of which all previous palliative treatment had failed, and in which the results have been equally striking. It seems to me too late to say, as Dr. Bangs does, that the relief appearing within a few hours has been too positive to be attributed to the operation itself, because "it hardly seems rational to believe that a hyperplastic organ in which, no doubt, there has been an increase of the connective-tissue element, should diminish in size within a few hours after castration has been performed." The facts are against him. The hyperplastic organs do diminish in size, and often in an almost incredibly short space of time.

Both the gentlemen who have been moved to warn the profession emphasize the possibility of mistake in diagnosis, Dr. Belfield going so far as to say that "whenever a case of real or supposed prostatic enlargement demands operative relief this should always be an incision into the bladder." I am quite willing to admit that there must be some doubtful cases, and that in these and in a certain proportion in which the diagnosis is certain a cystotomy will often be desirable. But it is assuming altogether too much to claim that this is "always" proper. I have not found the great majority of cases of prostatic hypertrophy difficult of recognition nor of classification by combined rectal and instrumental exploration. But if I may be thought to be mistaken as to this and other similar questions raised by these gentlemen, it is hardly likely that Fenwick and Moullin and Griffiths in England, Bereskin in Russia, Helferich and Meyer and Hænel in Germany, Ramm in Norway, Watson and Warren in Boston, Halsted and Fin-

ney in Baltimore, McBurney and Stimfon and Pilcher in New York, Andrews in Chicago, Souchon in New Orleans, Walker in Detroit, Haynes in Los Angeles, and dozens of other surgeons of more or less prominence have been wrong as to their diagnosis, or in saying that previous palliative treatment has failed, or unreliable in their descriptions of the rapid and sometimes astounding shrinking of the gland and disappearance of the subjective symptoms, even including long-standing cystitis. They are all now on record to this general effect at any rate.

Dr. Belfield alludes to a case in which a patient with a large prostate, "evidently inflammatory," and severe cystitis, was found, by suprapubic incision, to have a small calculus, previously undetected. He adds: "Prolonged vesicle drainage was followed by a great reduction of the prostatic enlargement and by a symptomatic cure." He then imagines with apparent horror the status—professional and legal—of the surgeon who might have done castration, when the calculus was subsequently discovered. This sort of argument appears to me to be misleading, as it lacks necessary detail. The age of the patient, indicating the value of the testicles from a sexual standpoint; the relation of the calculus to the enlargement of the prostate—*i. e.*, whether cause, which would be rare, or effect, which would be common; the period indicated by the word "prolonged;" the presence or absence of a urinary fistula; and the exact condition called a "symptomatic cure," should all be known before any such comparison could be drawn, I mention the case because in a gentleman aged seventy-six years, with a large prostatic hypertrophy and a secondary calculus, which had formed after a previous litholapaxy, and which lay in a deep post-prostatic pouch, I have within the last month deliberately performed castration as a primary operation. Two weeks later, the prostate having shrunk to one-sixth its former bulk, the residual urine having disappeared and the cystitis (in spite of the presence of the calculus) having almost vanished, I crushed and evacuated the stone. The patient was sent to me by Dr. Schum, of Huntingdon. He went home free from all symptoms.

Dr. Belfield says, finally, that "the claim that double castration is safer than drainage is not in his experience warranted, if drainage be made either by perineal urethrotomy or suprapubic incision in *deux temps*; the danger in cases that really demand operative interference is the anæsthetic, not the knife." But drainage in most cases is only a palliative measure, and, if permanent, is a source of more or less continued danger and of great discomfort to the patient. Dr. Belfield has very properly described it under the head of "Palliative Op-

erations," in an article that he has published elsewhere. It is not fair, therefore, to compare it at all with a measure that in properly selected cases is curative, and which thus challenges comparison with the various forms of prostatectomy. He might almost as well have written of the mortality of catheterism, which also gives great relief in some cases. As to the anæsthesia, as double castration can easily be performed within three minutes, it seems unlikely that any serious objection to the operation will prevail on that account. I have on several occasions completed it in a little less than three minutes before the class at the University of Pennsylvania, and without undue haste. In regard to the general question of mortality, however, I may be pardoned for quoting from a personal letter from Sir Joseph Lister, who writes me: "I am glad to see from the cases that have been published that your remedy has proved so effectual in this most distressing class of patients. If I have any fault to find with you in speaking of the advantages of your procedure it is that you seem to me to underrate them when you say that castration is an operation of little danger. You might, I think, have truly said that if it is to be performed with sufficient antiseptic precautions it is entirely free from danger. The rapidity of the relief afforded seems to me as remarkable as it is satisfactory. Allow me to congratulate you cordially on this valuable addition to art."

My personal and professional regard for the gentlemen who have criticised the operation, and my knowledge of their sincerity of purpose, have led me to reply at such length; but I also have been actuated by a desire to have both its merits and demerits kept fairly before the profession. There is much yet to be determined in regard to it, especially as to the selection of suitable cases and as to its remote effects; but I think I may fairly claim that the existing evidence—experimental, pathologic, and clinical—removes it from the region of theory and speculation, and demonstrates its applicability to a large proportion of cases of hypertrophy of the prostate.

Dr. Bangs' statement that "if this theory could be proven, about one man in three, after the age of fifty, ought to submit to castration in order to prevent enlargement of his prostate," is an extension of the operative field which must be regarded as peculiarly his own. I have as yet not considered the subject from the standpoint of early prophylaxis. As the theory is proved, it would be interesting to know how Dr. Bangs proposes to select his cases.

Very respectfully,

J. WILLIAM WHITE.

PARENCHYMATOUS INJECTIONS OF IODOFORM IN GOITRE.

Prof. Garré (*Wiener Med. Presse*, No. 33, 1894) has employed parenchymatous injections of iodoform in goitre, as recommended by Prof. Mosetig-Moorhoof, in 140 cases, with astonishing results. It has the advantage of being both simple and easily carried out, without disturbing either the business or the health of the patient; it is also without danger. He employs the following solution :

Iodoform	1.0 (grs. xv).
Olive oil, } aa	7.0 (ʒ j¾).
Ether, }	

After disinfection of the skin the gland is fixed between the second and third fingers of the left hand while standing behind the patient and pressing the goitre against the spinal column. Avoiding all visible cutaneous veins, the canula is plunged quickly from an inch to an inch and a half into the gland. Then removing the left hand the needle is held loosely in the hand and the patient is told to swallow. If it is actually in the goitre, then it will move up and down with the movements of the larynx. Then 1 c. c. of the solution is injected slowly, the needle withdrawn and the point of puncture either wiped off or covered with a piece of plaster. One syringeful is usually sufficient at a time. Injection causes generally only a little burning. Here and there these patients complain of pains in the ears or teeth, which are of short duration; others experience a sensation of tension in the neck, which, at the most, lasts for two days. Otherwise the procedure is utterly devoid of danger. The injections are made, as a rule, every two to five days. Seven are generally sufficient, though they may vary between three and sixteen. After three to five injections a reduction of two to three centimeters in circumference of the neck was noticeable. In many cases the ultimate result was not to be determined until a year after. The soft goitres react best under this treatment—simple hyperplastic goitre, the diffuse and nodular forms and the soft follicular variety. Most of his cases were in more or less advanced colloid degeneration.—*Lancet-Clinic*.

NEPHRECTOMY IN A CASE OF CONGENITAL ABSENCE OF ONE KIDNEY.

Dr. F. P. Kinnicutt related the case. He had seen the patient with the surgeon to a hospital in a neighboring city. She was poor, and had been compelled, because of her sufferings from a tumor of the kidney, to give up work and enter the

hospital. An exploratory incision was decided upon, was made in the lumbar regions, and led to removal of the kidney, which was of horseshoe form and had undergone sarcomatous degeneration. Absence of the other kidney had not been suspected until uræmic symptoms developed and terminated in death within forty-eight hours. He remembered that Dr. Polk had a similar experience some years ago.

Dr. Weir remarked that congenital absence of one kidney occurred once in about four to six thousand persons.

Dr. Polk said he had recently had another case of congenital absence of one kidney, but fortunately the anomaly was discovered before he took out a piece of the ureter of the only kidney, which he was about to do in an operation upon the uterus.—*Medical Record*.

LOCAL ELECTROLYSIS AND ZINC-AMALGAM CATAPHORESIS IN MALIGNANT AND NON-MALIGNANT TUMORS.

BY G. BETTON MASSEY, M. D.,

Physician to the Gynecological Department of the Howard Hospital and to the Sanatorium for Diseases of Women and Diseases of the Nervous System, etc.

Before reporting the three cases on which this new treatment of morbid growths is mainly based I must explain what I mean by local electrolysis and zinc-amalgam cataphoresis, and also advance reasons for my belief that these methods, either separately or together, present important advantages over cutting operations in certain cases of benign vascular growths and incipient cancers.

Local electrolysis means simply that the electrical decomposition of the tissue salts is confined to a localized area by the approximation of the poles. If both poles of a galvanic current be placed in the morbid tissue quite near each other, the bulk of the current will be concentrated within the portion of tissue immediately between them, and but little will traverse the outside healthy parts. In practice they should not be further apart than from a half to one inch, though this depends entirely on the strength of current to be used and the size of the growth. So placed, an enormous current may be employed to dissolve a morbid tissue without affecting surrounding tissues, the parts having been chilled by a spray, or otherwise rendered anæsthetic, if sensitive. The surgical possibilities of such currents are quite remarkable. All the salts and liquids of a given growth lying between the points become a prey to such a current, the watery contents being turned into oxygen and hydrogen gases, and the complex salts into solutions of acids and alkalies. This is, of course, attended with a material

rise of temperature, but nothing like charring. If the tissue subjected to the process is soft and vascular, or juicy, there will be very little left between the poles after the gas has been given off, but the acids and alkalies dissolved in a turbid liquid remainder. If the tissue is tougher and more fibrous, a gristly residue will be found which can be detached or left to be detached by nature.

The strength of current required to destroy tissue in this way depends altogether on its concentration at the active spot. A minute reproduction of the process occurs when we apply but two or three milliampères to the papilla of a hair sheath, or to a mole on the skin; but to completely dissolve tissues between two or more needles a half inch apart requires at least 400 to 700 milliampères.

Whether this portion of my method has any advantages over a cutting operation in removing malignant or non-malignant external growths depends upon circumstances. It is clearly inapplicable to any growth within the body unless it is situated in a drainable natural cavity, as a considerable quantity of detritus must drain away. It also presents the disadvantage of not permitting healthy tissues to be united at once over the seat of the removed growth, a procedure, however, that is often of doubtful utility, as it frequently covers up portions of the disease that failed to be removed. The advantages of the method over the knife are, on the other hand, by no means inconsiderable. It is absolutely bloodless, no matter where applied, thus enormously conserving strength after operations notoriously bloody; the edges of the undestroyed tissue remain non-absorbent, lessening risk of sepsis; and finally, there seems to be some property in the galvanic current to cause a retrogression of the whole of a benign growth even when but a portion is directly acted on, as in the Apostoli treatment of fibroids and the ordinary treatment of moles and other small skin tumors.

If the growth be a benign one the application described will probably cover the whole of the active treatment. If it be malignant, on the contrary, the second portion of the method—zinc-amalgam cataphoresis—is employed, a procedure of great value in radically removing all remaining traces of a still localized cancerous growth.

Zinc-amalgam cataphoresis is electrically mono-polar, the single active electrode, which is always positive, being applied to the cavity left by removal of the greater portion of the growth, while the indifferent or negative electrode, in the shape of large conducting pads connected together, is placed on any convenient portion of the body. The active electrode

is a freely-amalgamated zinc surface of one or two square centimetres area, which is held successively against all portions of the bottom and edge of the excavation. From 150 to 300 milliampères are sufficient, the pain being controlled by cocaine solution placed in the excavation beneath the electrode, to be conveyed into the tissues simultaneously with the nascent oxychloride of zinc and mercury, which is dissolved from the electrode by electrolysis.

By this procedure we search out and destroy all remaining spurs and paths of infection in the contiguous unhealthy and healthy tissues, the current seeking vascular and cellular paths of less resistance by preference in its journey to the other pole; and to the lethal effect of the current we add the well-known lethal effects of nascent mercury and zinc compounds. The surface of the amalgamated zinc electrode is consumed in the process—the mercury as well as the zinc—producing a mixed infiltration of the immediate polar region that is readily detected by the eye. Low organisms in the immediate neighborhood of the electrode quickly succumb, and the antiseptic value of the procedure is shown in the correction of any odors that may have accompanied the cancerous discharge. That the action is not confined to the immediate neighborhood of the electrode was well demonstrated in one case in which the zone-like base of a cancer was observed to lose its induration and shrink in places at least an inch distant from the contact point.

The applicability of the first portion of the method—local electrolysis—to a benign growth was shown in the following case:

CASE I. Large intra-uterine cystic fibroid destroyed piecemeal by repeated applications of bipolar local electrolysis, resulting in a satisfactory cure.—Mrs. D., a nullipara, aged 39 years, was referred to me by Drs. Hemminger and Bixler, of Carlisle, Pa., in September, 1892. Six or seven years previously Dr. Hemminger had discovered an intra-uterine growth, the lower portion of which later was found to be projecting from the dilated os, giving rise to pain and hæmorrhage. Efforts to remove the growth by the *écraseur* were made by Dr. Hemminger, but, owing to its extensive internal attachment and great vascularity, only the projecting parts were removed. When the case was admitted to the sanatorium the tumor was nearly the size of the adult head, the upper limit being even with the navel. The mass was symmetrical in shape, soft and semi-fluctuating. Examination showed the os fully dilated, through which projected a portion of the tumor the size of the fœtal head. Around this projecting mass several fingers could be swept, showing freedom from adhesion to the uterus for

three inches anteriorly and about six inches posteriorly. The mass was evidently a vasculo-cystic fibroid, situated within the cavity of the uterus and attached to the uterine walls throughout three-quarters of its periphery. It was spongy, but very tough, bled easily, and gave rise to a copious watery leucorrhœa. The conditions presented by this growth, particularly its cystic degeneration, absolutely contra-indicated the ordinary Apostoli treatment of fibroids on account of the danger of producing sepsis. I accordingly attempted its removal by morcellation, using the scissors, dull scalpel and fingers, but was compelled to desist, owing to the frightful hæmorrhage. In this dilemma the possibilities of localized destructive electrolysis occurred to me, and it was begun by the use of a bipolar instrument having four prongs, two to each pole. These prongs were buried in the projecting portion of the tumor, and 700 milliamperes turned on for six minutes. This dissolved quite a hole in the morbid tissue, making a spot too hot for the finger. The procedure was repeated daily as fresh portions of the growth were pressed down by the contracting uterus, without hæmorrhage or marked discomfort, the possibility of sepsis being guarded against by a continuous douche for an hour or more after each application. Three months were consumed in the eradication of the tumor in this way, though it doubtless could be done in a second case in a third of the time, the final examination showing nothing but a roughened spot on the anterior wall of the contracted uterus. External measurements now showed the upper limit of the uterus two and one-half inches below the navel. The cavity was capacious.

A letter from Dr. Bixler, dated February 26, 1894, stated that the patient was quite restored to health, complaining only of prolapse of the vaginal walls, the latter doubtless due to the descent into the pelvis of a uterus that had so long been within the abdomen. The cavity was still large, and there was some thickening of the walls on both the right and left of the uterus. The os would only admit the first joint of the finger.

In November, 1894, two years after the patient's admission, her husband called and reported her as in good health.

CASE II. Sarcoma of tonsil and soft palate cured by electrolysis, followed by zinc-amalgam cataphoresis.—W. H. L., blacksmith, aged 38 years, was also referred to me by Dr. Hemminger, February 17, 1893. Five years before, he suffered from an abscess of the ear. Two years before being seen by me the left tonsil was found to be the seat of a tumor. He had recently been sent to the Hospital of the University of Pennsylvania, where, he says, malignancy was diagnosed and an operation proposed, which he declined.

A tumor about the size of a goose egg filled the pharynx, involving the tonsil and soft palate, and threatening suffocation. Liquids could be swallowed with much difficulty.

The patient was placed on monopolar negative punctures, 30 to 60 milliampères, daily. But little progress being apparent at the end of a week, the parts were cocainized and subjected to bipolar local electrolysis with from 200 to 350 milliampères, on two occasions. The separation of the eschar that resulted was accompanied by considerable pain and reaction, but as the place healed it was found that but little of the tumor remained. He did not return for further treatment until more than a year had elapsed, during which he seemed to be well. At this time, however, a renewal of the growth occurred, and it was about the size of a peach-stone when he was readmitted to the Howard Hospital for further treatment. During this second treatment zinc-amalgam cataphoresis was mainly employed, the treatment lasting six weeks, and being carried deeply into the base of the growth. A complete cure resulted, and at an examination of the parts six months later, a healthy scar only was to be seen.

CASÉ III. Inoperable carcinoma of the groin greatly relieved by zinc amalgam cataphoresis; death from erosion of femoral artery and gangrene.—Colonel H., aged 62 years, was sent to me by Dr. A. W. Knox, of Raleigh, N. C., in the summer of 1893. One year before, he had noticed a lump in the left groin. On admission to the sanatorium the tumor was the size of a large walnut, of a bluish color, and firmly attached by a broad base to the deeper parts of the thigh. It was situated just below Poupart's ligament, and lay immediately over the femoral artery and vein, and was apparently attached to the latter, though the exact location of the artery was uncertain, owing to the general induration.

At the patient's request it was decided to make a tentative use of electricity. The central and projecting portion was accordingly destroyed by local electrolysis, making a slight cavity into which a solution of cocaine was poured. Into this the blunt amalgamated zinc electrode was pressed and daily applications of the cataphoresis made, with current averaging 150 milliampères. The immediate effect of the application was to whiten the edge of the growth in contact with the electrode, the whitened coating peeling off later. The indurated ring and base that now represented the growth was about three inches wide. Under constant applications the whole of this was gradually destroyed and replaced by healthy granulations, except the centre of the base, where the close proximity of the large artery rendered the applications unwise. At the end

of three months the diseased area had been contracted to the size of a five-cent piece, but this was a deep cavity extending down to the great vessels, where it was thought to be unsafe to apply the current. The patient had increased twenty pounds in weight, and though brought to the sanatorium on a stretcher, was now able to walk a half mile or more. During the continuance of this improved condition, however, the artery suddenly gave way one day at the bottom of the untreated spot. Drs. Thomas S. K. and T. G. Morton were called in and tied both artery and vein, which were found thoroughly infiltrated with cancerous material for some distance upward into the abdomen. Gangrene of the limb supervened, followed by death two weeks later.

An estimate of the value of the method in these three cases must be comparative, as cases similar to each are usually subjected to other methods, removal with the knife being the favorite. Hysterectomy in the first case would, of course, have involved removal of the ovaries also. Both this and removal of the uterus itself were avoided entirely, no natural structures being even injured, and the time required in the treatment was probably not longer than that necessary to recovery from abdominal section. In the second case the bloodless removal of a sarcoma of the palate was formed by a treatment that I hope will render the patient less liable to a return of the disease. The third case was, of course, a failure to cure or to preserve life, yet it is thought that life was prolonged by the very evident curtailment of the growth and improvement of health. Comparisons were hardly possible, however, as an operation had been refused by one surgeon as useless.

GYNECOLOGY.

A CONSIDERATION OF SOME DISPUTED POINTS IN THE ETIOLOGY, DIAGNOSIS, AND PROGNOSIS OF GONORRHOEA.*

By GEORGE EMERSON BREWER, M. D.

The practising physician is frequently called upon to answer inquiries regarding the probable origin of certain cases of urethritis occurring in married men and others, who presumably, have not been exposed to the ordinary sources of infection. The responsibility attending his decision is often grave, as it not infrequently involves the reputation of the patient or some member of his family. As our opinions upon this subject are

* Read by invitation before the Alumni Association of the University of Buffalo, May 1, 1894.

constantly undergoing change, owing to rapidly increasing pathological knowledge and clinical experience, it may not be a waste of time to briefly review the field, and arrive, if possible, at some definite conclusions which may materially assist us in forming conscientious opinions.

As time will not permit a review of all the questions which this inquiry involves we will limit ourselves to the consideration of but two: First—Is there an idiopathic, contagious urethritis? Second—What is the diagnostic value of the gonococcus?

First—Is there an idiopathic, contagious urethritis, or, in other words, can a perfectly healthy woman, by any amount of sexual excitement, excessive coitus, or alcoholic stimulation, acquire a contagious urethritis, corresponding in duration and severity to an ordinary gonorrhœa? Until quite recently the majority of writers upon the subject of genito-urinary diseases have not only maintained this to be a fact, but have even gone so far as to state that, in their opinion, the majority of cases of urethritis are acquired in this manner. Upon this subject Fournier states: "For one case of gonorrhœa resulting from contagion there are at least three in which the contagion, strictly speaking, plays no part." Ricord says: "Women frequently give gonorrhœa without having it." In the fifth edition of Bumstead & Taylor the following statement is made: "Of one thing I am certain—that gonorrhœa in the male may proceed from intercourse with a woman with whom coitus has for months, or even years, been practised with safety, and this, too, with no change in her genital organs perceptible upon the most minute examination with the speculum. I am constantly meeting with cases in which one or more men have cohabited with impunity with a woman, both before and after the time when she has occasioned gonorrhœa in another person, or, less frequently, in which the same man, after visiting a woman for a long period with safety, is attacked with gonorrhœa, without any disease appearing in her, and after recovery resumes his intercourse and experiences no further trouble. The frequency of such cases leaves no doubt in my mind that gonorrhœa is often due to accidental causes, and not to direct contagion."

The evidence upon which this theory has been constructed and by which it has been so long supported is that of a large number of observations by a large number of conscientious observers, where presumably healthy men have, after cohabiting with presumably healthy females, exhibited the symptoms of an acute urethral inflammation. That these men were healthy at the time is evidenced only by the absence of a visible

urethral discharge, and in the case of the women only by the absence of signs of disease of internal genitals and vagina. Is, however, this evidence conclusive? The following review of some now generally accepted facts will answer:

In cases of gonorrhœal urethritis in the male cessation of discharge by no means indicates a cure of the disease, for the disease may for years remain latent in granular patches behind strictures, and in the glands and follicles emptying into the canal, without the appearance of any discharge or even moisture at the meatus, and without the slightest inconvenience to the patient. The only evidence of disease in these cases is the presence in the urine of small, thread-like bodies or "tripper faden," which represent the rolled-up secretions from any granular patch or area of chronic inflammation on the surface of the mucous membrane, or minute plugs washed by the first jet of urine from the mouths of the glands. If examined microscopically these are found to consist of mucus, pus and epithelium. Gonococci may or may not be present. In the application of the two-glass urine test these invariably appear in the first specimen in all cases of uncured urethral inflammation. The disease, thus latent, may, under favoring conditions, again become awakened, reinfect the surrounding mucous membrane, and give rise to an acute inflammatory condition resembling in every respect a genuine, fresh infection. Instances of such awakening of a latent gonorrhœa are of frequent occurrence, and make up perhaps one-half of the acute attacks which the physician is called upon to treat in patients who have previously suffered from the disease. These attacks may occur many months or even years after the original infection, and after long periods of apparent immunity from all noticeable symptoms of the disease.

Prof. Frederick Goll, of Zurich, has recently called attention to the frequency of gonococci in the gleet secretions and tripper faden of chronic urethritis. The data from which he drew his conclusions were derived from careful microscopical examination of the secretions in 1046 cases of suspected chronic inflammation. In many doubtful cases as many as ten or fifteen examinations were made before the result was recorded. From his table it is seen that 85 cases were examined one month from infection; of these 40 still presented a discharge which contained gonococci. Seventy-five were examined two months after infection; of these 15 containing gonococci. Sixty-two examined four months after infection showed 13 containing gonococci. The number examined seven, eight and nine months after infection was 108, of which 28 were found to be capable of transmitting disease; of 83 examined one year

after infection 12 contained gonococci; of 135 examined two years after infection 7 contained gonococci; and of 80 after three years 3 contained gonococci.

If we are to accept the microbial theory of these inflammations, and if we are to admit the causative relationship between the gonococcus of Neisser and the disease, these observations of Prof. Goll conclusively show how easily one might fall into error in determining the origin of an inflammation, unless a far more than ordinarily careful examination were made; and as the originators and defenders of this theory lived and wrote, for the most part, previous to the discovery of the gonococcus, or the employment of our now more careful methods of examination, it is not surprising that their views should not be in accordance with those which logically follow the acceptance of the germ theory.

In 1891, the writer reported to the Genito-Urinary Section of the New York Academy of Medicine the case of a man who applied for an examination shortly before a contemplated marriage. He gave a history of severe urethritis five years before, followed by an obstinate gleet. This finally disappeared, and for two years or more no discharge had been noted at the meatus. Examination revealed the presence of tripper faden, which under the microscope contained pus and a few gonococci. The man married against advice, immediately communicated gonorrhœa to his wife, and experienced himself an acute exacerbation.

In his recently published work upon this disease, Ernst Finger, after speaking of the contagiousness of chronic discharges, states that the patient can be pronounced cured and not liable to relapse only when the following conditions can be established.

1. That after from two to four weeks of daily observation, the secretions from the urethra are found to be free from pus, and made up wholly of epithelial cells.

2. That no gonococci can be detected by the microscope, even after a purulent discharge has been established by the employment of irritating injections of nitrate of silver or bichloride of mercury.

3. That neither prostatitis nor stricture exist.

Again, our knowledge regarding the behavior of gonorrhœal disease in women has, during the past few years, become far more complete and exact, thanks to the investigations of Bumm, Bochart, Steinschneider, Noeggerath, and many others. That a careful examination of the external genitals and vagina fails to reveal the presence of disease by no means proves that the subject of such an examination is free from dis-

ease, for it has been conclusively shown by Steinschneider, and his views have been endorsed by Diday and Dayon, that after a gonorrhœal infection the micro-organisms may remain in a latent condition in the body and neck of the womb for months and years, giving rise to little or no inflammatory reaction, but that in infections from such sources the transplanted gonococci exhibit a virulence which leave no doubt as to their genuineness. In chronic purulent salpingitis, which, in the majority of cases, has a gonorrhœal origin, the disease is known in many instances to remain latent for a long period of time, the patient suffering practically no inconvenience during the intervals between the characteristic attacks of acute pelvic inflammation. In these instances, a small amount of pus may from time to time find its way through the uterus and cervix into the vagina, which may prove an occasional source of infection. In this manner we may rationally account for the large number of cases similar to those cited by Dr. Taylor. It is also a well known fact that gonorrhœal infection in women very frequently occurs on the mucous membrane of the urethra, and indeed may confine itself to the mucous membrane of the urinary tract, ascending to the bladder and kidneys, never attacking the vagina or appearing at the cervix uteri. The passage of urine just before an examination would, in this instance, remove all evidence of disease, especially if the inflammation had passed the acute state, leaving no redness or tumefaction of the mucous membrane to excite suspicion.

Furthermore, in a chronic inflammation of the vulvo-vaginal glands, a secretion may often be expressed which contains gonococci in abundance.

These facts are, I believe, all well known, and generally admitted by gynecologists.

During the year 1887-88, the writer, while in charge of the Genito-Urinary Department of Roosevelt Hospital, had an opportunity of investigating a large number of these cases of acute urethritis, acquired by individuals while cohabiting with alleged healthy females. In a not inconsiderable number of instances in private practice, an opportunity has been afforded of continuing these investigations. Although the number of such cases is not large, and the opportunities for a thorough examination of both individuals afforded in but a small percentage of these, still during the past six or seven years 12 or 15 such cases have been thoroughly investigated, with the result that in no instance were the acute inflammatory symptoms to be accounted for in any manner other than by direct contagion, by contact with the gonococci-bearing secretions from some portion of the genito-urinary tract in the female, or by an exacerbation of an uncured urethritis in the male.

It is, therefore, fair to conclude that the discovery of the gonococcus and the establishment of its relationship to this disease, the general recognition of the fact that a urethra which no longer furnishes a fluid discharge at the meatus may still contain the active germs of the disease (which, under favorable circumstances, may become the bearers of contagion), and also the fact that gonorrhœal disease in the female may become latent, give rise to no personal inconvenience, and furnish no signs pointing to its existence—have rendered the evidence of the existence of an idiopathic, contagious urethritis not conclusive.

WHAT IS THE DIAGNOSTIC VALUE OF THE GONOCOCCUS?

To answer this question, let us briefly refer to the history of the gonococcus, and the resulting changes of opinion which have been necessitated by recent bacteriological investigations.

Neisser, in 1879, discovered that the pus from gonorrhœal inflammations of the urethra and the conjunctiva differed from other varieties of pus by the presence in the former of a peculiar micro-organism, which he called the gonococcus. Abundant investigation subsequently demonstrated the constant presence of this organism in these affections. Pure cultures of the organism were made, and inoculations upon the human urethra conducted by a large number of experimenters. The report of Bumm conclusively demonstrated that the disease was produced, with all its characteristics symptoms, from pure cultures of the gonococcus, as far removed as the 20th generation. It was, however, shown that a number of other organisms which were occasionally found in the healthy male urethras, corresponded in appearance, size, and the staining reactions then in use, with the organism described by Neisser. This, while it in no wise disproved the relationship between the true gonococcus and the disease, introduced a grave element of doubt in any given case, and rendered the diagnostic value of bacteriological examinations in such cases negative.

Later, Gabriel Roux, of Lyons, found that the gonococcus alone, of all the organisms then known, possessed the characteristic of not being acted upon by Gram's fluid, and consequently lost its color when subsequently treated by absolute alcohol. His method of staining was as follows: The specimen, after being spread out in a thin layer on a glass slide and heated, was treated by a solution of methyl blue, gentian violet or fuchsin. This was subsequently washed off, and the specimen treated with Gram's iodo-iodide solution, mounted and examined. If diplococci were found in the pus cells, which were later thoroughly decolorized by absolute alcohol, the

organisms were surely gonococci, as all other forms of diplococci retained their color when subjected to this process.

This view was endorsed by a large number of observers, and the question seemed for a time relieved of many of its embarrassments.

Lustgarten and Mannaberg, while conducting a series of experiments on the normal male urethra, found a diplococcus, probably non-pathogenic, identical in appearance with the gonococcus, losing its stain when treated by Roux' method. This organism may occasionally be found in the lymphoid cells which so resemble leucocytes as to cause an element of doubt in examining the secretions or tripper faden of an old gleet, with a view to determining its contagiousness. They have never been found in large numbers, or with the characteristic grouping, in the protoplasm of the pus cells, and can never, therefore, affect the diagnostic value of the gonococcus in acute inflammations of the urethra.

Petit and Wassermann reported in 1891 the results of the careful bacteriological examination of 1000 urethras, in which they failed to find the pseudo-gonococcus of Lustgarten and Mannaberg, or indeed any other diplococcus which lost its color when Roux' test was applied.

In view of these facts, it may be stated.

1. That the gonococcus of Neisser is the cause of gonorrhœa.

2. That when the pus from an acute or subacute urethritis is examined by the microscope and diplococci in large numbers are found in the protoplasm of the pus cells clustered about the nuclei, and these organisms lose their stain when treated by Roux' method, they are surely gonococci.

3. That as long as these organisms can be demonstrated in the urethral secretions, the disease is uncured, and contagion is possible.

4. That in many chronic cases of urethritis, when the secretions contain diplococci corresponding in appearance and staining reaction with the gonococcus of Neisser, an element of doubt regarding their true nature must exist, especially if they be found in comparatively small numbers and associated with other micro-organisms.

In the opinion of the writer, the last conclusion is an important one to remember, for, while the percentage of cases in which this error would be likely to occur is small, yet the fact must be borne in mind when opinions are sought involving grave social or medico-legal responsibilities.—*American Medico-Surgical Bulletin.*

MORTUARY REPORT OF NEW ORLEANS.

FOR MAY, 1895.

CAUSE.	White.....	Colored...	Male.....	Female.....	Adults....	Children..	Total.....
Fever, Yellow							
“ Malarial (unclassified)....	5	5	6	4	7	3	10
“ Intermittent		1		1		1	1
“ Remittent	1		1		1		1
“ Congestive.....							
“ Typho							
“ Typhoid or Enteric.....	7	2	7	2	8	1	9
Leprosy		1	1		1		1
Scarlatina	1		1			1	1
Small-pox		17	17		17		17
Measles	3	1	3	1		4	4
Diphtheria	3	2	2	3		5	5
Whooping Cough	1			1		1	1
Meningitis	12	4	10	6		16	16
Pneumonia.....	20	19	23	16	25	14	39
Bronchitis	13	11	17	7	7	17	24
Consumption.....	41	48	47	42	85	4	89
Cancer	9	6	3	12	15		15
Congestion of Brain.....	2	2	2	2	3	1	4
Bright's Disease (Nephritis) ...	16	7	14	9	23		23
Diarrhœa (Enteritis)	36	25	33	28	20	41	61
Cholera Infantum	81	30	62	49		111	111
Dysentery.....	2	4	2	4	5	1	6
Debility, General	5	3	3	5	8		8
“ Senile	10	5	4	11	15		15
“ Infantile.....	2	2	1	3		4	4
All other causes	210	124	197	137	204	130	334
TOTAL	480	319	456	343	444	355	799

Still-born Children—White, 29; colored, 18; total, 47.

Population of City—White, 195,000; colored, 80,000; total, 275,000.

Death Rate per 1000 per annum for month—White, 29.53; colored, 47.85; total, 34.86.

L. F. FINNEY, M. D.,
Chief Sanitary Inspector.

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[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.]

ABDOMINAL HYSTERECTOMY FOR UTERINE FIBROIDS.*

By FRANK D. SMYTH, M. D., KOSCIUSKO, MISS.

According to most text-books on gynecology, the operation is indicated only in those cases where the tumor is growing rapidly, having been uninfluenced for good by less heroic but popular measures, holding that in a great many instances patients suffer but little discomfort, if any, and hence should not be subjected to an operation having a mortality of at least 8 per cent. attending its performance.

There is no question about the operation having its place in sound, conservative surgery. It has come to stay, each day adding to the already long list of recoveries among patients that heretofore have been considered in a hopeless condition.

I take it that a fibroid tumor of the uterus is essentially a surgical affection, and that all medical treatment is delusive delusive, "a miserable make-shift," and if persisted in usually results in disaster; rarely, if ever, effecting a cure. While fibroids are of a benign character *per se*, and may exist for some time without any great discomfort incident to their presence, yet like other innocent growths they are liable to undergo changes that may prove of serious import; and by pressing on the adjacent viscera, interfering with their

* Read before the Charity Hospital Alumni Association of New Orleans, April 15, 1895.

function, producing pain, obstruction to the circulation, enlargement of the uterus, repeated hæmorrhages, often bring the patient to death's door. I am not acquainted with a single case of fibroids that has received permanent benefit from the use of ergot, hydrastis, electricity and the like, save one case, in which a pedunculated submucous fibroid's expulsion was possibly promoted. Nor can I recall at this time a case, regardless of size, that did not often have occasion to complain of more or less distress dependent upon its presence as a cause.

A small tumor often produces more pain in certain situations than a very large one, filling the entire abdominal cavity, in others. The best results are to be had, on the whole, when the operation is performed early, the growth small and adhesions few.

The indications set forth by Keith and Skene for operation are among those cases that are usually hopeless, promising the operator but little from the beginning, with chances in favor of bringing abdominal surgery into disrepute.

It has not been my fortune to observe any change for the better in cases of fibroid after the menopause, notwithstanding it is an almost universal doctrine among authors on the subject.. On the contrary, I notice that the subjects of fibroid tumors have a protracted change of life attended with very frequent and sometimes dangerous hæmorrhages, to say nothing of the great tendency to malignant degeneration manifested in all cases of uterine tumors during the climacteric, fibroids not excepted.

Closing these remarks, I will now present the report of three cases upon whom I recently performed abdominal hysterectomy for the relief of uterine fibroids.

CASE I.—Patient, negress, 35 years of age, married; was never pregnant, addicted to alcoholic excess, cook by occupation; was called to see her on July 2, 1893, in consultation with Dr. J. W. Scarborough, of this place; found her suffering very greatly from intra-abdominal pressure. Pain disseminated throughout the whole pelvic region, extending along spine, up to between scapulæ.

She was confined to her bed, unable to help herself, hav-

ing been in the same situation some days prior to my visit. Hypodermic of one-third grain of morphia was at once administered and removal of tumor advised. To this she readily consented, urging prompt surgical interference. I at once began preparations for operation, and on the morning of July 4, with the assistance of local physicians, abdominal hysterectomy was done; an incision along the middle line was made from the umbilicus to within an inch and one-half of the pubes down to the tumor. The peritoneum was found very thick and adherent to whole of anterior of aspect of growth; after breaking the adhesions down, and ligating numerous vessels, large and small, it was found impossible to discharge or deliver through the abdominal opening.

The incision was then prolonged almost to ensiform cartilage; the ends of the ribs were literally turned upward and backward from prolonged pressure. The great omentum was found extensively macerated and adherent to the upper and posterior border of tumor, necessitating excision of a very large apron of it; the same was ligated carefully with sterilized silk before excision.

I disliked the idea of being compelled to remove so much omentum, though it is claimed that its function is to protect the intestines from cold and facilitate their movements, but as "there are both things in heaven and earth not dreamt of in our philosophy," I feared its function might be more important, hence my apprehension incident upon its necessary removal.

The tumor was grasped by an assistant and forcibly raised as much as was compatible with safety. The incision was kept widely separated with Péan's retractors. A double row of sutures was then introduced in broad ligaments on either side down to the uterine arteries, the tissue divided between them, and elastic ligature was thrown around cervix drawn tightly. The serous coat of the uterus was incised about one and one-fourth inches above ligature, on front side, then on posterior surface, extending down to a level with the internal os. When the uterus was amputated by internal incision the cervix was being held by a vulsellum forceps. After sponging out the pelvis thoroughly the flaps of serous membrane were accurately co-

aptated by means of Lembert suture; the uterine arteries could be plainly felt pulsating, were caught with ligature and firmly tied. The abrasions in broad ligaments were then snugly closed by continuous catgut sutures. The elastic ligature removed, cavity again cleansed of debris, blood, etc. Iodoform dusted gently along line of sutures, and the abdominal incision closed. Owing to the great thickness and extensive adhesions of the peritoneum, it was united by rows of catgut ligature separately. The abdominal incision was closed by means of silk-worm gut sutures. Patient dressed in the usual manner, put to bed, covered with warm blankets, hot bottles surrounding her. She rallied nicely from operation, after having suffered considerably from shock for three hours. She had slight fever for a few days, her recovery, on the whole, being uneventful, no untoward results following the sacrifice of omentum above referred to. The tumor was solid, hard, unyielding except a small cavity in the centre, which was filled with dark fluid surrounding a glue-like substance. The tumor weighed twenty-five pounds and was very vascular. Six weeks after operation the patient resumed her occupation as cook, and has since continued well.

CASE 2.—Mrs. C——, age 29, married eight years, has never had any children, nor has she been pregnant. Was referred to me by Dr. Anderson, of Pickens, Mississippi. She was a healthy looking subject, and gave no evidence of hereditary trouble. Complained of severe strangury constipation, and suffered from hæmorrhages. The bleeding was so severe at times that she would become pale, weak and almost exsanguinated; from the attack she would slowly emerge, make blood, build up, only to be followed by a more exhausting hæmorrhage than the one before. Examination showed per vaginam an enlarged external os with congested appearance, which bled freely when pricked with a tenaculum. There was a small submucous fibroid occupying part of uterine cavity. The probe showed that the uterus was very much enlarged, the instrument penetrating the organ to a depth of nine inches. The whole pelvic cavity seemed to be filled with a hard, unyielding growth, immovable and painful on pressure. The tumor extended nearly up to the umbilicus, simulating in appearance

about the sixth or seventh month of gestation. To the left was a tumor freely movable from side to side. Patient was prepared for abdominal hysterectomy; the vagina specially, as it is difficult to get it in an aseptic condition. The abdomen was opened through the linea alba from the umbilicus to within two inches of the pubis with a single stroke down to the tumor; the growth was not adherent to any of the surrounding organs. The principal complication met in this case was the bladder being spread out and adherent to the anterior surface of tumor. It was with great difficulty dissected away, using for this purpose blunt instruments, but the fingers chiefly. The upper part of the broad ligaments, including the ovarian arteries, were tied, long pressure forceps ploughed inside the ligatures near the uterus, the tissue divided. The remaining portion of the ligaments were then tied by sections, including the uterine arteries; the womb was then cut off on a level with the internal os in order to facilitate removal of the cervix; a transverse incision was then made at the bottom of vaso-uterine pouch in front; a similar incision behind in Douglas's pouch completed its removal; the cavity was then well flushed and sponged dry, the cavity packed with iodoform gauze, the opening left to heal by granulation. The tumor when removed resembled a massive artichoke. At this time the patient manifested symptoms of dissolution, and I was compelled to bring my proceedings to an abrupt termination. After closing the abdominal incision hurriedly the patient was placed in bed, and the customary methods of treating inaugurated; for six hours she lay quiet and almost pulseless, she then rallied and made a rapid and complete recovery. I am indebted to Dr. Anderson for subsequent attention to case and think to his efforts her life is indebted. I thought certainly if she failed to die on the table it would be only a few hours with her and all would be over.

CASE 3.—Mrs. F———, of Toronto, Canada, age 40, married, mother of four children, has always been robust and healthy; she had a sister to die at the age of 33 of hæmorrhage of the uterus, the cause of which she never knew; another sister has been recently operated upon for sarcoma of forearm; her troubles date back five years; the first thing noticed was undue menstruation, at the regular period; second,

its frequent occurrence; this condition of affairs continued unabated until I saw her in October last; she was weak, pale and exsanguinated from excessive blood loss. I at once proceeded to dilate and curette the uterus, afterward irrigated and then tamponed with iodoform gauze; this succeeded in arresting the hæmorrhage; she suffered no further loss until about March 1, at which time she came near flooding to death; when I reached her the measures formerly resorted to were again instituted; thinking that the growth of the uterus was likely cancerous from pain, hæmorrhage and history, I advised total extirpation, which was done one month ago. The patient was prepared for abdominal vaginal hysterectomy. The cervix cauterized with actual cautery.

The abdomen was opened and the operation continued, the fibroids filling the entire pelvic cavity; the upper part was seized with vulsellam, drawn up to abdominal opening and the uterus freed in accordance with the recognized technique, though every case has its individuality and the technique must be varied accordingly; the vaginal opening was closed, the serous membrane having been accurately apposed, the cavity well sponged out; the abdominal incision was then sutured with no preparation for drainage left.

Time consumed in operation, forty-five minutes; she rallied nicely, had no elevation of temperature above 101 on the second day, since which time she has rapidly recovered, and is now able to care for herself. I have performed something over forty abdominal sections for various conditions, and the one thing that has caused me the most anxiety is the invariable nausea and intestinal torpor following the operation. I have done everything possible to obviate this troublesome state of affairs, but have never, so far, succeeded in accomplishing my purpose. I have never operated on a case that did not at some time develop symptoms that caused me more or less anxiety, nearly always before the bowels had acted. Consequently, my first efforts after the stomach gets quiet is to begin with calomel and continue it until the bowels have been thoroughly emptied. Of course other measures are resorted to frequently for the purpose of expediting the action, but the above is usually sufficient, having the desired effect, the patient

usually pursuing afterward a smooth course up to complete recovery.

The last case operated upon was an unusually fine specimen for study, embracing every variety of fibroid with which I am acquainted, submucous, interstitial and subserous. This patient suffered greatly from pain down the left lower extremity; and breast of same side was engorged and knotty, evidently caused by pressure of tumor on the lumbar plexus. Of this she has been entirely relieved.

A TRAUMATIC ABSCESS OF THE BRAIN.

BY JULIUS F. SCHMITTLE, M. D., VISITING SURGEON CHARITY HOSPITAL.

The only thing that prompts me to report the following case is this: I once read that all cases of abscess of the brain should be observed and reported with the minutest and most exact detail, for it may assist one in the future to make a diagnosis more readily, since the symptoms vary considerably in every case.

The case I am about to relate is the case of an abscess of the anterior part of the left frontal lobe, following a closed fissured fracture, extending diagonally across the front part of the skull, that is from near the external angular process of the left frontal bone through the anterior part of the right parietal bone.

On the 31st of last July, Dora F., a female child, ten years of age, fell down a winding stairs. At a distance of about fifteen feet her head came in contact with one of the balusters, after which she dropped to the lowest step, a distance of eight feet more.

She was brought immediately to the hospital. When she arrived there she was perfectly unconscious, breathing about forty to the minute, pulse beat fifty-one.

A slight abrasion of the scalp was observed over the right parietal bone.

Though there were no positive signs of compression, it was thought judicious to operate, so that if there was compression it could be relieved; if there was none, the operation of

trepanning would not aggravate her condition. Accordingly the patient was anæsthetized and the scalp prepared for the operation.

A conical incision was made through the abraded part of the scalp over right parietal bone, because this was thought to be the seat of direct violence. Nothing but a fissured fracture was found thus far.

Still believing there might be some internal compression, a button of bone was removed with a small trephine, and the membranes exposed with a needle; nothing however was found. Wound was now sutured and dressed antiseptically.

Pulse and respiration improved every hour; during the early part of the night she was a little restless. But after the administration of a few twenty grain doses of potassium bromide by rectum, she became quiet. Next day patient was very much better, pulse eighty, respirations thirty-two. Temperature $98\frac{3}{4}$. She was perfectly rational. She called for a vessel, when she wanted to empty her bladder, and in every other way showed that she was conscious of what she said and did. She had a great desire to go home. Her stomach was very irritable; however, she took a little milk and retained it. There was now noticeable a very much contused place on the forehead in left supra-orbital region; evidently this part of the head struck the baluster; there was also some ecchymosis around both eyes.

Her condition remained about the same for two days more, when there was a sudden drop in the pulse rate. Respiration and temperature normal. As bowels had not moved yet an enema was given, after which she had a copious action. Nourishment was taken in sufficient quantity. Sutures were removed from the wound on the fifth day, and it was entirely healed. Nothing noteworthy occurred, except fluctuations in the pulse now and then, until August 9. On this day she complained of severe pains in the front part of the head, principally on left side. Ecchymosis had disappeared from around the eyes.

She still took plenty of nourishment. Bowels very much constipated and very difficult to remedy.

During the next two weeks patient was always more or

less in a semi-comatose condition, and I noticed that the left supra-orbital region was gradually becoming more prominent.

Temperature since the day of the accident had never gone beyond 100 deg. I suspected abscess, although as yet there was nothing positive to base my diagnosis on.

On August 29 she had a convulsion, epileptic in character. There was amnesic aphasia. Ptosis of left eyelid and great intolerance of light. I had Dr. B. A. Pope to examine her eyes, and choked disc were present in both, but were more marked in the left, the side of the suspected lesion. The swelling on the forehead had not diminished any.

Urine was examined and found to contain an excess of triple phosphate of ammonium. A quantitative examination for chlorides could not be made on account of not having the necessary apparatus.

Feeling somewhat assured now that I had to deal with an abscess of the brain in left frontal region, I deemed it best to evacuate the pus immediately.

The patient was chloroformed, scalp shaved and made aseptic. A horseshoe-shaped incision was made through the swelling on the forehead, and a button of bone removed with the trephine, about an inch in diameter. The dura mater bulged through the opening. I introduced an exploring needle and obtained pus. The dura was incised, and the opening enlarged by introducing a pair of artery forceps closed and withdrawing them expanded.

About six ounces of greenish, foul-smelling pus, containing particles, which appeared to be gangrenous brain tissue, were evacuated. The cavity was thoroughly washed with a 2 per cent. sterilized solution of boracic acid and a rubber drainage tube of large caliber inserted to the bottom of the cavity, which was about two and a half inches in depth.

Patient did very well after the operation. Next day she was perfectly rational and had nothing to complain of. The cavity was irrigated every other day with same solution as mentioned above. As the discharge of pus became less, and the cavity was filling up, the tube was shortened every now and then. In order to favor drainage, the patient was advised to lay on her abdomen, with face downward.

In two weeks after the operation she was up and about.

On September 21 her temperature rose rather quickly to 104 deg. She vomited incessantly, but did not complain of her head. An antipyretic was given which reduced the fever for a time, but the next morning it was up to 103½ deg. again; stomach was still very irritable and would retain nothing; dressing was removed from wound and there was more pus than at previous dressing. After this temperature went down and in a few days she was all right again.

As the cavity had nearly filled up and there was some difficulty experienced in retaining a tube, it was permanently removed on September 25 and a light packing of sterilized gauze used instead.

On September 29 patient was doing well, dressing was removed and cavity packed again. Four hours after this, patient had three convulsions in rapid succession. Thinking these convulsions might be due to some compression caused by the packing, it was removed and the cavity repacked more lightly. There were no more convulsions, but the patient was very restless, and large doses of potassium bromide and chlorhydrate had to be given repeatedly until sleep was produced. A few more days after this, no more packing being required, the wound was allowed to close, which it did readily. Patient did well from now on for a month, when there was some swelling, and tenderness over trephine opening, and intense frontal headache. An incision was made and some pus evacuated. Cavity treated in same manner as before.

On November 16 a red mass of fungous granulations, which pulsated, protruded through the opening; this was readily distinguished as a hernia cerebri. Great difficulty was experienced in keeping it reduced within the cranial cavity. Finally, after being partially excised, it was controlled by a pad and pressure bandage until the wound had healed over. Patient was apparently entirely well; she was, however, still kept under observation.

Two months later, January 20, patient had several convulsions. After this she became delirious and very restless; stomach irritable. Some swelling made its appearance over trephine opening; it was incised.

Pus had accumulated again, and a great deal of it at that. Cavity was treated in same way as before, except that it was irrigated with a 1-6000 solution of bichloride, and a dilute solution of peroxide of hydrogen injected.

Patient did comparatively well for a week, when she had a temperature of 106 deg., with violent pains in the head and retraction of same. There was internal strabismus. She fell into a deep coma and died in a few days, evidently from a leptomeningitis.

To my great disappointment the parents of the child would not permit me to open the cranium after death.

It will be seen from the clinical history of this case that a diagnosis was quite easy. The abscess must have originated on the surface of the cerebrum, agglutination of the membranes took place, and as the outside swelling indicated, it was beginning to make its way through the fissured bone. This being a latent region, there are no localizing symptoms that we can depend upon for a regional diagnosis. For, as in the above case, very little if any information was derived in that way.

In conclusion I must confess a source of great annoyance to me in the treatment of this case. I was never positive that the cavity had entirely filled up, nor was there any way of convincing oneself that there was not a sinus remaining. As a consequence it had to be incised and redrained three times.

THE CHARITY HOSPITAL AMBULANCE EMERGENCY CASE.

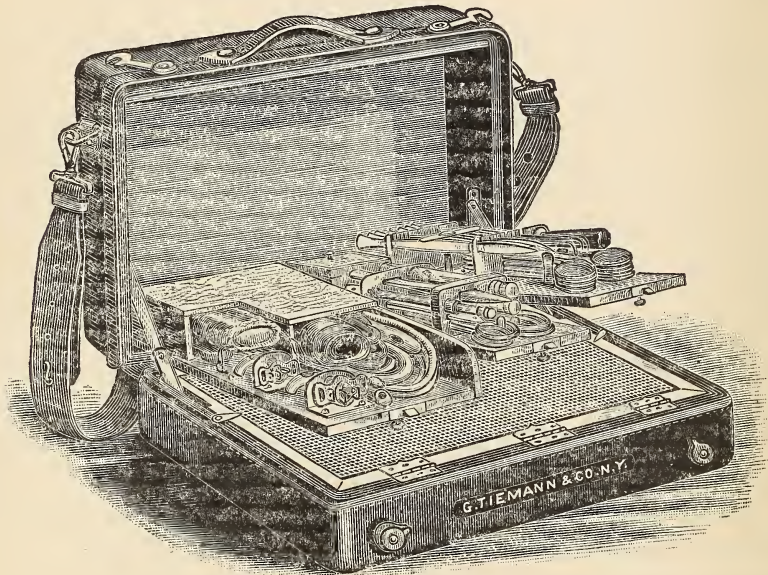
J. D. BLOOM, M. D., HOUSE SURGEON, CHARITY HOSPITAL, NEW ORLEANS, LA.

The execution of the ambulance service, preceded by conditions primitive and of humane promptings, renews its interest to the humanitarian in every betterment of pre-existing benefits whereby its humane life-saving mission is the more effectively and expeditiously accomplished.

With the active service of this department of the hospital's charity, its necessities are made most apparent, and the growing popularity of its many missions makes its perfection the more imperative.

With each year additions to the comfort of its patients and efficiency in work in the application of mechanical devices and administration of remedial agents have been made and confirmed in their benefits by a continued use.

To its armamentarium there recently has been added an emergency outfit, fulfilling the needs of accident demands in pertinent arrangement of detail, which the art of the manufacturer has further simplified in the convenience of handling.



The Charity Hospital ambulance case is made by Messrs. George Tiemann & Co., New York, of wood, with strong leather covering and army shoulder strap, lined with aseptic polished wood lining, and arranged in hinged trays, with metallic supports. Size: height, 10 inches; width, 13 inches; thickness, $4\frac{5}{8}$ inches.

When opened, the lower half, or compartment for dressings, stands at a right angle to the upright containing the trays.

A wire screen secures the dressings and acts as a rest support to the trays when in position for use.

The trays are four in number and contain the following:

TRAY NO. I.

One Gross' double instrument to remove foreign bodies from the ear.

One ear spoon.
 One ear hook.
 Two steel-handled scalpels.
 One sharp-pointed curved bistoury, steel handle.
 Four hæmostatic clamp forceps.
 Two tenacula, steel handles.
 One aneurism needle, steel handle.
 One extra fine trocar, used also for exploring.
 One larger sized trocar.

TRAY No. 2.

One razor.
 One pair scissors, straight.
 One Coxeter's dissecting forceps.
 Three Keith's needles.
 Twelve assorted suture needles, including Hagedorn's.
 Two dozen plastic pins, assorted.
 One Abbe's needle and hæmostatic forceps.
 Four spools in glass bottles with black and white silk.
 One spool with patent braided silk.
 One self-registering thermometer in gilt case.

TRAY No. 3.

Three velvet eye catheters, assorted.
 One stomach tube with rubber funnel.
 One transfusion apparatus.
 One hypodermic syringe also for tablets in aluminum case.
 One screw mouth gag, hard rubber.
 One large and one small double silver trachea tubes.
 One silver coin lifter with probang, silver screw joints.

OPPOSITE BOTTOM TRAY.

One Esmarch's tourniquet, also one tourniquet, Schapp's.
 One iodoform box, hard rubber, Bard's.
 One (one ounce) bottle carbolic acid.
 One bunch absorbent cotton.
 One rubber roller bandage.
 Sponges.
 Roller bandages, assorted.
 One package iodoform gauze.
 One piece chamois.

The instruments combined in this arrangement are such as the requirements of the service have demonstrated most necessary, so that its utility does not stand in question.

The ease of carriage, readiness, cleanliness, and facilities for use, as well as the appointed needs of emergency work, is a grouping of auxiliaries to the demonstrable good of our ambulance work that must prove reassuring to those unfortunates in the need of its succor, and creditable to the progressive spirit of the Board of Administrators.

INTERRUPTED DENTITION.

BY M. R. FISHER, D. D. S., NEW ORLEANS.

Mr. President and Gentlemen of the Louisiana State Dental Society:

I am about to treat of a matter which I am well aware is usually considered within the domain of the dental operator, and one which should be familiar to him in all of its phases, and one which should be equally if not more familiar to the medical observer.

Yet I feel that I am placed in the rather unenviable position of selecting a subject which is not, apparently, of general interest to either the dental or medical practitioner; but in offering you this humble tribute of thought, it is my hope that it may awaken an impulse to search with greater scrutiny for causes hardly yet investigated, and certainly not yet brought under universal consideration.

True science starts from the beginning of things in its investigations, and nothing should be accepted as true without close scrutiny; its theories and probabilities should be discussed, its facts brought out and weighed in the full light of modern science.

The wise men of to-day differ from the wise men of the past, in that they have found thousands of new facts to guide them to their conclusions.

My object is, however, to lead up to inferences from facts in general practice, also from physiological developments and pathological conditions, to, perhaps, a more intelligent conception of certain phenomena observable in practice.

In order to do this, I am now forced to the consideration of the subject of interrupted dentition, in order that I may draw conclusions to be more or less obvious as I proceed.

It is a well known fact that the development and eruption of teeth is a physiological process, and that the resources of nature are infinite.

The expedients to which she resorts are marvelous and endless in their variety.

When new conditions are to be met, her invention is rarely ever at a loss, and her capacity for change is almost boundless.

Environments change and corresponding alterations in organs arise to meet the new conditions presented.

The life of an organ depends upon this power to change, to conform to new environments, and in no set of organs is this infinite variety of resources, or the capacity for change, or the power of invention, so fully illustrated as in the teeth.

Yet we are forced to acknowledge that there are at times certain pathological conditions during the development and eruption of the teeth, especially in infants, that are worthy of very serious consideration.

I therefore hope to prove these assertions to be facts, and will endeavor to do so by first referring to their development; but it will not be necessary to go into the details of their earliest development, as we are all well aware of the fact that calcification of the teeth commences before birth, and at birth we have the enamel and dentine caps formed; and at that time there is no sign of the root, and this development of the crown continues by a deposit of the odontoblasts on the outside of the papilla, layer after layer, always developing from the periphery to the centre, until the crown is fully developed.

The papilla then, as well as I have been able to understand, changes into what is known as the pulp or nerve.

The root then develops in the same order as the crown, from the periphery to the centre, gradually developing to the centre and in length; and at the time of eruption the root is only partially developed, and while nature is making an effort to force the crown through, development of the root is also going on, bone is being absorbed at the root to allow for its development.

Bone is also being absorbed at the crown to allow for its eruption, and if nature's work is well done of course the erup-

tion is perfectly normal, and in many cases the tooth is through without even the mother's knowledge; but as we have evidences in our every day life that the human body is more or less susceptible to disease, and that nature's work is often interfered with, it is certainly not unreasonable to presume that her work might be interfered with during the development and eruption of teeth, and thus give rise to more serious results than are generally supposed.

My reason for stating in the early part of this subject that it isn't apparently of general interest to either the dental or medical practitioner is because dentists, as a rule, have very little to do with young children.

The mothers do not take them to see the dentist during the eruption of their first teeth, and it is a very rare thing that he is called even in consultation, although there are many times that he might be of great service to the family physician, as he is generally more familiar with the development and eruption of teeth than the average physician, for, as a rule, physicians pay very little attention to the development of teeth; but as young children are almost exclusively under their care for treatment, I think it quite necessary that they should be equally familiar with the subject of dentition, for it is very clear to my mind that many troubles that physicians are called in to treat are more or less caused from interrupted dentition, and when we consider the fact that the tooth is confined within the bone, and that the bone has to be absorbed before the tooth can be erupted, it is not unfair to presume that nature might fail to perform her duty in absorbing this bone, and that the development of the tooth might continue, which would naturally cause more or less disturbance.

The severe pain caused from interrupted dentition is no doubt in this way: that while nature is making an effort to erupt the tooth, if there are any interferences at that time, such as non-sufficient absorption of bone, or tough and unyielding gum, that the pain is principally due to the pressure of the root, which is developing around the nerve, and as calcification is not yet complete, there is supposed to be more or less rough and ragged edges that press on the nerve, and the more I think of these pathological conditions that no doubt do exist

to a certain extent, the more I am convinced of the fact that this subject should be given more consideration in the future than it has received in the past.

According to the laws of nature teeth are developed and irrupted in pairs, and certain teeth are supposed to irrupt when the child has reached about a certain age, although this rule varies to a certain extent; these facts should all be considered, and if a child is suffering from any disturbance that might arise from interrupted dentition, such as fever, diarrhœa, or convulsions, the mouth should be examined and age of the child ascertained, in order to assist in making a correct diagnosis.

It is not my intention to advocate a regular wholesale butchery among little innocents, but there are times when the lance should be promptly used, for there are no doubt certain conditions that justify it; and I believe in some cases that it is even necessary to cut deep enough to open the bone, which I think was accomplished in one case that happened to come under my care; which was a child which at the age of about seven months irrupted the two lower central incisors with but very little trouble, and in due time came the upper centrals without any trouble, and at the age of about eleven months the left lower lateral incisor was irrupted, also without any trouble, and the child was apparently in good health up to that time, but soon became fretful, lost its appetite, and nothing that it would eat seemed to agree with it; stomach out of order more or less all the time, and after several weeks began to have fever which could be checked only for a few days, when it would return again, and this went on for several months without any sign of the approach of the missing lower lateral, except some inflammation at that point.

It did not have that swollen or pointed appearance that is so common in such cases, and to the ordinary observer would not have been considered the cause of the trouble.

But being as familiar with all the facts in the case as I was, and also being very anxious about the child's condition, I determined to make an effort to give it relief, and after explaining to the mother what I thought might be the cause, she consented to me lancing the gums, and in making a deep in-

cision, I discovered nothing but bone; but after making two or three cuts with a good deal of force I discovered what I thought to be the tooth, and in the course of a few days the tooth came through almost turned round in its socket, and is now a little longer than the other teeth.

The child soon recovered its health without any other attention, and had no more trouble until it commenced to cut the upper canines, which was relieved by the use of the lance.

CASE 2.—I was spending a few days in the country with a friend who was a physician, and one day he invited me to take a trip with him, and in the course of his rounds he called to see a child whom he had been treating for several days for very high fever and diarrhœa, but with very unsatisfactory results.

I of course was not invited into the sick room, but was asked to take a seat in the parlor. The physician after a short while came into where I was and remarked that it was one of the most persistent cases of fever that he had ever treated. I then asked the age of the child, and advanced the idea that sometimes children are caused a great deal of trouble from teething, which led to my being invited in to see the child, which I found to be twenty months old, and an examination revealed the fact that it had never irrupted any of its canines, but the upper ones were trying to come through and had apparently passed the inflammatory stage of the gums; but the pressure was so great that the gums had the appearance of being stretched until they were almost white, which I consider a very tough and unyielding condition.

After explaining what I thought to be the condition, consent was readily given to allow me to lance the gums; the physician was a young man and frankly acknowledged on our way home that he had never paid any attention to children's teeth.

The next morning he saw the child again, and when he returned stated that the child rested well all night. The fever had cooled during the night, and one tooth had made its appearance; the other tooth came through in a few days, and the child soon entirely recovered.

CASE 3.—A little girl two years old, had been sick about a week with fever and diarrhœa, and for two days had been quite

ill, and threatened with convulsions, and had the physician to see her two or three times a day; and still the child grew worse, but when the physician heard through the mother that I had advanced the idea that the teeth might be the cause, laughed at the idea; and when I spoke to him about it, he set up the same plea that many others have, that the eruption of teeth is purely a physiological process, and if any one of these troubles were the result of teething they would soon yield to his treatment; that he had been practising medicine a long time, and had never considered it necessary to lance the gums, and was opposed to it.

The child was two years old, and on examination I found that it had never erupted any of its posterior molars. but all were in an inflamed condition, and apparently trying to come through at once, so to be sure of the right one, I lanced all of them, making cross-cuts over each one.

The child was soon quiet, and in a very short time went to sleep, and the mother got her first night's rest in a week; the next morning the child was much better, had very little fever, and in a few days the upper teeth came through, and the child was well, except a little stomach trouble, which lasted about a week, when the other teeth came through and the child got entirely well.

One misguided writer gives the following as his reasons for not lancing the gums:

1. It is useless, as far as giving relief to symptoms or facilitating or hastening teething.
2. It is useful only as blood-letting, and ought not to be done.
3. It is harmful in producing local and general disturbances, on account of hæmorrhages.
4. It should be used only as a surgical procedure, to give relief to surgical accidents.

Now, to my mind, his four reasons reveal a deplorable amount of ignorance, as he evidently knows nothing about the anatomical relations of the tissues involved or the physiological development, or the pathological conditions that might arise during interrupted dentition.

I could mention other cases that might be of interest, especially in the treatment of my own children, but for fear of taking up too much time, so I will only briefly refer to several works on children's diseases.

Dr. Henoch, professor in the University of Berlin, admits, in his works on children's diseases, that this backward pressure on the nerves by the developing roots might give rise to reflex symptoms, not only in motor, but in vaso-motor nerves, and in some cases cause convulsions.

Dr. Goodhart, also on Childrens' Diseases, says dentition is usually held to be the causes of many ailments, but to what extent is doubtful, but in a general sense the period of dentition is, no doubt, a time of peril; the mortality is high, and disorders of many kinds each claim its victims, and thinks during these disorders that it is a good idea to examine the child's mouth, and that if any teeth are trying to come through that can be lanced, to relieve the pressure.

Dr. Smith thinks that the teeth give rise to more or less disturbance, and that the relation which dentition bears to the various disorders should be understood, and relates several severe cases that were relieved by lancing the gums; he thinks that all other means should first be used before the lance, but in extreme cases, such as convulsions, fever or fretfulness, continuing day after day, that the lance should be used.

Now while it is not my intention to criticise so eminent a man as Doctor Smith, and one who is so generally beloved as an author, yet I can not understand why he would allow a child to suffer for days, before using a lance, when he admits that the simple act of lancing the gums would give relief.

In representing this subject I wish to state that it was not my intention to criticise any one, or to at all provoke the medical profession, for I hope the time is not far distant when we will be in our own intellects and affections on a plane of fraternity, and love of the truth, and until we are, we will not make the sufficient progress on this subject as we should.

REPORT OF THE CHAIRMAN OF THE SECTION ON DERMATOLOGY OF THE LOUISIANA STATE MEDICAL ASSOCIATION, MAY 9, 1895.

ISADORE DYER, PH. B., M. D.

DERMATOLOGIST TO CHARITY HOSPITAL, PRESIDENT STATE BOARD OF CONTROL OF THE LEPERS' HOME, ETC., NEW ORLEANS, LA.

Notwithstanding the appeal issued in the form of a circular request, printed on the back of a postal, the chairman of the section on dermatology has succeeded in collecting a very meagre contribution. In asking for papers, the subject for discussion was specified, and the requested contributions limited to "Skin Diseases in the Negro." While this would appear to narrow the field, it does just the reverse, for the specific skin affections attacking the negro are, in themselves, numerous enough to occupy the attention of this section for its full limit. Independent of this report, I had intended reading a paper on the generic subject of "The Negro in Dermatology." This I purposed as introductory to the papers of my section, of which I had large ideas. The paucity of contribution has forced me to withdraw this paper and to postpone it, in the hope that by the next meeting the subject may have more fully matured and the members of the society be more in the line of thought conducive to the study of the question. Excepting for a desultory article sprinkled here and there through dermatological literature, the study of the negro as viewed through the skin is as yet a virgin one. The field is broad and wide, and offers every opportunity for investigation, and should fully compensate the attempt.

The clinician of to-day in his study of skin diseases differentiates his case by analysis. The eruption is studied from the standpoint of the location and arrangement. The individual lesions are studied in their size, their shape, their character and their color, and finally in their pathology. The textbooks, often quite extensively, spread themselves on the differentiation in color, even drawing fine distinctions between the shades of color. For example, one reads of the violaceous red, the rosy red, the dusky brown, the coppery brown, the fawn and straw-colored yellow, the cerulean blue, the bottle green (of the urticaria pigmentosa, for example). To us who lived in the back centre, lines such as these are of little service

and the text-books have made no allowance for the colored race, or else argue the absence of pigment anomaly in the blacks. Even syphilis is diagnosed by a color test, and if for this alone, some new schematic methods should be suggested in the diagnosis of the so-called pigmented lesions.

The questions which must present themselves for our consideration are, first of all, is the negro a factor in dermatology, and to what extent? Excepting the microscope, the usual diagnostic methods are relegated. Degrees of inflammation, pigmentation, even shape, are obliterated by the superpigmentation in the natural hue of the negro. Statistically, the negro can not be faithfully studied here, as the milder and more benign diseases of the skin go untreated, while the painful, irritating, disfiguring and destructive diseases multiply. The negro is not esthetic, and a mere cosmetic complaint would not appeal to his intelligence as requiring a therapeutic measure.

It is chiefly when pain or discomfort or alarm or loss of tissue forces his attention that he comes for physical relief. So it is that diseases which simply mar the white skin by their presence, or annoy from their mere morbid or unnatural occurrence, are rare indeed in the negro.

The histological differences in the white and negro skin, evidenced by the excess of pigment and connective tissue, would lead us to expect hypertrophic diseases in the ascendant, and of more frequent occurrence than in the white.

Hygienic factors certainly determine a more marked occurrence of the parasitic and the filth diseases in the negro than in the white. Looser morals make a proportionately large percentage of syphilitics, while the same cause, together with neglect of treatment, determines the number of congenital cases of this disease. And so, the negro does occupy a place in dermatology, different in many ways from the position of the white, and there is afforded ample opportunity for the development of this field of study. I am anxious to encourage the work, and now invite co-operation for the coming year.

Before concluding my report, I feel it incumbent upon me to refer to the status of the leprosy question in the State of Louisiana. Following the adoption of the plan for legislation proposed by the Parish Medical Society of Orleans, at the last

session of the State Legislature, an act was passed creating a board for the purpose of locating, arranging and equipping a "home" for lepers. On December 1, 1894, the buildings of the lepers' home, in Iberville parish, situated on the grounds of the old Indian Camp plantation, on the east bank of the Mississippi river, were thrown open to the lepers of Louisiana. At this date seventeen patients have applied and have been admitted. Excepting two, these have come from the city of New Orleans, and have entered the home through the personal efforts of the board members, save in one instance, where a public-spirited citizen persuaded the patient to accept the accommodations of the leper institution.

Louisiana has fifty-two parishes, and leprosy is spread over many of these. Appeals to the sheriffs of these has met, in all instances, with a wonderful indifference. The State has created a board for the ultimate purpose of stamping leprosy out of the State. What can this board do with its hands tied? To no class of citizens in the State is the appalling outlook more apparent than to the rank and file of the medical profession. To us the leper comes with the evidences of his disease. At our hands advice is received. With a law compelling their isolation, with the personal knowledge of the certain conclusion of 199 cases out of 200, with the possible chance of contagion, with the history of a constant increase of the disease in the State, what should that advice be? * * * If treatment can avail, it certainly will accomplish most under a systematic method. The medical profession owe it to each other, owe it to the State in which they live, and finally to the patient, that this advice should direct them to the leper home.

It required only thirty years in the Sandwich Islands to develop leprosy, under conditions far less favorable than those in this State. In the light of this, and as a final line in my report as chairman of the section on dermatology, I wish to beg and urge the attention of members of this, the representative body of medical thought in the State of Louisiana, in the direction of the lepers' home in Iberville parish.

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AUGUSTUS McSHANE, M. D

COLLABORATORS:

DR. F. W. PARHAM.

DR. R. MATAS.

DR. A. W. De ROALDES.

DR. H. W. BLANC.

DR. WILL H. WOODS.

Editorial Articles.

CARE OF ADVANCED PHTHISIS.

It may strike some of our readers that we dwell with particular emphasis upon matters relating to the cure of the most common of all diseases—phthisis pulmonalis. In the whole range of human ills there are few that are more depressing to the general practitioner to treat, or that inspire the laity with a feeling of the utter inability of science to effect a cure. While we know that pulmonary consumption can be, and often is, completely cured when rationally treated in its incipiency, still the average medical man's heart sinks when he is called upon to relieve and cheer up a patient already far advanced on the road to death. We do not share this feeling of despondency, even though we recognize the gravity of the situation. It has been our good fortune to see a seemingly hopeless consumptive, with a large cavity, get up from her bed and almost regain her former health in the course of a few months, and that, too, not in an ideally dry climate, but in the damp, depressing climate of New Orleans. The cavity has dried up; the expectoration, formerly very abundant, has entirely ceased; the weight has increased 12 pounds; the menstrual function resumed, and the patient's energy and spirits wonderfully improved. More-

over, the patient has remained well for about a year and has no signs of a return to her former condition. At some future day we will publish the details of this unusually favorable case.

A recent article by Dr. Edward O. Otis, of Boston, on the treatment of advanced and hopeless cases of phthisis, is a very valuable contribution to the literature of the subject. Dr. Otis has had a wide experience in this class of cases. His article is a clear exposition of the means at the disposal of the general physician in the late stages of phthisis. We have the temerity, though, to hope that a closing statement will ultimately have to be revised. He says: "It is a losing fight at the best, and both the physician and the patient know it; but the gratitude of the one and the satisfaction of the other in duty well and patiently performed mitigate the bitterness of defeat."

Boston has a climate that is as unfavorable to consumption as that of New Orleans. This begets a pessimistic leaning in those who are compelled to minister to sufferers who have not the means to escape from that city. It is refreshing to turn from an expression of despondency to Dr. Charles Denison's booklet, "Exercise and Food for Pulmonary Invalids." Dr. Denison went to Colorado an invalid. He personally experienced the benefits of proper exercise and climate. He writes in a positive and unambiguous manner, which is justified by his personal experience, and has advised over 3000 consumptives, many of whom still live.

The consumptive who does not know his condition is always cheered up by the hope that he will get well as soon as "that little cough stops;" but when an intelligent patient learns the true state of affairs it will not do to try to mask the gravity of his disease. In such a case, when not almost *in articulo*, the physician of the present day has the double advantage over his predecessors of being able to ascertain the patient's condition earlier, and to lay down a line of conduct which experience has shown to be efficient to stay the progress of the disease, and even to bring the patient back to health and strength. It is unfortunate, though, that in most of these cases the requisite radical change of climate is impossible to procure. Those who most strongly appeal to our sympathies and fill us with

despondency are those sad-eyed men and women whose daily toil in close factories or at the sewing machine brings them hourly closer to their doom. This is the army that swells the mortuary figures of large cities, and these the helpless ones that can not profit by the cheering words of Dr. Denison; nor can they, in many instances, obtain the solace of Dr. Otis' well-devised measures of alleviation and euthanasia. Tuberculin will not meet the requirements of the case; neither will anti-phthisis, nor any other of the numerous agents put forward at various times. Here is a task that challenges the powers of the mightiest men of science, and here a field from which colossal fame and the gratitude of millions are to be harvested.

Is the labor a hopeless one? Is it beyond the power of man? We dare to hope it is not; we can do more now than the older physicians could; the field of our usefulness is expanding, and who shall say that we have reached our limit in the management of advanced phthisis?

Abstracts, Extracts and Annotations.

SURGERY.

THE TREATMENT OF MALIGNANT TUMORS BY THE TOXINS OF THE STREPTOCOCCUS OF ERYSIPELAS.

By N. SENN, M.D., PH.D. LL. D., Chicago, Ill.

It has been known for a long time that in exceptional cases an attack of erysipelas has exerted a curative effect on malignant tumors. A number of years ago Billroth reported a case of inoperable sarcoma of the pharynx cured by a severe attack of facial erysipelas. The tumor mass has sloughed and the large defect healed rapidly by granulation, leaving a healthy scar upon the site occupied by the tumor. Isolated cases of this kind have been reported from time to time, but the diagnosis was not always established by sufficiently careful clinical observations and microscopic examination of the tumor tissue. The discovery of the microbe of erysipelas by Fehleisen, and the cultivation of the streptococcus upon artificial nutrient media outside of the body, enabled investigators to produce erysipelas artificially in the uncomplicated form in

man and the lower animals. As soon as it was demonstrated experimentally that simple uncomplicated erysipelas is a disease attended by but little danger to life, the suggestion was made that, if the disease could be artificially produced in man by inoculation with pure cultures, the local and general conditions thus produced might prove useful in the cure or amelioration of inoperable malignant tumors. Of seven persons, the subjects of malignant tumors, inoculated by Fehleisen with pure cultures, six developed typical erysipelas; in the seventh case the patient had passed through an attack of erysipelas only a few weeks previously, and was, in all probability, still protected against a new attack. This patient was inoculated a second time, with a negative result. Fehleisen has seen, by this treatment, a cancer of the breast become smaller, while a case of fibro-sarcoma and another of sarcoma were not materially affected by this method of treatment.

Janicke and Neisser have recorded a death from erysipelas thus intentionally produced, in a case of cancer of the breast beyond the reach of an operation. At the post mortem it was shown that the tumor had almost completely disappeared, and the microscopic examination of portions that had remained appeared to prove that the tumor cells had been destroyed through the direct action of the microbes.

Biedert saw in a child suffering from a sarcoma, involving the posterior part of the cavity of the mouth and pharynx of the left half of the tongue, the naso-pharyngeal space and the right orbit, the tumor disappear almost completely during an attack of erysipelas.

Kleebblatt reports the case of a lympho-sarcoma followed by infection of the cervical glands, in which the tumors diminished markedly in size under the influence of an inter-current attack of erysipelas, but resumed its former malignant tendencies as soon as the disease had subsided. The patient was afterward intentionally inoculated with a pure culture of the streptococcus of erysipelas, but the beneficial effect was, as before, only a temporary one, as the tumors steadily increased in size, the patient dying of exhaustion. In another somewhat similar case, the inoculation caused a typical attack of erysipelas, under the influence of which the tumor rapidly disappeared.

Cases, on the other hand, have been reported in which, after an accidental or intentional attack of erysipelas, the malignant tumor began to grow more rapidly. Neelsen describes a case of carcinoma of the breast in which, after two severe attacks of erysipelas, the tumor not only began to grow faster, but at the same time regional infection progressed more rapidly.

Bruns gives an account of the effect of erysipelas on tu-

mors in twenty-two patients. Among these, three cases of sarcoma were permanently cured. Two cases of multiple keloid after burns were also permanently benefited. In four cases of lymphoma of the neck, some of the glandular swellings disappeared completely and some were reduced in size. In three cases of carcinoma of the breast, one was not influenced by the treatment, in one the tumor was diminished one-half in size, and in the third it contracted to the size of a pea, in which condition it remained at the time the report was made. A multiple fibro-sarcoma was greatly benefited, while an orbital sarcoma was not improved.

Spraentz concludes as the result of his observations that the products of the erysipelatos inflammation in certain cases can act in a curative manner upon malignant growths. He injected subcutaneously at a point distant from the tumor the sterilized toxic products of the microbes of erysipelas. Improvement and even complete disappearance of the tumors followed, although recurrence usually took place. The effect was much more marked in sarcoma than in carcinoma.

Burch observed that as a result of accidental or intentional infections with the microbe of erysipelas, tumors such as sarcoma disappeared by fatty degeneration.

Janicke and Neisser demonstrated by microscopic examination that cancer cells were actually destroyed by erysipelas streptococci. In view of the uncertainty of the result and the not inconsiderable danger to life which attends the inoculation of live cultures of the streptococcus of erysipelas, in patients debilitated by antecedent disease, it is safe to predict that this therapeutic resource will be abandoned in the future treatment of malignant tumors.

Coley, of New York, has made the treatment of malignant tumors with live and sterilized cultures of the streptococcus of erysipelas a special study since 1891. In 1893 he reported ten new cases of malignant tumors treated by repeated inoculations with erysipelas. From a study of the literature of this subject at that time it was found that there were recorded thirty-eight cases of malignant tumors in which an attack of erysipelas had occurred, either by accident or intent. In thirty-three cases the erysipelas was accidental and in fifteen it was the result of inoculation. Of seventeen cases of carcinoma, three were permanently cured. Of the seventeen cases of sarcoma, seven were free from recurrence from one to seven years after the attack of erysipelas. Ten cases showed quite marked improvement; one patient died as the result of an accidental attack of erysipelas.

In the summary of the analyses of recorded cases, Coley excluded eight cases of his own, treated by repeated inocula-

tions with erysipelas cultures; in none of these cases did an actual attack of erysipelas result, and yet the inoculations appear to have been followed by marked improvement, and this would indicate that there exists in the cultures some substance which is antagonistic to the tumor growth.

In view of the fact that the artificial production of erysipelas by inoculations with active cultures of the erysipelas microbe is not devoid of risk to life, and that improvement in certain cases followed, by inoculations with live cultures, which did not produce erysipelas, these facts led Coley and others to employ sterilized cultures, which appear to have produced the same therapeutic effects as the active cultures.

It was also ascertained by experiments that the efficiency of the dead cultures is increased by the addition of the bacillus prodigiosus, a comparatively harmless microbe. In a recent article on the treatment of malignant tumors with the toxins of these two microbes, Coley maintains the efficiency of the mixed dead cultures of these two microbes in the treatment of some cases of malignant tumors, especially sarcoma. In the same publications he reports nine cases of inoperable sarcoma permanently cured by repeated inoculations with the mixed toxins of these two microbes, that came under his own observation, and refers to a few successful cases in the practice of other physicians. The toxins which he uses are now prepared in the following manner:

“Method of Preparation of the Toxins.—To make the toxins of erysipelas and prodigiosus, ordinary peptonized bouillon is put into small flasks, containing 50 to 100 cc., which, after proper sterilization, are inoculated with the streptococci of erysipelas and allowed to grow for three weeks at a temperature of 30 to 35 deg. C. The flasks are then inoculated with bacillus prodigiosus, and the cultures allowed to grow for another ten or twelve days at room temperature. At the end of that time, after being well shaken up, the cultures are poured into sterilized glass-stoppered one-half ounce bottles, and heated to a temperature of 50 to 60 deg. C. for an hour; sufficient to render them perfectly sterile. After cooling, a little powdered thymol is added as a preservative, and the toxins are ready for use. The toxins when prepared in this way are very much stronger than when filtered through a Pasteur, Chamberland or Citasato filter, the active principles contained in the germs themselves being preserved. If, as is sometimes the case, the preparation is found to be too strong to use with safety, it can be diluted with glycerine or sterilized water.

“The best method of making the bouillon is to soak a pound of chopped lean meat over night in water. In the morn-

ing strain it through a cloth, make up to 1000 cc., and boil for one hour. Then filter through a cloth, add peptone and salt, neutralize and boil again for an hour. The bouillon will then pass through filter paper perfectly clear, and be ready to put into the flasks. It is not, however, necessary to neutralize the bouillon, as the streptococci will grow even more readily in acid bouillon, and the resulting preparation is, if anything, stronger than when neutralized bouillon is used.

“In order to keep up the virulence of the cultures they are put through rabbits in the following way: The hair of the ear is clipped close with a pair of scissors, and the skin washed with weak carbolic acid, and then sterilized water. A minute quantity of bouillon culture, forty-eight hours old, is then injected subcutaneously in four or five different places in the ear. Forty-eight hours later, after again washing the ear with carbolic acid and sterilized water, a flat needle sterilized in the flame is inserted under the skin at or near the point of inoculation, and the layer of the skin cut off with a sharp sterilized scalpel. The piece of skin is then rubbed well over the surface of an agar tube with a thick platinum wire needle. After twenty-four hours in the incubator the colonies of streptococci will show as minute white specks, and from them a pure culture can be obtained. If the agar is made with 75 per cent. of bouillon and 25 per cent. of urine, the streptococci will grow more freely than if bouillon alone is used. The dose of this preparation varies from 1 to 8 minims; I have had a temperature of 105 deg. F. following the injection of 2 minims. I usually begin with the minimum dose and gradually increase until the desired reaction, *e. g.*, temperature 103 to 104 deg. F. is reached.”

Coley does not say that this treatment is successful in all cases, and reports his failures with his successful cases, but his satisfactory results are out of proportion to those of any other practitioner, in the employment of the same remedy in similar cases. It is generally known that carcinoma has proved more refractory to the toxins of the streptococcus of erysipelas and the mixed toxins than sarcoma.

A distinction should be made between the therapeutic action of non-malignant tumors of erysipelas and the subcutaneous injections of sterilized cultures of the microbe of this disease. In erysipelas involving a malignant tumor, the superficial lymphatic channels are the seat of an active inflammation, the product of which always temporarily obstructs the pathways through which local, regional and general infections occur and, in exceptional cases, permanent interruption of the lymph current may limit or arrest the growth of the tumor. No such anatomic changes are produced by the injection of the toxins.

The treatment of inoperable sarcoma and carcinoma with the mixed toxins, as advised and practised by Coley, has been given a fair trial in the surgical clinic of Rush Medical College, and so far it has resulted uniformly in failure.

The accompanying table is a brief summary of the cases subjected to this treatment.

The injections were made daily, gradually increasing the dose until the desired reaction was produced. In most of the cases the reaction was initiated by a chill, or at least a sense of chilliness. The temperature reached the maximum height in the course of a few hours, and continued from six to twenty-four hours. The toxins used were obtained from three different sources, the last supply directly through the courtesy of Dr. Lambert, of the laboratory of the Cancer Hospital, New York. A temporary swelling and diffuse reddening of the skin at the point of puncture was a common occurrence; abscess formation was seldom observed. Loss of appetite, restlessness and insomnia were some of the general symptoms most constantly produced by the injections, when used in doses large enough to provoke febrile reaction. In all of the cases, the injections failed to effect even temporary improvement, and in some of them the local and general conditions appeared to be aggravated by the treatment. The results of this treatment have been most discouraging in my hands, and although I shall continue to resort to it in otherwise hopeless cases in the future, I have become satisfied that it will be abandoned in the near future and assigned to a place in the long list of obsolete remedies employed at different times in the treatment of malignant tumors, beyond the reach of a radical operation.

Name.	Age.	Tumor.	Number of injections.	Dose in minims.		Reaction.
				Mini- mum.	Maxi- mum.	
Ross	35	Multiple melano-sarcoma of breast and sub-clavicular lymphatic glands.....	25	3	10	101°F
Nelson.....	32	Sarcoma of testicle, regional infection of lymphatic glands.....	25	3	8	103°F
Sherwood.....	47	Sarcoma of thigh.....	50	5	9	103°F
Hickman.....	50	Recurring sarcoma of shoulder after amputation through shoulder joint for sarcoma of humerus.....	110	5	12	104°F
Leichserning..	48	Fascia sarcoma of back.....	40	7	12	102°F
Scott.....	36	Carcinoma of penis, infection of lymphatic glands of groin on both sides.....	30	7	8	102°F
Young.....	55	Sarcoma of mouth.....	65	4	12	102°F
Ehrlitz.....	52	Secondary carcinoma of lymphatic glands of ureter.....	25	5	10	103°F
Movius.....	45	Carcinoma of uterus.....	75	4	15	104°F

DISCUSSION.

DR. W. B. COLEY—I wish to thank you for the courtesy you have extended to me by asking me to open the discussion on a subject in which I have been deeply interested during the past four years. I hesitate to offer my own experience against that of so distinguished a surgeon as Dr. Senn, and I will first say that I heartily commend Dr. Senn for bringing before you his own results from the treatment with the toxins—failures though they be. No scientific opinion as to the value of the treatment will be possible unless the failures as well as the successes are recorded, and I myself have conscientiously endeavored to follow this method in my own work.

Since May 3, 1891, I have treated eighty-four cases of inoperable malignant tumors with the toxins of erysipelas and bacillus prodigiosus, and it seems to me that a careful study of these cases, extending over a period of four years, ought to enable us to formulate some definite conclusions as to three very important questions:

1. Have these toxins a destructive effect upon malignant tumors?
2. Is this effect merely temporary or permanent?
3. What forms of tumors are most susceptible to the action of the toxins?

A study of my own cases shows that of forty-three cases of inoperable sarcoma treated with the toxins eleven have been successful. One of these has since had a return of the trouble; one has gone nearly four years; two more than two years, and two one and one-half years, without relapse.

Within one month I have presented three cases before the Surgical Section of the New York Academy of Medicine, two of which had gone more than two years since treatment, and still remain in perfect health. These results are indisputable facts, the diagnosis having been established, not only clinically by the leading surgeons of the East, but confirmed microscopically by the best pathologists; and if further evidence were needed, the fact that a number of them had rapidly recurred after operation would be enough to establish their malignancy. If the diagnosis is still doubted, after having been subjected to all these tests, it seems to me that we had better at once abandon the discussion as to the treatment of sarcoma, and employ our time in learning how to make a diagnosis.

In regard to carcinoma, up to the time of my last paper read before the Academy of Medicine, Nov. 15, 1894, I had nothing but improvement follow the treatment in cases of carcinoma, and I have never advocated the toxins in carcinoma

except as a matter of experiment, though I confidently believed that in time good results would be obtained in this as in sarcoma.

Since November I have had two cases of epithelioma entirely disappear. One was a very rapidly growing epithelioma, involving the lower jaw and floor of the mouth and chin. The case was sent to me by Dr. George R. Fowler, of Brooklyn, in July, 1894, and was treated about three months at the New York Cancer Hospital. She has had no treatment since November; no evidence of the growth can be found, and the woman is now in perfect health. The entire tumor had developed in a space of four months, and the involvement was so extensive that Dr. Fowler regarded it as hopeless from an operative standpoint.

Against this positive evidence, based upon eighty-four cases, extending over a period of four years, Dr. Senn has presented on the other side nine cases, covering a very brief period of observation. If we analyze them what do we find? We find first three of the cases were carcinoma, a class of tumors in which I have not advocated the treatment. A fourth case was a melano-sarcoma, a rare form of sarcoma, of which I have treated three cases without success. The fifth and sixth cases were very advanced osteo-sarcoma, which I distinctly stated in my paper were the least influenced by the toxins. There remain but three cases upon which he can justly base an argument against the value of the toxins. With this limited experience, covering so short a period of time, Dr. Senn tells you that the treatment is valueless, and in another year will be entirely abandoned. I can only say that, if I continue to have as many successes in the coming year as I have in the past, I venture to predict that I for one shall be using the treatment, and I do not believe that I shall be the only one.

—*Journal American Medical Association.*

INFECTION OF RECENT WOUNDS.

From a clinical standpoint there seems to be nothing more certain than that antiseptic surgery has one of its most useful applications in the disinfection of contaminated wounds. The proof as to the efficiency of antiseptics, such as bichloride, as applied to all forms of infected wounds, is so overwhelming that there should apparently be no need of corroboration from the laboratory standpoint. The researches of Schimmelbusch, corroborated by Pfuhl Renault, Bouley, and a number of others, apparently absolutely disproving the efficacy of any anti-

septic, even if this be thoroughly applied within a few minutes of the time of contamination, have been so widely quoted, and have so profoundly impressed a certain number of scientific surgeons, that Henley's paper, in the *Archiv fur Klinische Chirurgie*, vol. xlix., 4th section, is timely and important.

Schimmelbusch and his followers, using the anthrax bacillus as the germ of infection and mice as the animals to be experimented upon, proved conclusively that the disease, once inoculated, ran identically the same course, whether the seat of inoculation was or was not immediately disinfected (*Therapeutic Gazette*, June, 1895). Moreover, if the end of the mouse's tail was inoculated and the tail amputated in ten minutes, the mouse still perished of anthrax. The natural conclusion to be drawn from these experiments is, that attempts at disinfection are perfectly futile.

It is clear, however, that the action of anthrax upon mice is by no means similar to that of the ordinary infecting germs of the human, and hence that conclusion drawn from such experiments are not capable of clinical application. The anthrax bacillus at once overcomes cell resistance, probably by the ptomaines it produces, and is taken by the circulation. The streptococcus and staphylococcus, the ordinary germs of sound infection, act quite otherwise. Their destructive power is far less. They remain strictly localized unless present in overwhelming numbers or representing cultures of unusual virulence. Even under these circumstances a certain length of time is passed before tissue resistance is overcome. It results from this fact that, if the point of infection be thoroughly cleansed and germs cease to multiply here, there will be no systemic infection, a point in which the pus microbes differ radically from those of anthrax, since the latter may, and often do, cause death from systemic involvement, even though the wound of entrance be thoroughly purified and heal *per priamam*.

It was for the purpose of offsetting these experiments of Schimmelbusch and his followers that Henly took up the laboratory study of streptococcus infection. The germs were obtained from erysipelas and phlegmons occurring in the human, and were inoculated into the ears of guinea pigs. In some cases they were rendered excessively virulent by being grown in a succession of guinea pigs, the spleen pulp of one animal dead of streptococcus infection being inoculated into another animal, and the reinforcement being so continued. The right and left ear of each animal was inoculated with a cut of the same depth and length, and with a similar amount of the germ-bearing mass. Microscopic sections were in many cases taken

to discover the extent to which the germs had spread. One ear was for a varying time from the period of inoculation washed with the bichloride solution of 1 to 1000; the other was either not treated at all or was washed with distilled water. The results show, almost without exception, that the application of bichloride prevented the development of erysipelas. The ear which was not treated, but simply cleansed with water, after thirty or forty hours became swollen, red, and infiltrated, presenting all the symptoms of a local erysipelas. Microscopic section showed wide diffusion of the germs. The disinfected ear remained normal without reaction, saving that which comes from the healing of a clean wound. Microscopic section showed complete absence of germs. Beginning with disinfection carried out a few minutes after the infliction of the wound, and lengthening the intervals, Henley found that if bichloride is carefully employed three hours after infection, even though the most virulent form of streptococci have been inoculated, the wound remains reactionless. In some cases, when cleansing was not attempted for eight hours, erysipelas did not develop, or, if it did, was milder and slower in its course.

The microscopic sections showed that for the first four hours the germ remained strictly localized; after this they began to penetrate into the lymph-spaces, and were found at some distance from the surface of the wound, hence beyond the action of even powerful disinfectants. As to the clinical application of these facts, it is clear that the value of the antiseptic treatment of recent wounds is thoroughly corroborated by laboratory research, and to be effective the antiseptic must be applied as soon as possible after the infliction of the wound, and must penetrate its deepest part; that there should be no hesitation in enlarging wounds when necessary to allow of thorough application of the disinfectant to its portions; that crushed, bruised and ragged portions of tissues should be removed by the scissors, as representing tissues of such low vitality that they offer no resistance, but rather a favorable food for the multiplication of germs. But even if the wound is two or three hours old, the surgeon may fairly hope by thorough application of his antiseptics to avoid suppuration.

These experiments would seem to indicate that some change is required in the technique of first aid dressings. The direction usually given to those who are liable to be called upon to apply such dressings, or to surgeons who are called in for the emergency treatment, is that an antiseptic or aseptic occlusion bandage should be applied. This is probably sufficient where the wound can be subjected to

cleansing within one or two hours. Where, however, it is probable that a wound will not be so treated for many hours, for instance, when a patient has to be transported for a long distance, those who administer first aids should certainly be instructed in the proper method of thorough flushing with bichloride solution, 1 to 1000. The tablets for making such a solution are readily kept and carried, and sufficiently pure water is nearly always at hand.

Schimmelbusch's paper has been widely quoted by the adherents of aseptic surgery. Henley's research, which has been amply corroborated by other experimenters, thoroughly answers the arguments based on the deductions drawn from Schimmelbusch's experiments.—*Therapeutic Gazette*.

NOTES OF A CASE OF SEROUS EFFUSION INTO THE PLEURA
TREATED BY FREE INCISION AND DRAINAGE AFTER
THE FAILURE OF REPEATED TAPPINGS.

By RUTHERFORD MORISON, M. B., F. R. C. S., Senior Assistant Surgeon, Royal Infirmary, Newcastle-on-Tyne.

Dr. Samuel West's report, in the *British Medical Journal*, of April 27, 1895, of a case of serous effusion into the pleura, treated successfully by free incision, after the failure of repeated tapping, and the interest his paper excited when read at the Medical Society of London, induce me to send the notes of a case very similar to his. My case occurred in 1882, and was recorded in a thesis presented by me to the University of Edinburgh, from which I have made the following extract:

E. A. L., aged 23, residing at West Hartlepool, was first seen on February 7, 1882. The patient, a thin, pale, delicate-looking little woman, was unable to lie down because of difficulty in breathing. Her feet were swollen. The temperature was 100.6 deg. F; the pulse was 96 when she was lying quiet, but ran up to 120 when she was disturbed. In the abdomen a large apparently multilocular ovarian tumor was discovered; and the right chest was found to be dull all over on percussion. Breath sounds, vocal resonance, and vocal fremitus were absent.

The abdominal swelling had commenced with what, from her description, was an attack of peritonitis seven months earlier, and three months afterward her abdomen was tapped by her medical attendant to relieve difficulty in breathing. A large but unknown quantity of clear fluid was removed by the tapping, with some relief, but the abdomen rapidly refilled.

On February 9, 1892, I tapped her abdomen and obtained

four gallons of the glairy fluid commonly found in ovarian cysts. The tapping relieved her, but dyspnoea at night was still troublesome.

On February 11, I aspirated the right pleura and withdrew the needle when 25 ounces of clear fluid had escaped. For two nights she was relieved; then the dyspnoea returned. On February 14 I aspirated again, slowly withdrawing through a small needle $4\frac{1}{2}$ pints of fluid. The chest rapidly refilled, and by February 28 the dyspnoea had returned, and the right chest appeared to be full again. I then decided to try if I could gain on the fluid by repeated small aspirations, and removed one pint of fluid. On March 2 a second pint was aspirated; on March 6 a third pint, and on March 10 a fourth pint. On March 12 the chest seemed to be as full as ever, and the patient was steadily losing ground from fever, night sweats, the frequent tappings, and inability to eat.

On March 14, 1882, with the antiseptic precautions practised at that time, under the carbolic spray, and without any anæsthetic, I made a free incision into the pleural cavity in the middle axillary line, and inserted three inches of large-bored India rubber drainage tube. Fluid rushed from the tube during its escape. On several occasions, fearing that so sudden an emptying of the cavity might cause serious disturbance, I restrained the flow. The patient, however, only felt relief, and made no complaint of pain or discomfort, except a weak sensation. Large antiseptic dressings (carbolic gauze) were applied, but in spite of frequent change and liberal use of gauze the dressings were continually soaked during the first five days. For the first two days the tongue was dry and the temperature 100 deg. at night, otherwise there was no constitutional disturbance. On the sixth day after drainage the discharge suddenly ceased, and the dressing was for the first time found to be almost dry. From the sudden cessation of discharge I feared the tube might be blocked, but, on removing it, I found its lumen patent. A director passed into the pleural cavity also showed that it was empty. The percussion note at this time was tympanitic all over; there was a complete pneumothorax. The tube was introduced and retained for two days longer, when it was finally removed, as there was no discharge from it. The patient steadily gained ground for a fortnight, at the end of which there were no physical signs of any chest derangement, except slight impairment of the percussion note and some weakening of the breath sounds.

The abdominal swelling now began to be troublesome again, and a week later I performed ovariectomy. The opera-

tion was a difficult and severe one from dense adhesions to the parieties in the left lumbar region and the patient died half an hour after being put into bed. No *post-mortem* examination could be obtained.

REMARKS.—Before performing this operation I had seen Sir Joseph Lister open and drain knee-joints distended by fluid with success. This experience gave me confidence, and the result justified the means, for I have as little doubt as it is possible to have in the absence of a *post-mortem* examination that my patient's chest was well when she died. I have since always thought that an aseptic opening into the pleura was free from danger, that the proper surgical treatment of pleural effusions which resisted a moderate amount of tapping was to have them incised, drained, and dressed by a careful surgeon; and my strong impression is that no present-day surgeon would be found unwilling to do as was done in Dr. West's case or my own.—*British Medical Journal*.

ANTICANCEROUS SERUM.

Emmerich and Schall (*Deutsche Med. Wochenschrift*, No. 17) inject serum taken from the blood of a sheep. The animal, having been previously inoculated with the erysipelatous streptococcus, is bled, and the blood thus obtained, when passed through a Chamberland filter, is ready for use.

The dose varies from $\frac{1}{2}$ to 25 cubic centimeters, given every day or every other day, depending upon the size of the tumor and the reaction that occurs. The usual dose, however, varies from $\frac{1}{2}$ to 4 cubic centimeters, and causes no pain. When larger quantities are injected, pain may continue for a few hours.

Fever following an injection is rare, and it never goes very high, even after very large amounts are employed.

Locally, the reaction is spoken of as a pseudo-erysipelas, which disappears in from twenty-four to forty-eight hours. Seven cases were treated by the authors, and the results were satisfactory, though time enough has not elapsed to say if the case is complete or permanent.

Sero-therapy for the cure of cancer finds its best indication in the recurring tumor following the employment of the knife.—*La Tribune Médicale*, May 22, 1895.

MEDICINE.

LEPROSY AT THE CAPE.

The final report of the Cape Leprosy Commission has recently been presented to the Cape parliament. According to the census of 1891 the total number of lepers in the colony, including Griqualand West and the native territories, was 625, or 4.77 per 10,000 of the population, and of these 366 were males and 259 females. Fifty-one of the cases were Europeans or white, and of the remaining 574, 532 were born in the colony, 41 in extern Colonial Africa, and 1 in Asia. Of the 51 white lepers, only 4 were born out of the colony, and these had become diseased after their arrival in South Africa. The disease was most common among the Hottentots, the mixed races showing the next largest proportion, then the Malays and the Fingoes, and lastly the Kaffirs and Europeans. In January, 1895, the total number of colonial lepers officially known was 1177, but it is believed that there are still more. The disease is thus showing a steady increase among the native races, as it is also among the whites.

With reference to the communicability of leprosy the commission point out that, admitting as the most probable theory its spread by contagion, the chances of becoming inoculated are greater in the family circle, especially in South Africa, where family ties are strong, the close intercourse of relatives the prevalent custom, and hygienic precautions are to a great extent neglected. Living in crowded numbers in small houses, occupying the same bed, using the same utensils, dirty habits, etc., and the general belief that leprosy is a "visitation of God," all tend to the spread of the disease by contagion, and thus to a great extent may be explained the fact that leprosy runs in families. The theory of the communicability of the disease appears to be the only one which can satisfactorily clear up every point in connection with the gradual spread and gradual decrease at different epochs.

As regards the promulgation of leprosy by vaccination, no single instance was met with or brought forward where it was asserted that leprosy was caused by vaccination, and no distinct evidence could be adduced to show that it could be so caused. From the official returns the proportion of lepers per 10,000 was 1.35 for Europeans, 5.04 for Malays. Now the latter, being Mohammedans, do not submit readily to vaccination, and a large number of them are unvaccinated. Moreover, the proportion of lepers among the Hottentots and Fin-

goes in the native territories, where vaccination is only sporadic and partial, is much greater than it is among those at the Cape, where vaccination has been practised for a longer period and much more thoroughly. Leprosy, indeed, is least prevalent among the most vaccinated people—the whites—and most among the least vaccinated—that is the native and other races of the native territories. It is also pointed out that when arm-to-arm vaccination is practised the lymph is taken from healthy infants. For practical purposes, therefore, there can not be the least fear that leprosy is likely to spread by means of arm-to-arm vaccination, even in the hands of careless and inexperienced vaccinators.

The commissioners have come to the conclusion that there is no proof of the direct hereditary transmission of leprosy, and are further of opinion that a hereditary predisposition can be adduced, if at all, only in a very small number of cases.

As regards the marriage of lepers, the report shows that leprosy does not produce sterility in all cases. Conjugal intercourse therefore should not be permitted between the leprous and the healthy, and only after the child-bearing age is passed, when both husband and wife are affected.

A careful inquiry was instituted by the commissioners into the alleged cures spontaneously or by treatment. Of 72 such cases only 6 could be looked upon as having the disease arrested. For practical purposes the commissioners consider that when a case of anæsthetic leprosy has remained inactive for two years it may be regarded as one of "temporary arrest," and that when no fresh symptoms appear for a further period of three years it may be looked upon as permanently arrested. They are of opinion that the former class may be entitled to their liberty under certain conditions.

The commissioners have come to the conclusion that all the recommended remedies for leprosy are of no avail, and that leprosy is an incurable disease so far as medicinal treatment is regarded.

The report strongly urges a modified system of segregation. There should be compulsory notification in every case of leprosy by the householder or occupier and by the attending medical practitioner. The isolation should be effected either in asylums, licensed houses, private dwellings or in leper villages or locations. An asylum should at once be provided on the mainland in the western district, and another subsequently in the eastern district. The asylum of Robbin Island should be temporarily maintained for the pauper class and for those unable to comply with the regulation as to isolation in their own homes. Those should also be sent to Robbin Island who do not conform to the regulations.—*British Medical Journal.*

TAKA DIASTASE.

By FERDINAND LASCAR, PH. GR., Pathologist to the Demilt Dispensary, Etc.*

In the human system a continued waste takes place which it is necessary to provide for, and to this end man partakes of food which must contain the elements for this purpose. To bring such food products into proper form, so that they can be assimilated and taken up in the system, the digestive organs perform their functions, and these are of a mechanical and chemical order. The food needed is both animal and vegetable in nature, the latter forming by far the greater and more important part. It can truly be said that upon the proper digestion of his food man's health, happiness and very life depends, and progressive science has fully demonstrated the unerring truth of this. Any irregularity or fault in the process of digestion very soon becomes manifest, malnutrition and ill health follow. As the food man partakes of is twofold, so is the process of digestion a twofold one, animal and nitrogenous foods needing an acid, while vegetable starchy foods need an alkaline process to bring them into a soluble form ready for assimilation. The general idea about faulty digestion is that the stomach performs its duties improperly. While this, in very many instances, is undoubtedly so, the fact is, nevertheless, that in the greater number of cases of impaired digestion improperly performed processes of other organs are at the bottom of the evil in failing to properly convert the starchy food partaken of.

The changing of amylaceous food into dextrose and maltose is the beginning of digestion. All will have observed that bread, crackers, or potatoes, not being sweet in themselves, very soon become so when masticated and thoroughly mixed with the saliva in the mouth, and that their taste becomes sweeter the longer this is continued. This sweet taste is due to the conversion of the hydrated starch by the action of the saliva upon it, the saliva containing an enzyme called ptyalin, which, by its presence, splits up the starch into soluble products which I will mention later on, and this splitting-up process of the starchy food even continues after it has left the stomach. Animal foods needing the acids which are found in the stomach are digested there, but acids materially interfere with the action of enzymes which cause the conversion of starch, even destroying such action altogether. For this reason it seems practically incorrect to say that the conversion of starch continues after it leaves the mouth; but nature has provided

[*Mr. Lascar is well remembered by his old friends as one of New Orleans' foremost chemists and pharmacists.—ED.]

against a too soon interference of acids, because it is now well understood that acid, especially hydrochloric acid, is secreted in the stomach a considerable time after the food has arrived there, and this may be one of the reasons why the converting of starch continues after it has left the mouth.

Since medical science has thoroughly grasped the philosophy of digestion, it has been the aim by artificial means to supply the enzymes which digestion calls for when they do not appear to be present in a sufficient quantity or are secreted in less potent form by the digestive organs. Science has succeeded fairly well in supplying gastric and pancreatic ferments when nature lags behind; but our success has so far been only a very partial one in supplying starch-converting substances, and for this reason a new and seemingly valuable discovery in this direction at once becomes interesting.

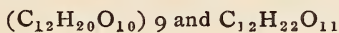
That diastase has an identical action with ptyalin upon starch is a fact long known, and for this reason the diastase contained in malt has been employed for this purpose. Diastase is contained in a lesser or greater extent in the different extracts of malt, and in minute quantities also in fermented malt preparations. In the latter the diastatic action, however, is generally totally destroyed by the acids present. Even in the best extracts of malt there is only a limited and variable amount of diastase present; and while the extract of malt will continue to play an important *role* as a dietetic agent, its utility as a starch-converting agent will always remain a limited one. From time to time pure diastase has been offered to the profession, but none has so far proved of a sufficient potency to recommend itself to general use. Great progress in this direction is the discovery of Mr. Takamine, a chemist of no mean ability, who acted as one of the commissioners of Japan at the Cotton Exhibition in New Orleans several years ago. At that time he showed me an extract of malt, as manufactured in Japan, very rich in diastase and nutritive properties, and which I have mentioned in a paper on the diastatic and nutritive properties of malt extracts, published in the December number, 1891, of the *Epitome of Medicine*. In that paper I warned against too great heat in the manufacture of malt extracts, as heat impairs, and even is liable to totally destroy, the diastatic action. The avoiding of all undue heat in preparing diastase may be one of the reasons why the diastase which is now manufactured by Parke, Davis & Co., under Mr. Takamine's discoveries, is so perfect in its action in converting starch into maltose and dextrose. His product is a dry powder similar in appearance to some I received from a reputable German firm years ago, but is vastly superior in potency. Since the receipt of this Ger-

man preparation I have frequently had occasion to experiment with various diastases, some being named vegetable ptyalin, but in no instance have they come up to the desired standard, and failed to fill the void felt for an enzyme which will accomplish what the enzyme of saliva in a healthy individual does accomplish.

In comparing notes of experiments lately conducted with taka diastase, other available diastases, and different extracts of malt, I find that the claim of the taka diastase that it will convert a hundred times its own weight of starch into a soluble state is well authenticated, for I have succeeded in converting even 50 per cent. more of starch than is claimed for it. Another point in favor of taka diastase above other similar products is the quickness of its action upon starch, for the action is almost instantaneous. To convert one hundred parts of starch into a soluble state by the action of one part of taka diastase, under proper conditions, it takes only four minutes until neither iodine test nor the microscope can detect unconverted starch. The product of converted starch with Mr. Takamine's taka diastase is to a great extent maltose. Compared with the time required by the best extract of malt to convert starch, this is certainly an excellent showing, for it took the best malt extract between seven and eight minutes to convert its own weight of starch into a soluble state, while with some other extracts of malt it took fifteen, twenty and thirty minutes to partially accomplish this end. Tests with Fehling's solution to ascertain in the converted starch products the amount of contained sugar therein were equally favorable to taka diastase.

In converting starch into a soluble state by the action of diastase, the rearranging of the molecules of starch is understood to be as follows:

Starch ($C_{12}H_{20}O_{10}$) 10, plus water, H_2O , are first formed into erythro-dextrose and maltose.



By the continued action of diastase further hydration of the erythro-dextrose takes place.

The erythro-dextrose further splits up into erythro-dextrose- β and maltose, the ultimate result being a small amount of dextrin (ancho-dextrose) and eight or nine equivalents of maltose. Since Leuch's discovery of the specific starch-converting property of saliva and its ptyaline, we have lacked an agent of sufficient potency to accomplish what good healthy saliva does, and, for the first time, we find in taka diastase a substitute of undoubted worth, which, even in the presence of a minute quantity of acid, does not cease to be

potent. The ptyaline in saliva is present there in a neutral or weak alkaline state, and for this reason it suggests itself that diastase, being an analogue with the former, acts also at its best in such a state, and is incompatible with acids. I employed in the greater number of my experiments with diastase carefully washed arrow-root, a perfectly bland and neutral starch; but I found that starches giving a slight acid reaction on blue litmus were equally well converted by taka diastase. In testing diastase as to its potency, I would recommend that the iodine as well as the copper tests be employed, and that undue employment of heat under all circumstances should be guarded against, as heat, as already mentioned, destroys the action of diastase.

Taka diastase being a dry powder, tasteless and of no perceptible odor, can be given in very small bulk, and for this reason I think it will prove itself of value in infant feeding, where it is desirable to give starch-containing foods, provided said food would easily dissolve and the infant's saliva could be relied upon to perform that function. That the new diastase is destined to become a favorite with the profession I have no doubt, having acquainted myself with its potency in converting starch in a minimum of time into a form ready for absorption by the system, and I think it will be found the very remedy for which we have waited so long.—*Therapeutic Gazette*.

TYPHOID ANTITOXIN.

Peiper and Beumer (*Wiener klin. Rundschau*, May 12, 1895), at the Congress for Internal Medicine at Munich, referred to their earlier experiments, which showed that the toxin of typhoid cultivations is contained chiefly in the bacilli themselves, for after passing a cultivation through a Chamberland filter the filtrate was less virulent than before. The bacilli are killed, without damage to the virulence of the cultivation, by warming for an hour at 55 to 60 deg. C. Their recent experiments show that by repeatedly injecting small quantities of virulent cultivations into sheep, antitoxic substances are formed in the organism which prevent the poisonous action from showing itself. The action of this antitoxic serum depends on its power of destroying, not the bacteria, but the poison. By injecting previously or at the same time antitoxic serum, mice and guinea pigs were protected with certainty against double or treble the fatal dose of virulent cultivation, and even if injected with the antitoxin one to four hours after the fatal dose was given, they could be cured.—*British Medical Journal*.

THE EARLY DIAGNOSIS OF TYPHOID FEVER.

Typhoid fever is one of those acute, infectious diseases which is most prone to an atypical course, which lasts longest, and for which responsibility weighs heavily on the physician on account of its attacking usually young persons, with their deep interests in life.

During all this morbid evolution, which is often so tortuous and deceiving, one will be under constant surveillance and be strictly judged. Therefore, have a care not to utter a word that may conflict with your ultimate diagnosis and never appear surprised; for the interest of the patient requires the physician to possess the full confidence of his friends.

It is true that the diagnosis is ordinarily easy and the treatment fixed by rule; but the disease may burst upon one at any time, and find him unprepared. On the contrary, if early appreciated, the disease may often be kept within bounds and be led on to a favorable issue. Therefore study carefully each case of typhoid fever which you may meet, and even if fortune forsake, you will be assured that you are worthy of the mission confided you.

How does typhoid fever begin? Here is the first stumbling block, and not the least embarrassing of a medical career. The problem is often very difficult to solve. First of all, I would have you keep in mind that it is rare that typhoid fever begins suddenly with chills and fever, and that it is not a disease with a violent beginning as pneumonia, erysipelas or scarlatina, but that usually it develops in an obscure manner, and only little by little, after an undecisive course, does it assume a definite form.

When the pathogenic microbe has penetrated into the intestine it is not in the midst of an ideal culture medium as in the laboratory, but the field is already occupied by other germs, which, to employ Metchnikoff's expression, act either favorably or unfavorably upon its development. Decreased or increased in morbid power by this first conflict it invades the organism which reacts and resists in a different manner according to the age, social standing, constitutional predispositions, former hereditary weaknesses, etc. From these proceed the differing variations of typhoid fever. Generally typhoid infection of the organism, whatever may have been the initial condition, reveals itself at a given moment by a thermic evolution, with a definite cycle, in three stages which are quite distinct: first, a stage of ascending oscillations; second, a stage of stationary oscillations; and third, a stage of descending oscillations. This is called

Wunderlich's temperature curve. But this tracing is not exactly parallel, for before the invasion of the organism, the disease undergoes a preparatory elaboration which is performed in absolute silence or with badly characterized signs.

Therefore, it is convenient to admit in this period of incubation—in this propyretic stage, as Gueneau de Mussy calls it—a first phase which is absolutely latent, and a prodromic period, properly called, which is marked by the first appearance of malaise, and even by a slight and irregular febrile movement. I shall tell you later that it is exceptional that one is able to obtain a complete tracing according to Wunderlich, and especially if one attempt to discover the first elevation from a complete state of apyrexia. These are the signs which should be first tracked out and of which the exact interpretation should be made. This prodromic period represents, on a small scale, a typhoid fever which is germinating and extending. You have been able to form an opinion from the eleven cases of typhoid which we observed during the last six months. Let us take as a type the young clerk who lies in the sixth bed of the Magendie ward.

Aged 20 years; he has only been living in Paris for eighteen months, and has always been in good health. At his entrance into the hospital he had been sick for about a week, he having been seized toward evening one day with a feeling of weakness and with pains in the muscles upon the least effort. The next morning he felt somewhat better, but soon his usual work became too much for him; his sight became dim, his mind confused, and for a short time he fell into a sort of stupor, after which he returned to his work. It was not long before he commenced to complain of his head, roaring in the ears, dizziness and chilliness. He staggered in walking, and he was forced to leave his work before the usual hour. He went to bed feeling sore, depressed, restless, and slept but little or none at all. He was entirely without appetite, with a bad taste in his mouth and a pasty coating on his tongue. He had had at the beginning alternating constipation and slight diarrhœa, with some colic. The patient thus tried for six days to keep at his work, but on the seventh, finding it impossible, he entered our service. We found his mind clear, and about in the condition of the preceding days, which he described to us with precision. The rectal temperature, on the evening of his admission, was 37.6 deg. C., the next morning 37.2 deg. C., that evening 37.2 deg., the morning following that day 37.4 deg., and that evening 37.8 deg.

From this moment it increased progressively, to attain four

days after 39.4 deg. in the morning and 39.9 deg. in the evening, at which figure it remained, with variations of some tenths of a degree for twelve days, when it began to descend and finally entered into the apyretic period, during all of which time the characteristic symptoms of the disease developed.

The prodromic stage had lasted eight days and had presented the appearance of a shortened attack. You will remark that he has had no epistaxis. Epistaxis is an expressive and habitual sign of the beginning, but it is neither constant nor pathognomic. It is also observed at the beginning of other infectious acute diseases and again it may frequently be lacking. Thus, out of the twelve last typhoid cases we have observed it but five times. The statements of the patients should be received with caution, for we can not always confirm them by those of the family. Therefore, ordinarily, the prodromic period is not characterized by anything localized nor conclusive; hence, here is the first difficulty.

You are called, for example, to a young man or a young lady whose health has been sensibly disturbed as in the case I have just related you. The parents are anxious; the parents are always ready to think their children attacked by typhoid fever, for they know that at their age they are particularly liable to be attacked by this disease which has still a feared name. Therefore, they are all anxious and press you. They call you aside and put you through the same list of questions. What is it? Is it not the typhoid fever? Now, it is most frequently at this period impossible to give a decided answer. At all events, do not pronounce the word typhoid fever until absolutely certain of the diagnosis. Do not become frightened too soon and especially without cause. The friends will not pardon you for such a cruel error.

Therefore, examine your patient very carefully and attentively; be prudent and reserved. The case is possibly that of a candidate for an examination for a concours; possibly that of a workman who has been overworked or undergone privation, or that of a high liver who has given himself up to excesses. Think also of a gonorrhœa which might have been concealed. The patient is perhaps of a consumptive parentage and you are in the presence of one of those cases of tuberculosis with an insidious beginning which bear the impress of typhoid fever. The case may be again that of a young girl who has been affected by violent emotion. Is it hysteric fever?

The patient is in the midst of an epidemic of grippe or typhus fever. Is it either of these? Remember that sometimes in tuberculosis the initial manifestations of syphilis are

preceded by a germinative phase which is analogous to that of typhoid fever. You will call to mind each of the morbid states mentioned and remember how their respective beginnings differ from that of typhoid fever. Hold in mind, besides the time which the patient has been living in Paris, or any other large city, the season, the coexistence or not of an epidemic of typhoid fever. Find out if he had the disease before, for recurrences are very rare, though possible.

In spite of all this it will be frequently more than once difficult for you to fix your diagnosis. Ordinarily, it must be admitted, the hesitation will not last long; the characteristic symptoms are not long in appearing, but often also the prologue will be very long, and your indecision and embarrassment will increase. Therefore, you must know the possible duration of the prodromic period, for it may be very variable. During the two years which I was interne at the Hospital Cochin under Bucquoy, which then had only one medical service, there appeared one day a young man who did not desire to enter the hospital, but only asked for relief. He complained of being without appetite and feeling weary. Nothing else was to be discovered and he was given a purgative and advised to rest. Several days after he reappeared feeling no better. His appetite and strength were still the same. No appreciable signs of fever could be discovered nor other typhoid signs. He again refused to enter the hospital. Several days later he again returned, but this time dragging himself along with difficulty, and accompanied by a comrade who had brought him in a carriage. His face, the state of his tongue and the fever could leave us no longer in doubt; it was typhoid fever.

As he had first been seen ten or fifteen days before, for the first time, one would think that he was at least at the end of the first week of his disease, having had at the beginning a *levissimus* or *ambulatorius*. Yet at the first examination in the ward we were able to find neither sibilant rales in his chest, nor the rose-colored "rash" upon his abdomen. His temperature did not go above 38 deg., and it continued to rise for two or three days, when the rales were observed and soon after the characteristic "rash."

The patient was therefore only at the second, third or fourth day of his disease and the preceding days of malaise represented the germinative or prodromic stage, which is usually only four to six days. Now out of twenty cases where I have been able to note the prodromic period precisely, which was generally from four to six days, I have found seven where it lasted from fifteen to twenty days, and further observation

was able to prove that the ultimate course was not due to relapses but was marked by the grand characteristic lines and episodes of a typhoid attack. During these two years, where the conditions for observation were especially favorable, I have not been able to obtain a complete and tracing of Wunderlich's ideal temperature curve. Either the patients escaped observation during this period or they did not enter until the disease was well developed. Whatever it be, that which I have stated is in accord with the statements of a large number of writers. The prodromic period or that portion of the period of incubation which consists of the first malaise to the setting in of definite febrile symptoms lasts, according to Murchison, from one to several days; Griesinger puts it at two to five days as an average and sometimes even seven or to fifteen days and over; Guéneau de Mussy would fix it at two weeks, on an average, and sometimes even three weeks.

These variations should not astonish you, for as I said before the pathogeny of infectious diseases is subordinate to a multitude of conditions. This organism may be more or less predisposed by former excesses of constitutional defects or the germ may be particularly virulent or associated with other pathogenic microbes. The micro-organism does not present the whole morbidific power, for the individual also plays his part. You perhaps are familiar with the fact reported some time ago by Quincke, of fourteen persons who had, at the time, drunk of water contaminated by the dejections of typhoid patients and who were seized with the disease in eight to ten days after, yet the mode of beginning differed notably.

Thus, in even two or three weeks, it may be impossible for you to make a visible diagnosis, and do not forget how long it is occasionally necessary to wait. During this obscure period you should constantly keep in mind certain facts which will lead you through the difficulties.

In the first place, among the typhoid states without precise localizations which may be confounded with an incipient typhoid fever, you will be able to eliminate also completely, *a priori*, those which set in suddenly, as gastric fever, the grippe, typhus, certain forms of malaria, herpetic and hysteric fever.

In gastric fever vomiting is much more frequent and albuminuria less constant than in typhoid. In the grippe the temperature in the evening of the second or third day reaches 40 deg. and even more; the profuse sweats occupy an important place, while they are exceptional in typhoid fever (except in the sudoral form of Professor Jaccoud). In the grippe, the urine more frequently contains an abundance of urobiline. Yet this disease and typhoid fever may exist in the same

person and develop parallelly. Professor Potain has called attention to this combination of which I have shown you every autumn several examples. With us the epidemics of grippe rage ordinarily in the fall months at about the time when the typhoid epidemics are inclined to diminish, so that our hospital often contains several cases of typhoid and the grippe at the same time. At a given moment it is possible to distinguish in patients the existence of signs common to the diseases, but in the commencement the distinction is by far not marked. Not to withdraw too far from the special point under consideration I shall simply state that usually it is the grippe which begins and even may persist after subsidence of the typhoid fever.

Typhus is to be differentiated not only by the appearance as an epidemic and the greater suddenness of its beginning, but also by the deep stupor which it characteristically produces. You know that for several years it seems to have acclimated itself here, so that it is well to think of it.

There are also continued forms of intermalarial fevers as well as there are typhoids which affect an intermittent type; here the therapeutic test with quinine and the presence of Laveran's hematozoa in the blood will decide. The same holds good in those cases where the two diseases are associated typho-malarial fever.

Herpetic fever, when the eruption is confined to certain regions of the body, especially the genitals, may also simulate typhoid. Therefore, once more let me tell you always to examine your patients as our fathers said *e capite ad calcem*.

In hysteric fever the urine may remain abundant and clear (Hanot et Boix) and present the inversion of the phosphates as pointed out by Cathelineau and Gilles de la Tourette.

Do not forget that acute osteomyelitis usually sets in suddenly with a profound typhoid state without any definite local symptoms; cerebro-spinal meningitis nearly always bursts forth, all at once, with chills and a fever, with an initial temperature of 39-40 deg. from the first day.

Let us now pass on to a second group of typhoid states which set in more insidiously and slowly.

Firstly, there is acute granular tuberculosis where, from the beginning, one observes fine and fleeting rales in the lungs, while in typhoid fever the pulmonary signs only are seen after the thermic curve is definitely established, and then as sibilant rales. If the rales have not already appeared the fever is active in acute miliary tuberculosis, and often presenting the inverse type as described by Brunicke as characteristic of acute tuberculosis and in typho-bacillosis there is a disassociation between the pulse and temperature as pointed out by

Landouzy. Often from the very beginning the pulse in typhoid is slower, while in acute tuberculosis it is accelerated.

Only very exceptionally is acute phthisis to be diagnosed by the discovery of tubercular granulations in the choroid by the ophthalmoscope. Remember again, that acute miliary tuberculosis is much rarer than typhoid. Nevertheless, in a general way, it may be stated that the germinative period of all the great acute infections as tuberculosis, typhoid fever, syphilis, can not be distinguished the one from the other; even phthisis and acute typhoid fever lack special distinguishing signs. At this period bacteriological examination of the blood will not give the result that it will later. Read in this regard the work of Villomin, where the illustrious physician emphasizes the resemblance of acute tuberculosis and beginning typhoid fever; he shows that they appear to be two modalities of the same general infection. Very able diagnosticians have taken a fever which might be called presyphilitic for a typhoid.

When you have passed in review those morbid states which I have enumerated, you might think also of a typhoid state dependent upon trichinosis or farcy.

In 1874, at the Hôpital Cochin, I saw a farrier who had been sent in by a physician in the city, as affected by typhoid fever. The disease had begun suddenly with chills, fever and headache; several days later the characteristic abscesses of farcy appeared.

There are besides acute cryptogenic infections of which the pathogenic microbe has not yet been determined. The clinician will finish by having impressed upon his eye and mind the physiognomy of the general infection, but what is the hidden germ which is destroying the organism? That is the difficulty which only clinical experience can solve, yet it does not always succeed. At other times the typhoid state is subordinate and dependent upon an acute and local lesion which is primary and predominant as in endocarditis, nephritis, typhlitis or meningitis. An attentive examination will enable one to distinguish the cause. You will have observed that during this entire discussion I have not referred a single time to the value of dicrotism of the pulse, enlargement of the spleen, the detection of Eberth's bacillus in the feces, urine or spleen.

Remember that this is only a question of the diagnosis of the disease at the beginning. Now, I can not tell you whether the dicrotism is to be perceived in the prodromic period, or just before the period of ascending temperature, or how much time before. This will vary according to the case. Besides, dicrotism is observed in other infectious diseases, yet it is espe-

cially noticed in typhoid fever. Puncture of the spleen is not a practicable procedure and the bacilli in the feces are said by Chantemesse to be difficult of recognition before ulceration sets in. Besides, the bacteriologists differ on this point. In the feces of typhoid patients, Gaffky, Di Vesica, Pfuhl, Eisenberg, Rodet and Roux, Redtenbacher, etc., never were able to demonstrate by cultures, the presence of Eberth's bacillus; it was found several times by Pfeiffer, Seitz, Merkel and Goldschmidt; Villschour and Karlinski have never been able to isolate it before the second week. Chantemesse says that one will commence to meet with it from the tenth to the twentieth day.

Habitually, in typhoid fever, the spleen is increased in volume, but it is not always so. Last week, at the necropsy of the woman lying in the thirteenth bed of the Grisolles ward, who died on the twentieth day of typhoid fever, during which course we discovered a suppurating thyroiditis containing Eberth's bacillus, we did not find the spleen much enlarged; it weighed 205 grammes, measured ten centimeters in length and six in breadth.

On the other hand, an enlarged spleen is met with in typhus, also acute tuberculosis, the grippe and during the fever preceding syphilis, as my regretted friend Quinquad demonstrated.

In several cases in the prodromic period of typhoid I have observed most frequently I was unable to determine if the organ was enlarged. It must be admitted that an increase in volume of the spleen is not always to be made out; though the German writers often speak of the spleen as easily to be felt, percussion will furnish you with the most precise indications. Professor Peter laid great stress upon the pain provoked by percussion of the splenic region; that is a sign of infection, but is not distinctive. Never forget when you have made out an increase in volume of the spleen, of asking whether the patient has ever lived in a malarial district or has had the malaria, for sometimes this is the only sign of palustral infection.

Since Dr. Vallin's monograph appeared, several cases of afebrile typhoid have been reported where the prodromic stage, the invasion and stage of full development are thrown into one uniform course, without characteristics and not without peril. At the beginning it presents nothing particular, but it must be kept in mind that one does not confuse a feverless typhoid in full blast with a characteristic case having a prolonged prodromic stage. One might easily announce the near convalescence of the case when it is hardly established in its

course, or, possibly, while it is on the eve of a mortal complication. Beware of apyretic typhoid.

I once saw a young chlorotic girl who had been ailing for fifteen days without appreciable fever; she was livid, emaciated, no longer able to be on her feet; she was seized with epistaxis and metrorrhagia. A diagnosis of grave chlorosis from pernicious anæmia was made. Death took place one night, and the necropsy revealed Peyer's patches in the intestines to be ulcerated, with intestinal perforation and subacute peritonitis.

Another time I was called, with three of my colleagues, to a lady aged about 60, who had lost a daughter from typhoid fever. After her death she fell into a state of profound depression, which was thought due to her sorrow. She was abed, motionless and pale. It was a question whether she was not affected at the same time as her daughter, who lived with her. But the rectal temperature never reached 38 deg. C.; besides we could not discover any "rash," and a very thick layer of abdominal fat prevented an examination of the spleen. We, therefore, hesitated at a diagnosis when a mortal hemorrhage from the intestines put an end to the disease. In typhoid fever without elevation of temperature all chronological distinguishing features are wiped out, and we are obliged to wander about without a guide.

I have shown you the first difficulties which will present themselves to you. Though the prodromic stage may be prolonged, it may, on the contrary, last but a few days. The condition of the patient aggravates the weakness, increases, headache remains intollerable and is often accompanied by epistaxis; to be about becomes impossible, diarrhœa appears, the nights are passed without sleep and restlessly with some delirium, the fever rises, the pulse becomes dicrotic, the tongue dry, the belly tympanitic, the spleen swells and albumen appears in the urine. The picture is then characteristic, especially, as I repeat, if it be a young man or a young girl who has but a short time before come to Paris and an epidemic is raging. I emphasize these words, *young man, young woman*, for, according to the age, the picture will change.

Thus in children, on account of the particular sensitiveness of the nervous system, the disease often begins with delirium and convulsions which might lead one to think of a meningitis, or by abdominal pain and vomiting, which might induce one to diagnose peritonitis. In old persons the commencement is often insidious, most generally without headache,

without epistaxis, with abdominal symptoms and almost without fever.

Even in the ordinary cases of the young man and the young woman one may encounter another difficulty. Sometimes the disease will begin with a maximum of concentration of the morbid agent or by a localization in some other region than the intestine, a sort of heterotopia.

In several cases reported by Drs. Jaccoud, Dugued, Lecomché, the affection began by a tonsillitis, and it was only later with the appearance of characteristic symptoms that it was recognized that a masked typhoid fever was developing. I had seen just such a confusing case during the last year of my time as interne, and the circumstances remain graven in my mind.

One of my friends was seized with an intense tonsillitis; nevertheless, he continued at work in the hospital. For about two weeks we saw him pale and wan, stretched out every afternoon in the easy chair of the watch-room taking with difficulty a few teaspoonfuls of porridge. He only complained of his throat, which seemed to explain everything. Finally, unable to bear up longer, he left Paris to go to his parents. The same day of his arrival there, after the first meal with his family, he died of intestinal perforation.

At other times it is pneumonia which opens the scene. Professor Potain, in his lectures, has pointed out the mode of its beginning. Gerhardt and Lépine have also published several cases under the name of pneumo-typhoid. I have also recorded a typical observation in 1884, in the thesis of Dr. Mulette. In a case reported by Dr. Lecomché, a pleurisy seemed to have been the initial phenomenon. Besides, do not forget that cerebral symptoms may burst forth with great violence during the first days under the form of mania. Patients have been sent to asylums for maniacal symptoms which masked a typhoid fever. Soon the disease was manifest enough, while the mental complication went on to decrease or disappear. Take care not to fall into such an error which may be so disastrous in many ways. Quite a while ago I observed two cases of typhoid fever commencing by melancholy and delirium de grandeur. You may find them in Dr. Barbelet's thesis (1874). One of these was a young woman who accused herself of having drowned her two children, groaning without cessation and demanding mercy; the other was a man who thought himself director of the opera and distributed tickets to boxes to those about him. These two patients had been sent to Sainte-Anne Asylum where the diagnosis was rectified a little later. Dr. Bucquoy and I, in our monograph

on the delirium of typhoid fever, have treated of these pseudo-maniacs of the beginning of typhoid fever.

Without having exhausted the subject of typhoid fever, I think I have dwelt long enough on the subject to teach you prudence and reserve.—*Medical and Surgical Reporter*.

GYNECOLOGY AND OBSTETRICS.

ANTISEPTIC METHODS IN MIDWIFERY.

The *London Practitioner* for March, 1895, tells us that at Queen Charlotte's Lying-in Hospital, London, the following antiseptic measures are adopted:

The patient, on admission to the hospital, before entering the labor ward, is washed from head to foot and clothed in garments provided for the purpose.

On entering the labor ward, before and vaginal examination is made, the vulva and surrounding parts are thoroughly washed with soap and water, and, the soap having been removed with plenty of water, the vagina and vulva are irrigated with a solution of perchloride of mercury, 1 in 2000.

The importance of keeping the hands clean and free from scratches, and the nails short, is pointed out. Before any examination is made, any rings worn are to be removed and the hands well washed with soap and water and scrubbed with a nail brush. The hands are then immersed for not less than one minute in a solution of perchloride, 1 in 1000. As a lubricant, vaseline and perchloride (1 in 1000) is used, and the jar containing it is kept permanently immersed in a basin of 1 in 1000 perchloride solution.

When delivery is completed, a warm vaginal douche of 1 in 1000 is given to all patients.

Forceps and other instruments, before being used, are boiled in water in a vessel resembling a fish-kettle in shape.

The solution of perchloride of mercury is made from ordinary tap water, and no acid or other substance is added, except some coloring material.

At the General Lying-in Hospital, London, where the antiseptic methods adopted have met with so large a measure of success, the rules are much the same as those above mentioned. The vulva is cleansed, and a vaginal douche is given before and after delivery.

The lubricant employed consists of glycerine and perchloride, 1 in 1000.

A small quantity of hydrochloric acid is added to the mercurial solution.

At St. Mary's Hospital and at the Manchester and Salford Lying-in Institution the methods are as follows:

The nurses are taught to thoroughly cleanse the hands with soap and water and turpentine, and to soak them in a solution of perchloride of mercury (1 in 1000) for five minutes.

The vulva is always cleansed with soap and water, and then with the mercurial solution, 1 in 1000; but if vaginal evidence of septic discharge exists, as for example in cases where there is profuse leucorrhœa or evidence of vulvitis, a douche is given. It is, moreover, given in cases where operative measures are to be undertaken.

The lubricant to be used is glycerine and perchloride of mercury, one grain to the ounce.

After delivery a douche of perchloride of mercury (1 in 6000) is given in all cases.

At the Rotunda Hospital, Dublin, the following plan is adopted:

The vulva of every patient is washed with soap and then with lysol solution at the commencement of labor. It is believed that this hardens the tissues less than corrosive sublimate.

A vaginal douche is not given either before, during or after labor in uncomplicated cases, nor during the puerperium.

Four vaginal examinations are all that are allowed during the entire course of a normal labor.

The hands are carefully scrubbed with soap and water and a nail brush, and the latter is kept constantly immersed in a creolin solution, and, as an additional precaution, is boiled once a week. All soap having been washed off, the hands are soaked and scrubbed with a special brush for one minute in a solution of perchloride of mercury (1 in 500), to which some tartaric acid has been added.

The hands are not dried before examining, and no lubricant is used under ordinary circumstances. If, however, the hand has to be passed into the vagina, then soap is the lubricant preferred. Carbolic soap is usually employed, but no stress is laid on this, as ordinary soap, when once its surface is melted off by hot water, may be regarded as an aseptic substance.

Before obstetrical operations the vulva is scrubbed with sterilized tow, soap and creolin solution 2 per cent. The vagina is scrubbed out in the same way with soap and the 2 per cent. creolin solution.

Professor Tarnier, late surgeon to the Maternity at Paris, recommends the following plan:

The hands are washed and scrubbed with a nail brush in a solution of 1 in 4000 perchloride of mercury, soap being used. The depression around the nails is cleansed with a wet cloth, and the hands are then washed in alcohol, and are then steeped in a perchloride solution. The advantage of washing the hands in alcohol is that by this means the fatty substances are removed from the skin, and so the antiseptic has a better chance of penetrating.

A vaginal douche of perchloride of mercury is always given before and after the delivery, and the greatest care is exercised in cleansing the vulva.

At the termination of labor an intrauterine douche of iodine and water is given in all cases, the following formula being the one employed:

℞	Tinct. iodi.....	ʒi.
	Potassi iodidi.....	ʒiss.
	Aq. destill.....	Oii.
	Ft. lotio.	

Instruments are sterilized in a specially devised dry-heat sterilizer.

The following solution, known as Van Swieten's fluid, is the preparation of mercury which is employed:

℞	Hydrarg. perchlor.....	1 part.
	Alcohol.....	100 parts.
	Aq. destill.....	900 parts.
	Misce et ft. lotio.	

This lotion is diluted with four times its bulk in water before use, so that the strength becomes 1 in 5000. He believes that this is less tonic than mercurial solution made with tartaric acid.

Professor Winckel, of Munich, recommends the following:

The genitals should be washed with a 3 per cent. solution of carbolic acid, and then dried with salicylated cotton-wool.

He considers that vaginal injections before delivery are not necessary in all cases, but when given carbolic lotion of the strength mentioned above should be used.

The hands and arms after washing should be soaked either in a 3 per cent. solution of carbolic acid or a solution of perchloride of mercury, 1 in 1000.

It will be observed that the methods described above admit of being divided broadly into (1) methods for disinfection of hands and instruments, and (2) methods for disinfection of the patient. It is universally acknowledged that the preliminary and most essential step is to thoroughly cleanse the hands with hot water, soap, and a nail brush, and after this

has been done the hands are immersed in an antiseptic solution for at least a minute, this immersion being repeated before every subsequent examination of the patient. It is difficult to enforce an immersion of longer than a minute. The most widely used of the modern chemical antiseptics is perchloride of mercury, and for the hands nothing better can be desired. It is a powerful germicide, it is portable and it is cheap. A solution of from 1 in 1000 to 1 in 2000 is commonly employed, although Tarnier and Vignal have shown that the streptococcus is destroyed as easily by a solution containing 1 in 5000 as by one containing 1 in 1000. If mixed with ordinary tap water, the lime salts which are present in solution react upon the perchloride of mercury, and some of it is thrown down as an insoluble oxide; so that, if no precautions are taken to prevent this, a certain amount of perchloride is lost. If, however, a solution of the proportion of 1 in 2000 be used, the amount of perchloride precipitated by the lime salts in the water will probably not be sufficient to seriously interfere with its efficiency as a germicide, always supposing that the solution is freshly made. To prevent the partial decomposition of the perchloride, distilled water has been used, or, failing this, various substances have been added which counteract the effect of the lime salts and render the solution of perchloride stable. A solution of perchloride of mercury in distilled water could hardly be employed, except at a lying-in hospital, and even there it would involve considerable trouble and expense, so that the other plan of rendering the solution stable by the addition of certain chemical substances to the water is more generally used. Of these substances, tartaric acid or chloride of sodium are the most convenient, the amount added being double that of the perchloride. In hospital practice it is customary to have a concentrated acidified solution of the strength of 1 in 200 made; but for use in private practice powders having the following formula may be carried:

℞ Pulv. hydrarg. perchlor.....gr. x.
 Pulv. acidi tartarici.....gr. xx.
 Cochineal.....gr. i.
 Misce et fit. pulv.

One of the powders added to a quart of water makes a solution of 1 in 2000. Chloride of sodium may be substituted for tartaric acid, and tabloids containing chloride of sodium and perchloride of mercury are now sold, and are very easily carried. The addition of some coloring matter is advisable, as the solution has neither taste nor smell. It must be remembered that a solution thus prepared is rendered inactive by admixture with soap or any albuminous material, so that the

hands, if soiled with blood or other discharges, should be thoroughly wiped before being plunged into the solution. If, however, care be taken, a solution prepared at the commencement of labor will last until the termination of it. The chief advantages which perchloride of mercury possesses over carbolic acid as a disinfectant for the hands is its greater portability and greater cheapness. There are numerous other antiseptics which are used for the hands, but of these it is unnecessary to speak, because none are so simple, so easily managed, and so effective as perchloride of mercury. To disinfect the forceps, the simplest plan is to boil them. Metal instruments should not be placed in a mercurial solution, as metallic mercury is deposited on them, which not only weakens or destroys the germicidal properties of the solution, but also dulls the surface of the instrument.

At all lying-in hospitals the importance of cleansing the vulva is recognized, and the method of doing it does not vary very widely. Washing with soap and water, followed by thorough swabbing with a solution of corrosive sublimate, is the best plan, and the nurse should be instructed to do this as soon as labor sets in. It is obvious that unless this is done, microbes, either putrefactive or pathogenic, will be introduced into the vagina, although every care has been taken to disinfect the hands. During the course of the labor the vulva should be sponged from time to time with cotton-wool soaked in the antiseptic solution. The necessity for the routine employment of an antiseptic vaginal douche at the commencement of labor is not universally recognized, and, though it is used in many, it is not used in all lying-in hospitals, unless special indications are present. At any rate, the routine disinfection of the vagina is much less essential than the routine cleansing of the vulva, because in the former situation pathogenic microbes are rarely met with, whereas in the latter situation such organisms are common. The employment of a vaginal douche would, therefore, seem to be to a large extent optional, though it may be pointed out that, besides the additional safety which it offers the mother, it possesses the fourth advantage of dismissing the risk of purulent ophthalmia in the infant.

In lying-in institutions, where the patient is often examined by more than one person, the use of an antiseptic douche after delivery is completed is a wise precaution, but in private practice it can not be regarded as necessary, especially if the examinations made have been few and the labor has not been instrumental.

The lubricant used is either vaseline containing perchloride of mercury in the proportion of 1 in 1000, or glycerine con-

taining the same substance in the same proportion. Vaseline is a much more efficient lubricant than glycerine, and its only disadvantage is that, being insoluble in water, it is not easily washed out of the vagina afterward; but, if only small quantities are used, this is a matter of no importance. In many cases it is quite unnecessary to use any lubricant at all, and under no circumstances should lard or such like material be employed. It becomes apparent, on considering the details of the antiseptic methods of midwifery, that the two fundamental points are thorough disinfection of the hands and thorough disinfection of the vulva. To these two all the other details are subsidiary, and are to be regarded as additional precautions—precautions, it is true, which in many cases can not afford to be neglected, but still of distinctly secondary importance. Attempts to make antiseptic methods too complicated and too elaborate often end in their being discarded altogether, with the result that the patient is exposed to grave risk, either of death or serious and protracted illness.

Although many will be at once inclined to agree that precautions such as these are right and easily managed in lying-in institutions, yet how to carry them out in private practice is a matter of much greater difficulty. We would suggest the following routine procedure, which is not unnecessarily complicated, and is easily carried out if a competent nurse is in attendance. Before full term is reached an order should be given to the patient to procure a packet of absorbent cotton-wool, an ounce of sublimated vaseline (1 in 1000), and twelve powders prepared according to the formula given above, or, if preferred, at least two quarts of carbolic lotion (1 in 20). The nurse is instructed that, as soon as the labor pains begin, she is to wash the patient's vulva with soap and water, and then thoroughly sponge it with cotton-wool soaked in the antiseptic. A fresh supply of the antiseptic solution is then to be prepared and placed on a table by the side of the patient's bed, together with the jar of vaseline, so as to be in readiness for the doctor when he arrives. Before making any examination the hands are washed with soap and water and then immersed in the antiseptic solution at the patient's bedside. The vulva should be sponged from time to time with pledgets of cotton wool soaked in the antiseptic.

After labor is over, and during the puerperium, three basins should be placed side by side on the wash-stand and permanently kept there. The first is to be used for washing the hands in when necessary; the second is used to contain a solution of perchloride of mercury, which is freshly prepared

each morning by the addition of one of the powders to a quart of water. The third basin likewise contains a solution of the perchloride, and in it are kept the glass vaginal tube and catheter; but, if douching is not employed, the third basin is not necessary. The nurse is instructed to soak her hands in the solution contained in the second basin before doing anything for the patient which involves contact with the genital organs. If this plan is insisted on and explained to the nurse, there is no reason why in most cases in private practice antiseptic precautions should not be carried out as efficiently as within the walls of a well-managed hospital.

It should never be forgotten that all the knowledge of the accoucheur goes for nothing if he be not imbued with the antiseptic method.—*Therapeutic Gazette.*

Book Reviews and Notices.

Pathology and Treatment of Diseases of the Skin. For Practitioners and Students. By Dr. Moriz Kaposi, Professor of Dermatology and Syphilis and Chief of the Clinic and Division for Skin Diseases in the Vienna University. Translation of the Last German Edition. New York: William Wood & Co. Bound in extra muslin at \$5.50 per copy, and in leather at \$6.50 per copy.

It has required about five years for the publishers of this work to recognize the importance of an American edition. The value of the translation is nowise affected by this delay, as it has been carefully done, with constant attention to the details of the work. Little or no attempt has been made to do more than reproduce the author's subject matter. The finished production is only accredited in a passing way to the one who has deserved the honor of the work, Dr. J. C. Johnston, of New York. The scheme of the work is that of a series of lectures, each group of lectures exhausting a division of the diseases as classified by the author. The classification of Hebra is followed in the work, with some expanding of the subdivisions by the author. The objective method of the Vienna school is strongly evident in the work, while the pathology and anatomy are amply discussed and illustrated. The work is a welcome addition to publications in English on this branch, and is in strong contrast to some recent editions,

which have lacked the style and finish of the work under discussion. It is unfortunate that a revision of date has not been made in Dr. Kaposi's original edition and in this translation, as the omissions of recently differentiated diseases are quite apparent. Notable among these is the seborrhœic eczema of Unna. Altogether the arrangement of the work makes it far more suitable for a work of reference than for a modern textbook.

ISADORE DYER.

State News and Medical Items.

DR. I. J. NEWTON, JR., of Monroe, La., who was elected president of the State Medical Society in 1888, has removed to Little Rock, Ark. He was chairman of the Committee of One Hundred appointed by the late Dr. A. B. Miles, in 1893, resulting in the enactment by the State Legislature of the present law regulating the practice of medicine. He attended several sessions of the New Orleans Polyclinic, and was a frequent visitor to the clinics at the Charity Hospital. He also visited clinics in other medical centres. The JOURNAL congratulates Little Rock on its new acquisition and wishes Dr. Newton success in his new home.

DR. JOS. S. JONES, of Baton Rouge, La., has been appointed assistant to Dr. C. P. Wilkinson, at the Quarantine Station.

DR. O. B. LEWIS, of Bienville, La., who graduated at the last session of the Gross Medical College, Denver, Col., has returned home.

DR. NUMA HIMEL, of St. James, La., has been appointed health officer, and has been very busy vaccinating the people.

DR. C. B. MCKINNON, a graduate of Tulane, has been appointed to a position at Dry Tortugas.

DR. J. B. McMAHON, of Lake Charles, La., who has been seriously ill, is much improved, and has resumed his practice.

DR. AND MRS. E. A. BARKER, of Plaquemine, La., lost their little daughter, Lilla Edna, aged 3 years, July 2.

DR. A. J. PERKINS, of Lake Charles, accompanied by his wife, was in the city last month.

THE grand jury indicted Phillip Hahn for violating Act 49, of 1894, prohibiting the illegal practice of medicine without having previously presented a diploma to the State Board of Medical Examiners, or without having passed an examination before them.

DR. JOS. MEYER, of Honey Grove, Tex., has removed to Dallas, where he will practise hereafter.

DR. C. W. HILTON, of Monroe, La., is enjoying a much needed vacation at Cooper's Wells, Miss.

DR. F. A. BROWN, of Rayville, La., met with a severe accident lately, by the overturning of his carriage.

DR. BURKETT has returned to Bienville, La., from California, where he went several years ago.

DR. R. O. SIMMONS, of Alexandria, La., was called to Magnolia, Miss., by the fatal illness of his sister.

DR. D. E. LYONS, of Lake Charles, La., has been appointed city physician and sanitary inspector.

DR. C. D. DUCOTÉ, of Cottonport, La., passed through the city recently to attend the graduating exercises at Spring Hill College, where his son was valedictorian of the graduating class.

DR. W. G. BRANCH, of Bunkie, La., was in the city last month.

DR. W. WEATHERSBY, of Wellman, Miss., was in the city with his bride last month.

MARRIED.

LEBEUF—WEAVER.—On Wednesday evening June 26, 1895, at St. Louis Cathedral, by the Rev. Roman, S. M., Dr. Louis George LeBeuf and Miss Zema Hill-Weaver.

DIED.

AT Mississippi City, July 23, Dr. Harry Hayward, aged 35 years, a native of New Orleans.

DR. WM. E. SCHUPPERT, of New Orleans, died on July 9, 1895.

DR. THOMAS HEBERT, of New Iberia, died June 8, after a lingering illness.

MRS. SALLIE A. KENDALL, wife of Dr. Wm. S. Kendall, of Cedarton, La., died at her home May 7.

MORTUARY REPORT OF NEW ORLEANS.

FOR JUNE, 1895.

CAUSE.	White.....	Colored...	Male.....	Female...	Adults ...	Children.	Total
Fever, Yellow							
“ Malarial (unclassified)...	2	11	5	8	8	5	13
“ Intermittent							
“ Remittent	4	2	5	1	2	4	6
“ Congestive.....	4	2	4	2	4	2	6
“ Typho	7	1	4	4	4	4	8
“ Typhoid or Enteric.....	5	5	8	2	8	2	10
Puerperal	3			3	3		3
Scarlatina							
Small-pox		3	2	1	3		3
Measles	1			1		1	1
Diphtheria	4	4	2	6	2	6	8
Whooping Cough	2		2			2	2
Meningitis	16	2	9	9		18	18
Pneumonia.....	13	10	7	16	10	13	23
Bronchitis	6	5	6	5	4	7	11
Consumption.....	39	25	34	30	64		64
Cancer	8	4	3	9	12		12
Congestion of Brain.....	9	6	8	7	10	5	15
Bright's Disease (Nephritis) ...	16	8	12	12	23	1	24
Diarrhœa (Enteritis)	31	16	22	25	19	28	47
Cholera Infantum	11	11	8	14		22	22
Dysentery.....	10	5	10	5	13	2	15
Debility, General	2	1	3		3		3
“ Senile	20	6	8	18	26		26
“ Infantile.....	5		2	3		5	5
All other causes	192	117	171	138	200	109	309
TOTAL	410	244	335	319	418	236	654

Still-born Children—White, 26; colored, 20; total, 46.

Population of City—White, 195,000; colored, 80,000; total, 275,000.

Death Rate per 1000 per annum for month—White, 25.23; colored, 36.60; total, 28.53.

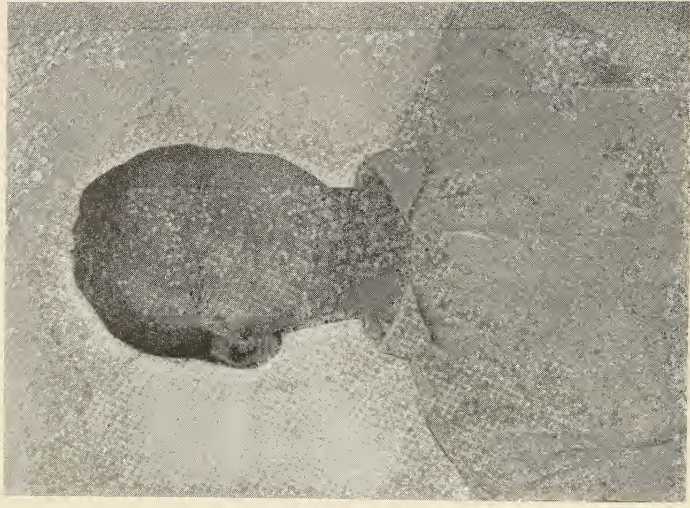
L. F. FINNEY, M. D.,
Chief Sanitary Inspector.



I.
DR. MARTIN'S CASE OF OSTEO-SARCOMA
OF LOWER JAW.



II.
DR. MARTIN'S CASE OF OSTEO-SARCOMA
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III.
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[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 RESECTION OF INFERIOR MAXILLA FOR OSTEO-SARCOMA TREATED WITH IMMEDIATE PROTHESIS BY ARTIFICIAL MAXILLA IMBEDDED IN TISSUES.*

BY DR. E. D. MARTIN, VISITING SURGEON TO CHARITY HOSPITAL, NEW ORLEANS, LA.,
ASSISTANT TO CHAIR OF SURGERY NEW ORLEANS POLYCLINIC.

J. H., female, colored, age 18, admitted to Charity Hospital September 17, 1894.

Patient was suffering from growth involving body of lower jaw on left side, including symphysis (see Fig. 1), which, on examination, proved to be a cystic osteo-sarcoma with two cysts, each about the size of a walnut. Growth was of two years' standing, and originated from extraction of tooth. Had grown more rapidly in past few months, and was not only inconvenient but painful.

The tumor was so extensive that I was undecided in regard to resorting to any radical means for some time, because the operation was a serious one and might give only temporary relief. After a more thorough examination, I found that it would be possible to leave a portion of the ramus of the jaw on the left side, and a small portion of the body or the right. This would leave a means of attaching an artificial apparatus.

After reading the work of Dr. Claude Martin, of Lyons, France, on the subject I felt that if so much had been ac-

* Read by title before State Medical Association.

complished by this genius, the experiment at least was well worth trying. The dimensions of the maxilla were taken as nearly as possible and an artificial maxilla of hard rubber made and vulcanized in two parts, the first representing an inferior maxilla, sawed through on the right about an inch in front of the groove for the facial artery and on the left sawed through the ramus on a plane with the lower teeth.

A silver pin one inch in length was fixed in either end, to be inserted into the bone; two holes were also drilled through either end, one above and one below the pin, through which a wire passed through a corresponding hole in the bone, was to be threaded and tightened to hold the artificial jaw firmly in place. Past experience had taught me that in these cases it was not an easy matter to determine before operation the extent of the disease, and fearing that the ramus might be involved and disarticulation would be probable, the second portion of the artificial maxilla was made to correspond to the ramus of the jaw, including the condyle. For the execution of this delicate piece of work I am indebted to Dr. L. D. Archinard, D. D. S.

Being fully prepared, I determined to operate on October 11, assisted by Dr. E. Souchon, (who greatly facilitated the operation by administering the anæsthetic with his new anæsthetizer, already so well known to the profession,) Dr. F. W. Parham and members of the hospital staff. An incision was made on the left from a point opposite the lobule of the ear, and carried along the lower margin of the maxilla to a point within half an inch from the facial artery on the right.

The facial on the left was ligated and dissection begun by hugging the bone, and preserving as much of the mucous membrane as possible.

The bone was sawed through at the points above described with Wyeth's exsector, and tumor turned out of its bed. The points were well taken, the ramus was not diseased, the mucous membrane was brought closely together with fine catgut, and the entire cavity of the mouth closed.

The artificial rubber jaw was put in position and fastened with silver wire, as already described. The genio hyo-glossus and genio hyoideus muscles were caught up with a silver loop and made fast to the symphysis of the artificial maxilla, through a hole drilled for the purpose.

Deep sutures were then passed through skin and muscle and the entire length of the incision closed, and a small drainage tube inserted at either end.

Wound healed without suppuration.

Plate No. 2 shows the result.

Although there was partial ankyloses, owing to the length of time the jaw had been kept immobile, the symmetry of the face was preserved and little remained to show the extent and gravity of the operation.

Patient took liquid food by mouth after first day.

About ten days after healing, and when the patient had apparently made a perfect and happy recovery, two small abscesses formed; one at the angle of the jaw, the other at the symphysis.

Examination revealed a sinus leading from the oral cavity, where the mucous membrane failed to unite primarily, just at the origin of the frenum; another posteriorly on the left and too far to reach.

I found it impossible to close the latter, and after several unsuccessful attempts, determined to remove the rubber maxilla, close the sinus and substitute a splint made of silver. This was made of seven-eighths silver tube, oval in shape and moulded to fit the cavity and fastened as the rubber maxilla had been.

The operation of removing the artificial maxilla, which was done January 31, was far more difficult than the removal of the diseased bone. I found it necessary to cut through a cicatrix half an inch thick and as hard as cartilage. This done the sinus was closed and the silver splint left *in situ*.

As long as the parts were kept quiet the result was gratifying, but as soon as the patient was allowed to use the jaw freely, another sinus formed externally, and though there was no communication with the mouth, it was impossible to get permanent union. After a second unsuccessful attempt the artificial apparatus was removed and my patient was in a very short time perfectly well, with much less deformity than I had anticipated.

The result is shown in Plate III.

From this case I have made the following deductions:

An artificial apparatus, where the disease has been so extensive, can not be permanent, as necrosis at the point of fixation is apt to follow and a suppurating sinus will be the result.

That in all cases where the operation is extensive, especially when the symphysis is removed, a temporary splint should be inserted to hold the glossal muscles *in situ* until union has taken place and a firm cicatrix formed. This splint should be made of large wire or silver tubing, so as to be easily removed through an incision at one or both ends. This measure will reduce the deformity to a minimum. The same method may be practised where half the jaw is removed, but if any part of the symphysis is left to hold the glossal muscles to their attachment no artificial means will be necessary, as the deformity will not be great.

I hope to have another opportunity of trying this device in a case where the disease is less extensive and fixation is more easily accomplished, as this alone would insure success.

Although the brilliant results at first promised by this case were not verified the patient has been greatly benefited by the temporary use of the splint.

A CASE OF PLACENTA PRÆVIA IN PRIMIPARA WITH INERTIA OF UTERUS.*

BY DR. E. D. MARTIN, VISITING SURGEON TO CHARITY HOSPITAL, NEW ORLEANS, LA.

Mr. President and Gentlemen—My object in reporting this case to-night is to interest every member of this society, in a matter which has proved of so much interest to me, owing to a recent experience.

I do not believe there can be any better method of impressing facts upon one than by actual experience, but when this experience must be limited, owing to the infrequency of the cases, is it not possible that some who hear the subject discussed to-night will be better prepared for such emergencies?

Though a member of this society for four years and a regular attendant I have no recollection of having heard the report of any cases of placenta prævia. The importance of

* Read before Orleans Parish Medical Society, June, 1895.

this subject can not be over-estimated. It is unquestionably one of the most formidable conditions the general practitioner or obstetrician has to cope with. When we consider that in every case the life of both mother and child are endangered, and that statistics show a maternal mortality ranging from 40 to 80 per cent., and an infantile mortality even greater, we are forced to realize the gravity of every case and the necessity for prompt, cool and deliberate action.

The literature on this subject is extremely interesting, but proves very conclusively that no two cases can be managed exactly alike and, therefore, that no set rule can be adhered to beyond the fact that temporizing at any stage is a mistake. Once the diagnosis is confirmed, the sooner labor is induced the better; for at all times often the first appearance of hæmorrhage is the life of the child, and possibly the mother's, in danger from more serious hæmorrhage, which may occur when least expected.

I believe, too, that this rule should apply in cases of detached placenta, which are not always easy to differentiate from placenta prævia.

The methods in vogue for inducing labor and the subsequent treatment are too well known to you to need recitation here, but we should not lose sight of the danger of secondary hæmorrhage and septic infection. The greatest precaution must be taken against both.

The most difficult cases to manage are in primipara, as dilatation of the os is slow, manipulation difficult and danger of injury to the soft parts greater.

The following is the report of a case which recently came under my care:

Mrs. X., primipara, seven months pregnant, age 20, married three years, suffered from menorrhagia for a year or more prior to conception. Saw patient first in April, was suffering from a cold, otherwise seemed strong and healthy.

On May 10 was called to see her. Learned that she had had a slight hæmorrhage.

On examination could feel head of child presenting on right side; on left side felt a soft mass intervening between head and uterine walls; os not dilated.

Although I could obtain no history of accident, I suspected one of two things: detached placenta or placenta prævia.

Tamponed and gave ergotin, gr. 1, morphine gr. $\frac{1}{16}$ every three hours. Returned next day and found patient much better; no sign of hæmorrhage, no pain; removed tampon, but continued the ergotin and morphine, and recommended absolute rest; diagnosis still doubtful.

On the 13th she had another slight hæmorrhage; pursued the same treatment with success.

On the morning of the 15th she had quite a profuse hæmorrhage.

On examination I found the same condition existing, except that the os was patulous and I was enabled to confirm my suspicion of placenta prævia.

I determined to induce labor at once. I introduced the index finger to dilate the os, hoping to excite uterine pains. Tamponed. At 1:30 introduced large tupelo tent, although introduced through the internal os did not perforate the placenta. At 8 P. M. found patient doing well, no pains and hæmorrhage. Left to make some calls before taking more active steps. Returned at 9:30 to find the patient had had a copious hæmorrhage at 8:30, and still bleeding freely; pulse was quickened and the patient weak and faint. I sent at once for an assistant to administer an anæsthetic.

Drs. Batchelor and Knolle responded.

The anæsthetic was administered, a Barnes bag introduced, and the os dilated about one and a half inches. This stopped the hæmorrhage temporarily. As soon as the bag was removed, part of the detached placenta and membrane presented. The membranes were ruptured. Still no uterine contractions.

After dilating the vulva sufficiently to introduce my hand into the vagina, I continued to dilate the os with my fingers, hoping to be able to perform podalic version, and by using the body of the child as a wedge control the hæmorrhage until delivery was effected, and thereby maintain nutrition through the undetached portion of the placenta, and save the child if possible. Owing to the intervention of the placenta, which blocked the way, I found this impossible, and to save time detached the placenta and delivered; then turned the child and

delivered with some difficulty, being compelled to apply forceps to the head, which was fixed and could not be extracted otherwise.

From the time the placenta was delivered there was little hæmorrhage, although complete inertia of the uterus.

After delivery I removed all blood clots and remaining portions of the placenta with my hand, and gave a hot douche, which was quite effective in contracting the uterus.

Fearing secondary hæmorrhage, I introduced a tampon of absorbent cotton, saturated with vinegar, into the uterus, and left it *in situ* over night. There was absolutely no laceration of either cervix or perineum. The binder was snugly applied and patient made comfortable.

The pulse was now 140; condition bad; gave brandy and strychnia hyperdermatically, and applied heat to feet and body; time, midnight.

Patient rallied from effects of chloroform, though troubled with nausea to such an extent that it was impossible to nourish by mouth.

Milk and egg enemata were given every four hours, and strychnine, gr. 1-30, digitalis, (normal liquids ℥iii) every three hours hypodermatically; carbolated douches, 1-100, twice daily.

On May 16 pulse was, average, 135; temperature, 101 deg.

On May 17 pulse was 125; temperature, 100 2-5.

On May 18 pulse was 116; temperature, 100.

On May 19 pulse was 100; temperature, 100.

Panopeptine and milk by mouth.

On May 26 pulse was 108; temperature, 99.

No nausea, and nourishment given by mouth.

Digitalis and strychnine by mouth.

After this date patient continued to improve rapidly, and on May 30 was sitting up and feeling quite well. No antiseptics were used in this case, except on the second day, when a 1 per cent. solution of carbolic acid was given as a vaginal douche. The strictest asepsis was maintained throughout.

The result was most gratifying.

SERUMTHERAPY OF TUBERCULOSIS.*

DR. E. M. DUPAQUIER, NEW ORLEANS.

On the subject of antitoxic therapeutics in tuberculosis I will make a rapid sketch of the situation up to date, drawing an account of the attempts to prevent or cure the tuberculosis infection in man by means of antitoxic serum, and I will make reflections upon the facts stated with the view to form an opinion of the value and future welfare of serumtherapy of tuberculosis.

First, it is proper to state, as many may have forgotten it, that this question of antitoxic therapeutics in tuberculosis brings us back to the very source of the question of antitoxic serums. Tuberculosis it is that prompted the birth of serumtherapy, and curious to say, tuberculous man has not gained by it as much as the diphtheritic sufferer so far.

In 1889, Prof. Chs. Richet and M. Hericourt, of Paris, read before the Society of Biology a communication in which they showed that they had succeeded in abating in rabbits the evolution of avian or bovine tuberculosis by injecting into the peritoneum of those rabbits some dog blood.

This demonstrated the bactericidal properties of the blood, the foundation of the new biologic therapeutics. But how could such a transfusion of blood *in toto*, corpuscles and liquor sanguinis be practised clinically? The injection of blood into the human peritoneum was not feasible. This gave the idea of injecting only the serum part of the blood in the subcutaneous tissue of the patients, hence serumtherapy, as the serum of the blood of immunized animals proved shortly after in the hands of Behring to contain the immunizing principles. From that time the use of serum in all infectious processes was set in motion. Let us briefly review its history in the treatment of tuberculosis:

In 1893, at the Congress of Tuberculosis in Paris, S. Bernheim read on his method of serumtherapy of tuberculosis, similar to Behring's method in diphtheria, and reported excellent results in a number of cases, among which some were

* Read before the Orleans Parish Medical Society, August 24, 1895.

pretty far advanced. Hardly any notice was then paid to this premature statement.

In 1894, at the International Congress at Rome, he again insisted upon stating that he had obtained a good result in tuberculosis by the use of serum. In 1894 also Babes, Richet and Hericourt came to the rescue. They had immunized animals with avian tuberculosis, and stated that the serum had been efficacious against human tuberculosis, though at that time they had no clinical case to report. They ascertained merely that animals immunized with avian tuberculosis produced a serum which arrested human tuberculosis.

But in 1895 Richet, who had shown in 1889 that the serum of animals refractory by nature to tuberculosis abated the tuberculous process in other animals, instituted a new series of experiments with the assistance of Hericourt, basing them, this time, on the principle of double refraction, which consisted in immunizing an animal already refractory by nature. The results conclusively showed that the serum of the donkey injected with tubercle cultures had clearly exhibited curative properties. At this time Richet, passing from the laboratory into the hospital wards, made clinical tests, and on January 12, 1895, before the Society of Biology, he reported two cases in which injections with immunized donkey-serum had almost completely arrested the progress of tuberculosis.

Now, such a statement from such an authority began to stir the profession, and it aroused their universal interest, the more so that serum in diphtheria was triumphant.

In July, 1895, Boinet, of Marseilles, reported eight cases treated with immunized goat-serum. In three, in the first stage, improvement was very remarkable. In two, in the second stage, presenting yet more dry crackling sounds than moist rales, the result was also good. But in the other three, presenting cavities, no betterment at all was ever noticed. Boinet states again that in slow, torpid cases without fever the serum does good, but it is injurious in acute forms with fever, bleeding, sweats and laryngeal complications.

In July, 1895, Charrin and Pottevin, seeing the difficulties offered to the serum treatment of visceral tuberculosis, thought of trying it in surgical tuberculosis, particularly that of the skin, for the following reasons:

1. Because in skin tuberculosis there are less bacilli and much less virulent bacilli, judging from the slowness in extending itself. 2. Because it is directly accessible. 3. Because in skin tuberculosis microbial associations are more easily avoided. In a case of fungous ulceration following the removal of a fistulous epitrochlear ganglion a complete cure was obtained in ten days. For two months previous to the use of serum the sore had been dressed with no improvement at all. Same result in another case wherein imperfect extirpation of a lupus had left on each thigh an atonic ulceration. In two other cases of large ulcerated lupus scattered all over the arm, after one month cicatrization was almost complete. In another case of non-ulcerated lupus forming a projection on the arm, this diminished after a few injections; unluckily the patient was lost sight of. In another case of lupus of the face improvement was first noted, but shortly after ulceration recurred, due to some suppuration occurring on the spot.

In short, Charrin and Pottevin do not mean to offer by this instance a specific remedy for local tuberculosis, but their observations help to show that the serum is beneficial in the surgical treatment of certain cutaneous ulcerations.

Lately, Prof. Maragliano, of the University of Genoa, aroused great interest among medical men in Europe by his report on the treatment of tuberculosis by the use of serum. At the recent Medical Congress at Bordeaux he reported that he had treated over eighty cases of tuberculosis by this method and that while some of these were still under treatment it was possible to report distinctly favorable results in three-fourths of all the cases.

On this side of the Atlantic we had the Paquin serum. No report of national extent has been published in our leading medical journals on the value of this serum. Only local reports have been published so far in the *St. Louis Medical Mirror* and in the daily press of New Orleans. All the physicians of this city, except one, who seemed to have met favorable cases, are dissatisfied with the result given by the Paquin serum. The Orleans Parish Medical Society has passed and published a resolution disapproving the use of Paquin's serum in the treatment of consumption. In connection with this, a very amus-

ing story can be written in a few words. In the month of June the New Orleans physicians who were begging for serum were styled by the St. Louis people, as it appeared in the press, "very intelligent and progressive medical men." We were eagles then. In the month of August, as the New Orleans physicians openly pronounced their dissatisfaction, the St. Louis firm changes style in its publications and bestows praise in this way: "The medical men in New Orleans are all ignoramuses." The eagles have now become dunces, and this metamorphosis beats any fairy exhibition on the stage.

But let us return to our serious purpose.

The statement of these serum experiments with varying degrees of success is yet more promising than the disastrous consequences of the Kock's tuberculin treatment. It saves from banishment the guiding principles of a method which may lead to success finally; and if we only consider the difficulties we meet with in treating visceral tuberculosis we may be persuaded to stand within the bounds of conservatism and concede that we can trust in the future of serum therapy of tuberculosis, or of some biological therapy of tuberculosis immediately connected with serum therapy. There is for the present a very large obstacle to the brilliant success of the method in tuberculosis as well as in other infectious diseases, and that is the mysterious factor of microbial associations. No one has succeeded yet in satisfactorily explaining the mechanism of those associations, and the latest researches on the subject which I have read even go to show how warily and guardedly one must apply to man the results obtained in experiments on animals. This is too important a point to be dismissed with a mere passing mention. You know that the bacillus prodigiosus, which is not pathogenetic, has been recently employed in bacteriotherapy as an antagonist to the bacillus anthracis. Roger injected a mixture of bacillus anthracis and bacillus prodigiosus cultures in rabbits and guinea pigs. In the rabbits the prodigiosus effected a therapeutic action, to-wit: the test animals inoculated with bacillus anthracis alone died from the second to the fifth day; the animals that received together the bacillus anthracis and prodigiosus lived. In the guinea pigs, very unexpectedly, the contrary of this

beneficial action occurred. The guinea pigs injected with the beneficial mixture presented after a very short time extensive œdema and all died, even before the test animals that had received the fatal bacillus anthracis alone. Thus, the same microbial association may have diametrically reverse effects in two different animal species. The result in the guinea pigs forbids any therapeutic attempt in clinical work; for one can not tell or foresee what would befall if similar injections were made in the human species. In short, we have to deal, in combatting infectious processes, with a mysterious factor of which we know nothing yet, except that in some cases such and such association will prove beneficial, and in other cases the same association will prove fatal.

There is, however, one association which is known to us as always a dangerous, if not a fatal one, and that is the association with the streptococcus, which in tuberculosis is so patent. At one time, when bacteriotherapy was the method in vogue, Emmerich was the first one who ever thought of using attenuated streptococcus cultures in tuberculosis, but his purpose was to check the course of tuberculous infection by inoculating the patient with another disease, as Peroncito, Schmidt, Tillmans, Brandt, Waibel and Schaefer had reported cases, which, during the evolution of tuberculosis, had caught erysipelas, and in which recovery had seemed to arise from the occurrence of this intercurrent disease. Emmerich, therefore, strove hard to treat tuberculosis in animals, by inoculating them with streptococcus cultures, but it gave a negative result, and even caused some accidents. Yet the idea of Emmerich is, nowadays, taken up again, but with some improved method, a more rational one, that of inoculating tuberculous subjects with serum from animals immunized against the streptococcus. It is with anxiety that the result of such experiments is awaited. It seems natural to believe that this is in the right direction.

Indeed, the best course would be to inject the tuberculous subject with as many different antitoxic serums as he presents different bacteria associated with the bacillus. The bacillosis serum is efficacious only versus the bacillus, the aspergillosis serum only versus the aspergillus, the streptococcic serum only

versus the streptococcus, and so on. In a word, each serum is a specific against a specific germ.

This view is the latest expressed in the memoire of Calmette, in *Annales de l'institut Pasteur*, Paris, April, 1895.

He says: "Certain animals, for instance, the ichneumon of the Antilles, possess in a marked degree some immunity to the venom of snakes, and their serum possesses a certain amount of antitoxic power. Widening the field of my experiments I have ascertained like others have that the serum of man, in its normal state, is at times antitoxic to diphtheria and that the serum of many animals immunized either against toxines or against pathogenic viruses acquired by the vaccinal treatment a certain amount of antitoxic power, even strong enough to be a preventative against other toxines or other different viruses. All these facts, therefore, show that the serum of animals immunized against certain viruses or certain poisons can possibly give immunity against different other viruses or poisons. But is it to be inferred from this that antitoxic serums have, in reality, no specificity? And are we right in hoping that we will discover some day one ideal serum capable of giving immunity against united microbial poisons? However seductive, this hypothesis is not admissible. For we do not know of one single serum capable of modifying with equal energy several toxines and *vice versa*. The antivenomous serum, for example, is much more active on the snake venom than any other antitoxic serum, and so it is with the tetanus and diphtheria serums regarding tetanus and diphtheria. Thus it is sure that the antitoxic serums are specific. Each one exercises toward a specific germ and its toxines a reverse action, not that it mixes with the toxine and modifies it, but, by its presence, it acts by opposing the production of the toxine's noxious effects."

Therefore, by directing our activity after this guiding principle, we may, by detecting the germs associated with the bacillus, combat more efficaciously the great obstacles to the treatment of tuberculosis, namely, the microbial associations, by opposing to each germ detected its antitoxic serum.

Of course, there remains yet at the bottom of each case that peculiar individual disposition to infection, foetal, inherited or acquired, that may always baffle our skill, but this is beyond

the reach of man as much as the solution of the problem of his own creation and existence. And here fixed science of nowadays yields the pen and the floor to the metaphysically inclined mind, a fossil at the present time, where facts only are legal tender, the one pure metal of our scientific currency.

A CASE OF PLEURAL REFLEX.

BY H. B. GESSNER, A. M., M. D., VISITING PHYSICIAN OF CHARITY HOSPITAL,
NEW ORLEANS, LA.

The patient was a Sicilian, horse-shoer, 46 years of age, with a good family history. He had been shot in the left side of the chest with a revolver some 22 years before. The bullet was supposed to have lodged in the lung. An abscess followed. Treatment was received in the hospital at Palermo, in Sicily, where a rubber drain was introduced, and the cavity irrigated with permanganate solution.

For twenty-two years the fistula persisted, a fine rubber tube being used as a drain. Finally in January last, the sufferer entered the service of Professor Matas, with a view to submitting to an operation. During the preceding twelve-month he had been troubled with hectic fever, loss of appetite and dizziness. The fistula presented a depressed opening on the left side of the chest, in the mid-axillary line, on a level with the nipple. It was discharging offensive pus.

A free incision was made on the 24th of January, chloroform being the anæsthetic used. About three inches of the sixth rib were removed. This rib was much thickened and was adherent to the fifth and seventh; it presented a smooth, round perforation. The small cavity exposed was packed with iodoform gauze; the lips of the skin wound were brought together with sutures.

Irrigation with $\frac{1}{1000}$ bichloride solution was practised at each dressing, which was completed by the introduction of an iodoform gauze pack.

On the 23d of March I began dressing the patient at his home; a $2\frac{1}{2}$ per cent. aqueous solution of carbolic acid was used for irrigation. At times he complained of slight dizziness

while the cavity was being washed out. The latter was now very narrow and somewhat tortuous, running backward and upward about four inches.

On the 6th of April, while irrigation was being practised, the patient sitting on a chair, he complained of dizziness and impaired vision. As his skin was pale, and his general appearance alarming, the irrigation was immediately discontinued, and the patient was made to sit on the edge of the bed. Here his weakness increased; he gradually sank to the supine position; the skeletal muscles became tonically contracted. The face was now flushed, the pupils widely dilated; no pulse beat could be detected at the wrist. Finally, the respiratory effort ceased, and cyanosis showed itself, the lips assuming a livid hue. While this was going on, the wife and children of the patient, believing him to be in "articulo mortis," vented their feelings in tearful wailings.

As soon as the cyanosis appeared, I pulled the man's shoulders to the edge of the bed, allowing his head to hang low, and practised artificial respiration. The patient began before long to inspire of his own account, though superficially and irregularly. The pulse could again be felt at the wrist, though barely perceptible and exceedingly irregular. One-thirtieth grain of atropin sulphate was now given by the mouth, with some whisky; within an hour the dose of atropin was repeated; whisky was freely administered. Improvement was steady and satisfactory.

At the time of this occurrence I thought the untoward symptoms to be due to absorption of the carbolic acid solution, or perhaps of some undissolved globules. The wife informed me that in former years, when she had irrigated the cavity through the rubber drain, with a hand syringe, dizziness and impaired vision had occasionally appeared, but had passed away in a short time; plain water was the liquid she had used. It would seem then that the phenomena observed were due to a pleural reflex, affecting the cardiac and respiratory centres.

STUDIES IN THE PERITONEUM.

BY DR. FRED. BYRON ROBINSON, CHICAGO, ILL.

Fœtus No. 8, female, in alcohol, about $9\frac{1}{2}$ inches long, $4\frac{1}{2}$ months old; skull $6\frac{1}{2}$ inches in circumference; fine hair on scalp; eyebrows distinct to naked eye; fingers and toes, as well as nails, completely formed; fœtus well developed in osseous and muscular system. Abdomen opened by an incision one-half inch to left of median line in order to secure a good view of the ligamentum suspensorium hepatis. In this fœtus the suspensory ligament is almost exactly triangular, with its apex on the notch on the anterior border of the liver. The anterior border of the ligament is $1\frac{1}{2}$ inches, extending along the linea alba. The inferior border, extending from notch on anterior edge of liver to umbilicus, is three-quarters of an inch. Its posterior border—*i. e.*, along the upper surface of the liver, between the right and left lobe, is three-quarters of an inch. The ligament in its widest part—*i. e.*, from anterior edge of liver to the white line of the abdomen, is one-third of an inch. In a fœtus of $9\frac{1}{2}$ inches the liver lobes are distinctly different in size. The left has so shrunk that the ligament plainly bends toward the right, making its concavity on the left side. The ligament is of a pearly white color, partially transparent, and streaked with milky white lines running parallel to each other. These lines I have noted in adults and consider them lymphatics. The ligament passes up to the diaphragm and merges into the coronary ligaments, right and left. The left is large, and as usual its origin is from the upper surface of the left lobe of the liver, and not from its posterior border. The posterior border of the ligament, originating between the left and right lobes, diverges to cover the upper surfaces of the liver on each side. The left surface of the ligament lies on the left lobe, but the right surface of the ligament lies against the diaphragm, all of which was due to the excessive shrinking of the left lobe and deviation of the liver to the right. The round ligament (ligamentum teres hepatis) coalesces for one-third to three-quarters of an inch to the posterior abdominal surface, thus apparently lessening the real length of the base of the suspensory ligament extending

from the umbilicus to the notch on the anterior border of the liver. To secure a good view of the suspensory ligament, make an incision on each side of the linea alba one-half inch from the middle line and extend the incision from the xiphoid appendix to umbilicus. One can then observe the suspensory ligament throughout its whole extent, besides all its borders, origin, insertion, shape, outline, contour and natural position.

On opening the abdomen by a crucial incision reflecting well the flaps, one sees a large round pocket of intestinal coils occupying the situation in the lower left region in the abdominal cavity. They do not occupy the position of the adult, viz.: along the left lumbar and iliac region in the pelvis. But in this foetus the packet composed of the small intestines, the ascending and transverse colons are entirely abdominal; not a coil enters the pelvis. The small intestines vary in size from a wheat straw to an ordinary lead pencil. The small intestines are larger than the colon. There is no order to the coils, *i. e.*, the coils and loops are not in regular order from above downward. Adjacent coils may be in contact or several inches distant from each other. The shape of the packet of intestines shows distinctly that either the liver is shaped to fit the packet or the packet is shaped to fit the liver, and both to absolutely fit the abdominal cavity. It is more likely that the liver moulds itself to adjacent organs, for as the left liver lobe shrinks the space is promptly occupied by the rapidly growing intestinal coils. The liver seems to yield to any adjacent viscus, for if it rests against the liberal duodenum in a foetus, the liver substance yields by allowing the duodenum to make a deep depression on its under surface. Also, the gall bladder, if it be pressed by adjacent viscera, makes a deep depression in the liver substance. Hence, it may be said that the liver is so soft that it must accommodate its shape to surrounding viscera, and that surrounding viscera forces the liver into shapes to suit their growing and expanding condition. In other words, abdominal viscera moulds and shapes the liver in direct accord to their expanding power. In this foetus the liver has shrunk to one inch above the umbilicus, so that its atrophy is well along. Some coils of small intestine at the upper left end of the packet extend close up to the diaphragm, immediately under the left

liver lobe which coils on the right, force themselves directly under the surface of the right lobe.

This fœtus ($9\frac{1}{2}$ inches and perhaps four and a half months old) has a great omentum of three-quarters of an inch long and over one inch wide. It is a transparent membrane, almost devoid of fat. It is rolled up around the transverse colon and passes off on the left side into the ligamentum phrenico-colicum. It extends toward the right side down the ascending colon as omentum Halleri.

The appendix is three-fourths of an inch long. It lies immediately above the iliac crest, at the lower pole of the right kidney, almost transversely over the vertebral column, and points to the spleen. It is almost parallel with the lower end of the ilium. It has a full mesentery, but it is so short that it throws the appendix into a spiral coil and also kinks it. The appendix lies immediately behind the entering ilium for a physical reason, and that is, the mesenterium of the ilium is very high in the fœtus where it crosses the vertebral column and the great vessels. In this fœtus the end of the appendix extends to the left edge of the vertebral column. The appendix is relatively much larger and longer in fœtuses, infants and children than in adults.

The cæcum lies on the middle of the face of the right kidney. It is purely of a fœtal type—*i. e.*, like a dog's. It is about the size of a large wheat straw and is here the widest portion of the colon. One can observe the lower pole of the kidney just below it. It lies to the inner edge of the kidney. The fossa ileo-cæcalis superior is large and well marked; none others may be made out, though an irregular peritoneal depression may be seen, which might be designated fossa ileo-cæcalis inferior. The plica ileo-cæcalis superior is large and distinctly marked, while the mesenterium and the plica ileo-cæcalis inferior are blended and merged almost into one fold. The ileum enters the cæcum at an acute angle, and the cæcum runs parallel and against the ileum for a short distance.

So far as actual position is concerned, there is no ascending colon in this fœtus. But I have assumed as a standard of measurement for the ascending colon two points, *viz.*: the point of the entering ileum and the ligamentum hepato-colicum,

which is visible in this fœtus. With this standard the ascending colon is one-half an inch long, and for one-fourth of an inch at the upper end it has a mesentery of one-fourth of an inch. The other half of the ascending colon has no mesentery; it is stolen and appropriated by the growing kidney. The part of the ascending colon which had a mesentery of one-fourth of an inch lies between the ligamentum hepato-colicum and the pars descendens duodeni. As the colon crosses the duodenum it loses its mesentery. In this fœtus it is plain how the upper half of the ascending colon has a distinct mesentery to the point where it crosses the descending portion of the duodenum and then the mesentery is appropriated by the growing kidney. The lower end of the ascending colon makes a sharp bend just before the ileum enters something like the ascending colon and cæcum of a horse, which veterinarians call "the crook." The ascending colon in the fœtus is almost horizontal, forced into this position by the lower surface of the right lobe of the liver. Of course, the cæcum has not descended in this fœtus below the anterior border of the liver, not to the lower kidney pole—a considerable distance above the iliac crest.

The transverse colon is $1\frac{1}{4}$ inches long, extending in a curved form along the greater curve of the stomach from the ligamentum hepato-colicum (hepatic flexure) to the ligamentum phrenico-colicum (splenic flexure). It is about the size of an ordinary wheat straw, much smaller than the jejunum intestinum. The transverse colon has two loops in it, one toward the splenic flexure and one toward the hepatic flexure. These colonic loops are, no doubt, atavism or reversion to earlier types, of which typical examples, kinks, loops or double colons, are found in the solipeds (horse) and rodents (squirrel). There is a distinct meso-colon of one-third of an inch, extending from the hepatic flexure to the splenic flexure.

The descending colon is just one inch long and extends from the ligamentum phrenico-colicum to the point where the bowel turns to cross the psoas muscle. It has no mesentery except at its upper end for, say, one-third of an inch, where it is not in contact with the kidney. The moment it strikes the left border of the kidney the descending colon loses its meso-colon, which is appropriated by the growing kidney. The

lower pole of the kidney reaches to the point where the colon turns to cross the psoas. Hence, as in the adult only the upper end and rarely the lower end of the descending colon possesses a short strip of mesentery. From the whole of the external border of the kidney the descending colon is forced against the left lateral abdominal wall. Sacculations are distinctly visible on the colon transversum, and some may be seen on the other parts.

The sigmoid flexure or S-romanum is one and one-half inches long. It lies in the left iliac fossa, along its wall. Its mesentery is one-half an inch. It begins at the left edge of the psoas muscle and ends at the point of the bowels in the pelvis, when it loses its peritoneal covering, for I include the peritoneal portion of the rectum with the sigmoid. The meso-sigmoid begins at the left border of the psoas and assumes a curved line from its insertion toward the right until it almost reaches the middle line of the body. However, in this nine and one-half inches long and four and one-half months fœtus the meso-sigmoid never quite reaches the median line. There is no adhesion in the meso-sigmoid, but in adults I find 40 per cent. of adhesions in the meso-sigmoid. In this fœtus there is a beautiful little funnel-shaped inter-sigmoid fossa into which exactly fits the perpendicularly situated ovary and Fallopian tube. No doubt the genital glands and Fallopian tube with the ovarian vessels are responsible for this peculiar peritoneal fossa or recess. The lower portion of the sigmoid flexure enters the pelvis of this fœtus on the left side and it forces the left tube and ovary and border of the uterus further forward than these parts are on the right. This no doubt accounts for torsion of the uterus from left to right. The sigmoid shows sacculations and the appendicæ epiploicæ are distinctly visible to the naked eye. These diminutive omenta may be seen all along the colon, but most distinctly along the sigmoid. A white line is visible along the descending colon and upper sigmoid on the left side; some think it an evidence of coalescence of the left blade of the descending meso-colon and the parietal peritoneum, but it may also be a line of displacement or re-adjustment of external layers.

As one unfolds the packet of intestinal coils he observes

that the fossa duodeno-jejunalis appear just as it does in adults, due to the inferior mesenteric vein projecting up a fold of peritoneum. The duodenum shows atrophy pressure of the left blade of the mesentery. There is an upper and a lower fossa—duodeno-jejunalis.

The jejunum and ileum measure 14 inches. The small intestines show the largest calibre in the middle; much larger than the colon. The mesentery is an inch long and will easily allow the bowel to pass through any hernial orifice just as it will in adults. The root of mesentery is one-half an inch long; its line of insertion is situate above the iliac crest. It crosses the body transversely and not obliquely as in the adult. The insertion of the mesenterial root (*radix mesenterii*) differs from adults in being very much higher on the vertebral column and also transverse in direction. The mesenteric glands are well and distinctly developed in this fœtus. They are nearly as large as flax-seeds; most of them, however, are one-tenth to one-half as large. They are very yellow in color and oval in shape. They develop on a kind of serial grade. A long series is found close to the root of the mesentery. A little further toward the bowel is another series found of a smaller size. The graded series yet smaller and smaller until the glands found among the arterial arches of the *vasa intestini tenuis* are so small that the naked eye can only just discern them. There is a distinct *mesenterii membrana propria* even in this fœtus of $9\frac{1}{2}$ inches and $4\frac{1}{2}$ months old.

The stomach is really vertical and lies exactly under or behind the *lobus sinistrum hepatis*. It has made a deep and wide depression in this lobe of the liver and the depression is also vertical. The stomach lies precisely behind the spleen on the left and Spigel's liver lobe on the right. The lesser curvature of the stomach has attached to it the *omentum minoris*, while the greater curvature has attached to it the *omentum majoris*. The pylorus makes a sudden bend toward the right and posterior, due to the dragging on it by the liver and thus an apparent transverse position of the stomach arises, but is only apparent, for in this fœtus notably the stomach shows itself vertical, but the deep impression in the left lobe of the liver is vertical. The spleen is vertical; it lies against the

stomach and extends up over the fundus. It is exactly moulded to the stomach. Its lower quarter is entirely covered by peritoneum as in adults. There is a well defined strip of peritoneum one-quarter of an inch wide stretching from the upper pole of the kidney to the junction of the lower and middle thirds of the spleen which we may call the *ligamentum renoliana*.

On opening the lesser omental cavity by breaking through the gastro-colic omentum one thing is plain to observe and that is the pancreas is partly in the meso-colon transversum and partially out of it, and besides the splenic artery runs behind the peritoneum at the upper edge of the pancreas, and then it suddenly turns upward to gain access to the *ligamentum gastrohepaticum*. It is plain in this *fœtus* that the pancreas is gradually gliding out of the meso-colon transversum. The lesser omental cavity in this *fœtus* is plain and distinct in its outline. It extends from Winslow's foramen to the spleen horizontally on the left and from the lower edge of the great omentum to the lower border of the fundus of the stomach. The cavity is simply a depression in the right wall of the meso-gastrium and its neck, like a jug, constricts itself at Winslow's foramen. For clearness I will divide the lesser omental cavity into two departments, viz.: a smaller right one and a larger left one, divided by the *ligamentum pancreaticum* or lesser curve of the stomach. However, it is really a vascular arch which divides the two cavities. The arch is made up behind by the hepatic artery and above and in front by the gastric and pyloric arteries, which make a ring projecting out peritoneal folds on the circumference, which really forms the septum between the two cavities of the lesser omental sac. The right department of the lesser omental cavity is the smaller. We may call it the *bursa omentalis minoris* or *antrum bursa omentalis*. It is bounded in front by the omentum minus. Behind by the dorsal peritoneum. Its inlet is Winslow's foramen (*hiatus Winslowi*) and its outlet is the orifice between the lesser and greater departments of the lesser omental cavity. I have termed this orifice *Huschke's foramen* in honor of the anatomist who wrote the first scientific treatise on the peritoneum, the *orificum bursa omentalis*.

In adults Winslow's foramen admits two fingers, and Huschke's foramen admits four fingers. In this fœtus Winslow's foramen admits the point of the little finger. The right department of the lesser omental cavity contains one viscus—Spigel's lobe of the liver. The bursa omentalis majoris, or the left department, extends from Huschke's foramen to the spleen, and from the lower edge of the great omentum up to the fundus of the stomach. It is the real cavity behind the stomach. The septum burse omentalis, which is perforated by Huschke's foramen, divides the lesser omental cavity into two unequal departments, much like a non-symmetrical hour-glass. By lifting up the stomach and tearing through the gastro-colic omentum, one can observe in this fœtus the whole of the two irregular departments of the lesser omental cavity. The outline of both cavities is very irregular. The greater cavity contains no viscus. In this fœtus the lesser omentum (ligamentum gastro-hepaticum) is plainly divisible into three parts; the upper parts tendineus (Robinson); the middle part flaccida (Toldt), and the lower, the ligamentum hepato-duodenale of the ancients. It seems to me that the idea of coalescence of the posterior plate of the ascending blade of the great omentum to the upper (anterior) plate of the meso-colon transversum must be given up, and that for coalescence we must substitute displacement or readjustment of the peritoneum. So far as I can understand fœtal development of the peritoneum, the peritoneal fold forming the peritoneal recess between the posterior plate of the ascending blade of the great omentum and the upper (anterior) plate of the meso-colon transversum is drawn out, replaced or readjusted, and does not coalesce. However, for respect of the great names of Meckel, Miller and many others, I will not deny that coalescence could not accomplish it all, yet it is peculiar that coalescence does not occur in other localities equally frequent. And if coalescence can occur at any point, it may occur at any and all points of the peritoneal cavity, and hence a person is in constant danger of losing his whole peritoneal cavity by coalescence. But since none do this, there must be a flaw in the coalescence theory, when applied in practice.

As the ascending colon passes the lower pole of the right

kidney a fold of peritoneum is raised which is easily seen in nearly all adults. I have termed this fold ligamentum phrenicocolicum dextrum. The fold is due to the kidney. Winslow's foramen (orificum epiploon, Hiatus Winslowi), is seen in this fœtus to be bounded by two mouths. The opening into this foramen is really funnel-shaped, and hence it has two mouths. The circumference of the larger or first mouth is made by the right border of the ligamentum hepato-renalē; the left circumference of this mouth is made by the edge of the ligamentum hepato-colicum; the upper border by the lower surface of the liver and the lower border of the colon. The smaller mouth, or what is generally known as Winslow's foramen, is bounded by the ligamentum hepato-duodenale in front, behind by the vena cava, above by the liver and below by the duodenum. All these boundaries in this fœtus are plain and well marked. The meso-duodenum has not lost all of its anterior or left serous surface and a little of the right or posterior surface still remains. It may be remembered that in the early fœtus there is a liberal meso-duodenum. I will take the anatomical liberty to deny that an adult human has no meso-duodenum. An adult man has a meso-duodenum, though it be deprived of its serous covering of shining endothelial cells on both sides. Any one who will take the pains to dissect out the duodenum will clearly observe that he has a meso-duodenum, and in it may be seen the arcs and arcades of blood vessels, as in the mesentery of the small intestines. Its nerves, lymphatic and vessels are arranged just like other mesenteries, yet the serous endothelial cells are gone on both sides, through displacement or coalescence; yet the real meso-duodenum, the membrana mesenterii propria, the real neuro-vascular visceral pedicle still remains. It may* be remembered that every real mesentery has three layers, viz.: (a) the essential one may be called the membrana mesenterii propria; (b) the two serous endothelial layers, one on each side of the middle layer. In this fœtus the pars ascendens and pars descendens duodeni have made depressions in the yieldable liver substance.

The two adrenals may be both seen lying against the vertebral column, at the upper and inner pole of the kidneys. Both are faced in front by peritoneum fairly movable. The

lower poles of each kidney descend to one-third of an inch above the iliac crest. The Fallopian tube and ovary lie parallel, and both are entering the pelvis obliquely. The ovary is almost one-half an inch long, while the tube is one-half an inch long. The ovary has already a slight mesentery (ligamentum latum uteri), while the tube has quite a mesentery (meso-salpinx).

The uterus lies high in the pelvis, and its right corner is rotated backward. The uterus, bladder and rectum fill the pelvis completely. The uterus has the shape of the adult organ. The round ligaments, the division between the uterus and tubes run outward from the uterus right and left.

CONCLUSIONS FROM A $4\frac{1}{2}$ MONTHS OLD FŒTUS, $9\frac{1}{2}$ INCHES FROM CALVANUM TO FEET.

1. The peritoneum is still incomplete in development, as is shown by the partial descent of the cæcum and the high position of the mesenterial root (radix mesenterii). The examination of other fœtuses has convinced me that the peritoneum is completely enveloped at the sixth fœtal month.

2. The peritoneum is developed step by step with the viscera.

3. The membrana mesenterii propria is the real neuro-vascular visceral pedicle and exists as the meso-duodenum after the serous endothelial covering of both sides had disappeared by displacement or coalescence.

4. All acquired peritoneal folds are devoid of the membrana mesenterii propria, as it is an original mesodermic structure.

5. The liver yields to adjacent viscera and is moulded in shape by other viscera according to their power to force.

6. This fœtus shows no peritoneal adhesions, while adults show 80 to 90 per cent. of peritoneal adhesions. (Robinson.)

7. This fœtus shows well that the fossa duodeno-jejunalis, the inter-sigmoid fossa and the fossa ileo-cæcalis superior et inferior are produced by blood vessels prominently projecting peritoneal folds, and that all four fossa occur before the fourth month of fœtal life.

8. This fœtus would start suspicion and doubt as to peri-

toneal coalescence and induce one to think of displacement and readjustment of peritoneal folds.

9. This fœtus of $4\frac{1}{2}$ months has distinct colonic sacculations and distinct appendicæ epiploicæ.

10. The great omentum in this $9\frac{1}{2}$ inch long fœtus is $\frac{3}{4}$ by 1 inch and having little fat in it.

11. A graded series of mesenterial glands exist at $4\frac{1}{4}$ months of fœtal life. The largest lie near the root of the mesentery and the very small ones lie in the vascular arcades of the mesentery.

12. A vertical stomach exists.

13. This fœtus shows well some of the stages of rotation of the navel or umbilical loop.

14. It shows that almost all of man's peritoneal attachments are acquired, except a small part of the meso-sigmoid. Of course the meso-duodenum could be raised by clearance to the mid-dorsal line.

15. It shows that all the peritoneal attachments are changed by a gradual process of growth, and that axial rotation of the navel or umbilical loop is also a matter of growth.

16. The growing kidneys steal away the meso-colon ascendens and descendens, and that the descending colon lies along the external border of the left kidney, and the ascending colon lies along the left border of the right kidney.

17. The mid-dorsal insertion of the meso-gastrum has shifted toward the left by displacement (or coalescence), perhaps more probably by readjustment of the left blade of the mesogaster.

18. This fœtus shows almost adult shape of tubes and uterus, but purely fœtal shape of ovaries. The genitals do not descend lower in the pelvis.

19. The small intestines are coiled into a round packet which occupies more of a central position than in adults, and no small intestine occupies the true pelvis.

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EDITED AND PUBLISHED BY
AUGUSTUS McSHANE, M. D

COLLABORATORS:

DR. F. W. PARHAM.
DR. H. W. BLANC.

DR. R. MATAS.

DR. A. W. De ROALDES.
DR. WILL H. WOODS.

Editorial Articles.

PAQUIN'S ANTITUBERCULAR SERUM.

Last January Dr. Paul Paquin, of St. Louis, Mo., brought to the notice of the profession a preparation he employed in the treatment of pulmonary consumption. Dr. Paquin had long before demonstrated his ability as a bacteriologist during his connection with the University of Missouri, at Columbia, in that State; and during that time he established the *Bacteriological World*, a journal devoted chiefly to the new science of bacteriology, but which has since fused with Dr. Kellogg's *Modern Medicine*.

His long identification with bacteriological work had, no doubt, its influence in causing him to apply the idea of serum-therapy to tuberculosis. According to the *Medical Mirror*, Dr. Paquin extracted the serum from the blood of immunized horses, in which, it is to be presumed, the same general plan of immunizing was followed as in diphtheria. Dr. Paquin exhibited before the St. Louis Medical Society a number of cases that he had treated with his antitubercular serum, some of them being very advanced. The results reported were so startling as to cause Dr. I. N. Love, editor of the *Medical*

Mirror, to break forth in a strain of gladsome triumph. He says: "Weighing the evidence presented to us, a greater part of which we have been able to confirm to our own satisfaction, we feel justified in taking the position that Dr. Paquin has made the most pronounced step forward in the treatment of consumption, and can only hope the future will emphasize the value of his work."

It is with profound regret and sadness that we confess our inability to join Dr. Love in exulting over the supposed triumph of his friend and co-laborer, Dr. Paquin. Dr. Love has personally examined a number of Dr. Paquin's patients, and he confirms the claim made for the serum. Dr. Love's endorsement means much, for he is too skilled to deceive himself or be deceived, and too prominent to lend his name to an absurdity. While we can not, and do not, question the reality of the results obtained in the favored city of St. Louis, we do assert our right to an opinion based on the experience of local physicians. New Orleans is particularly unfortunate in regard to consumption, and this fact makes our physicians eager to give a fair trial to any new thing that holds out some hope of success, whether from the nature of the drug or the professional standing of the introducer, or some other good cause. The use of Paquin's serum in this city was largely due, at first, to the untiring efforts of the editor of the *Times-Democrat*, one of our most influential daily papers.

The serum was tried, as far as our knowledge extends, only in pulmonary and laryngeal tuberculosis. In the latter, Paquin's serum proved itself utterly inert in the hands of the writer. Of all the physicians of this city who have tried the serum, only one speaks in praise of it, and this gentleman, who had tried it in more than thirty cases, made the astounding statement, over his signature and in the daily press, that he had cured with the serum a case of pulmonary consumption in six weeks.

Paquin's abortive attempt at serum-therapy in tuberculosis does not mean that there is no hope for consumptives in that direction. The new method of treating bacterial diseases is still in its infancy, but the achievements of its brief existence have already justified us in expecting greater things. We

will continue to live in the hope that bacteriologists will yet produce an antitubercular serum that will not confine its beneficial action to one favored locality, but extend them far beyond the narrow confines of the place of its production.

The use of Paquin's antitubercular serum has about died out in New Orleans. The sentiment of the profession of this city is pretty fairly expressed in the following resolution, adopted by the Orleans Parish Medical Society, August 24, 1895:

“*Resolved*, The sense of the society is unfavorable to the use of Paquin's serum in the treatment of consumption.”

DR. MARTIN'S NEW APPARATUS FOR CHLOROFORM ANÆSTHESIA.

Many instruments have been devised for the purpose of administering chloroform, but few have met with any degree of success, principally on account of their complicated mechanism.

We believe, however, that a new instrument devised by Dr. E. D. Martin, of this city, will fully answer the popular demand. Its chief recommendations are simplicity, cleanliness, economy of chloroform, and the certainty and regularity with which the anæsthesia can be administered.

The New Orleans physicians have not made themselves famous for devising new instruments, but Dr. Martin's new inhaler will go a great way toward redeeming us in that respect.

Abstracts, Extracts and Annotations.

SURGERY.

LOCAL ANÆSTHESIA BY INFILTRATION.

Dr. O. Bloch, of Albury, contributes an article on this subject to the *Australasian Medical Gazette* for June 15, in which he says that the dangers and the respective merits of the various methods of general narcosis have been the subject of a great deal of discussion, the practical results of which are not

so satisfactory as might be expected from the amount of scientific labor spent over the question, although, he says, they have achieved one good result in reminding medical men of the sense of danger, and therefore of the responsibility attached to the administration of any general anæsthetics. To them, he says, is due the wonderful progress of surgery, and considered from a broad point of view, they will do a great deal more good to humanity than harm can be done through them to the individual. But it should be impressed on the mind of the surgeon that in general narcosis he has an undoubtedly dangerous helpmate. The more surgery advances, he says, the more numerous the cases of narcosis will become and the higher will be the absolute death rate, even if we should find means and ways to lessen the dangers of the individual narcosis by a choice of drug or method. But it is not at all likely that we should ever be able to overcome its danger, for the simple reason that we can not paralyze the central organ of sensation without influencing the rest of the central organs of vitality, and while the first may be suspended without danger to life for a long time, respiration and circulation will not stand suspension for any length of time.

Therefore, it is very urgently incumbent on modern surgery to find out or follow up such substitutes for general narcosis as, while fulfilling the humane postulate of anæsthesia, will not endanger the health and life of the person for whose benefit they were intended, and any reasonable attempt to do away with a considerable percentage of the more dangerous general narcosis ought to command the sympathy of every surgeon. This, he says, is the reason which induced him to introduce the new method of local anæsthesia invented by Dr. C. L. Schleich, of Berlin, which was exhibited by him during the Congress of German Surgeons at Berlin in 1894. The author himself has had the opportunity of testing this method in over half a dozen cases.

The new method which may be called the infiltration method, says Dr. Bloch, is based on a perfectly new principle, or rather on two. It establishes a local œdema in whatever tissue and and at whatever depth the knife may have to work in. It uses, as a vehicle to bring about this œdema, a fluid which, while not destroying protoplasm life and not injurious to the general health, deadens for the time being the sensitiveness of the area of infiltration and interrupts the nerve conduction within it. This vehicle is a 0.2-per cent. solution of ordinary table salt, to which is added a minimum of narcotics, such as cocaine, morphine, or codeine, in a concentration far below the dangerous dose, even though large quantities of the fluid

should be injected. If a certain area of any tissue, says the author, is thoroughly infiltrated by a 0.2-per cent. salt solution it becomes anæsthetic, in consequence partly of the specific action of the solution on the nerve tissue, partly in consequence of the combined effects of the ischæmia, compression and local decrease of temperature produced in the œdematous area. The cooler the injected fluid is the more effective it is. Schleich uses three solutions, in which the 0.2 per cent. chloride of sodium solution is combined with cocaine and morphine (or codeine) in various degrees of strength; the slight addition of carbolic acid is made to keep them aseptic.

Solution.				In English Measure.		
	I.	II.	III.	I.	II.	III.
Cocaine hydrochloride.....	0.2 grm.	0.1	0.01	4 grs.	2	$\frac{5}{10}$
Morphine hydrochloride.....	0.025	0.025	0.005	$\frac{1}{2}$ "	$\frac{1}{2}$	$\frac{1}{10}$
Sodium chloride.....	0.2	0.2	0.2	4 "	4	4
Sterilized distilled water..... 100 grm.				4 fl. oz.		
Add three drops of a 5 per cent. solution of carbolic acid.						

The tablet salt ought to be heated and the distilled water boiled before making up the solution to insure asepsis; the cocaine and morphine are naturally germ-free.

The solution No. 2 is one generally used; No. 1 may be used in much inflamed tissues. No. 3 is very often sufficient and especially useful in protracted operations, when, by using No. 2, the maximum dose of the narcotics would be approached. It will be seen that about two ounces, or fifty Pravaz syringes of twenty minims each of No. 2, or twenty ounces, equal to five hundred syringes of No. 3, can be injected before the maximum dose of cocaine (or morphine) is reached, and practically even double the quantity would still be without danger, as we will learn from a more detailed description of the technique, that the whole amount is not injected at once, but in minute quantities at a time, and at least half or two-thirds of the injected fluid is washed away by the blood or oozes out from the wounds without being absorbed into the system.

Every operation, says the author, has to begin with the establishment of an œdematous spot within the layers of healthy skin in the vicinity of the place to be operated upon. The needle of a Pravaz syringe is filled with one of the solutions and inserted into, not underneath, the skin, superficially and as much as possible parallel to the surface, just far enough to cover the slit. By gentle pressure sufficient fluid is driven out to cause a white œdematous spot, a sort of wheal, to arise. Within this spot the tissue is perfectly anæsthetic. By inserting the needle again into the first wheal a second wheal is

established, and so on. This is illustrated by a cut showing a semi-circular line of wheals which outline the extent and shape of the incision to be made. Only the first insertion of the needle, says Dr. Bloch, is accompanied with the slight pain of a prick, which may startle very nervous patients and children; but even this can be prevented by using the ether spray on the spot of the first injection (which, it must be kept in mind, has always to be done in healthy skin) or, on mucous membranes, by touching it with concentrated carbolic acid or a small crystal of cocaine. All the following insertions of the needle are perfectly painless, being made within the area of previously established anæsthesia. Along this line of wheals the skin is incised right into the subcutaneous tissue. If it is necessary to go further than skin deep, the subcutaneous tissue is infiltrated in exactly the same way, always taking care that every subsequent injection is made within the area of already infiltrated tissue. Bleeding points can be secured in the usual way; in the case of larger vessels it may be necessary, after gently pressing them between the branches of the artery forceps, to infiltrate the sheath of the vessel before ligating it, or to touch it with a drop of concentrated carbolic acid, which will be found sufficient to deaden the sensibility of the fine nerves running inside the coatings of the blood vessels. Every tissue, says the author, whatever its nature may be, may be infiltrated and rendered anæsthetic; it can be done easily and with little waste of solution in the soft tissues (subcutaneous, muscular, fatty), with greater difficulty and under considerable pressure in sclerotic ones. Even bone can be rendered perfectly anæsthetic by the infiltration of the periosteum, and amputations of the fingers, amputation of the forearm and resections of the wrist have been painlessly performed by circular infiltration of the respective bones. If the stratum within which the operation has to be performed is not too deep, the infiltration can be carried on to it by simply pushing the needle, under continuous expression of fluid, deeper and deeper; or we can infiltrate layer after layer, keeping the margins of the superficial ones apart by sharp or blunt hooks in the usual way as we proceed. The time during which the anæsthesia will last may safely be supposed to be from twenty to twenty-five minutes, sufficient for operating in one layer of tissue, but nothing prevents any layer from being reinjected as often as can be done without transgressing the maximum dose of the nervine. The stitching of a wound may be done painlessly in the original line of superficial wheals, or new wheals may be established for the purpose. It may be remarked that infiltration in itself (by compressing the capil-

laries) prevents a good deal of bleeding; that larger vessels can be easily ligated as described above; that the infiltrated tissues, far from becoming indistinct, are very plainly defined against each other, so as to afford a good anatomical view and allow neat preparatory work.

While the foregoing remarks may give a general idea of the infiltration method, says Dr. Bloch, there are, of course, many little points to be observed which have to be learned by practice, and every operation, according to the nature of the ailment and the tissue to be worked upon presents new features of technique. He, however, states from his own experience that there is little difficulty to suit the way of proceeding to the nature of the case.

With regard to the enucleation of a superficial tumor, a lipoma, or an atheroma, says the author, a curved needle is advisable. A superficial line of wheals is established across the greatest diameter of the tumor, taking care, if it rises considerably over the surface of the skin, to draw it to one side while injecting, in order to minimize the steepness of the ascent from the surface of the skin to the tumor. An incision is then made along the line of wheals and the solution injected into the subcutaneous tissue between the skin and the capsule of the tumor, first on one side then on the other. By using a curved needle the cellular tissue can be infiltrated to such an extent that an atheroma may be fairly pushed out through the incision and quite easily detached from its bed. If the tumor is very large the operation may require very large quantities of anæsthetic fluid and very long needles, and it may not always be possible to finish the operation without resorting to general narcosis.

For the radical operation for hydrocele this method can be readily employed, and for the opening of any cavity of the body the same general technique holds good. For hæmorrhoids, says the author, this method has proved to be of the greatest value. Schleich cites twenty-five cases in which he successfully employed this method; the patients were cured in from six to ten days. Analogous to this operation, says Dr. Bloch, are those inside the vagina, and in operations on hydatids and the gall bladder this method will prove particularly useful. In regard to abscesses, under no circumstances must any fluid be injected into them before at least some of the contents is previously allowed to escape, as the increase of inside pressure is extremely painful, and the first injection must be made into healthy skin at some distance from the abscess. After infiltrating the skin covering the abscess (with solution No. 1 if there is much inflammation) a very small in-

cision ought to be made, part of the contents let out, and the pyogenic membrane infiltrated before extending the incision. By injecting the walls of the abscess it can be scraped out painlessly. It does not matter in the least how deep the abscess is situated, for it can be reached by slowly progressing from layer to layer. Dr. Bloch states that he has opened an abscess of the thigh containing about a pint and a half of pus, originating from the periosteum, which he was able to reach only by working through the big adductor muscles to the depth of four inches and ligating several arteries. During the operation the patient never flinched.

Panaritium, says the author, requires a very subtle technique under the new method. Boils may be incised by using a simple skin-infiltration with solution No. 1, or the inflamed tissue may be approached from four sides, and, by lowering the needle, undermined by a perfect bed of infiltration, after which the boils can be cut out.

Dr. Bloch says that a great number of other operations have been performed under this method of local anæsthesia, amounting altogether to over three thousand. He also says that the inventor of this method does not allege that it takes the place of general narcosis. On the contrary, there are cases where it is insufficient, or the nature and the local conditions of the ailment do not admit of its employment.

It would be a great gain, he thinks, if most of the minor operations could be performed without exposing the patient to the dangers or, at least, to the inconveniences of general narcosis.—*New York Medical Journal*.

A PUNCTURE WITH A BONE OF A LIVING FISH IN THE WEST INDIES, FOLLOWED BY LEPROSY IN A CAUCASIAN SUBJECT.

I have had an opportunity of examining a case of leprosy in this city, which has been first seen by a medical friend of mine, who knowing that this disease was a subject in which I had always been deeply interested since my sojourn in Japan and that I had published a number of articles about it in the medical papers, has been kind enough to let me study the case.

C. G., aged 35, but looking 50, of more than average intelligence, of intemperate habit, born in Germany, of German ancestors, came when 2½ years old from Germany to the port of New York; has been married twenty years; has five living children all healthy, one a married daughter, who has a child of 7 months. He says he was healthy until six years ago. The

following is his history: He lived in New York until he was 18, when he went to Brazil, as an engineer's storekeeper; the trip occupied two months. He left there and went to Aspinwall as waiter and chief cook on a ship belonging to the Pacific Mail. He remained in this service two and one-half years when he changed to the Savannah line, as cook, and remained in that service four years. Then he was employed by the Ward line running between New York and Havana, Matanzas, Tampa, Tuxpan and Vera Cruz. He was with that line one year. He then worked six months on a steamer running to Santiago, Cuba, Nassau, Cienfuegos. He went then to the Clyde line, running between New York, Charleston and Jacksonville, where he remained one a half years. After that he entered the service of the Red "D" line, running between New York and Curacao, Puerto Cabello and La Guayra. During all this service his family lived in New York, and his employment on his trips was always that of cook, storekeeper or waiter.

Six years ago he was on board a steamer running between Tampa, Key West and Havana, on which he had been employed during the preceding four months. Just as he was leaving Havana, from which the run to Key West is only a night's trip, while cleaning a red snapper, a fish which among sailors has the reputation of possessing a poisonous fin just behind the gills, he punctured with the bone of that fin the tip of the thumb of his right hand, through to the bone. The next morning he felt no pain in his hand, but the arm was beginning to swell; it continued to swell for some days, then the swelling subsided; the whole process lasted a week. At the climax it was about three times its natural size, the swelling extending to the shoulder. The man was under the treatment of the U. S. Marine Hospital surgeon at Key West, and gradually recovered. Immediately afterward an eruption appeared on the front of the chest, the head and face. Watery vesicles appeared, which broke and formed huge scabs.

Dr. Daniel M. Burgess, U. S. Marine-Hospital Inspector at Havana, treated him for this, but he did not define the case as having any relation to leprosy. When these eruptions were cured, after some months, there remained red blotches which crossed his nose and cheeks, and appeared symmetrical on his forehead over the eyebrows. Nothing appeared on the chest, where the eruption had been localized. These red blotches gradually thickened, hardened and became nodulated. He first noticed this on the sides of the nose. None of the blotches had at that time shown on his ears. This condition continued increasing; his ears became tuberculated, and six months ago

Dr. Burgess, of Havana, first declared the case to be one of leprosy. Soon after the first outbreak of blotches, the patient had discovered a numbness in the ulnar side of his forearms; he had no numbness in the feet until two years ago, at a time when my medical friend treated him for pleurisy and pneumonia. The hardness and hypertrophy about the wings of his nose, cheeks, eyebrows and ears was gradual; it began three years ago.

Present Condition.—February 17, nose hypertrophied, three times its natural size, tuberculated, nodulated, both ears hugely hypertrophied, tuberculated and pendulous; the whole forehead hypertrophied and nodulated; cheeks, upper and lower lips, fingers of both hands hypertrophied and nodulated; the back of both forearms tuberculated. Color of skin, face, neck, hands and forearms a deep tawny hue. The tongue can not be bent from right to left; it is bent over to the right side. He has the well known leonine face expressive of leprosy. The patient has a feeling of stretched numbness in the ulnar side of his forearms. The toes of both feet have been numb these two or three years. Ulceration on the tips of the three larger toes of both feet. He has just returned from a trip to Venezuela, which lasted twenty-five days, and is now laid up on account of the sores on his feet. He has no history of any disease except Chagres fever seven years ago and of pneumonia two years ago. I saw four generations in his house; his mother apparently in good health, his married daughter and his two sons, aged five and seven years, and the married daughter's infant son, seven months old. The married daughter is of a strikingly pearly white complexion. Both sons present a similar complexion. The infant grandson is in robust health. There is no history of leprosy in the family in any preceding generation. I cut one of the tubers from the finger of his left hand, and from sections made with the microtome, stained with carbol fuchin and methylene gentian violet, found lepræ bacilli in abundance, spherical accumulations of bacilli heaps, the so-called "leprosy cells."

Here we have, then, a man who had been exposed to the influences of leprous countries for at least eleven years; who received a wound from a fish caught in what we may call leprous waters; the wound is peculiar in that it was anæsthetic at the start; when it healed, the consequent swelling abated; there supervened a peculiar vesical eruption, which on breaking forms huge scabs. When he recovers from this, there appears with complete evidence the erythema of the plaques of leprosy, followed by hypertrophy and nodulation, these also characteristics of leprosy. From this moment, beyond doubt,

the case was manifestly leprosy, although the truth had not been recognized in the earlier stages.

Now, these questions arise:

Did the patient have leprosy germs latent in his system at the time of his accident?

Was he inoculated with leprosy at the time?

If there were such latent germs, would they have remained latent had not such an accident occurred?

Is it necessary, when leprosy germs are latent in the body, that an exciting cause intervene to develop them into activity?

Is it the case in leprosy as in tuberculosis, that germs may remain latent always?

I must remark here that everything seems to show that there are fewer chances of evident inoculation of leprosy germs than of tubercular germs, and that therefore there is greater probability of latency of leprosy than of tuberculosis.

There has always been a suspicion, for obvious reasons, that fish had something to do with leprosy, and I believe myself in intermediary marine host function. Can the case in hand be considered as corroborative of this opinion?

Hanson himself says that leprosy if not contagious, can at least be inoculated. The patient in question is living in fond relations with four generations, in a tenement house containing twenty families, in a non-leprous country. He is a New York man, having come here at $2\frac{1}{2}$ years of age; and therefore not to be shipped home, as might a Chinaman. What is our duty to the community, to the inmates of the tenement, to the man's family, and to himself, under these conditions? If he is reported to the board of health, he has only to expect the utmost rigors of charity; he will be put in a tent on some island, and condemned to perfect isolation; his family will suffer by the report.

If this patient is not reported and isolated, according to Hansen's belief, soon member or members of his family may become inoculated. (His married daughter and his two boys have now the peculiar pallor which, in the East, is considered as premonitory of the disease.) If they do become inoculated with leper germs, or if they are already inoculated with them, and yet escape the outbreak, may we not suppose that being in a non-leprous condition, and no incident like that which originated the disease in our patient occurring, the germs will remain forever latent? My own belief as to the contagiousness or the inoculability of leprosy is that the measure of danger is in the individual, the race and place of residence. There is much more danger here in New York from cohabitation and breeding of a leper with a healthy woman (a child was born to our

patient's wife one year after his outbreak of leprosy) than from contact or any such relationship. The Oriental law is that a leper shall breed with his own generation of leprosy; a leper belonging, let us say, to the second generation, that is, being the son of a man or woman in whom the disease first appeared, will be allowed to marry the daughter of a man or woman in whom the disease first appeared, and so on for the other generations. In this way the susceptibility to leprosy becomes extinct in the fourth generation and the leper germs will always remain latent afterward in that family.—*Journal American Medical Association.*

CASE OF ENDOCARDITIS AND PERICARDITIS WITH EFFUSION—
ACCIDENTAL TAPPING OF RIGHT VENTRICLE—APPARENT
DEATH—RECOVERY.

M. B., aged 19 years, a tall, fairly healthy young lady, was seized on 12th May, 1894, by a severe attack of erysipelas, which affected chiefly the left side of the face and head, and although it spread over the forehead and part of the right side of the face, was fortunately arrested, under treatment with ichthyol and lanoline externally and iron internally, on the fifth and an apparently rapid recovery was about to ensue. The temperature, which at the commencement varied from 103 deg. to 105 deg, had become normal, all sign of inflammation had disappeared, and a perfect cure seemed established, when suddenly, without any fresh exposure—the patient never having been allowed out of bed—a very severe attack of rheumatic fever developed.

To this there was a marked family predisposition, the father having suffered from a prolonged attack of acute rheumatism, which left him a martyr for sixteen years to subacute attacks, and completely deformed him; and her only brother having twice had attacks of rheumatic fever, and suffered frequently from rheumatic sore throat. Her mother and two sisters are alive and well; but her father, who at the time of her attack was suffering from tuberculosis of both lungs—the result of influenza—has since died. Her maternal grandfather and grandmother are octogenarians and in good health, but on the paternal side there is a distinct tendency to phthisis.

Her previous illnesses all indicate the same susceptibility to rheumatism. When two months old she suffered from bronchitis, which lasted about a fortnight. At five years of age she had rheumatic fever, and two years afterward suffered

from measles, which was followed by a second slight attack of rheumatic fever. Between the ages of nine and ten she had diphtheria, but for the next eight years enjoyed perfect health. In the beginning of February, 1893, she was attacked with scarlet fever so severely that from the outset she was put on a water-bed, and in spite of daily 30 gr. doses of salol and continued lying between blankets, she was seized with a third sharp attack of rheumatic fever, with accompanying endocarditis. This left a well marked cystolic mitral murmur, which, however, in the course of a few months, entirely disappeared, and with the exception of slight œdema of the right foot, she enjoyed robust health till within a few weeks of her present attack, when she began to feel her duties as school teacher rather fatiguing, and doubtless the anxiety regarding her father's health predisposed her to the attack of erysipelas, which was the starting point of the present, her fourth and most severe attack of rheumatic fever.

Salicylate of soda, in 10 and then in 15-grain doses every three hours, along with aromatic spirits of ammonia, was substituted for the quinine and antipyrin, which had been given along with the iron during the attack of erysipelas, and had been very badly borne. From the 17th to the 22d fair progress was made, the temperature varying from 99 deg. to 103 deg., but with a distinct tendency to an evening rise. No great relief, however, was got from the pains, which were general throughout all the joints, and were most severe in the muscles of the calves. An 8-grain Dover powder was given at bedtime with marked benefit, as a few hours' sleep was induced, and the restlessness which had been characteristic from the first somewhat allayed.

A daily careful examination of the heart revealed nothing till the morning of the 24th, when slight præcordial pain and a feeling of oppression about the chest was complained of, followed in the evening by well-marked friction, the "to-and-fro" murmur being audible over the whole base, but loudest and apparently nearest to the ear over the pulmonary area. The dose of salicylate of soda was increased to 20 grains every twenty-four hours, and digitalis added to quiet and strengthen the pulse, which from the beginning of the attack had varied from 100 to 116 per minute, but had been of fair strength, regularity and volume. Warm poultices and sinapisms were applied locally, with the result that in five days the friction had entirely disappeared, and the patient again seemed in the fair way of recovery. Still the temperature kept irregularly rising and falling in a suspicious manner without sufficient ascertainable cause, and the muscular pains in the limbs became even

worse. Salicin alone, and combined with antipyrin, was tried, but ineffectually; and considering the attack to have a possible septic origin, salol in 12-grain doses every four hours was substituted, with a slight resulting decrease in fever, but no diminution in pain. In fact, the only drug administered with certain benefit was the old-fashioned but reliable Dover's powder. During all this time the services of a skilled nurse had been utilized, and every precaution as to diet and the general treatment of a patient suffering from acute rheumatism had been most scrupulously and carefully observed. The urine, tested twice a week, presented no abnormality other than scantiness in amount and excess of urates.

From the 28th of May to the 4th of June the condition of the patient remained much the same, but on the evening of this day there was a return of the friction, and in addition a well-marked systolic mitral murmur was audible. Hourly, almost, a change for the worse progressed, hastened by the thought of parting from a dying father, who was being removed to the country in the vain hope of prolonging his life, and without an interview. Every movement was accompanied by excruciating pain, mostly in the muscles of the lower limbs; nourishment was taken, with difficulty, owing to occasional attacks of sickness; an irritable, hacking cough developed; the pulse became rapid—120 to 140 per minute—feeble, and dicrotic and the respirations were greatly increased, reaching to 30 and 50 per minute. The livid, anxious countenance, the pallor of the lips, the working of the *alæ nasi*, the dilatation of the veins and the increased general restlessness, all indicated rapid effusion into the pericardium, which physical examination too truly revealed. The area of cardiac dullness was greatly increased, extending fully half an inch to the right of the sternum, up to the second interspace above, but below and to the left was indistinguishable from a dullness which extended over the whole of the left lung, doubtless due to compression from the bulging pericardium, and probably to some actual pleuritic effusion, as all breath sounds were inaudible over the whole of the left base, and up to the middle of the scapula. Friction was still to be heard, but the actual heart sounds were distant, feeble, and obscured.

From the 8th to the 11th matters got worse, the changing color of the face indicating the possibility of a fatal faint at any moment, and an ever-present terror of approaching death adding greatly to the patient's discomfort and pain. By this time all anti-rheumatic remedies had been stopped and stimulants, in the form of champagne and brandy, freely given, while a mixture of

strophanthus, strychnine, and iron was added with a view to keep up the heart's action. Two blisters were applied over the præcordium and sinapisms to the bases of the lungs. Curiously, all the time the patient could only lie in an absolutely recumbent position, any attempt to raise her with a view to ease the breathing having quite the opposite effect.

My mind was gradually being made up that tapping the pericardium alone would benefit the patient, so on Tuesday, June 12, Dr. Bramwell was called in consultation. So grave was the patient's condition during the afternoon that the subject of tapping was not even mentioned between us, and the application of another blister was the only remedy suggested. In addition to all the other symptoms, considerable difficulty in swallowing had arisen, showing further increase in the effusion. The blister was applied a little lower down and more to the left than the previous ones, exactly over the apex-beat, which now corresponded to the left nipple.

On the following morning, June 13, I set up the aspirator and had it ready exhausted in an adjoining room, though the friends of the patient greatly objected to its being used. The pulse, which had been so rapid, had become alarmingly slow—80 per minute—and the nurse was warned if there was further slowing to send at once for assistance.

During the afternoon the patient was seen by Dr. Calder, of Leith—a personal friend—who was then of opinion that, tapping or otherwise, she had only an hour or two to live.

About 8 P. M., on my way to the house, and whilst about four minutes' walk from it, I was met by a young lady, who told me to hurry, as my patient was just dead. I ran as quickly as possible, and found that Dr. James Smith had been summoned, to find her either in a fit or faint. The pulse was uncountable and hardly to be felt, and the livid pallor of the face, profuse, cold perspiration, and changing, startled expression, indicating approaching death. First, thirty minims of ether were injected into the arm, and then a sudden dilation of the pupils and rapid receding of the pulse warned us of further need of stimulation, and thirty minims were injected into the left breast. I proposed tapping; but as the friends were anxious first to see Dr. Bramwell, Dr. Smith ran to telephone for him. Immediately afterward the heart and respiration stopped, and in the moment of excitement I jumped up, seized the aspirator, and plunged the needle into the fourth interspace, about half an inch to the left of the sternum and a little below the left nipple. To my astonishment, from eight or ten ounces of pure blood flowed rapidly into the bottle of the aspirator, and then suddenly stopped,

and to my dismay I found I had penetrated a cavity of the heart. As I was slowly withdrawing the canula, regretfully telling the nurse it was all over and to close the patient's eyes, to my surprise the heart made first a feeble, irregular movement, then gave a sudden strenuous jump and, finally, like a pendulum regaining its swing or a runner his stride, it started to beat again in the race for life. In moments of intensity it is difficult to estimate time, but I should say fully half a minute had elapsed between the introduction of the needle and the restarting of the heart-beats. It was an extraordinary sensation to feel the heart beating more and more forcibly against the points of the canula, which was gradually withdrawn, so as not to injure the heart wall.

I was standing with my thumb on the puncture made by the needle, when Drs. Bramwell and Smith made their appearance. My uppermost feeling at first was one of regret that I had converted a patient practically dead into one apparently dying, and sincerely did I lament she had not been left to pass away in peace, for a most pitiful scene was now enacted for an hour. Occasionally there was given a heart-rending shriek, quantities of frothy mucus were half-coughed, half-vomited and had to be swept out of the mouth with a towel, the blood went ebbing and flowing from the cheeks, which were first ashy-gray then purplish in hue, the pupils were dilated to their fullest extent, the running, fluttering pulse was quite uncountable and the patient had every appearance of one dying asphyxiated. Another dram of ether was injected, with the result that the patient became maniacal, and Dr. Bramwell's suggestion, first one-sixth and then another one-sixth grain of morphia was administered hypodermically to keep her quiet. This had a slightly soothing effect, and Drs. Bramwell and Smith now left, thinking it quite impossible the patient could live through the night. In another hour, however, her aspect had vastly improved, the lividity of the countenance and pallor of the lips had disappeared, the breathing was easier and the mania was succeeded by the most delightful feeling of intoxication, the patient repeatedly breaking out into ripples of laughter, and saying, "Oh, how nice! What a dear, kind doctor!" "Oh, how funny! Needles and pins, needles and pins running down both legs and arms!" In another half hour she was able to recognize her mother, who had been brought in from the country. The services of two fresh skilled nurses were obtained, and with injunctions that she should be freely stimulated with champagne and brandy, she was left for the night. The blood, which filled one-third of a 30 oz. Winchester jar, had formed a solid clot, and had to be broken up

with a stick and dissolved with soda and hot water before the bottle could be cleaned. In it there was no apparent mixture with serum, and clotting had taken place early and was specially firm. The smallest size of the ordinary aspirating needle was used.

During the night the patient was inclined to wander, and the pulse remained very rapid, changeable and irregular, while the respirations varied from 22 to 34 per minute, broken at intervals by a prolonged sigh. Occasionally great anxiety was caused by the deathly pallor of the lips spreading round the angles of the mouth, at which times a little brandy or champagne was administered in teaspoonfuls. In the morning consciousness completely returned, and the patient was able to take half a cup of tea and a biscuit. She had no recollection whatever of the dreadful crisis she had passed through, having been quite unconscious during the operation of tapping; and when puzzled as to the piece of plaster over her left breast, was told it was part of the dressing of her blister, as it was thought wiser to avoid any excitement. The pulse varied from 118 to 122 per minute, and was still very feeble and irregular, with a long pause at every fourth beat. The most absolute rest was enjoined; liquid nourishment was given in small quantities frequently, and stimulant only in dram doses, and with caution in fear of over-exciting the already too tremulous heart's action. In the afternoon the temperature rose to 101 and 104 deg., but this was accounted for by the exhaustion and the general feeling of soreness, due to continued lying in the same position. As there was still a tendency to mental excitement and no further sleep had been obtained, at 12.30 A. M., 15 grains of bromide of potassium were given, after which she slept till 2 A. M. At 4.30 there was great restlessness, and another 15 grains were given, with the result that repeated short sleeps were obtained between the times of administration of nourishment. Two days after the operation the temperature fell suddenly to normal, and the pulse from 104 to 40, which occasioned great anxiety; and this happened from time to time, till the pericardial effusion cleared away about eight days afterward, while the slightest movement on the part of the patient caused immediate paling of the lips and face.

It is needless for me to detail the daily progress of the case, which was hourly observed and noted by the two nurses to whose superb after-attention the patient owes her life. It will suffice for me to point out that after the fifth day there was no rise in the temperature above 99 deg. until July 2, and it was due to slight gastric disturbance, the consequence of over-feeding; that the pulse first became regular, then gradually

slower, till on the 22d of June it reached the normal rate of seventy-six, and the respirations, which had varied from twenty-two to thirty, correspondingly declined to eighteen per minute. During the first twenty-four hours no urine was passed, and for seven days after only twelve to fourteen ounces daily, thick with urates; but the patient continued at times to perspire so freely that her flannel gowns had to be changed frequently. The first urine passed contained no sugar nor albumen, but was greatly discolored owing to the previous free administration of salol. Solid food in the form of white fish was first given six days after the tapping, and the cardiac tonic of arsenic, strophanthus, strychnine and iron resumed. Fruit in the form of bananas and oranges was allowed, and strong soups flavored with vegetable juices given with a view to combating the profound anæmia which had ensued. Stimulants were only given when specially called for, and the bowels relieved by glycerine enemata. The only complaint the patient had was about the soreness of her bones, owing to her great emaciation; but an attempt to put her on a water-bed caused such alarming faintness it had to be abandoned.

It is the most extraordinary fact that here was a case of rheumatic fever, apparently of septic origin, which no therapeutic agent with the exception of the opiate, had done anything to alleviate, which almost nightly for three weeks had produced a temperature of 104 deg., and which, with its complications of endocarditis and pericarditis, had nearly caused the death of the patient, suddenly and finally arrested by the heroic process of drawing off ten ounces of blood direct from the heart. At no time afterward did the patient suffer from the very slightest rheumatic pain, whilst previously she was practically never free from such night and day.

For the first five days physical observation could only consist of stethoscopic examination over the heart; but till Tuesday, the 20th of June, the heart sounds were represented by irregular, muffled thumps, and were quite indistinguishable in any area. On that day they could be faintly heard and localized—the first sound feeble in the aortic, tricuspid and pulmonary areas, the second, relatively much accentuated; while in the mitral area, and especially over the left nipple, a soft blowing systolic murmur was distinctly audible, with a less certain presystolic. Daily the sounds became clearer, and when the patient became stronger, percussion revealed the gradual disappearance of the pericardial effusion, which was further hastened by the daily external application of iodine. A fortnight elapsed before the lungs could be satisfactorily examined,

but at the left base there was still extensive dullness and absence of breath-sounds. Rubbing with turpentine, iodine and blister were successful in removing this, and in three week, except for great debility, the patient was physically perfectly well, the systolic mitral murmur being the only persistent indication of what she had passed through.

Dr. Bramwell, who daily had looked for some announcement of the patient's death, kindly revisited her on Friday, the 23d, nine days after the tapping, and found the young lady whom he had left *in extremis*, apparently without the faintest hope of recovery, enjoying, through the kindness of a too indulgent nurse, a plate of strawberries and cream. In a month the patient was allowed up on a couch, and in another week to make personal efforts which had previously been forbidden; and it was the utmost gratification to me that within seven weeks from the time of cardiac aspiration she was able to be driven seven miles into the country to visit her father, the shock of whose death a day or two afterward she stood remarkably well. A week after this she was sent to the country and since then has enjoyed perfect health.

December 5, 1894.—The patient continues in excellent health; she has had no return of the rheumatism, and the cardiac murmur has entirely disappeared.—*Med. and Surg. Reporter.*

THE PREVENTION OF MASTOID EMPYEMA.

Much that is interesting and valuable has been written upon so-called "mastoid disease" and its treatment, but little or nothing on its prevention. This tends to spread abroad and foster the idea in the minds of the general profession that mastoid disease—*i. e.*, mastoid empyema and caries—is almost a necessary consequence of an otitis media, whereas quite the reverse is the truth. The subject naturally divides itself into the consideration of acute and chronic mastoid empyema.

It is highly probable that in every case of acute otitis media purulenta there is some involvement of the mastoid antrum in the inflammatory process; but this, like the acute inflammation in the tympanic cavity, will get well if not secondarily infected from without by improper treatment. Hence the prevention of mastoid empyema in cases of acute otitis media resolves itself into the prevention of secondary infection of the acutely inflamed middle ear.

It is the duty of the members of this society to inculcate the idea that the proper treatment of an acute otitis media is largely negative, after either spontaneous or artificial opening

in the membrana has occurred and a discharge set in. The inflammation of the middle ear being due to pathogenic germs (streptococci) in the middle ear, to which they have gained access from the naso-pharynx, the endeavor on the part of Nature, generally successful, is to afford them an exit from the tympanum by a spontaneous rupture of the membrana. Then a natural siphonic action sets in, which empties the mastoid antrum and saves the mastoid cavity, if this siphonic current is not stopped by irritative interference.

However, inspissation of the lateral portion of the exudate lying against the inner surface of the membrana, or previous thickening of the membrana, often delays and sometimes prevents spontaneous rupture of this diaphragm. Pain continues, the exudation is dammed backward toward the antrum, and if paracentesis is now performed within twelve hours of the beginning of the earache, a mastoid empyema may be the result.

It follows, therefore, from what has just been said of the origin and progress of an acute otitis media, that all forms of inflation of the tympana should be carefully avoided in this disease, not only for the welfare of the ear already affected with pathogenic germs, but also in order to avoid forcing similar germs, into the, as yet, unaffected ear. In fact, in many cases of acute otitis media the disease in the middle ear is often a secondary result of the treatment of the naso-pharyngeal disease, rather than of the latter disease itself. It will be found, when an acute otitis media occurs a week after the ear on the opposite side has been inflamed, that this result is due to the numerous inflations of the tympana that, unfortunately, most of us have been taught to practise as of a routine treatment of an acute otitis media. I have long since found it advisable *never* to inflate the ear, by *any* method, in either acute nasal or aural disease, because it has proved to be both painful and injurious.

I do not believe it is possible to abort an acute otitis media excepting by a paracentesis of the membrana in the early congestive stage. Sometimes congestion of the auditory canal and of the membrana undergoes spontaneous resolution, in spite of the ill-judged treatment it often receives. In acute otitis *dry heat* will never do any harm and may give relief. An instillation of ten drops of a warm watery solution of carbolic acid (2 per cent.) or of mercuric chloride (1:10,000) may also give relief, if the congested membrana can endure the mechanical presence of such a column of fluid, which, I have observed, it rarely can. Such applications, however, tend to destroy staphylococci, always present in the auditory canal, and

thus render the middle ear less liable to secondary infection through the perforation in the membrana when it occurs. As soon as the membrana is perforated and a discharge sets in, or even before this takes place, immediately after paracentesis, we should urge the medical attendant to insert simply a strip of iodoform gauze or carbolic acid gauze, an inch and a half long by a quarter of an inch wide, into the auditory canal for antiseptic drainage purposes, place a tuft of the same gauze in the concha, and let the ear alone for twenty-four hours, when the same kind of dressing may be reapplied if the previous dressings are moist, or let alone for twenty-four hours longer if they are dry. At no time do I syringe the acutely inflamed ear, or put anything into it but the dressing mentioned, and I find that the middle ear heals rapidly and the perforation closes. We should strenuously diffuse the idea that all insufflations, moppings, syringings, and instillations, of anything, will now be irritant to the membrana and middle ear, and tend to bring about secondary infection.

We have all seen cases of acute otitis media, treated in the old way by putting various medicaments into the ears, turned into chronic cases, both with and without mastoid envelopment; whereas an acute otitis media properly treated is never followed by mastoid envelopment, or a continuance of discharge from the ear, but gets well in five or six days.

Since January of this year, I have seen in consultation six cases of mastoid empyema, one chronic and five acute, *all* the result of improper treatment of the primary otitis media, by syringing with hydrogen dioxide, insufflation of boracic acid, inflation of the tympana, etc.

The members of this society should spread abroad the valuable knowledge that if dry heat gives no relief to pain, then the only other proper thing to do in acute otitis is properly incise the membrana, preferably under ether. Then drain the canal antiseptically as described, and let the ear alone. We thus can prevent mastoid empyema. Schwartze was the first to sound the note of warning against secondary infection of the mastoid by insufflation of boric acid in acute otitis media, and Gradenigo and Pes have recently written what must ever stand as a classic guide in the rational treatment of acute otitis media, in which they urge what in substance I have presented in this paper. Lermoyez and Helme, too, have shown that even the cotton-tuft on the cotton-holder, twisted by the cleanest of fingers, is loaded with staphylococci, and should be subjected to sterilizing processes before being inserted into the ear.

In the face of all this wise teaching, it is most regrettable that many of the younger aurists and some general practition-

ers are apparently vying with one another in their devices for pumpings, syringings, blowings, swabbings, etc., applied to the naso-pharynx and middle ears in acute otitis media. It is not surprising, therefore, that the number of cases of acute mastoid empyema is increasing, and that reports of such cases come in from all quarters, the writers and reporters apparently unconscious that they are detailing the secondary reports of their own irritant and infectious treatment, applied either by way of the naso-pharynx or external ear, or by that unfortunately infectious procedure, in the absence of suppuration beneath the mastoid tissues, the so-called Wilde's incision, and in some cases by setons, even in this era of antisepsis.

If acute mastoid empyema is not prevented, necessarily we must all continue to observe chronic otorrhœa and chronic mastoid empyema. Here too the treatment resolves itself into one directed primarily to the middle ear. Chronic mastoid empyema can not be cured until the chronic tympanic purulency is arrested. Mastoid trepanation in chronic mastoid empyema, without exposure of the middle-ear cavity and removal of carious and necrotic tissues, is valueless in all instances, even in intracranial lesions, for if the tympanic cavity is allowed to remain more or less full of the carious and infective tissues from which the mastoid caries, the sinus-thrombosis, or the cerebral abscess has arisen, not one of those diseases is radically cured until the infectious nidus in the middle ear is destroyed.

Mastoid trepanation alone does not check chronic otorrhœa. The necrotic tympanic tissues must be removed before the chronic purulency is checked. This is a common observation, not only in mastoid caries, but in intracranial, cervical, and pharyngeal lesions of otitic origin. No operation on the neck or within the cranium in such cases, though it may immediately save the life of the patient, may be of permanent value so long as necrotic tissues are left in the middle ear. This fact aurists should keep before the minds of the profession. But far better than any directions for the cure of mastoid empyema is the proclamation of methods of prevention.—*Medical News.*

A CASE OF TETANUS, WITH DEMONSTRATION OF THE BACILLI; TREATED WITH INOCULATIONS.

The patient was a school boy, 13 years of age, admitted to the Presbyterian Hospital in August last. Previously he had been in ordinary good health. When I first saw him his

condition strongly suggested hysteria, or rather one of those cases of hysterical or pseudo-rabies which are not uncommon, and there was a history dating back for several years of occasional fits of hysterical laughing, coughing and crying, with violent outbreaks of passion. The subsequent course of the disease, however, fully established the diagnosis of tetanus, and this was further confirmed by finding the specific bacillus.

The following data, which have been kindly furnished me by the House Physician, Dr. Thornly, were noted on the boy's admission:

Three weeks ago, while getting over a fence, the patient stepped on a spade which penetrated his shoe and made a wound in the ball of his right foot. A poultice was applied and the wound healed quickly. About a fortnight after the injury he began to complain of pain in the foot. The next day the leg grew painful so that he limped very much in walking. The thigh and hips next became painful, and the whole limb stiff; general pains were also noticed. Two days ago he first complained of stiffness in the jaw. He had been told that he was going to have "lock-jaw," which alarmed him and his family, so they brought him to the hospital. His symptoms became rapidly worse, and on admission frequent clonic spasms of all the muscles appeared, with some opisthotonos, but no general convulsions. The jaw became set and the boy was unable to swallow. He also developed general anæsthesia. Physical examination showed nothing of interest beyond the nerve-muscle symptoms. The patient was somewhat emaciated, but not anæmic. The mouth could only be opened about three-eighths of an inch, and this effort caused decided risus sardonicus. The thoracic and abdominal muscles were prominent and subject to spasms of board-like rigidity. The major muscles of both lower limbs became rigidly contracted on slight irritation. There was intermittent contraction of the extensor longus pollicis in both legs, with some slight dullness of sensation over this region. Deep reflexes not obtainable. The pupils were regular and reacted normally.

The symptoms were evidently exaggerated by observation (for the boy swallowed without difficulty a glass of milk which was left beside him), yet the means ordinarily employed to detect hysteria failed of effect, and convulsions could not be excited by any reasonable degree of peripheral irritation. The patient grew worse, and during the following week reached a condition in which the muscles became so rigid that he was unable to make any voluntary movement at all. Tetanic contractions were always present even during sleep, but whenever the slightest stimulus was applied, such as the change in temp-

erature or weight produced by removing the bed clothing, or by tapping on the chest, the entire body became as rigid as a board. In fact the boy could be lifted completely off the bed, by raising the toes of one foot, so that the only support of the body was at the occiput.

A peculiarity of this condition was that the patient repeatedly said that he had "no pain at all." When one recalls the intense pain of a "cramp" in the calf of the leg, which sometimes seizes a person at night, it seems incredible that tetanization so severe as to throw every muscle into strong relief should exist for hours continuously without producing any pain or even soreness. Spasmodic jerking and twitching of the muscles did occur frequently, and at times affected the whole body, and these spasms were often preceded by a cry of pain very closely resembling that of hydrocephalic children, and which sometimes occurred during sleep; but uninterrupted contraction, no matter how severe, was not painful, even when so strong that the arms, which were kept flexed across the chest, could not be extended short of force which would have fractured them. Another very curious fact in connection with this disease is that no degree of continued electric or other stimulation, applied physiologically to muscles either directly or through their nerves, is capable of maintaining a muscle in tetanus more than a few moments at a time. Relaxation from fatigue inevitably follows. But in this case the rigidity was absolute for hours together. The diaphragm and the tongue seemed to be the only voluntary muscles not affected. The breathing consequently became wholly diaphragmatic, and the boy was able to swallow fluids which were poured between the set teeth.

The electric reactions of the muscles were tested with the following results: The minimum galvanic current of a dry silver battery which produced perceptible muscular contractions was, for the masseter, 15 cells; right arm, 9 cells; left arm, 10 cells; right leg, 23 cells; left leg, 19 cells. The infra-maxillary muscles were strongly and painfully contracted with 25 cells, but the jaw was not opened beyond the usual three-eighths of an inch. Other symptoms which predominated were constipation, incontinence of urine, excessive perspiration and fever.

The following notes are copied from the record of the fourth day after admission, or the ninth day of the disease:

"Profuse perspiration exists. The patient cries continually for water, which he swallows with difficulty. Spasms more frequent, twenty or thirty occurred in the night. During intervals muscles still stand out prominently and are relaxed to

some extent, but not wholly. Arms are becoming more involved in spasms. Abdominal muscles very distinct, more rigid than any others. Feet are flexed and markedly inverted; the first phalanx of the toes is extended; the others are flexed. Patellar reflexes are lost."

On the thirteenth day of the disease the patient became much worse, owing to progressive exhaustion and emaciation. The temperature, which had not previously been above 102.5 deg. F., suddenly rose without chill to 106.8 deg. F., with a very feeble pulse of 164 and respirations of 45. There was repeated projectile vomiting and the patient was evidently *in extremis*. There was delirium, and the spasms were very frequent and severe.

At this time I succeeded in obtaining from the Loomis laboratory a tetanus toxin, made after the method of Brieger, that is, it was developed by growing fresh tetanus germs in a strong bouillon, and the boy received daily, for five days, inoculations of from one-half to one cubic centimeter, which were placed in the gluteal region. Before the inoculations were given various anti-spasmodic remedies were tried, such as chloral, morphine, urethan, conium, etc., but all were practically without effect upon the muscular rigidity. On one occasion I ordered a very hot bath, 105 deg. F., hoping that it might relax the spasms, but the result was so unsatisfactory that it was not repeated. The arms were completely relaxed in the bath and remained so for some minutes, but the pulse rose to 200 and became very feeble. While the disease was at its height nutrient enemata were given, for mouth-feeding became very difficult.

Much interest attaches to the question whether the inoculations benefited the patient or not, and I confess myself somewhat in doubt in regard to it. They certainly did no harm, and in each case were followed by a fall in temperature, excepting after the last inoculation, when it rose a degree and a half. The patient was almost moribund, with a temperature of 107 deg. F. and a pulse of 164, when the first inoculation was given, and next day he was decidedly better, although the tetanus and muscular spasms continued for five or six days longer before they began to diminish. This all may have been merely a coincidence, but according to Gowers only 90 per cent. of all cases recover without inoculation, and Dean states that the tetanus mortality in the London Hospital for the past sixteen years has been 80 per cent. Recovery is certainly very rare after the symptoms have become as severe and the exhaustion as great as in this case, which lasted for two months before the tetanus entirely disappeared.

Never having employed the toxin before—in fact I believe it had not been previously given in this city—I was cautious in its administration, and no doubt gave smaller doses than were necessary, not over 1 cc. being injected at a time. From inoculations made upon animals with the same toxin, it seemed less powerful than I supposed, and it had perhaps deteriorated in the daylight, as it is said to be very susceptible to the chemical rays of the sun. It was originally derived, however, from a very virulent case, and was the only specimen obtainable in town at that time. It would be a matter of great accommodation if bacteriologists would keep all the new toxins and anti-toxins on hand ready for immediate use.

The subsequent history of the case is uneventful. The symptoms subsided very gradually, the rigidity of the jaw slowly lessened, and the muscles of the legs were the last to relax. A spastic condition of one of them continued for some time after the patient was up and about the ward, and the right foot retained the position of talipes equinus. The delirium, vomiting, thirst and perspiration also slowly diminished, and the fever, which had been of a continued type for a fortnight, subsided completely upon the twenty-third day. After two months the boy wholly recovered.

I was very anxious to have the diagnosis confirmed by bacteriological examination, and Dr. Connolly, of the Bacteriological Department of the University Medical College, kindly assisted. He made cultures in two agar and two bouillon tubes, from blood taken from the immediate vicinity of the scar on the boy's foot, the original wound having healed, but they gave no result. We then drew three drachms of blood from the patient's median cephalic vein, and injected this beneath the skin of a rabbit. No result was produced, and the animal remained as lively as ever. This was not necessarily discouraging, as the tetanus bacilli are not usually found free in the blood, and at the time of the latter experiment (the twenty-second day of the disease) the toxins in the blood were probably not strong. I then asked Dr. Connolly to examine the soil in the yard in East Eighty-first street, where the boy received his injury, and after diligent search he succeeded in getting tetanus cultures from scrapings made about the hole in the boy's boot, at the point where the iron fence spike had penetrated in going into his foot. Specimens of these bacilli, some showing the typical spores, are to be seen under the microscope.

It is now just ten years since tetanus was shown by Rattone to be an infectious disease, capable of inoculation from man to the lower animals. The pure cultures of the bacillus were first

obtained by Kitasato five years ago. Its natural habitat appears to be the upper layers of the soil, especially in towns and suburban districts. Sternberg produced tetanus in a rabbit by inoculation with mud from a street gutter in New Orleans. Its common occurrence among the fishermen along the Shrewsbury river, near Seabright, N. J., and in some parts of Long Island, is familiar. The tetanus bacilli form straight thin rods which have rounded extremities that sometimes project into long threads. The spores form at one extremity of the bacilli, and as they are spherical and rather larger than the latter, each germ with its spore looks like a small club.

The bacilli grow readily in various common culture media, both with and without oxygen, and at ordinary temperatures, the best being from 36 to 38 deg. C. Cold below 14 deg. C. checks their growth. According to Kitasato, the spores develop in from a day and a half to a week, depending upon the nature of the culture medium. They do not grow well in blood-serum. The spores have been proven to remain capable of development even after two months of drying, and Turco has demonstrated that they withstand a 5 per cent. carbolic acid solution for fully ten hours. They die in three hours in 1 to 1000 corrosive sublimate solution, but the addition of weak hydrochloric acid kills them quicker.

Kitasato has derived pure cultures of the bacilli from the pus of inoculation wounds. Brieger, in 1886, isolated a crystallizable toxin, which he named "tetanin," and his work was confirmed by Kitasato and Weil. This toxin is fatal when inoculated, but a still more powerful tox-albumin has more recently been isolated by the same bacteriologists which destroys guinea pigs, mice and rabbits when inoculated. It is a product which rapidly loses its virulence in sunlight.

Kitasato, to whom we owe much of the best study of these tetanus poisons, has succeeded in rendering both rabbits and mice immune by repeated inoculations with the tox-albumin; and two other experimenters, Tizzoni and Cantani, have immunized the dog and guinea pig.

Kitasato failed to find the bacilli in human blood, but its toxins are undoubtedly present, for he succeeded in killing mice with tetanic symptoms produced by inoculation of very minute quantities of the blood—only 0.2 to 0.3 ctgr.

Two interesting cases of inoculation with the tetanus anti-toxin are reported by Dean and Evans, respectively, in the *British Medical Journal* of September 15, 1894 (pp. 579 and 581). The patients both recovered after severe symptoms had developed. The dose injected was $2\frac{1}{4}$ gm. Tizzoni gives the maximum dose at 4.5 gm.—*New York Medical Record*.

A TREATMENT FOR ACNE OF THE FACE.

In an abstract from the *Bulletin General de Therapeutique*, which appears in *Lyon Medical*, the writer gives the following formula which, he says, has often been employed at St. Louis with success: Fresh lard, 750 grains; sublimed sulphur, 105 grains; beta-naphthol and styrax ointment, each, 30 grains. Applications of this mixture should be made with strong friction every night for a week, then interrupted for six days, when they may be repeated, if necessary, although it is often useless to do so. If there is an appearance of small acute clusters, which generally show themselves toward the second day, the acne is ordinarily cured or very much ameliorated at the end of a week.—*Medical and Surgical Reporter.*

 MEDICINE.

MALARIA.

Since the publication of Lavran in 1880, describing a parasite in the blood in cases of malaria, which he regarded as the cause of the disease, a great number of articles on the subject have appeared. The most comprehensive article which has been written on the subject is the recent monograph of Thayer and Hewitson in the Johns Hopkins Hospital Reports, previously referred to in an editorial, July 4. The authors have carefully studied 616 cases of malaria which were treated in the wards and in the medical out-patient department of the Johns Hopkins Hospital between June 14, 1889, and August 1, 1894.

In the first part of the paper there is a review of the enormous literature on malaria which has appeared since its recognition of its parasitic nature by Lavarán, together with some of the more important literature preceding this period. In all, 359 articles are referred to.

In the articles which have appeared since 1880, the original observations of Lavarán have been confirmed and many new facts discovered which have cleared up many of the uncertainties of this disease.

Up to a few years past malaria was one of the most obscure diseases, and as such it formed a convenient cloak to cover ignorance. With some practitioners it still remains a sort of medical cesspool into which cases of lack of occupation, neurasthenia, incipient phthisis and typhoid fever are in-

discriminately thrown. It was supposed, unlike other diseases, to have no definite symptomatology or pathology.

By the term malaria we understand a definite infectious disease due to a definite cause. Unlike other infectious diseases, it appears under different forms, which are in many respects similar to one another. Each of these forms is produced by a definite parasite, and there may be mixed forms in which the parasites of one or more different forms of the disease may be present at the same time.

Malaria may be divided into three forms, tertian fever, quartan fever and estivo-autumnal fever. In each of these a parasite is found which goes through its cycle of development within the red blood-corpuses. In tertian and quartan fever the cycle can be determined with exactness and the paroxysms of fever coincide with a certain stage in the development of the organism. Tertian fever is produced by an organism which begins its development as an ameboid organism within a red corpuscle. It gradually increases in size, destroys its host, becomes pigmented and divides into a number of small forms which enter into other corpuscles and again pass through their cycle. The paroxysm of fever coincides with the segmentation and is probably due to toxic substances which are set free by the dividing parasite. The probability that such toxic substances are produced is shown by certain anatomical changes in the organs, similar to those found in other infectious diseases, and which may be caused by chemical toxic substances obtained by filtration of cultures.

There may be two or more crops of the same organisms present in the blood at the same time, each of which completes its development in forty-eight hours with paroxysm of fever coinciding with segmentation. In this way a quotidian fever may be caused. It is the same condition as two crops of peas of different time of planting growing in the same soil. The quartan fever is produced by an organism similar in its general features, which completes its cycle of development in seventy-two hours. Here, again, there may be several crops of the same organism present in the blood at the same time. There may be two crops producing a double tertian or three crops producing a daily paroxysm. In the estivo-autumnal form the parasite passes through a cycle of development the exact length of which has not been determined; it probably varies from twenty-four hours or under to forty-eight hours or more. The stages of the development of this organism can not be so easily determined, for they do not ordinarily take place in the peripheral circulation, the main seat of the infection being in the spleen, bone, marrow and other internal organs.

“Infection with this form of organism is associated with fevers, varying greatly in their manifestations. There may be quotidian or tertian intermittent fever, or, more commonly, more or less continuous fever with irregular remissions. The individual paroxysms last on an average about twenty hours. The irregularities in temperature depend probably upon variations in the length of the cycle of development of the parasite, or upon infection with multiple groups of organisms.” There may be mixed infections, the patient having at the same time the organisms of tertian and quartan or either of these forms with the estivo-autumnal.

In addition to the differences in the periods of development there are some morphological differences in the different forms. The organism is larger in the tertian than in the quartan and more indistinct, and there is also a difference in the number of segments into which it breaks up. It is probable that the organisms of each of these forms of malaria represent distinct species. The authors have never seen anything to make them believe that under any conditions these various forms may pass into another, as a quartan organ becomes a tertian, etc. In each of the organisms in addition to the typical forms which develop within the red corpuscles other forms which probably represent either degenerative or unusual forms of development are met with. In all there may be found an organism with long, actively-moving flagellæ free in the blood.

It has been suggested that this may represent the form of the organism when leading a saprophytic existence. That it may be a degenerative condition of the organism is shown by the fact that this form is almost the only one that is attacked and destroyed by the leucocytes.

The estivo-autumnal fever is further separated from the others by the presence of a pigmented crescentic organism. This is found in a large number of cases. It has never been possible to follow exactly the various stages of development of these extra corpuscular forms of the parasites.

It is to be regretted that the authors have not been able to include malarial hematuria in their observations. It is very possible that this disease is due either to a still different species of the malarial organism or to an entirely different organism. It is very improbable that certain manifestations of a disease should be confined to certain localities, as seems to be the case with malarial hematuria. It is greatly to be hoped that the authors will complete their work by the investigation of this disease which the proximity of Baltimore to one of the habitats of the disease in Virginia should make possible.

It has also been clearly established that quinine is most efficacious when given just before or at the time of the paroxysm. The segmenting forms and the young brood are much more susceptible to its action than the older forms completely enclosed in corpuscles. When two broods of the tertian organism are in the blood, giving rise to a quotidian fever, it has been found possible by giving quinine at the time of a paroxysm to kill one brood, leaving the other intact.—*Boston Medical and Surgical Journal*.

THE BLOOD IN BRIGHT'S DISEASE.

Ernest Freund (*Wiener klinische Rundschau*, January 27, 1895) gives the results of his observations on this subject, extending over three years. These refer to cases of Bright's disease (chronic parenchymatous, or nephritis, with dropsy), in which the clinical features were well marked, and which were verified by pathological examination. The results were compared with other cases of albuminuria and dropsy without Bright's disease. (1) Analysis of the blood of 9 cases showed no changes in the absolute quantities of either organic or inorganic constituents. The only alteration was in the relative amounts of the globulins compared with the albumens in the serum. While in normal and other pathological conditions the relation was 1 to 1.5, in the cases of Bright's disease it was 1 to 2.8. In 2 cases, in spite of the clinical diagnosis of Bright's disease, the relation of globulins was 1 to 1.1, and 1 to 1.13; in one of these cases the necropsy showed cystic kidney, in the other contracted granular kidney. This alteration in the relations of globulins to albumens can not be held as specific, because in a case of pernicious anæmia it was found to be 1 to 2. (2) As regards the alkalinity of the blood, no specific abnormal condition was found. (3) The conditions of coagulations were found to be altered. While normal serum coagulates uniformly at a temperature of 70 to 74 deg. C. to a firm jelly, in Bright's disease coagulation does not occur till 78 to 82 deg., and the clot, instead of remaining firm, is easily broken up by shaking it. It has been shown that much dilution alters the point of coagulation as well as the condition of the clot, and a dilution of 1.018 generally raises the coagulation point. Normal serum diluted to the same specific gravity as serum from Bright's disease was found to behave in the same way, and similar results were obtained in serum from dropsy without Bright's disease and in pernicious anæmia. (4) Semmola in 1881 showed that serum from Bright's disease had a greater

power of diffusion than normal serum, or serum from cases of albuminuria without Bright's. Freund's experiments confirm this view, for in 15 cases of Bright's disease the diffusibility with egg albumen was 0.006 to 0.025 g. per cent.; in 3 out of 16 control experiments from other diseases the diffusibility was 0.003 to 0.004 per cent., 13 giving negative results.—*Ontario Medical Journal*.

GYNECOLOGY.

THE QUICK GETTING-UP AFTER CHILD-BIRTH A MATTER OF DRAINAGE.

Dr. A. Rose has written to the *New York Medical Journal*, July 20, in confutation of the doctrine that lying-in-women are advantaged by the prolonged recumbency that is almost universally practised at the present day. Dr. Rose calls attention to the fact that, a number of years ago, the question was experimentally studied at the obstetrical clinic of Halle, Germany. Five hundred women, after normal confinement, were allowed to rise as soon as they pleased, and remained up out of bed as long as they felt like it—*i. e.*, as long as they felt comfortable. Some of these women left the bed for a shorter or longer time as early as the second day postpartum. No ill could be observed in any of these 500 cases. Five hundred women under similar circumstances were kept in a recumbent posture, or in bed, according to the time-honored custom, for a week or the well known superstitious nine days. The result was strikingly in favor of the 500 early risers.—*The Journal of the American Medical Association*.

Correspondence.

Editor N. O. Medical and Surgical Journal:

A few words concerning what, to me, is a remarkable personality may not prove uninteresting to your readers.

I refer to Professor Leopold von Dittel, of Vienna, Primarzt of the K. K. Allgemeine Krankenhaus, and what suggests my writing of him is that yesterday he took leave of the hospital staff for his vacation, a leave which may probably be a permanent one, as the doctor has recently been put on the re-

tired list and pensioned by the State. It is only in the event of a successor not having been chosen when his vacation is over that he will work again at the hospital.

Though over 80 years of age the doctor is as active as any of his young assistants. In fact, one has to take a pretty lively gait in order to keep up with him in walking from one ward to the other. Sufficient other testimony as to his vigor being practically unimpaired will be the mere statement of his work on the day previous to his leave-taking: After visiting his four wards, two down and two up stairs, he performed three consecutive operations, on different subjects, one for stricture of the urethra, one for prolapse of the rectum, and a ligature of the seminal ducts for hypertrophy of the prostate.

His hand is remarkably steady. He is fond of saying that it is because he has used so little alcohol during his entire life. At first, he says, it was because he could not afford it financially, later because he did not care for drink and thought he was better off without. He never drinks wine and seldom beer.

He is a small man, not fat, but with a good color and a bright eye; his movements are quick, though he is a careful operator.

Of few words, yet often humorous. The poor fellow whose ducts he tied was profuse in his thanks, in anticipation of relief, and told him he would never forget him, would pray for him for the rest of his days, etc. The professor turned it off by saying, "All right, I will on my part always remember your scrotum."

Dr. Von Dittel is perhaps the one who has had the largest number of cases of stone under treatment in the world. He has operated on about eight hundred and fifty, the large majority of which were by lithotrity.

You will agree with me that even if he never resumed harness he would still have done more than his share of work in this world, and that he well deserves the handsome pension which is now allowed him.

The leave-taking ceremony was simple yet affecting. His assistants surrounded him in the operating room, and the chief, in a short address, expressed their regrets at his departure and their good wishes for the future. One could read the pleasure in the old doctor's eyes at the words of appreciation. He responded very briefly but with feeling. No hand-shakings except by the writer, who had only that method of showing his gratitude for the kindness shown during our short acquaintance. The nurses, however, all grabbed a hand in turn and kissed it reverently as he passed, and one old fat woman, who is the

one in charge of the instruments and usually hands them to him during an operation, broke down completely and let her tears flow. She has served him nearly forty years. C. C.

Vienna, August 13, 1895.

Book Reviews and Notices.

Skiascopy and its Practical Application to the Study of Refraction. By Edward Jackson, A. M., M. D., Professor of Diseases of the Eye, in the Polyclinic and College for Graduates in Medicine; Surgeon to the Wills Eye Hospital; chairman of the Section on Ophthalmology of the American Medical Association; member of the American Ophthalmological Society, etc. With twenty-six illustrations; published by the Edwards & Docker Company of Philadelphia, 1895.

This latest contribution to ophthalmological science by Dr. Jackson is a very valuable one; coming at a time when so much is said for and against this comparatively new science by incompetent writers; its careful study convicts us at once as to the value of skiascopy as an aid to correct diagnosis.

The doctor has left no point in doubt to the reader; he goes over each chapter with the thoroughness of a master.

Confined to 112 pages, he discusses his subject in eight chapters.

I. History, Name, Difficulties and How to Study the Test.

II. General Optical Principles, Reversal, Real and Apparent Movement of Light, Rapidity of Movement, Form and Brilliancy of Light Area, The Point of Reversal.

III. Conditions of Accuracy, Source of Light, Focusing on Retina, Positions of Accuracy, Irregularities in Media or surface.

IV. Regular Astigmatism, Points of Reversal, Band-like Appearance, Changes with Distance, Direction of Band and Movement.

V. Aberration and Irregular Astigmatism, The Visual Zone, Symmetrical Aberration, Positive and Negative, Irregular Astigmatism, Conical Cornea, The Scissors Movement.

VI. Practical Application with a Plane Mirror, Position and Arrangement of Light, H., E., M., Regular Astigmatism, Aberration and Irregular Astigmatism, Measurement of Accommodation

VII. Practical Application with a Concave Mirror, Posi-

tion and Arrangement of Light, H., E., M., Regular Astigmatism, Aberration and Irregular Astigmatism, Measurement of Accommodation.

VIII. General Consideration, Apparatus, Midriatics, Relative Advantages of Plane and Concave Mirror.

In concluding his discussion on the relative advantages of the plane and concave mirror he says: "Perhaps the greatest advantage of one over the other is that the plane mirror over the concave in thus making possible the more complete study of aberration and irregular astigmatism.

WILL. H. WOODS.

Modern Medicine and Homœopathy. By John B. Roberts, A. M., M. D. Philadelphia: The Edwards & Docker Company.

This little book conveys information on a very important question. The author shows a remarkable impartiality and a thorough knowledge of the subject. It is to be wished the profession and the public at large would read the instructive statements and remarks made by Dr. Roberts, for, as he justly says in his preface, "some members of the medical profession may find in them reasons for abandoning a sectarian name, and others may see the impropriety and folly of proscribing those whose opinions conflict with their own."

Note this, page 22: "If the societies composed of non-sectarian physicians revise their by-laws so that physicians now called homœopaths may be eligible for membership, the next move should be for the homœopathic medical societies to drop the sectarian name. Could anything show better than this suggestion (made by a well-known homœopathic journal) the slight hold homœopathy has upon many of the supposed followers of Samuel Hahnemann?"

The public, also, which is still fascinated by sectarian designations, and still under false impressions in regard to homœopathy and homœopaths of the present time, will find in the book abundant proofs of the popular misapprehensions in the matter. Whilst none doubt that homœopathy has taught the world profitable lessons in the past, we all know that its birth and growth are accounted for by the erratic ways of therapeutics, years ago, but that modern medicine, in the work of reform, has outdone homœopathy. At present any designation of school is absurd and nonsensical; for all educated physicians are at liberty to use and are actually using the same remedies, the same doses, the same palatable preparations, pellets, triturates, tablets—all according to circum-

stances, without respect to impractical, dogmatic principles, and to "sectarian" patents of medicinal preparations, vary their prescriptions and their medications with the only view of fulfilling their noble mission, to help the sufferer, whether he be a weak child or a robust adult. Shocking *sectarianism* is now stung to the quick, but it can not be revived. It must die.

DR. E. M. DUPAQUER.

The Pocket Materia Medica and Therapeutics.—A resumé of the action and doses of all officinal and non-officinal drugs now in common use. By C. Henri Leonard, A. M., M. D., Detroit. Second edition, revised and enlarged; cloth, large 16 mo., 367 pages, price, post-paid \$1; Detroit, 1895. The Illustrated Medical Journal Co., Publishers.

Dr. Leonard's handy little work is most conveniently arranged for ready reference. It is a condensed dispensatory and report of new remedies and of the new uses found for old remedies. Such works are always welcomed by the busy practitioner; and the demand for a second edition testifies to the satisfactory manner in which at least one of the wants of students and practitioners has been supplied.

BOOKS AND PAMPHLETS RECEIVED.

Index Catalogue of the Library of the Surgeon General's Office. Vol. XVI, with supplement.

Physical and Natural Therapeutics, etc. By George Hayems, M. D., of the Faculty of Medicine, Paris. Edited by Hobert Amory Hare, M. D. Philadelphia: Lea Bros. & Co., 1895.

Practical Dietetics, with special reference to diet in diseases. By Gilman Thompson, M. D. New York: D. Appleton & Co., 1895.

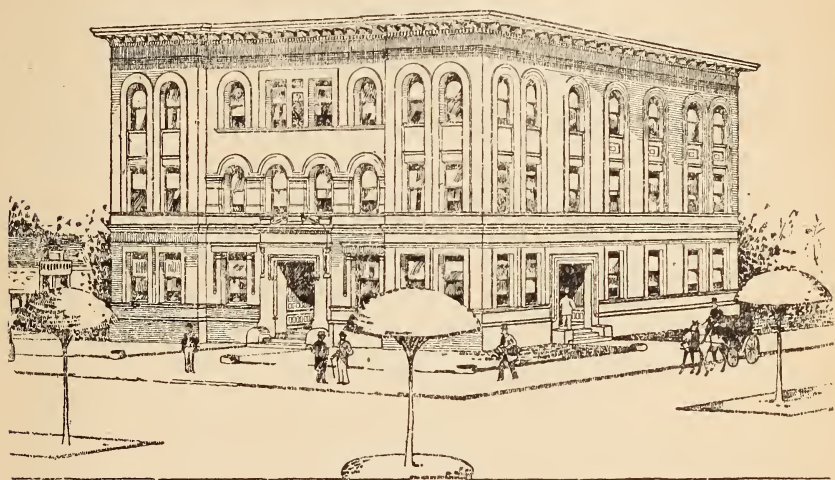
Science and Art of Obstetrics. By Theophilus Parvin, M. D., LL. D. Third Edition. Philadelphia: Lea Bros. & Co., 1895.

State News and Medical Items.

THE NEW BUILDING OF THE POLYCLINIC.

The New Orleans Polyclinic, which for the past several years has been affording post-graduate medical facilities to students and physicians here, has sold its old quarters on Canal street; and in the course of a few days will begin the construction of a new building at the corner of Common and Liberty streets.

The new building will be large enough to meet all the present and future demands of the Polyclinic, and will also be a very handsome structure of stucco finish. Standing at the northern corner of the streets' intersection, it will have two entrances on the ground floor, one each on Common and Liberty streets, near the corner.



The building will occupy a ground space of 70x72 feet, leaving enough vacant ground to permit of beautifying, as the property measures 85x88 feet on the street frontages, and more in depth and rear lines because of the irregular form of the square in which it is situated.

The lower floor of the new Polyclinic School will contain the clinic rooms for male patients. The second floor will be the female clinic department. A portion of the down-town end of the Liberty street side of both these floors, however, will be devoted to the amphitheatre, which will be two stories high. The third floor will contain the laboratories for histology, urinary analysis, and operations on the cadaver, and the dissecting room, and later on, in all probability, a bacteriological laboratory will be added.

The instruction term of the Polyclinic does not begin until the 1st of February, 1896, by which date the building will be ready for occupancy and fitted for use.—*Times-Democrat*.

MORTUARY REPORT OF NEW ORLEANS.

FOR AUGUST, 1895.

CAUSE.	White	Colored...	Male.....	Female.....	Adults ...	Children.	Total
Fever, Yellow							
“ Malarial (unclassified)....	4	6	6	4	8	2	10
“ Intermittent							
“ Remittent	4	6	8	2	6	4	10
“ Congestive.....	2	1	1	2	3		3
“ Typho	2	1	2	1	3		3
“ Typhoid or Enteric.....	4	5	6	3	9		9
Puerperal							
Scarlatina							
Small-pox		2	2		1	1	2
Measles		1	1			1	1
Diphtheria	4	1	2	3	1	4	5
Whooping Cough	2	2	2	2		4	4
Meningitis	5	3	6	2	2	6	8
Pneumonia	8	7	4	11	6	9	15
Bronchitis	10	3	7	6	10	3	13
Consumption	29	37	36	30	65	1	66
Cancer	10	1	4	7	11		11
Congestion of Brain.....	4	3	2	5	5	2	7
Bright's Disease (Nephritis)	18	10	15	13	27	1	28
Diarrhœa (Enteritis)	26	7	18	15	12	21	33
Cholera Infantum	6	3	7	2		9	9
Dysentery.....	3	2	2	3	5		5
Debility, General	1	1		2	2		2
“ Senile	15	5	6	14	20		20
“ Infantile.....	3	2	3	2		5	5
All other causes	162	85	141	106	159	88	247
TOTAL	322	194	281	235	355	161	516

Still-born Children—White, 25; colored, 28; total, 53.

Population of City—White, 195,000; colored, 80,000; total, 275,000.

Death Rate per 1000 per annum for month—White, 19.81; colored, 29.70; total, 22.51.

L. F. FINNEY, M. D.,
Chief Sanitary Inspector.

ERRATA.

Page 199. Line 16 from top read *one dram doses.*

Page 206. Line 7 from end of article read *one dram doses.*

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

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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.]

MENINGITIS AS FOUND IN COUNTRY PRACTICE IN LOUISIANA.

BY DR. I. T. YOUNG, LINDSAY, LA.

There are four points in connection with meningitis which I desire to establish beyond question.

These points are: First, that meningitis exists in our midst unrecognized, occurring at short intervals from time to time; and that many of the cases reported to have died with congestion, as a complication of malaria and other diseases, if they had been properly treated, would have survived, to have proved, by subsequent developments, their meningeal origin.

Second—That the sporadic, when idiopathic, and the epidemic are probably but different forms of the same disease.

Third—That the plan of treatment that I have laid down is both scientific and successful.

Fourth—That the opium treatment is both unscientific and unsuccessful, or not successful to an extent that would warrant its continuance, although a good substitute for the bleeding and starvation treatment of forty to fifty years ago, for which it was first introduced.

The necessity of discussing a disease in connection with its environment, or the peculiarity of locality, does not seem to be fully appreciated by the profession. Of course I do not

wish to depreciate the plan of viewing it from all points, but this is fully appreciated and utilized.

However, this plan is often confusing to one who is confined to one locality.

The classification of disease, too, is often more scientific than practical. This also causes the country practitioner to grope in the dark until he learns from sad experience to use his independent judgment. Dr. Wilson (in Hare's Syst. Pract. Therap.) sounds the key-note to this sentiment when he opens his article on cerebro-spinal fever in these words: "The present article includes the treatment of so-called idiopathic cerebro-spinal fever, both in its epidemic and sporadic form."

Although I have been treating meningitis for seventeen years, I have found great difficulty in classifying the cases; that is to say, which is of the sporadic and which of the epidemic form. Smith, in his "Diseases of Children" (3d Ed.), which seventeen years ago was a standard text-book (p. 297), says: "The diagnosis of cerebro-spinal fever from the common forms of meningitis is ordinarily not difficult, for while in the former there is the maximum intensity of symptoms on the first day, in the latter there is a gradual and progressive increase of symptoms from a comparatively mild commencement."

This would class half of my cases with the sporadic form. However, when they survive, the subsequent course of the disease is much the same. Smith further says (page 297): "Moreover, cases of ordinary or sporadic meningitis occurring at the age when cerebro-spinal fever is most frequent are commonly secondary."

Dr. Stillé (in Pepper's Syst. Med., Vol. 1, p. 227) says: "It is distinguished from sporadic meningitis by the fact that the latter disease is never primary." This would place nearly all of my cases under the head of cerebro-spinal fever, for nearly all of them were primary; yet some of them were about a month in developing, pointing to the brain, however, from the first as the seat of the disease. Besides, some authors claim that one is a summer disease, while the other prefers winter. This would demand another change in my diagnosis, as most of my cases, and many of the worst, were in summer.

Why can not these cases represent one and the same disease under different circumstances? of course excluding the cases of secondary meningitis. We of Louisiana, who know how often yellow fever has prevailed in our metropolis without assuming the proportions of an epidemic, can the better appreciate this idea.

Yellow fever under certain circumstances seldom produces black vomit.

Meningitis under certain circumstances seldom produces an eruption.

I have seen only a few cases with a characteristic eruption.

Dysentery, in its sporadic form, seldom produces congestion; in its epidemic form this frightful symptom is, alas, too common, in fact is nearly, if not always present in fatal cases.

Add to this the statement of Dr. Stillé (in Pepper's *Sys. Med.*, Vol. 1, page 800) viz.: "The first appearance of the disease in Philadelphia took place in 1863, and from that date until the present (1884) it has never failed to appear among the causes of death in the reports of the health office," and the argument grows stronger.

Might I not add that it is quite probable that it was there before that date, in its sporadic form, but it took an epidemic to force the medical profession to recognize its presence.

This seems a most rational conclusion, as I have been treating this disease for years in this locality, and yet my professional brethren, with few exceptions, seldom see a case; and when visiting some other portions of the State an inquiry is met with practically the same statement, viz.: "I have not seen a case of meningitis since I left the hospital." I am prompted to reply to such remarks: "What meaneth then this bleating of the sheep in my ears, and the lowing of the oxen which I hear?" What mean, then, these children with dwarfed minds, dating from a spell of illness a few years back, and some with impaired locomotion, and some with heads too large for their bodies, with a like history?

What mean these men who have forgotten their letters, and men whose minds are weak, all of which date back, sometimes years, to a spell of illness, if this monster has not been here?

I am satisfied that many of the cases which fill our asylum, near by, are but cases of meningitis, unrecognized and uncured in the gloomy past.

Again, what mean all these new graves if the monster, meningitis, has not visited your section? Do you credit this to typhoid fever or to malarial fever? These diseases should ordinarily yield to your skill.

If it can be established that meningitis did exist in Philadelphia unrecognized for a time before the outbreak of the epidemic, it will explain another difficulty in the way of assuming that all the idiopathic cases among the sporadic are of the so-called cerebro-spinal fever.

This difficulty is the fact that the sporadic is more fatal than is the epidemic form of the disease. Now, in no other disease is this the case, and if this is the case with meningitis, it goes far to prove that there are two or more separate and distinct diseases.

First let us see if this is the case.

Smith (*Diseases of Children*, page 295) states that he lost twenty-six and cured twenty-six out of fifty-two cases of cerebro-spinal fever (50 per cent.). Again, on page 375, he says of the simple form: "Meningitis is one of the most fatal maladies of early life. Whether the form is simple or tubercular, if the initial stage has passed without proper treatment, death may be considered inevitable." (See also Barlow's *Practice of Medicine*, page 441.)

But if we take into consideration the large number of cases, probably two-thirds of the whole, which are not recognized in the sporadic form, which would all be recognized if an epidemic prevailed, the force of the argument fades before the light of investigation.

Seventeen years ago I encountered this disease, and lost my patients as fast as I got them. I lost two in one day. Finally, with the assistance of a neighboring physician, I succeeded in saving two. Some time after this I succeeded in saving about half; and now to lose a case, which has survived the first shock, is the exception. But I find that the disease is here, and is likely to stay here until I lay down my armor, as did my professional brother who assisted me in saving my first

two cases. He continued to treat the disease successfully, and to find it to treat, until the close of his life. It is my impression that but few practitioners among us recognize this disease, or only recognize it when it is too late to save the patient, and it is that impression which has prompted this article. It is only within the last few years that I have learned to fully appreciate the importance of early treatment. The premonitory symptoms often occur in time to enable the practitioner, by proper treatment, to ward off the disease entirely, or, failing in this, sometimes the disease is aborted.

Formerly I classed the aborted cases as a mistake in diagnosis, and those who died within the first days of the disease, and in which many symptoms were absent, I often failed to recognize as meningitis. Now, when I suspect the brain I treat for that malady until I can make out the diagnosis; it is seldom that the patient's life is risked by this plan.

The question of diagnosis can not be dwelt upon in this article; and those points left untouched are sufficiently explained in the text-books; the important question is to realize that the disease is ever with us and must be met.

The fretful condition of the patient, the constant headache, the gradually developing impairment of the mind and hallucinations, with a temperature too low to account for it by typhoid fever, the hydro-cephalic cry and opisthotonos, mark the course of the gradually developing variety. Or the high fever, or spasms, or collapse, coming on suddenly with serious impairment of the brain, fever continuing for several days and subsiding, leaving the brain no better; and opisthotonos, sometimes marked with hydro-cephalic cry, small and corded pulse, and temperature often falling below normal, such mark the other form.

The disease has another peculiarity of not assailing more than two in one house, and showing no evidence of contagion. I can not recall an instance in which I have had more than two cases in one house in the same season.

In 1885 I took a first-course student, who had been taught to doubt the diagnosis in favorable cases, to see a case which had been neglected that he might be convinced that we were dealing with the genuine disease. This case, a child between

three and four years old, had been sick a month before I saw it. It had now been sick about seven months. As we viewed him lying on his pallet, I thought I had never seen a human being, or any vertebrate animal, approach so near the vegetable kingdom. He had some motion of the head and lower jaw, but I think every other joint in the body had long since forgotten its function. Arms and legs flexed in a typical manner, spine curved to its fullest extent, joints enlarged, and body apparently skin and bones, with no mind and no language but a yowl.

COMPLICATIONS.

I shall refer to but one. In my experience, pneumonia developing after the second week, very materially modifies the disease. The function of the brain is soon restored, the pneumonia runs a mild course, and when resolution sets in, convalescence begins.

TREATMENT.

In the treatment of this malady, we must view the end from the beginning. We must recognize the emergencies of the hour, and the dangers that lurk in the distance; and while combating the ones, we must never lose sight of the others. Never let symptoms divert your attention from the real condition of your patient.

The indications are, first, to relieve the nerve strain, and to promote, or produce, quiet, refreshing sleep as a means to this end (bromide of potassium and chloral hydrate). Second, to lessen or restrain inflammation by reducing the blood supply to the affected organs (bromide of potassium, belladonna or ergot). Third, to relieve hyperæsthesia (bromide of potassium) and tetanic muscular contractions (chloral hydrate and belladonna). Fourth, to sustain the vital powers in the most careful manner. Fifth, to avoid all remedies which would irritate, excite, or impair the brain (quinine, alcoholic stimulants) or that would promote stupor or impair the digestion (opium). Sixth, keep the patient quiet in a darkened and well ventilated room. Seventh, after the acuteness of the attack begins to subside, to promptly institute measures to repair the damage already done (iodide of potassium and tinc-

ture of belladonna). I fear this precaution is too often overlooked, or too long delayed, and hence the permanent impairment so often following this disease.

Called to a patient with this disease, if a small child, I give calomel, then bromide of potassium, and if the fever is high I give some simple fever drops, then await developments. If the child is large or the symptoms are severe I combine the bromide with chloral hydrate, remembering that the combined effects of these drugs is greater than the sum of their effects estimated separately.

I use Young's rule of dosage, and estimate the adult dose of chloral hydrate at 15 grains, and the bromide of potassium at 20 or 30 grains. I repeat every three hours if necessary, but seldom go above the dose I have indicated. If there is severe headache and it fails to yield to the above prescription I give ergot (adult dose $\frac{3}{4}$ of fluid extract). This seldom fails to relieve the head or to relieve the spasms which so often occur in young children. In fact I have seen ergot relieve the spasms promptly in this disease when all the usual remedies for this symptom, including opium, had utterly failed. I use cold applications to the head whenever indicated, or whenever agreeable to the patient, which is usual; counter-irritation along the spine and back of the neck with croton oil diluted with turpentine whenever there is spinal irritation, which is usually the case; small blisters back of the ears whenever stupor is increasing or approaching coma.

In this I acted with West and Condie and against Smith. I have found that these blisters increase the excitement of the patient when used too early, and for this reason have omitted their use until later, and seldom fail to get up reaction by their use; my patients usually arousing from their stupor when the blisters draw. Whenever the stupor comes on at any stages of the disease they are repeated with usually the same result. I think it very important to begin treatment as early as possible for the removal of the effusion, so as soon as the fever declines or in cases where the fever is not a prominent symptom, I begin at once with iod. pot. 4 grs. and tr. belladonna from 8 to 10 drops (as an adult dose) given every four or six hours.

I find that these drugs given together produce much better

results than is reported of either drug when given alone, and the objections to the use of the iodide are to a great extent removed by this combination. I vary the dose when I think necessary, but never give very large doses, preferring to accomplish my object by their long continued use. I seldom begin the use of these drugs before the fourth or fifth day of the disease.

The effects of iodide in promoting absorption need not be discussed, although its utility is overlooked by many.

The use of the belladonna may need some explanation, as it does not seem to be in favor with the profession generally, yet highly recommended by a few. My results warrant its use with the iodide as also with the chloral hydrate and bromide of potassium.

At this stage belladonna assists the chloral and bromide very materially in relieving pain and quieting the patient; it aids in lessening the blood flowing to the brain; prevents the depressing influence of the chloral and bromide on the heart, stimulates that organ, elevates the temperature, which is now inclined to fall below normal, dries the surface which is now bathed in perspiration, promotes elimination by acting on the kidneys, overcomes constipation, quiets the nervous system without disturbing digestion or appetite, and renders iodide of potassium much more tolerant to the system while increasing its efficacy in this disease. Last, but not least, its stimulating action is very marked upon a respiration, which is usually irregular, sighing, sometimes rapid, though usually slow, or even temporarily arrested at intervals.

Since I have adopted the systematic use of these remedies, together with systematic and liberal feeding and good nursing, my patients, with few exceptions, not only get well, but recover their physical and mental vigor; but not until after a long and tedious struggle, the contemplation of which brings "a weariness of the flesh;" and seldom do I make the diagnosis of meningitis that it is not followed by a deep involuntary sigh. My first two patients treated in this way, although their brains were left in such a condition that I found it necessary to prohibit study for nearly two years, have since taken honors—one the second, and the other the first—in one of the best female

schools in the South. One advantage in this treatment is, that my patients usually have a good appetite throughout the course of the disease (except, perhaps, the first few days)—even when they know nothing and their throat is so paralyzed that they can scarcely swallow, they will usually take food willingly; and many of them who can swallow will take with a relish all the food you give them, and digest it as if they were well. I have attributed this peculiarity entirely to the disease.

As some writers do not find it so marked a symptom, I think it probable that they blunt their patient's appetite, or destroy it, by the use of drugs. It would seem that the necessity of protecting the appetite and digestion could not fail to be appreciated by one who has treated the disease. And yet to my mind it has been, to a great extent, due to a lack of this protection and to a failure to indulge the appetite which has caused this disease to prove so fatal in the past. I believe that by liberal feeding the death rate is much reduced. I must not neglect to mention the utility of mustard foot-baths in relieving the head and quieting the patient. Indeed, we have need to resort to all such measures for relieving or quieting our patient. If we were to use drugs to the extent that would be required to relieve all the annoying symptoms of our patient I am sure it would be at a sacrifice in the outcome. I have generally contented myself in giving my patient from four to six hours' sleep in twenty-four hours when they were at their worst; indeed, I have often failed to reach this point, only securing a few cat-naps at intervals for several days, and yet my patients would eventually recover. Not wakefulness, but stupor, usually warns us of the approach of death.

I have usually given a dose which was within safe limits, and then persisted in its use and awaited results. I prefer this to overwhelming my patient with the drug. When temporary relief is to be gained by jeopardizing the final result we must forego the former, giving preference to the latter.

I fear that opium stands in the category of temporary remedies. And, too, the enormous doses recommended by its advocates are an argument against its use. I have given it to cases which I did not suspect as having the seat of the disease in the brain, but by its profound and altogether unusual effect,

given in small doses, I was able to recognize the malady. It sometimes has the opposite effect and excites the patient beyond all reasonable expectation; and this also points to the brain as the seat of the trouble. I have seen one small dose of an opiate throw my patients into a stupor from which they would not be aroused for twenty-four hours; in this time taking no nourishment and no water. If they had aroused from this condition in any way improved, I should have continued the treatment, but there was no appreciable benefit derived from this long sleep. They had lost the sustaining treatment, and stupor, which so often marks the danger line in this disease, had warned me to desist.

Every practitioner of medicine is, or should be, an independent factor in developing the science of medicine. We write what we see, and what we know from experience. If I differ in no way from our text-books, there is nothing to write, and I should keep silent. Dr. J. C. Wilson (in Hare) expresses himself as follows: "Opium, by the concurrent testimony of all observers, holds the highest place in the treatment of this disease."

Dr. Stillé (in Pepper's Syst. Med.) quotes many authors to establish the great tolerance of opium in this disease, but says: "It seems probable, however, that the benefit of the opium treatment was more decided in the early stages of the attack."

Bartholow says: "The author is convinced that we possess no means of treatment of cerebro-spinal fever so effective as the opium treatment," but, continuing, he says, "When effusion takes place, and stupor and coma ensue, the utility of opium is ended." Then, I am to infer that he thinks as Smith does about the simple form, that "if the initial stage has passed without proper treatment, death may be considered inevitable."

According to these authors, only a few days are allotted to the treatment of a disease which is likely to last for months.

My experience with opium in the treatment of meningitis has not been extensive, and the stupor produced by this drug may not be as dangerous as it appears, but my knowledge of its physiological effect, as well as of the pathology of the disease in question, leads me to question its utility.

In this connection I would call attention to its depressing effects on the respiration, which in this disease is usually depressed and sometimes very slow and often intermitting. Yet, when its advocates obtain better results with it than I can obtain without it, I shall be ready to give it a further trial. But if opium is to be retained at the head of the list of drugs to be used in the treatment of meningitis, then the *materia medica* should be rewritten, or the physiological action of a drug has nothing to do with its therapeutic value.

Let us now compare opium and belladonna, or atropine, in their physiological action, and see which is most likely to prove beneficial in the treatment of this disease. (For this see Bartholow, *Mat. Med. and Therap.*, pages 589 and 590.)

Atropine causes delirium, hallucinations and disturbed sleep, relieves pain. Morphine produces stupor, somnolence, hebetude of mind, relieves pain to a greater extent.

The after-headache, vertigo, nausea and depression of the heart's action, caused by morphine, are to a great extent prevented by the conjoined administration of atropine. Morphine prevents the contraction of the arterioles produced by atropine.

Morphine depresses the action of the lungs. Atropine is a powerful respiratory stimulant.

Morphine produces pallor of the surface, and reduces the external temperature.

Atropine causes redness, injection of the skin, and elevates the body heat. I have seen it raise a subnormal temperature 1 to 2 degrees within an hour, but it often fails to affect a temperature already above normal.

Morphine lessens, atropine increases the functional activity of the kidneys. Morphine induces, atropine prevents perspiration. Morphine constipates, belladonna promotes the movements of the bowels.

Compare the physiological action of these drugs with what is indicated in meningitis, and add to this the tendency of morphine to disturb digestion, and but one conclusion is to be reached.

Opium has but one thing to recommend it, and that is to relieve pain; this it often fails to do, given in any reasonable dose.

This, however, recommends it more to the weary nurse than to the doctor, for I am sure the results will not warrant its preference to belladonna combined with chloral hydrate and bromide of potassinnm.

About fifty years ago the profession began to use opium in the treatment of meningitis. In those days of blood-letting and starvation, the mortality was about 96 per cent. in the epidemic form, which was reduced to about 50 per cent. by substitution of opium; and this is claimed to be less than in the sporadic form (see Barlow's *Prac. Med. and Condie on Dis. of Children*).

The advocates of the opium treatment claim little more than this percentage to-day. If in these forty odd years they have made no progress, it is about time they were ready to try something else, and especially when others are claiming better results, all of which they seek to neutralize by explanation. Whatever has been gained in this time is due to hygiene and nutritious diet.

The great danger in the failure of the early recognition of meningitis is intensified in this malarial district, where every fever, not otherwise accounted for, is classed as malarial. And in the fall I fear many of our practitioners lose sight of the fact that there is any other fever.

The result of this is that quinine is the first thing prescribed; which is adding fuel to the fire in meningitis.

I never use quinine in this disease. I use cinchonidia in very small doses, to remove a malarial complication, or some decidedly periodical disturbance, which is annoying or exciting my patient; but this is usually after the disease is fully developed, or the brain symptoms beginning to subside. It is then given in three small doses a day (not more than 2 gr. for an adult), given three hours apart, given for two days and then omitted. Even in this small dose its effects on the brain are very perceptible to a careful observer. Yet its antiperiodic effect is very decided, and the benefit gained, when given in this way, outweighs the evil produced.

I would call attention to the fact that cinchonidia, while possessing an antiperiodic effect nearly equal to that of quinine, is much less liable to produce unpleasant brain and head symptoms.

Many persons who can not take quinine on account of its unpleasant effects on the head, take cinchonidia without any inconvenience whatever. But as a uterine stimulant it seems to be equal to quinine, and its liability to produce urticaria is identical with that drug.

I am satisfied that there are hundreds of children throughout the State sacrificed every year by the indiscriminate use of quinine. The fevers, which in their first appearance, often resemble severe malarial fever with brain symptoms, are very apt to mislead, and when of meningeal origin the condition of the brain is much aggravated by the use of large doses of quinine, although the fever may be reduced by them. This is one of the peculiarities of our section, in the treatment of meningitis, which is scarcely alluded to in the text-books.

I think it probable that I would have lost a number of children last summer and fall had I not recognized, or suspected, the brain origin of the trouble when first I called to see them. And, as I did not share in the mortality, which was great, in our section at this time, I am inclined to attribute it to meningitis, not recognized, and treated as malaria.

If these patients do not succumb to the disease in its first assault, under this treatment, but should survive, their recovery is apt to be incomplete and their minds and bodies permanently impaired for want of proper after treatment.

This would be almost a certain result but for the pains so often left behind and which bear such resemblance to rheumatism as to suggest *iod. pot.* to the doctor who has failed to recognize the nature of the disease he has been treating. Even this, begun too late, usually fails to complete the work. As for calomel, I never give it in decided doses after the beginning of treatment, but often find alterative or laxative doses indicated during the course of the disease.

Alcoholic stimulants I often find indicated, but seldom find a patient with a condition of the brain that will tolerate them in any form; and even carb. ammonia often proves irritating to the brain. Sometimes belladonna excites the brain when it is taken, but this is followed within an hour by a soporific effect, and when combined with *chlo. hyd.* and *bro. pot.* often ends in a quiet sleep. But this is not the case with

alcoholic stimulants or with the carb. ammonia. Carb. ammonia, however, is often well borne from the first, and then renders valuable service. But when it disagrees it should not be given except when the circulation imperatively demands it, and belladonna has proven to be equal to the emergency.

I usually continue the iod. pot. and tr. belladonna long after leaving off the chlo. hyd. and bro. pot. I think this is necessary to avoid serious after effects. It is usually necessary to intermit, occasionally, for brief periods, to allow some symptoms to subside, which we may suspect are produced by the drugs, or that we may the better understand the real condition of our patient.

The best results I have seen recorded are those of Dr. Read, of Boston, referred to by Dr. Stillé (*Pepper's Sys. of Med.*, Vol. 1, p. 834). These were obtained by the combined use of ergot and belladonna.

Dr. Stillé seems to question the efficacy of the dose used, but when it is remembered that these drugs are synergistic it is quite probable that the dose was capable of doing what Dr. Read claimed for it, besides the drugs were given every three hours, when belladonna is usually repeated from four to six hours in my cases.

Again, probably the best results are not obtained by large doses of belladonna. I have never used ergot in so small a dose in this disease; I have given it in ounce doses of fluid extract to an adult, and usually with happy results, patients soon free from headache and soon sleep.

In conclusion, I will say that during convalescence tonics are usually indicated for a long period of time.

This must be left to the discretion of the attending physician. No stereotyped rule will answer for all cases.

NOTES ON INTUBATION IN LARYNGEAL DIPHTHERIA.

BY AUGUSTUS MCSHANE, M. D., FIRST ASSISTANT SURGEON EYE, EAR, NOSE AND THROAT HOSPITAL, NEW ORLEANS, LA.

The clinical notes that are here given, though not numerous or extensive, contribute a mite to the constantly growing literature of intubation, and serve further to emphasize the prompt and energetic action of the diphtheria antitoxin when

the patient has not become hopelessly saturated with the diphtheritic poisons.

I. On December 9, 1894, Dr. E. J. Graner requested me to go with him in haste to intubate a child that was threatened with suffocation. He had seen the little girl only the day before, when her voice was extinct, but her breathing not embarrassed. The history was one of a severe cold, gradually becoming worse. Dr. Graner gave appropriate remedies for acute laryngitis, but in twenty-four hours he saw that something else had to be done, and very quickly, too. When we arrived at the house, at 9 P. M., the little patient, aged 6 years, was almost comatose, the lips growing livid, and the respiration so labored that it was painful to behold her struggles. A hurried laryngoscopic examination revealed an uninterrupted layer of false membrane, covering all of the vestibule of the larynx, and, with thick muco-pus, filling the glottic space. The patient's mind was so heavy from carbonic acid poisoning that she could not be fully aroused. With the assistance of Dr. Graner, intubation was performed; the first attempt was unsuccessful, but the tube was properly placed on the second introduction. The silk string attached to the tube was tied to an improvised cravat and left there. As soon as the obturator was removed from the tube the child began to cough up large masses of viscid muco-pus, which her previous efforts could not force through the stenosed larynx. This matter was coughed up every few moments, and it was certainly appalling in amount. It had been accumulating in the trachea and bronchi for several hours, at least, and was gradually suffocating the little patient; and as it was expelled her color came back, her eyes grew brighter, and, in a word, her whole appearance was transformed.

When the patient's condition permitted it, another examination of the throat was made. There was no false membrane on the fauces or pharynx; it was confined to the larynx, extending upward to the edges of the ary-epiglottic folds, and downward to the vocal cords and beyond, perhaps. A culture-tube was inoculated with the secretion rubbed from the pharynx and upper part of the larynx; the bacteriologist, Dr. P. E. Archinard, reported that the case was one of true diphtheria.

The nourishing of the little girl was a troublesome matter. She could not swallow liquids even when lying down, and it became necessary to feed her by the rectum. Hare's formula of eggs, milk and brandy was used, and also Fairchild's pano-peptone, which is easily borne and very quickly absorbed. This was kept up for nine days, during which time the tube remained in position. On the sixth day the string rotted and became detached, which alarmed the parents for a while. On December 18, the tube was removed with the extractor under the mirror. During the course of the disease the patient was frequently seen by Dr. Graner and myself, and the condition of the larynx noted. The tube might have been removed earlier, perhaps, but it was deemed safer to allow it to remain in after the larynx seemed to have reached its most tranquil state, as far as the laryngoscope could show. The diphtheria antitoxin was then a novelty in New Orleans, and as our patient was one of the best test cases that the Antitoxin Commission could find, we thought we had better not take any unnecessary chances.

The treatment in this case was very simple. On December 10, 1894, Dr. E. D. Martin, for the Antitoxin Commission, injected a vial (30 cubic centimeters) of serum prepared by Dr. Gibier, of the Pasteur Institute, of New York. No medicines were given, because there were no indications for them. Marchand's peroxide of hydrogen was sprayed into the mouth and throat to keep these cavities measurably clean. The patient's throat was examined nearly every day, and the false membrane grew thinner and smaller, until, on about the fourth day after the injection of the serum, there was only a narrow white ring around the yellow metal shoulder of the tube. No clogging of the tube occurred, and it did not become necessary to remove it to clean it. Later, when the laryngoscope did not reveal any exudate around the tube, there was the red line of congestion, which, it was feared, might again serve as a nidus for the development of false membrane in the event of a re-infection. When the temperature and general condition of the patient showed that there was no further danger, the tube was removed.

The patient was not much emaciated at the end of her

nine days of rectal alimentation. She was bright and cheerful all the time, and complained only of thirst. The tube never disturbed her. Her voice was husky for several weeks, but it is now perfectly clear.

The complete chart of temperature, etc., kept by Dr. Graner, which forms part of the records of the Antitoxin Commission, speaks very strongly for the action of the serum.

II. On January 1, 1895, Dr. J. W. Belden brought me to a boy 2 years old that he had been summoned to treat a few minutes before. The patient was a strong, chubby little fellow, who had been suffering apparently from a cold, which suddenly grew worse. The boy played around almost as much as before, and no alarm was felt until he began to breathe very hard. Then Dr. Belden was sent for, and he saw at a glance what ailed the child. He came for me in a hurry, and we were soon at the side of the little sufferer, whose breathing was very labored. The pulse was very weak, and the patient evidently in a bad way.

A culture tube was quickly inoculated, and intubation performed.

The child did not come out of his semi-comatose condition, but the pulse continued to grow weaker in spite of digitalis hypodermically, and in less than half an hour the patient was dead.

In this sad case the heart had already become involved, and the patient was moribund when intubated. It was truly a "fulminating" case.

The only inference that we can reasonably draw is that when parents find that a cold does not readily yield to domestic remedies they should consult the family physician before it is too late.

III. Later in the same month Dr. Belden requested me to see another patient with a stridulous cough that did not improve after twenty-four hours of treatment. One Saturday morning he was aroused by a messenger who stated that the little girl, 3 years old, was much worse than the day before. Just then New Orleans was in the throes of an unusually severe spell of cold weather; there were icicles over a foot long on the edges of a public fountain. That was bad weather

for anybody to have a cold in. The doctor sent for me quickly, and at 8 A. M. we intubated the patient. By some oversight O'Dwyer's gag was missing from the set of instruments, and the wooden handle of a tongue-depressor was used for the purpose. During the child's struggles the tongue-depressor abraded the roof of the mouth and the lower lip, in both of which places false membrane developed in twenty-four hours. After several attempts the tube was inserted with the assistance of Drs. Belden and Kohnke. The breathing at once became easy and the patient soon went to sleep.

Anti-diphtheric serum was scarce in those days, and it was with difficulty that a vial of Behring's No. 2 was obtained. Dr. Loeber kindly placed at our disposal his last bottle. About twelve hours after the intubation one-half of the contents of the bottle was injected beneath the skin of the left lumbar region. This amount was used by Dr. B., who had had only a few days before two cases, adults, in which marked depression was observed twelve hours after the injection of the full dose. In the present case there was a profuse sweating and chilliness about eight hours after the injection of one-half a bottle of No. 2, Behring.

For several days after the injection of the serum the false membrane in the larynx became somewhat less, as did also that on the lip and the palate where they had been abraded. The patch on the lip disappeared under the generous use of Marchand's peroxide of hydrogen, but that on the palate remained stationary after diminishing a little. The laryngoscope always showed a distinct ring of membrane around the shoulder of the tube. The child was very intelligent for one of her age, and it was generally an easy matter to examine the larynx after the fears and troubles of intubation had been passed. The peroxide was also sprayed into the nose and throat at frequent intervals. The child was nourished by rectum very well. The temperature never rose very high. The condition of the patient seemed to improve slowly for about a week, and then it remained stationary for six days, and then the heart began to fail. We all know the dreadful listlessness, languor, feeble and compressible pulse and sighing respiration and cold, clammy surface; we know that

myocarditis has set in and it is only a question of a few hours when the heart will be completely overpowered by the toxins of the disease. On the fifteenth day after intubation the child died.

This experience was a very sad one, and tended to shake one's faith in antitoxic serum, but it should be remembered that one-half the full dose had been given and the disease had existed, unrecognized, for at least a week before Dr. Belden was called in.

IV. In March, 1895, Dr. A. Noha requested me to see a case that he had treated for a short time, but was growing worse. The patient was a strong boy, two years old, who had had a violent "cold in the throat" for more than a week. At first household remedies were given—emetics, coal oil, etc., but there was no improvement after a week's treatment, and Dr. Noha was called in. He followed the customary treatment, but soon saw that there was more than a mere catarrhal laryngitis. When we reached the patient his breathing was very noisy and difficult, but he was not cyanosed. The laryngoscope showed an extensive false membrane all over the vestibule of the larynx and extending to the upper border of the epiglottis. The patient's pulse was weak and the general condition unpromising. Intubation was performed at 7 P. M. Through the courtesy of Dr. P. E. Archinard, of the Antitoxin Commission, we were enabled to inject a vial of Behring's No. 2 into the patient about three hours after the intubation. The breathing was at once relieved and the little fellow had a chance to sleep. He did not get any stronger, and he died thirty-six hours after the injection of the serum.

V. In May, 1895, Dr. Gayle Aiken sent for me to intubate a little girl of eight years. She had been hoarse for five days and was treated with household remedies. She did not go to bed, but played as usual with the other children of the family. One day the breathing became very bad, and the family sent for several doctors at once. Drs. Holt and Aiken at once saw the necessity for relieving the breathing. She was becoming cyanosed. At midnight we performed intubation. The child went to sleep. At 9 o'clock next morning Dr. Aiken in-

jected the contents of a vial of Behring's No. 3. Marchand's peroxide of hydrogen was sprayed into the mouth and throat from time to time. The little girl could, after a little practice, swallow upward—that is, her head and shoulders were drawn over the edge of the bed, with her head hanging down slightly. This is the method devised by Dr. Casselberry of Chicago. She took a good deal of liquid nourishment in this manner, as rectal alimentation was tried but was not successful, and was soon abandoned.

I have very full notes of this case, but the most gratifying part of it all is that she recovered. The tube was removed at the end of five days. There was very little emaciation. No medicines were given. Nothing was done beyond the intubation and the injection of the serum; the peroxide was not sprayed into the larynx. The false membrane was confined to the larynx. Her voice is nearly normal at the present time.

VI. Last spring I was called to see a child of fourteen months, of poor parents, who had had a cold for a week or so, but suddenly got worse, one morning about 6 o'clock. A physician was called. He told them to send for me and went away. Intubation was performed at 11:30 A. M. The child was cyanosed and unconscious. A few minutes after the tube was introduced, the blue color of the face gave way to a rosy hue, and the child was awake and took notice of things around him, as in health. The laryngoscope showed a broad layer of false membrane around the shoulder of the tube. In this case, as in all the others, a bacteriological examination confirmed the diagnosis of laryngeal diphtheria.

As the patient had been sick for at least a week, during which time the toxine of the disease had been at work, no time was to be lost in injecting the serum. With the kind assistance of Dr. P. E. Archinard, a vial of Behring's No. 2 was injected at 1 P. M., that is, one hour and a half after the intubation. A mixture containing a small amount of digitalis was ordered, on account of the disordered heart-action. The child died nineteen hours after the injection, from heart failure.

Here are six cases with only two clear recoveries. This is apparently not a good showing for the antitoxin. The intubation did all that could be expected of it; it relieved the breath-

ing and removed the most distressing symptoms; there was no escape of liquid food into the trachea. It is said that if the serum be injected in sufficient quantity and the patient do not die in twelve hours, he ought to get well. The serum is expected to inhibit the formation of toxine and thus avert its fatal action upon the heart or nervous system; but when this toxine has been gradually doing its work for more than a week before a diagnosis is made, it is unreasonable to expect the antitoxin to undo the damage wrought by the soluble products of the action of the diphtheria bacillus. It can head off, so to speak, any prospective or possible pernicious effects of the toxine; but, when a myocarditis of the heart-muscle, or a degeneration of a nerve structure has already begun, we can hardly expect the serum to restore the muscle or nerve to its normal condition. The importance of an early correct diagnosis in diphtheria in any of its forms becomes apparent. Nowadays, when a bacteriological examination can be obtained so easily and without cost, the physician should in every suspicious case avail himself of this valuable aid to diagnosis.

The treatment of laryngeal diphtheria by calomel fumigations has become an established procedure. It was first prominently brought forward by Dr. J. C. Corbin, of Brooklyn, in 1881, and has since constantly grown in favor. Drs. O'Dwyer and Smith state that the mortality in cases of laryngeal diphtheria, not treated surgically, has been reduced from 65 per cent. to 43 per cent. by the use of calomel fumigations. In every household can be found materials that will make a satisfactory improvised apparatus for the sublimation of the calomel. A small tent, having a capacity of about fifty cubic feet, can be placed over the bed of the patient, and the fumes of the calomel directed under this tent. About fifteen grains of calomel may be volatilized every four hours or even oftener, and the child may inhale the fumes for about ten minutes.

When the dyspnoea increases steadily in spite of the calomel inhalations, surgical interference becomes necessary. Although the technique of intubation has been described in the text-books, it would not be amiss to insert here Dr. O'Dwyer's recent practical hints in the *Journal of Rhinology, Laryngology and Otology* concerning it:

“*When to Operate.*—When a progressive, unremitting dyspnoea, despite all previous treatment, allows any considerable part of the posterior portion of the lungs to become non-inflated, when the labored breathing begins to produce sensible exhaustion, intubation is to be performed promptly. From this moment nothing but harm can come to the lung and to the heart. If air can not be inspired, blood will be, and pneumonia is invited.

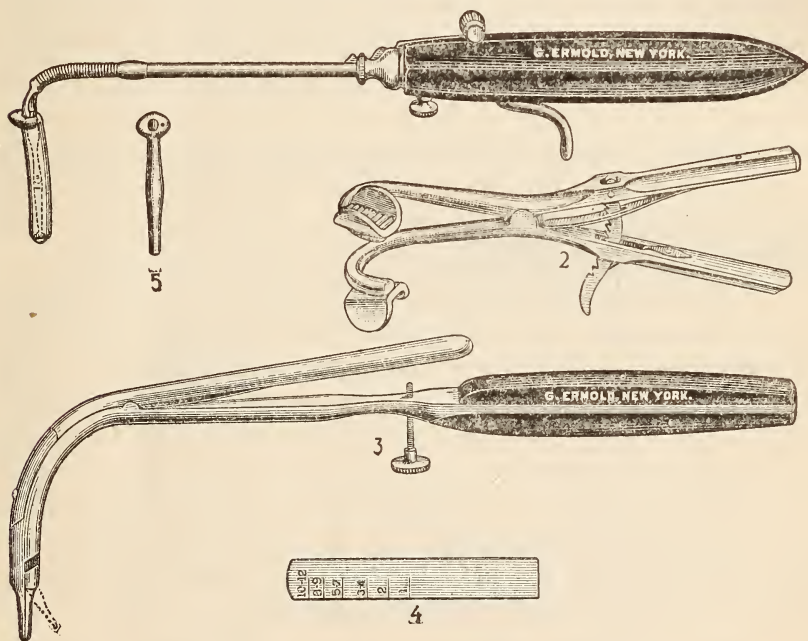
“*How to Operate.*—The *technique* of intubation having become so thoroughly a matter of literature, we will emphasize only certain points. Wind the child from chin down in a light blanket, shoulders, arms and hands included. Pin the blanket closely about the neck, and yet do not make a bulky roll to interfere with depressing the introducer-handle. In this way the elbows are pinioned to the side and the hands are held across the child’s abdomen.

“These precautions cause no annoyance to the child; it does not worry or resist, and when the time for rapid action arrives it can not move. The nurse who is to hold the child should sit in a high, firm chair bolt upright. The child should be placed upon her lap, nurse and child exactly facing the operator. The nurse being upright, not leaning back, should grasp the child’s elbows firmly, outside its winding blanket, of course, and clasp the child’s legs between her knees, making sure she twines her own about the legs of the child. All these precautions are to secure the child in a firm grasp, to immobilize it without interfering with the expansion of its chest, and may be taken without causing any apprehension or excitement. *The position of the child should be as though it hung from the top of its head.*

“The physician assisting should stand behind the chair of the nurse, grasp the child’s head between his hands, hold it firmly, and when the gag has been inserted include it within his grasp to insure its firmness and steadiness. The operator, seated or standing squarely facing the child and nurse, inserts the gag (Fig. 2), opens the mouth widely, and gives the handle into the keeping of the assistant. At this point, for the first moment the child worries; yet from this point to the end of the operation need be but a few seconds, though it takes some

moments to describe it. The introducer (Fig. 1), armed with the proper sized tube, is supposed to be threaded and at hand. The scale (Fig 4), enables the operator in a few seconds to select the tube suitable for the patient.

“Just at this point it is well for the operator to be sure that all the above directions have been carefully carried out, that the position is exact, the gag well held, the grasp firm. A moment suffices, and it is time well spent. Next he inserts his



index finger, hooks up the epiglottis, crowds his finger to one side, passes the tube past it till it engages in the chink of the glottis, elevates the handle, gently passes the tube down till the head is within the box of the larynx and the introducer lies crowded upon the tongue. He then, with the trigger, loosens the obturator, holds the tube with the left index-finger while withdrawing the obturator, and with a gentle thrust presses the tube's head well into the larynx and removes the finger and gag. Just here let me emphasize what is stated above—keep the introducer in the middle line; otherwise the obturator will pinch in the calibre of the tube and drag the tube with it as it is withdrawn.

“The handle of the introducer should be held most lightly between the end of the thumb and the fingers. In this way it is impossible to use enough force to make a false passage. It is easy for a right-handed operator, inadvertently, to carry his handle to the left of the child’s middle line. It is often that the child manages by one effort to slip down in the nurse’s lap, while the grasp which the assistant exerts tilts the head back, and the tube may then impinge on the anterior wall of the larynx. The lines and angles must be maintained to insure quick intubation. The lack of observance of, and carelessness in, these points explain many failures of inexperienced operators.

“Again: suppose on the first attempt the tube is not successfully placed in the larynx. How long shall one try? Shall one repeat the attempt? It is better to make repeated short attempts than prolong one.

“Having placed the tube in the larynx, there will be rattling in the tube on the first respiration and subsequent cough and expectoration. A vigorous cough argues well for the sensitiveness of the parts and for evacuation of accumulation below. The gag is removed as soon as the tube is in place, but not so the thread; it must remain till it becomes evident that all obstruction to breathing has been overcome and no partially-detached false membrane is in the trachea below the tube. The thread at first acts as an inciter to cough, which is desired; ordinarily ten minutes are sufficient.

“*How to Remove the Tube.*—Place the child in the position for intubation as described above. Thrust the left index-finger past the epiglottis, hook it up, rest the tip of the finger upon the two arytenoid cartilages and carry the extractor (Fig. 3) point to the end of the left index-finger at the pulpy portion generally regarded the most delicately tactile. The situation is then as follows: The finger-tip upon the arytenoids marks the posterior boundary of the glottis in the median line. Now, if the extractor point be carried along the median line to the end of the finger and the handle be elevated, the point will naturally be pried forward from the end of the left index-finger on the arytenoids into the aperture of the tube. To me this seems the most satisfactory method for the beginner. I have de-

scribed it to several, and their successes justified the plan. The guard screw of the extractor-lever should be carefully set to avoid injury to the tissues in case the extractor-jaws should be opened by mistake in the soft parts instead of in the tube. Of course, the difficulty of removal is to find the opening in the tube. Many operators, both in Germany and America, leave the thread attached throughout the whole time, and occasionally a tube is coughed out after the swelling releases its grip. So in actual experience one is not called upon to extract so often as to intubate. The fact remains that extubation is more difficult.

“*When to Remove the Tube.*—This depends on the age of the child and duration of disease before intubation became necessary. The older the child the earlier the tube can be

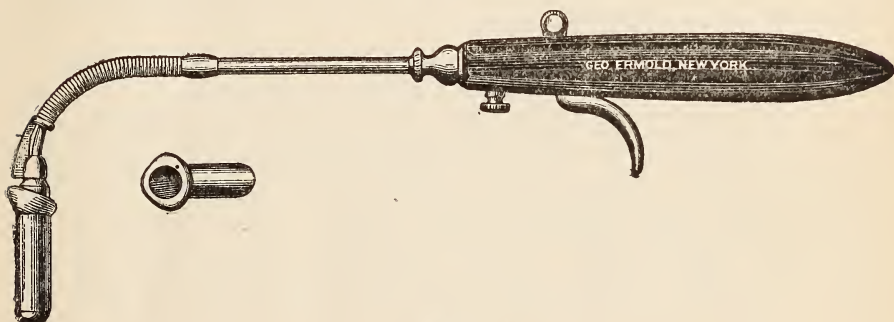


FIG. 5.

dispensed with. Estimating the maximum of the disease to be seven days, five days' wearing the tube is considered on an average sufficient.

“DANGERS AND DIFFICULTIES OF THE OPERATION.

“In the hands of an *experienced* operator there is practically *no danger to life* at the time of operation.

“A few authentic cases of pushing down membrane before the entering tube have been recorded. It happened to O'Dwyer three times in his first two hundred and nine cases on first intubation. Expert intubation presupposes that the thread has been left attached, and therefore easy, immediate removal is possible. What does it mean, then, to push loose membrane into the trachea from tissues above the larynx, for instance? It means *more room* in the larynx. If the tube is removed

the mass of membranes is forcibly ejected and the patient is really benefited by the proceeding and at no time endangered. This experience with loose pseudo-membranes occurs more often late in the disease and in reintubation. (A new form of tube, of very large calibre, has been devised by Dr. O'Dwyer to allow of the expulsion of patches of false membrane in case they should become detached. This tube is represented in Fig. 5.)

“To the *inexperienced* there are many dangers: (1) asphyxia from prolonged attempts; (2) laceration of the parts, false passages, etc. The explanation usually given to those two most common accidents is “pushing down false membrane.” So-called syncopal attacks are simply lesser attacks of asphyxia. Convulsions are recorded and instruments have been broken in intubation.

“DIFFICULTIES.

“An experienced operator may encounter two difficulties:

“1. The point of the tube may enter one of the ventricles of the larynx. This is not common, for the original disease usually fills and obliterates these cavities. Such obstruction, however, does occur. It may readily be seen how an inexperienced, sure that his tube and handle were exactly in the middle line, might force his tube into the tissues of the neck. He certainly has but to remember the cardinal points of advice, and he will use most gentle pressure; indeed, he need but look at the light introducing instruments to appreciate that they are for delicate work.

“2. The second difficulty or obstruction that an experienced operator may meet in intubation is subglottic stenosis—or what is so often described as “œdema.” The narrowest part of the respiratory ways is the cricoid ring. This fact, so far as I know, came to light for the first time in Dr. O'Dwyer's early investigations in intubation. If the head of an intubation tube be forcibly crowded down from above it may pass the vocal bands and yet resist all effort at the cricoid ring. Given a resisting cartilaginous ring lined with mucous membrane, we have the very elective conditions for stenosis. Fortunately, the swelling and infiltration are not often extensive enough to

cause serious obstructions, but may be. Operators come upon cases where the properly selected tube surely passes into the larynx, and yet encounters resistance—even ‘creeps back,’ as some one says, ‘like an oiled cork in a bottle.’ If one is sure of the diagnosis and a proper size fails, a smaller tube may, with moderate pressure, be introduced. This is the only condition where force is justified in intubation.

“DANGERS AND DIFFICULTIES OF WEARING.

“1. The tube may become obstructed by loosened *plaques* of false membrane. This constitutes the one important danger in wearing an intubation tube. It is easy to understand that large *plaques* may become loosened and detached in the trachea, especially after several days of the disease.

“A detached *plaque* may act like a valve at the tube’s lower end, closing on expiration, opening on inspiration, till the lungs become quite distended from accumulated air. Such is exactly what happened in three of O’Dwyer’s first two hundred cases, with three deaths.

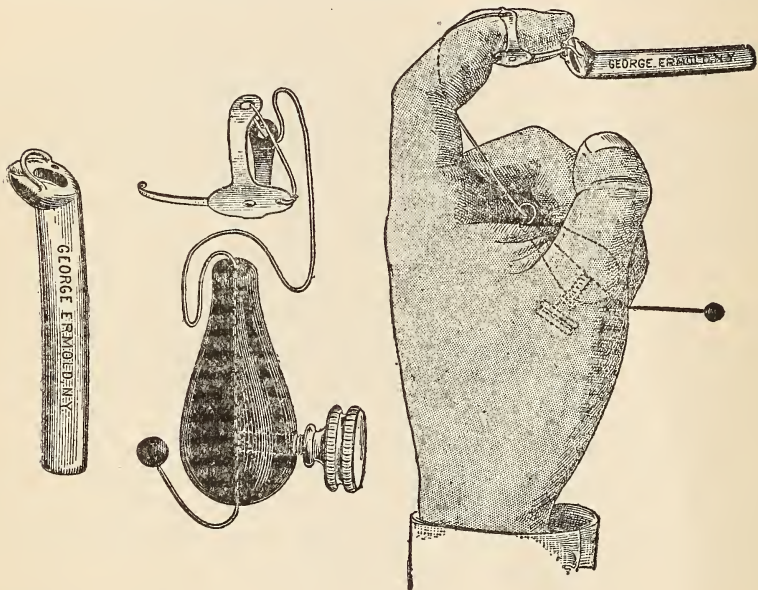
“At this point let me interject the symptoms of loose membrane: (1) croupy character of cough (tube being in); (2) flapping sound; (3) most important, sudden obstruction to outgoing air, especially during coughing.

“If the string had been left attached in O’Dwyer’s three cases this danger could have been obviated. Most continental operators loop the thread about the ear, protecting it along the cheek with rubber adhesive plaster, and leave it throughout the wearing of the tube. This is advisable outside of hospitals with beginners, and in case loosening pseudo-membrane is suspected in the trachea. Possibly mucus may gradually collect in the tube of such a tenacious quality, especially in mouth-breathers suffering from high temperature, that it becomes an embarrassment or even danger.”

Dr. Dillon Brown, of New York, has devised a modification of O’Dwyer’s tubes and the extractor, which may be easily understood from the accompanying illustration. (See next page.) The instruments are also made by Mr. George Ermold. Dr. Brown gives the following description of his

tubes and the method of extracting them in the *Medical News* of July 6, 1895:

“The greatest difficulty in the technique of intubation is the removal of the tube, and it is almost always during efforts at extraction that the larynx or neighboring soft parts are injured. Either the sharp point of the extractor is forced into the soft tissues and a false passage is made, or the tip fails



to enter the tube and passes along the outside of it, within the larynx, so that when the blades of the extractor are widely opened and withdrawn they divulse the larynx, and the tube sinks out of reach.

“On account of these objections many have entirely abandoned the operation; others remove the tube by position and by pressure over the trachea; and others remove it by the string, one end of which is attached to the tube and the other fastened to a tooth or brought out through the nose. The dangers and disadvantages of such methods are obvious.

“These serious drawbacks to this most brilliant operation have led me to modify the tubes and to devise the extractor which is described and illustrated in this paper. A wide experience in teaching men who are unfamiliar with the operation has demonstrated to me that a large proportion of them find

much difficulty in removing the tube with the old extractor, and many of them never succeed in doing it quickly and skilfully. With the new instruments rarely does a man have any trouble in quickly extracting the tube—even in the beginning, and without practice. And it seems to me that a nurse could be easily taught to take out the tube after a few minutes' instruction on the cadaver.

“The new tube is as efficient as the old one; it does not increase the difficulties of deglutition—rather the reverse—and it does not interfere with the older methods of extraction. It has a stiff wire loop attached to its head (see illustration), which is firmly fastened to one side, rises about one-eighth of an inch, closely follows the posterior edge of the head of the tube, and is finally fastened to the corresponding point on the opposite side. This makes an *eye*, bent posteriorly, which is easily and almost unavoidably caught, and which does not interfere with the opening in the tube or with the epiglottis. The posterior part of the head of the tube is scooped out, making an antero-posterior groove, which still further facilitates the catching of this eye.

“The extractor is a simple *hook* fastened to the finger (see illustration), so that the tip is held moderately firmly against its palmar surface, and far away from the ball to prevent its interfering with the sense of touch. The hook is fastened to the finger by the flexible metal ring, and is removed by the string after it has caught the tube. Pulling on this string brings the ends of the metal ring together and holds it firmly on the finger, and it is kept steady by wrapping the string once around the index finger and grasping the wooden handle in the palm of the hand. The string can be sufficiently shortened by means of the screw to enable one to do this with ease.

“On feeling the tube, and pressing firmly down and back, it is almost impossible for the *eye* to avoid slipping between the finger and the *hook*, and the shape of the latter prevents it from escaping. On withdrawing the finger the tube must come with it. It is evident that this extractor not only greatly simplifies the removal of the tube, but makes it impossible to do any damage to the larynx during this procedure.”

THE MAGMA, AND ITS PLACE IN THE MATERIA MEDICA.*

BY ALEX. K. FINLAY, PH. D., NEW ORLEANS.

The rapid solubility of some, and the diffusion or spreading property of other precipitates when employed in their moist or hydrated form should entitle the magma to a far greater share of favor than it now enjoys.

The list of preparations of that nature which have achieved popularity is for the present limited to two, viz., cream of bismuth and milk of magnesia.

These preparations (the former especially in this community) and their merits are familiar to the medical profession, and are used in daily practice with satisfactory results.

There are many other compounds that assume the gelatinous form after precipitation and which on being desiccated become granular or gritty, and lose to a large extent their ready solubility and spreading properties.

Calcium phosphate and ferric hydroxide are notable examples of this class of substances—both of them combine with large proportions of water, presenting the appearance of gelatinous or pultaceous masses.

The former dissolves readily in acetic and phosphoric acids, while the same substance in its anhydrous form resists the action of these solvents almost indefinitely.

In the preparation of the magma the more dilute the solutions employed, the more bulky will the resulting precipitates be, and the longer the period required for subsidence and purification. The mass, however, will drain down and shrink to almost any degree of concentration.

The ratio of combined water in different magmæ of equal firmness varies considerably with the substance.

In the case of magnesia, a satisfactory product can hardly be made to contain more than 4 per cent. of the anhydrous oxide. In this proportion the division will be perfect, and it can be readily poured from an ordinary vial.

Calcium phosphate unites readily with ten or twelve times its weight of water in firm combination, and its container will suffer inversion without fall or slip of the mass.

* Read before the Orleans Parish Medical Society.

Bismuthic oxide is less bulky in the hydrated form, being limited to five times its weight of water when of the standard consistence.

The addition of sugar or glycerine to any of those hydrates effects a remarkable change in their physical characteristics; they lose their tenaciousness and become fluid. This phenomenon may be ascribed to the lubricating property of these substances, which separates the tangent particles that become intermeshed during contraction.

This property tends to greatly facilitate their exhibition, and although this admixture is followed by separation and deposition of the suspended substance, the process is so slow that gentle agitation will secure uniformity and equalize the dose.

The therapeutic value of the magma is self-evident. Take, for instance, ferric hydrate or hydrated sesquioxide of iron and observe its properties. It is virtually tasteless, save for a not ungrateful astringency. It does not attack the teeth (one of the disadvantages of that splendid chalybeate, ferric chloride). It is readily soluble in acidulous menstrua, and therefore more prompt in therapeutic action than the element in its metallic state, however minute in its division.

It is preferable to dialyzed iron, which is so prone to form an insoluble coagulum in the presence of acids, resisting solution and assimilation.

Its combination with oxygen conforms to that already existing in the blood.

Lastly, when given in excess, only so much will be absorbed as the needs of the system demand, and the remainder will be voided without any possible injury.

Calcium phosphate, in view of its being the chief constituent of the bony structure of the body, may justly be considered in the light of a valuable chemical food. In its anhydrous or pulverulent form it is acted on very slowly in the stomach, and when exhibited in that form passes through the alimentary tract inert and unchanged. The use of its acid solution may not always be desirable; the same solvents used in the official preparation, syrup of lacto-phosphate of calcium, may be contra-indicated.

In the form of magma or moist precipitate calcium phosphate dissolves readily in weak acids. It is acceptable to the stomach and facile of assimilation. The only objection that could be urged against its use might be its tendency to produce constipation when administered in excessive quantity. This could be removed by reducing the dose and by the simultaneous exhibition of the alkaline phosphates, preferably the sodium salt.

The magma or cream of bismuth, by virtue of its extremely minute division and spreading power, is capable of covering a far larger extent of surface than a similar weight of the subnitrate in its analogous form.

It is especially adapted to the treatment of diseased mucous surfaces. It mixes readily with water in which the precipitate is held in suspension long enough to insure its equal distribution.

In the case of hydrate of magnesia no such occurrence could ever follow its use as that related in medical annals, in which death is alleged to have occurred from the accretion of large masses of magnesia in the bowels, the victim having been a constant consumer of Henry's calcined magnesia. The perfectly anhydrous oxide will form a solid mass with many times its weight of water somewhat after the manner of calcium sulphate and hydraulic cement.

With all its therapeutic advantages the magnesia in its simple form can hardly be included in the category of elegant or convenient pharmaceutical preparations.

It can, however, be modified by combination with appropriate diluents which will produce fluid mixtures and secure uniform results.

With this object in view the following formulæ are offered:

Glyceritum ferri, a mixture of equal ferruginous strength with tincture ferri chloridi, in which glycerine and water replace the acid and alcohol of that preparation. It contains nearly 5 per cent. of metallic iron. This may be combined with aromatic elixir or any suitable vehicle.

Mistura calcii phosphatis in which the hydrated phosphate

of calcium combined with glycerine can be dispensed in like manner, the product containing 5 per cent. of dry calcium phosphate, say 12 gr. to the tablespoonful.

Mistura magnesiæ hydratis may be given as an antacid or laxative, the adult dose ranging from one-half to two fluid ounces.

In fluid preparations or mixtures the magma of bismuth will replace the anhydrous subnitrate, using double the weight of the substance to obtain its therapeutic equivalent.

In conclusion, it may not be amiss to remark that when the dried article is substituted for the magma by the unscrupulous pharmacist, the practitioner may be prepared to meet with disappointment in the successful treatment of his patient.

Correspondence.

PAQUIN'S ANTI-TUBERCLE SERUM.

Editor New Orleans Medical Journal, New Orleans, La.:

DEAR SIR—In the September number of your journal you give a sweeping opinion concerning the treatment of tuberculosis by the use of serum, and take an adverse position, founding your judgment on your own experience and that of some of the local physicians with the serum I produced. It is to be regretted that any learned physician should come to an adverse conclusion with respect to any treatment of tuberculosis in as short a time, and in such desperate cases as were the majority of those treated in New Orleans. It seems to me that the very nature of the disease is sufficient to convince scientific medical men, who will reflect sufficiently, that nothing short of many months of investigation can warrant as decisive an adverse opinion, as you have expressed; and when the ages of failure in the therapeutics of phthisis are considered, fair-minded men wonder why so much haste is displayed to tear down new investigators.

The premature opinion of your medical society contributes

additional proof of the unfortunate fact (very detrimental and unjust to suffering humanity) that the differences in the nature of the various forms of tuberculosis seems to be often ignored totally, or considered lightly, among the conditions upon which physicians must (if they will be just to their patients) base a diagnosis and prognosis, and render judgment on the value of the treatment used afterward. There are at least fourteen different pathological conditions in tuberculosis which should always be taken seriously into account by every physician who will study and treat that disease conscientiously, and it is manifestly unfair to all concerned (patients and physicians) for any one to deny *in toto* the efficacy of any treatment of this most fatal of all diseases, without making public at the same time good grounds for the action. No one should do so without explaining the kind of cases which form the basis of his judgment, and even then if the judgment is pronounced by men with limited experience with any given treatment, the unfairness is not less emphatically declared.

Unquestionably the serum therapy does not reach all kinds of tuberculosis. I never have claimed anything so absurd. To expect it to do so is unscientific and unwarranted by any results in any manner of therapeutics in any disease.

In fact I have yet published nothing but reports of progress, and I have claimed no complete recovery; science and righteousness demand of me that I wait long enough to judge of the permanency of the improvements obtained.

I have been able to gain some information concerning the cases that some New Orleans physicians have treated, and upon which they based their adverse report, which contributed to your opinion, and I am aware of the fact that several of those patients should have been considered absolutely hopeless from a pathologic standpoint. Indeed some of them might have been treated five or six months or a year (as should have been done before attempting a fair report), and yet not have improved very much, if at all. Not because Sero-therapy is a fallacy, but because of the absolute impossibility to repair in less time, if at all, the extensive disorganizations and changes that were present.

The essential conditions to be considered in pulmonary tuberculosis, in regard to any form of treatment, are the following:

1. Gray and dark granulations.
2. White granulations.
3. Yellow granulations.
4. Caseous masses.

5. Gray infiltration.
6. Red hepatization.
7. Fibrosis.
8. Cavities, their size, location and origin.
9. Cretaceous masses.
10. Fibrinous Nodules, and the kind of hæmorrhages that produce them.
11. Chronic, local vesicular emphysema.
12. Acute vesicular emphysema.
13. Hæmorrhages of the pulmonary artery.
14. Hæmorrhages of the smaller vessels.
15. The length of the tuberculosis period preceding the appearance of cough, fever, sweats, etc.
16. The various complications of the nervous system, the alimentary canal, etc.

I desire to ask you, in all kindness, and those on whose judgment you have based your opinion, if these conditions were weighed sufficiently in the diagnosis and investigations of the cases who were treated with the serum, and upon which your opinion and that of your society were declared? There is no evidence of it in print. This, in all justice to all concerned, should have accompanied the resolution of the Parish Medical Society and the denial of the serum's efficacy. Considering that it requires some years of pathologic changes for the production of several of these varieties of severe tuberculous processes, some of which are almost always present in chronic forms, what grounds are there in them to hope for early improvement by any process of therapy? Nothing short of a miracle could *arrest* even pulmonary tuberculosis in certain conditions. And yet it is largely upon the result of treatment of this class of desperate cases that certain New Orleans physicians who denied the utility of sero-therapy base their belief. I might enumerate many hopeless conditions in which physicians have, without reason, hoped for results by climatic influences or otherwise in a few weeks or a few months. That is evidenced by their actions in sending desperate patients away to other climates. The same thing has been expected of the serum. Cases with a foot in the grave constitute 95 per cent. of those treated with serum as a test.

For instance, what kind of treatment can possibly improve in a short time or some months a pair of lungs with a thousand or more scattered yellow granulations, or yellow tubercles, which the circulation does not reach, or barely touches, whether they be surrounded or not by the transparent material which is usually found around them?

What form of treatment could influence favorably in two

or three weeks, or two or three months, fibrosis of the lungs, which is so common in chronic tuberculosis, and so seldom considered by the clinician (although it must be apparent that the fibrous portion of the lung, denied a blood supply, must result in destruction in a great majority of instances)?

What treatment could have rapid beneficial influence in a case of caseous masses, or yellow infiltration or cretaceous masses or large cavities, or eroded large arteries? Is the adverse judgment of a physician, no matter how learned and experienced and successful and respected, to be relied upon without question when it is based upon therapeutic results and experience of a meagre kind in chronic tuberculosis, which is a disease largely constituted by the above conditions? Still it is a fact that the majority of my few adverse critics have expressed themselves on this kind of testimony, and this, too, after an experience varying from nothing to *ninety days* or little more. It may be objected to by those who did treat absolutely desperate cases that these were in the first or second stage, as has been done repeatedly.

This is simply an error of diagnosis on the part of the doctor, due either to lack of practical knowledge, or careless examinations or indifference. It is, very unfortunately, a very common thing among practitioners to date the beginning of consumption back a few weeks or a few months preceding examination, at the time when cough or fever began, and thus be misled by a partial history, and the patient's usual desire to make light of his disease, when, as a matter of fact, in 90 per cent. of cases, the origin dates back one, two, three, four or five years or more prior to the appearance of symptoms that scare a patient to the doctor's office. A clearing of the throat without cough, with scant usually grayish sputum, is generally present years before the appearance of symptoms, sufficient to alarm a patient, and during all this period tuberculosis progressed. It is at the very earliest moment of this tuberculous development that the disease may be called in the first stage, and it is only preceding it that it can be justly termed incipient, a word used so carelessly by many reputable physicians to designate pulmonary consumption, which is far advanced.

Sero-therapy has come to stay in infectious maladies. Whatever theorists may preach, it is based on scientific principles, and whilst it can not be expected to accomplish as much in a disease as slow as tuberculosis as in infectious maladies running a rapid course, it is fair even without experimentation to assume that it is justified in therapeutics. But there has been much experimenting, and I will assert here that its efficacy has been demonstrated clinically. I stand ready to sustain this position.

It is a pity that there are so many American medical men who delight in pouring cold water on the efforts of investigators in this country, and that so few are disposed to assist them. There seems to exist a kind of suspicion that investigators are animated by nothing else than mercenary motives, and there is a disposition in certain quarters to criticise without knowledge, and in these quarters are those who would rush abroad to investigate a treatment that had nothing more than a shaky reputation of having *partly cured* a case of lupus. It would seem hard enough for practitioners in the United States who are disposed to experiment and investigate (and most of these are poor men) to be compelled to do this at their own expense, without having to be discouraged without justice.

In all my humble endeavors in the investigation of consumption and its treatment my researches have been open, and the medical profession *has been invited to examine* into the labors and my methods. I am glad to say that a number of physicians in high standing in many States have done me the honor and justice to see for themselves before passing an opinion.

I now take the liberty of inviting you, and those whose statements back your opinion, to visit our institution, to see our methods of investigation, and see in the city of St. Louis the physicians who have had the longest experience with the serum and to examine their patients and mine who are under serum treatment. I am prepared to exhibit to you patients in whom the disease (pulmonary tuberculosis, laryngeal tuberculosis, surgical tuberculosis) seems absolutely arrested, if one can judge by physical and microscopical analyses, but I have not yet published them as cured, being perhaps more conservative than some of my adverse critics.

We are offering to you facts that you may study for yourself; facts that mere opinions can not disprove.

I would be delighted also to have a committee of experts, unbiased men—not men who have already pronounced judgment—but men who have not tried the serum, and who are not unduly influenced by adverse or favorable criticisms, and who can and will make a careful diagnosis in each case, to come and investigate our labors and examine the patients.

As to the resolution of the Parish Medical Society, it is without weight with me. Not that I consider it with disrespect—on the contrary, I bow to the intelligence behind the judgment; but it is unjustified by the facts. It can scarcely have weight in the judgment of any impartial investigator or in the minds of scientific medical men, who will consider thoroughly the nature of tuberculosis before accepting an opinion, and who

will remember that the simple fact that it usually takes a long time, sometimes years, to develop chronic lesions in tuberculosis, is evidence enough that it must usually take many months, if not years, to arrest its progress. The resolution is, after all, only a vote, depending upon the cursory experience of a very few men, as I have explained, and the total ignorance of the majority, who had never seen the serum and can not express individual knowledge of facts. The problem must have been studied a year before an honest vote can have been taken, bearing on the result of three years of investigation. Then the report would have been entitled to rank as the result of conscientious work.

The serum-therapy in tuberculosis is only in its infancy.

We allow physicians to use our serum on their own knowledge of facts.

We do not push it beyond the results obtained by doctors, and this course is imperative to defray the heavy expenses of continual experiments. This is criticised by a few as "commercialism." I declare here that the moment the firm of John T. Milliken & Co., who supply the serum, shall be too commercial I will denounce it and withdraw. Much is to be learned yet. For instance, we have found that the products of certain animals are not as good as those from others; some serums have failed to do good. Again, certain serums produce fever and others do not. We have found also that certain things in the serum are useless and damaging, and we are trying to eliminate them. The experiments shall remain under my control, and be completed, or the public and profession will know when I retire.

I beg to say that I am now preparing an article covering all the experiments that I have made on the subject, including the experiments and studies of others, which will explain as far as we can at present, the conditions which are, and which are not, favorable for the treatment.

Since you have given publication to the adverse opinion of the serum, and have used language which may be construed as a reflection upon my sincerity and honesty, I very respectfully request you to publish this letter in your next issue. Should you refuse to do this you will please return it with your reasons, and I will try and get justice elsewhere.

I am pleased to say in conclusion that a number of good physicians in Louisiana are still using the serum, and the longer their experience, the better their reports. I remain,

Very respectfully,

PAUL PAQUIN, M. D.

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EDITED AND PUBLISHED BY
AUGUSTUS McSHANE, M. D

COLLABORATORS:

DR. F. W. PARHAM.

DR. R. MATAS.

DR. A. W. De ROALDES.

DR. H. W. BLANC.

DR. WILL H. WOODS.

Editorial Articles.

THE SMALL-POX IN NEW ORLEANS.

Since last February small-pox has been with us on a small scale, and still lingers among that class of the population that is difficult to reach in a sanitary way. A negro, traveling from Hot Springs, Arkansas, came to New Orleans last February, and stopped at Memphis and other places on his way to this city. It is impossible to learn where he acquired the disease, as he had been in contact with many people before he arrived in New Orleans. The long period of incubation of small-pox enables a sick person to travel from the place of infection, and develop it in some distant locality.

It was at first feared that a small-pox epidemic would develop, as in 1883; but the vigorous measures adopted by the Board of Health checked it, though they did not entirely suppress it. On two occasions the disease seemed to have been stamped out, but suddenly a small group of fresh cases would be unearthed, and then the fight would be repeated. Up to the present time there have been about 160 cases, four fifths being among the negroes. The prompt removal of the great majority of the cases to the pest-house served very materially

to restrict the spread of the disease. Several cases were found only when convalescence had set in; meanwhile the opportunities for infection were practically unlimited. It was among the ignorant and careless portion of our negro population that the disease made its greatest ravages, and there it still has its stronghold. When a physician reports a case of small-pox, it is an easy matter for the sanitary authorities to take steps that would prevent a spread of the disease; but it is well nigh hopeless to attempt the crushing out of infection when it lurks in corners unknown even to physicians, for some cases do not have medical aid.

When it became evident that the usual measures were insufficient, the Board of Health decided to carry out vaccination on a large scale, as was done in 1883, by the Auxiliary Sanitary Association. The city was parceled out in districts, and each district assigned to an official vaccinator. There are now about thirty medical men at work vaccinating the whole city, free of charge. The ordinary revenues of the board were insufficient, and the City Council, with commendable spirit, promptly appropriated \$5000 for the Board of Health, to enable it to carry on its campaign against the loathsome disease. The vaccinators are now industriously engaged in their work, and in a short time nearly the whole city will be vaccinated. When this work is done, there will be no more material for the smallpox to feed on, and it will die out.

DR. REEVES' VICTORY.

A few years ago a prominent daily newspaper of New York City offered a prize for the discovery of a remedy for consumption. This caused Dr. W. R. Amick, of Cincinnati, Ohio, to emerge from his modest seclusion and give to the world (at ten dollars a package) a remedy (as he alleged it to be) for the most widespread of all human ailments. True, he did not take the world into his confidence and tell what the stuff was made of; possibly there are some things too precious for an ignorant laity, or too deep for an envious profession to appreciate. At any rate, he devised, compounded or otherwise prepared what he modestly (and mysteriously) dubbed

the "Chemical Treatment," and organized a stock company to bring to suffering humanity the unknown substances which, combined with faith, were supposed to strike terror to the heart (or its representative) of the bacillus tuberculosis, and to cause that formidable destroyer to cease his ravages and become an inert mass of dead protoplasm. In a recent number of the JOURNAL we noted the death of the business manager of the company that manufactured the Amick remedies; he died of consumption—but this might have been merely one of those cases in which the combination does not seem to work.

The course of the Amick Chemical Company, however, did not run smooth. Dr. James E. Reeves, the well known microscopist of Chattanooga, Tenn., was devoid of faith, but full of investigation—full, indeed, to overflowing. Knowing how difficult it is to check the tubercular process, he examined into the claims made for the so-called chemical treatment, and found evidence enough to justify him in denouncing it, and warning the people against using it. The secrecy and objectionable advertising methods of the promoters of the chemical treatment brought from him vigorous denunciations which formed the basis of a suit for libel. We have been favored with a full report of the trial, but the profession is chiefly interested in the last sentence, wherein it is stated that the jury renders a decision in favor of the defendant (Dr. Reeves).

The JOURNAL congratulates Dr. Reeves upon his victory. He fought, single-handed, the fight for legitimate and dignified professional conduct; and, in rendering a verdict in his favor, the jury expressed for the public at large its confidence in reputable medical men and its condemnation of methods that they deem unworthy.

CHARITY HOSPITAL ALUMNI.

The Charity Hospital of Louisiana Alumni Association was organized in April, 1894, and now has eighty members on its roll. This list, while embracing a considerable number of the ex-resident students, is far from being complete. Much difficulty has been met with in securing a full list of names and addresses. The attention of all ex-resident students is called

to this matter, and it is requested that they send their addresses to the Secretary, Dr. Jno. F. Oechsner, 124 Baronne street, New Orleans, La. The Alumni Association is in a flourishing condition, and it is to be hoped that by concerted effort it will become a prominent factor in scientific work, as well as a means of preserving the ties of friendship and fellowship of old Hospital days.

DR. PAQUIN'S SERUM.

A communication from Dr. Paul Paquin is printed elsewhere in the JOURNAL. For humanity's sake, we hope that there is some good in it; but for the present we think it will not be used here on a large scale until its utility has been demonstrated in other localities.

Abstracts, Extracts and Annotations.

MEDICINE.

STRYCHNIA AS A CURATIVE AGENT IN ASCITES.

In our eager and no less industrious search after new and often untried therapeutic agents for the cure of disease, or the relief of human suffering, the older and sometimes more reliable and more useful remedies are in great danger of being overlooked, if not entirely discarded from our list of remedial agents.

Having had occasion several years ago to call the attention of the profession to the subject of this paper, I feel that an apology may be due this association for introducing at this time so trite a subject as the treatment of ascites.

Some time ago, while discussing the treatment of abdominal dropsy with a member of this body, he remarked that the treatment was as simple as the cure is easy.

Upon interrogating him as to this all-sufficient remedial agent, his reply was mercury, calomel in small and repeated doses. This is truly a simple treatment, though it has not proven to be sufficient, satisfactory or always safe in my hands.

The fact is familiar to all, that dropsy, abdominal or other, has long been regarded as a symptom of disease rather than a disease itself. And, in the language of a most distinguished writer, it has been affirmed that it would be more philosophical and scientific to treat the original malady upon which the effusion or accumulation depends, to erase dropsy from the list of substantive disease and to place it in the catalogue of mere symptoms.

But this, in my mind, is a very mistaken view of the matter. For, first, it is oftentimes uncertain, while the patient is yet alive, what or where the primary disease may be; and even after death we sometimes can discover no organic change that would satisfactorily account for the effusion. Practically speaking, in such cases the dropsy is the disease, and the sole object of our treatment.

And, secondly, dropsy is in fact to a medical eye in all cases something more than an effect or symptom of disease. The imprisoned liquid is often a cause of various other symptoms; embarrassing by its pressure important functions and even extinguishing life. The removal of the dropsy (although its original cause, of which it was a symptom, may remain behind untouched, to be again productive of effusion under circumstances favorable to its operation) will often restore a person to comparative comfort, or even to what, so far as his sensations and powers and belief are concerned, is to him, for a time, a state of health.

Without essaying any refinement in diagnosis, or attempting to distinguish dropsy as a disease and dropsy as a symptom in the treatment of ascites, it is proposed to speak of it as disease *per se*, and more particularly of the use of strychnia as a curative agent in that disease. No sound practitioner, however, will close his eyes to any concomitant which may appear, whether it be functional or organic; or fail to supplement any line of treatment with remedies specially adapted to existing conditions whatever may be his faith in that drug or material. Nor would he neglect any febrile movement, where such condition exists any more than he would ignore the existence of an engorged liver, or obstructed portal circulation, or torpid state of bowels, or cardiac or venal derangement. Adjuvants are useful and helpful in all cases.

It is deemed safe and within the limits of conservatism, founded on a somewhat extended experience, to speak of strychnia as a curative agent in the treatment of ascites. While the claim to priority in the use of this agent as above stated is just so far as my knowledge goes, it is the result of an accident. Many years ago there came into my hands for treatment a

negro woman about 40 years of age, and the mother of eight or ten children, who, in the hands of other practitioners in the neighborhood, had gone through the usual course of treatment without avail, and who had already undergone many tappings. In my hands these were continued with considerable regularity at intervals of fourteen, sixteen to twenty days, until paralysis of one side took place. For this strychnia was prescribed, and the trocar or other evacuating instrument was never afterward necessary in her case. The dropsy was cured, as was also the paralysis of the leg, though the use of the arm was never fully restored.

Some years after the case of another woman presented itself. She was a bright mulatto, about 36 years of age, the mother of seven children, and had enjoyed good health previous to this attack, which set in with decided inflammatory symptoms, rapidly resulting in œdema of the lower extremities, soon followed by peritoneal effusion which demanded the use of the trocar.

After a number of tappings the intervals between some of which did not exceed ten days, she began the use of strychnia, and was cured of her dropsy. During the second year afterward she bore another child, dying five or six years later in the hands of another practitioner, and without any return of her dropsical symptoms.

A still more remarkable case, perhaps, is that of a gentleman forty-eight years of age, who at various times had been in the hands of neighboring practitioners (as the patient informed me) for treatment of supposed incipient tuberculosis, he having suffered for some time with dyspnœa, cough and sanguineous expectoration, followed by wasting, inability to preserve the recumbent posture, œdema of lower extremities, and other evidences of anæmia. To be brief, when this patient was first visited, more than a year after the first symptoms presented themselves, he was found laboring under anasarca as well as ascites. There was also distressing dyspnœa inability to rest in the recumbent posture, some cough and tumultuous heart action. In this case the dropsy was evidently symptomatic, and had its origin, no doubt, in valvular insufficiency with blood stasis of the pulmonary tissues resulting in cough with bloody expectoration. Under the use of cardiac sedatives, diuretics and purgatives, there was decided amelioration of the more distressing symptoms, but the anasarca, *pari passu* with the ascites, advanced until within a few weeks they assumed the most prominent place in the category of symptoms.

With the distressing peritoneal effusion, enormously swollen genitals superadded to the general swelling of the body, face

and extremities. Soon the cuticle gave way on the lower extremities, discharging each day a considerable quantity of serum.

Under the use of strychnia there was gradual improvement. When last heard from (three months ago), this patient was eating and sleeping well, being then about the farm attending to his affairs in comparative comfort, though with some œdema still present in the lower extremities.

A cure was not expected or hoped for in this case, though it seems that impending dissolution has been averted for more than two years under the continued use of strychnia. The use of this was instituted early in this case, in connection with remedies previously mentioned, and given in 1-30 gr. doses every eight hours, gradually increasing the dose until the 1-11 gr. was reached, when the muscular pain of the arm became so great as to make it necessary to reduce the dose, or for a time suspend its use entirely. That its physiologic effect shall be experienced seems necessary to its full therapeutic action, and it has been found safe to increase the dose to that extent.

Case 4 was that of a young lady 20 years of age, who was first seen in April, 1893. She had previously been in charge of another attendant, whose service had been, as reported, very irregular, and who had suspected incipient tuberculosis on account of the prominent pectoral symptoms, cough, dyspnœa, rather free expectoration, and the known fact that several members of the family had died of that disease.

At this visit, besides great irregularity of pulse beat, there was present dyspnœa, slight cough, diastolic heart murmur, œdema of feet and ankles extending nearly to the knees, and ascites so prominent as to offer mechanical obstruction to the respiratory act, even in the sitting posture, recumbency being quite out of the question. This was evidently another case of symptomatic dropsy caused by grave structural lesion of the centre of circulation.

Under the use of diuretics, cardiac sedatives, occasional hydragogue cathartics and the constant use of strychnia gradual improvement took place. The patient was so far relieved as to be able to rest in bed, eat well, take out-door exercise, even going so far as horseback riding. At this period treatment was interrupted, and was not renewed (owing to the absence of the attendant) until the swelling had again made considerable progress. When treatment was again applied for, and the strychnia given as before, it was without effect, and the patient died eleven months from date of first visit.

This brief and very cursory account of these four cases of ascites in which strychnia was freely used will, it is hoped, suffice to show the effect, and serve also to bring to the notice of the association an experience with a remedy, the mention of which, so far as my reading or observation goes, does not appear in our text-books, or in current medical literature, as a therapeutic agent in the treatment of ascites.—*Medical and Surgical Reporter*.

NEW METHOD OF STAINING MICRO-ORGANISMS IN THE BLOOD.

When there are a few micro-organisms and especially such as do not take a distinctive color by the Gram method, there is danger of concealment in masses of red blood corpuscles. The coloring matter attacks the hemoglobin; if this is removed then the blood corpuscles remain unstained. Let a thin layer of blood on a cover-glass dry at ordinary temperature or only slightly elevated, treat for one-half to two minutes with the following:

5 per cent. aqueous solution of carbolic acid.....	6.
Saturated solution Na Cl	30
Glycerine	30
Filter.	

This fluid frees the hemoglobin, does not change the form of the red corpuscles and makes no deposit. Pour off, wash in distilled water and stain with carbol methyl blue to which 1 to 2 per cent. of aqueous solution of methyl violet is added. This method is also useful in demonstrating plasmodium malarix.—*Gazette Med. de Paris*.—*Jour. Am. Med. Association*.

THE TREATMENT OF FETID EXPECTORATION WITH THE VAPOR OF COAL-TAR CREOSOTE.

Chaplin (*British Medical Journal*), No. 1799, p. 1371), observing the freedom from pulmonary affections enjoyed by those employed in the manufacture of coal-tar creosote, was led to employ this substance in the treatment of various conditions attended with fetid expectoration. For this purpose he utilized a small chamber about seven feet square by eight feet high, made as air-tight as possible, and in the centre of which on a pedestal was placed a spirit lamp, and over this a flat, open dish into which was poured the creosote. When the lamp was lighted the room soon became filled with the charac-

teristic pungent fumes. The patient sat in the chamber and inhaled the vapor, at first with only a gentle heat applied. As time went on, however, the patient was able to stand the inhalation with impunity. To obviate the irritating and smarting effects of the vapor upon eyes and nose, the former were covered with watch-glasses fixed with adhesive plaster, and the latter was plugged with cotton-wool. A towel pinned over the head and a loose dressing-gown protected the hair and clothing from the odor of the creosote. The first inhalation lasted a half hour; the latter an hour or an hour and a half. The treatment was repeated daily, and the course lasted from six to twelve weeks. Altogether six cases were thus treated, a seventh being still under observation. Expectoration was facilitated, the quantity at first increasing, but later diminishing and the offensiveness disappearing. Breathing became easier, and the general condition distinctly improved.—*Medical News*.

GYNECOLOGY.

THE GENERAL THERAPEUTIC EFFECT OF THE ALTERNATIVE ELECTRIC CURRENT OF HIGH FREQUENCY AND OF HIGH TENSION.

By DR. G. APOSTOLI (of Paris).

Dr. Apostoli, together with Dr. Berlioz, on the 18th of March, 1895, presented a paper on the above mentioned subject to the Academy of Sciences of Paris. He now, after longer and riper experience, desires to present a summary statement of his general conclusions:

1. According to Professor d'Arsonval's discoveries alternative currents of high frequency and of high tension exert a powerful action upon all living bodies submitted to their inductive influence.

2. The best method of applying these induced currents is to place the patient, free from all contact with electrodes, in the circuit of a large solenoid traversed by these currents.

The patient being thus completely insulated, the currents which circulate in his body by *auto-conduction* have their origin in his tissues. The body plays the role of a closed induced circuit.

3. By this method the physiological discoveries of Professor d'Arsonval are confirmed and we are able to prove the powerful influence of these currents upon the *vaso-motor* system—although they produce absolutely no sensation and

although they have no apparent effect upon the motor or sensory nerves.

These currents have nevertheless a powerful action upon all the nutritive functions, as has been verified by Dr. d'Arsonval's numerous analyses of the gaseous products of respiration and by Dr. Berlioz' not less numerous analyses of the urinary excreta.

4. The general therapeutic applications to be deduced from this physiological action are confirmed by clinical observation.

Dr. Apostoli has now treated more than a *hundred* patients by this method at his clinic and at his private consultation rooms. The greater number of these patients have been greatly benefited by this new treatment, which, be it remarked, has been used to the exclusion of all other forms of medication, dietetic or otherwise.

5. These currents exert in the majority of cases a most powerful and generally beneficial action upon diseases due to *slackening of the nutrition* by accelerating organic exchanges and combustion. This is proved by analyses of the urine made by Dr. Berlioz, of which the following is a brief résumé :

The quantity becomes more normal; the products of organic waste are better eliminated.

The *increased combustion* is shown by the diminution of *uric acid*, while the percentage of *urea* is generally increased. The relative proportion of these two substances changes under treatment so as to reach, in general, the figure 1-40.

The elimination of the mineral products is also changed, but in a manner less marked.

6. When the daily séances are given, each lasting fifteen minutes, we may generally observe in patients submitted to the influence of these currents the following modifications in their general condition. We mention them in the order of their occurrence :

Return of sleep.

Increase of strength and vital energy.

Increase of gaiety, of power for work and ability to walk.

Improvement of appetite, etc.

In short, *general progressive improvement*.

This general improvement often manifests itself after the first séances before any local influence is apparent and before any change has occurred in the urinary secretions.

7. Local pain and trophic changes are often more slowly affected by these currents and at times they are entirely refractory for a longer or shorter period.

In such cases the same currents must be applied locally by contact with the electrodes.

This subject will be treated later on in a separate communication.

8. The diseases which have appeared incurable by this treatment are those not associated with well-defined organic changes, such as *hysteria* and certain forms of *neurasthenia*.

Dr. Apostoli has also observed that certain *localized neuralgias* are refractory to this form of currents; they require its more direct local application.

9. The diseases which have derived most benefit from this therapeutic agent belong to the *arthritic class*—*rheumatism* and *gout*.

10. In certain *diabetic* subjects the sugar has disappeared altogether from the urine under the influence of these currents, while in others there has been no such change, notwithstanding the manifest and constant improvement in the general condition.

Is this difference due to the imperfection of the electric apparatus or to the manner of its application? It is hoped that further experience will soon afford an answer to this question; although the fact that diabetes has many different causes may in itself explain the difference in the results obtained by this treatment.

11. In conclusion, the currents of high frequency and of high tension introduced into electro-therapeutics by Dr. d'Arsonval greatly increase the field of action of medical electricity.

They furnish general medicine with a new and valuable means of treatment, capable of modifying more or less profoundly the processes of nutrition.—*British Med. Association, London, 1895.*

PUERPERAL INFECTION—IMPORTANCE OF EARLY RECOGNITION AND TREATMENT.*

J. F. FOX, M. D., New Philadelphia, Ohio.

In taking the subject of puerperal infection for my paper, I do not intend to mention anything new in particular, simply to present in an appreciable form the latest treatment for this dreaded disease.

I believe there is no accident that can happen to a physician in his obstetric practice that will give him more anxiety

*Read before the Tuscarawas County Medical Society, held at New Philadelphia, O., April 23, 1895.

and worry and shake his reputation more than the occurrence of puerperal septicæmia in his patients.

There is no doubt in my mind that to many of you, when brought in contact with this disease in the past, the most difficult question to answer was, "What is the best possible treatment I can give my patient?"

It seems to me that until comparatively recently the profession was very much divided on the methods of its treatment, or at least the disease was treated very differently by different practitioners.

At present, I am happy to say, we are more in unison in our methods for treatment, undoubtedly because we better understand the cause of the disease, and hence far better results follow.

I shall not attempt to go into the pathology of the disease, only so far as to give us a clear idea for our treatment.

All writers agree that the presence of pyogenic bacteria in the genital tract is absolutely necessary for the production of the disease. The principal of these germs are streptococci and staphylococci. Also others are mentioned by Dr. Ernst that may be concerned in producing the infection.

There can scarcely be any doubt that puerperal infection is at first a local disease entirely. It matters not how the bacteria gain entrance, whether invited by the putrefaction following retained membranes or bits of placenta, or by the infected finger or instruments of the attending midwife or physician.

I did not intend to say anything about the prevention of the disease; only next of importance to prevention is its early recognition.

The early diagnosis and treatment is what I should like to hear you discuss. It is a mistake to call it typhoid fever, la grippe or the like, and treat with antipyretics, thinking our patient is getting better because the temperature does not run so high.

We are taught that any rise of temperature in a lying-in case that can not be accounted for in any other way must be of septic origin.

Suppose a woman for one or two days after confinement has a suspicious temperature of 99 to 100 deg.; suddenly takes a chill, with temperature of 102 to 104 deg.; anxious expression of face and a rapid, full pulse; possibly a sensitiveness over the uterus; the parts have increased heat; the cervical canal is wide open, and there is a fœtid odor to finger as it is removed from vagina; the lochia are frequently entirely suppressed; an energetic treatment in such a condition is indicated.

A careful examination is now necessary to make sure of

our diagnosis; pneumonia and trouble with the breasts due to fissured nipples must be carefully eliminated.

An acute indigestion or intestinal disturbance often produces a rise of temperature, but no chill; a saline cathartic will soon correct this; an old imprisoned abscess or pus tube might by the recent confinement be inflamed anew and produce septic symptoms.

If there is still an uncertainty about the diagnosis several hours could be allowed to pass, not giving an antipyretic to misguide us; if the temperature is no lower there can no longer be any doubt as to the real nature of the trouble.

If we agree that the disease is produced by pyogenic germs we will also agree that it is at first a local disease; it is in fact an acute septic endometritis. We still further agree that the sooner these germs are removed from the uterus and vagina the better it is for our patient, because the tissues will not be involved so deeply and the germs will consequently have less chance to enter the circulation.

It can not be denied that wounds of perineum, vagina or cervix, when they become infected, may produce fever; according to Dr. Bumm the infection usually remains local, the germs do not travel far beyond the margins of the wound, these wounds are therefore of subordinate importance in the treatment of puerperal infection.

When the interior of the uterus is invaded an entirely different state of affairs is brought about. It seems to be a fact that occasionally pieces of placenta or membranes are retained in the uterine cavity, a rise of temperature follows, which if invaded only by bacteria of decomposition, germs of less virulency than the streptococci or staphylococci, the case is not a true infection, simply as Dr. Bumm calls it "a putrid intoxication." The fever in these cases usually comes on more gradually and somewhat later after confinement, and is produced by the absorption of the products of decomposition; a rapid decline of temperature follows the removal of these putrid masses with antiseptic irrigation; usually no further treatment is required.

If the diagnosis is once established that we have a puerperal infected uterus to deal with, it is our duty to give it a careful curetting and packing with iodoform gauze at once, if we intend to give our patient the best chance for her life, according to our present knowledge of treatment.

There may be different methods for cleaning out the uterus; frequent or constant irrigation have good results follow, however not as satisfactory as curetting, and is far more annoying and exhausting to the patient. The usual method for doing the curetting is briefly as follows: The patient is placed

on a table with a Kelly pad or an ordinary rubber cloth under her hips; an anæsthetic is required, as the os is generally sufficiently dilated for doing the curetting. The operation must be done thoroughly aseptic, soap, hot water and mercuric bichloride solution, one to five thousand, should be freely used on the outer parts and the vagina; a perineal retractor is now introduced and the cervix brought into view; a constant stream of bichloride solution should be kept flowing over the parts.

It is very important to irrigate the interior of the uterus with bichloride solution of sterilized water before curetting. By so doing we remove all loose particles of decomposition and prevent a possible new absorption of septic matter by the denuded surface subsequently made by the curette. This can be successfully done by using a long glass tube, slightly bent several inches from the end, or a catheter made for that purpose. Great care must be taken so there will be no hindrance to the outflow of the fluid; the entire endometrium is next thoroughly, but carefully curetted with a sharp curette. There is no danger in this, if, as Dr. Goffe says, "pressure is only applied with the drawing motion of the curette." The dull curette should never be used; it simply bruises the tissues and so hastens absorption. A peculiar grating feel is imparted to the curette when the diseased and softened tissues are removed and instrument comes in contact with the more or less firm muscular layer of the uterus.

An irrigating curette is probably the best instrument for cleaning the uterine cavity. When we feel satisfied that all has been removed, the uterus is again irrigated with bichloride solution and loosely packed with iodoform gauze; the vagina is dusted with iodoform, and also packed with gauze. The drainage when introduced in this manner will insure complete drainage; usually the fever will entirely disappear. In thirty-six to forty-eight hours the gauze is removed.

Should in some cases the temperature remain above 101 deg. the uterus should be irrigated every few hours with sterilized water once or twice a day, with 1 to 5000 bichloride of mercury. All wounds in vagina or cervix be dusted with iodoform.

Dr. Ill reports fifty cases treated in above manner with only one death. In that instance it seems treatment was too late. She had had a high temperature for one week. I have only a few cases of my own treated in this manner, several of them previous to full term, all with good results.

An accident that may occur in these cases is a perforation of the fundus by the curette, especially if the ordinary size is used. A broad curette should always be used, and great cau-

tion taken when curetting the fundus. Several cases of perforation are reported. However, so far as I can ascertain, there were no fatalities on account of the perforation.

There are some who will say they have seen patients get well without such heroic treatment. That is true; but they will also remember that their deaths far outnumber their recoveries. In the cases that do recover we see a lingering convalescence. They are emaciated and pale-looking, frequently requiring months for recovery, and at times never regain their former health.

The curetting, if properly done, positively hinders no patient from getting well. On the contrary it produces a speedy and more perfect recovery.

Since we can not tell in the beginning which cases are going to recover by what might be called a conservative treatment, it seems to me far more rational to put them at once on the above described treatment, and not delay until it is too late for any treatment to be of any avail. Sustaining and stimulating treatment should be kept up from the start. Simply treating the symptoms as they come up, as is sometimes done, is bad and should not be practised. Opiates and antipyretics should never be used. They simply cover up the true condition and are of no benefit whatever. The ice bag on the abdomen is always agreeable to the patient and usually relieves all the pain that is present in those cases, also prevents to a great extent inflammatory invasion of the peritoneum. By lowering the temperature we do not cure our patients. We should remove the cause. It is not that kills; it is the septic infection that does the damage.—*Annals of Gynæcology and Pædiatry.*

EARLY DIAGNOSIS OF CANCER OF THE CERVIX UTERI; PATHOGNOMONIC SIGN.

By W. J. SINCLAIR, M. A., M. D., M. R. C. P.,

Professor of Obstetrics and Gynecology, The Owens College, Victoria University, Manchester

There is at the present time a tolerable consensus of opinion that cancer, affecting the cervix uteri, can, in its early stages, be successfully dealt with as a local disease. All specialists in gynecology, who have turned their attention to the operative treatment of cancer of the uterus, lament the smallness of the number of cases that come into their hands at a sufficiently early stage to give them a reasonable hope that the operation of extirpation will not be followed by comparatively early recurrence. Of such common occurrence is cancer of the uterus that cases are constantly coming into the hands of

all general practitioners, and it is on their promptness in recognizing the nature of the disease, and having it dealt with in the most efficient manner at present known to us, that our hopes of any considerable improvement in practice must rest. Some of the difficulties in the way of obtaining more satisfactory results in the surgical treatment of uterine cancer arise from the nature of the disease, the absence of striking symptoms, especially of pain, in its early stage, and the patient's ignorance of the significance of irregular discharges and hæmorrhage. The patients are shy about mentioning their troubles; they procrastinate, and when at last they seek advice there is no time to lose, even if it be not already too late to operate.

For the prompt and efficient treatment of the cases which come under our observation in the early and favorable stage, we largely depend upon some definite and easily applicable method of diagnosis. Cancer of the cervix uteri in the ulcerative stage has such marked characters, and is consequently so easily diagnosed, that hesitation in applying to it the radical surgical treatment, if it has not already passed beyond the point at which such treatment may be of service, is, with the present available knowledge, altogether unjustifiable practice. There is, however, a still earlier stage of the disease which occasionally comes under the observation of the practitioner, the most hopeful stage from the point of view of surgical interference, which is too often allowed to pass because of doubt as to the significance of the facts observed and consequent feebleness in action. Any method of diagnosis depending upon features which are to be looked for in any given case, and when observed, accepted as sufficient to justify action, must be generally available, and therefore easy of application, by the average general practitioner. In order to attain the maximum amount of usefulness, such diagnostic signs must be comparatively easily found when looked for, and their verification must not require any processes which demand a large amount of time and care and special knowledge on the part of the practitioner. The chief objection to microscopic examination of tissue obtained from a portion of the organ suspected to be diseased, as a method of diagnosis, is the difficulty of its application. It requires special knowledge of the methods of obtaining and preparing tissues for microscopic investigation, and even when such knowledge is available, the amount of time required for its application greatly diminishes its value. In addition to that, we have to remember that the mere histological examination of tissues can only be looked upon as an auxiliary and complement to the observation of clinical facts, not as a substitute for it. It may be said with confidence,

therefore, that the usual advice given in books and clinical lectures, under the head of diagnosis of cancer of the cervix uteri to make a histological examination of the suspected tissues, is one of more apparent than real usefulness. What we require is an easily applied clinical method of diagnosis, such as will differentiate early cancer from any other condition which a practitioner of average knowledge and intelligence could possibly mistake for it; a method which gives at the same time a moral certainty, or at least the very strongest presumption that the diagnosis depending upon it is correct. Such a method of differentiating between early cancer and other conditions which more or less resemble it is that to which I wish to call your attention.

If in any given case under examination the results obtained by palpation and the closest inspection are such as to leave any doubt in the minds of the practitioner as to whether the condition is or is not early cancer of the cervix, the doubt will, in my opinion, be invariably cleared up by ascertaining the amount of friability of the tissues. If the suspected portion be thoroughly exposed by a suitable speculum, and the uterus held steady by the volsella, if the disease is malignant, a firm scrape with a sharp curette or spoon will enable the examiner to obtain a definite distinct piece of tissue, larger or smaller according to the extent of the infiltration and consequent friableness of the tissue thus operated upon. If it is not malignant, the firm scrape with the sharp curette will only make the parts bleed, and, at the most, some small thin shred or pellicle of semi-translucent epithelium or of granulation will be obtained. The difference is very strikingly brought out by comparing the effects thus produced upon a case of old chronic cervical catarrh with hypertrophy, ectropium, and retention cysts, with the effects produced by similar forcible application of the spoon to the tissues in the early stage of epithelioma. The existence of this contrast, with its easy application of diagnosis, is of the greatest importance in general practice, inasmuch as chronic cervical catarrh, complicated with the other tissue changes just mentioned, is almost the only condition met with which is at all likely to be mistaken for early epithelioma of the cervix. If we take, for example, the two cases shown in the water color drawings [the reference to drawings of typical cases made before operation], the characteristic difference does not appear on simple inspection. In the case of malignant disease the ring of the external os is complete, and the diagnosis by simple inspection would have to depend upon a mere *nuance*, an indescribable difference in the color of the mucous lining and of the discharge at the os in the two cases respectively.

A comparison between the results which were obtained by palpation would not have brought us anything further toward the completion of a differential diagnosis. In both cases there was a certain element of hardness, unevenness, and irregularity in the consistency of the tissues about the external os; in both there appeared to be some hypertrophy of the cervix, but there was nothing, as far as the touch was concerned, that would justify one in saying that one case was malignant and the other was not. From certain facts in the clinical history of the malignant case the nature of the disease was suspected, and the test of the sharp curette was applied. The instrument cut through from inside the os downward to the vaginal surface of the portio as through a piece of moist cheese, and although a microscopic examination of the tissues was made, the diagnosis was completed by the effects of the curette, taken in conjunction with the other clinical facts, quite independently of the histology. On extirpation of the uterus the condition shown in the annexed drawing was discovered, that is to say, there was extensive breaking down of the tissues of the cervix uteri, extending even above the external os.

Quite recently I had the opportunity of dealing with a case which formed a striking illustration of the application of this method of diagnosis, where the clinical history, the appearances, and the results obtained by palpation, all tended to support the diagnosis already confidently arrived at before the patient was sent to me, viz.: that she was suffering from epithelioma of the cervix uteri. There was, on the posterior lip of the deeply lacerated cervix, a considerable area apparently devoid of epithelium, with an irregular indurated margin studded with small retention cysts, some of which were ulcerating. The test of the sharp curette was applied with a negative result, that is to say, the suspected surface was merely made to bleed, and only some thin particles of epithelium were scraped away. A distinct mass of friable uterine tissue was not obtained; nevertheless, the appearance of the hypertrophied eroded posterior lip was so suspicious that it seemed as if an exception to the rule had been found, and therefore the test had failed for all. The patient was kept in bed for several days, and medicated tampons were applied in order to thoroughly cleanse, and as far as possibly modify, in a healthy direction, or otherwise, the appearance of the suspected area. The change which took place was of small avail for completing the diagnosis, and the sharp curette test was again applied, with the same result. It was, therefore, decided to proceed with Emmet's operation, as the most effective method of dealing with the laceration and hypertrophy, inasmuch as the

definite conclusion was reached that the erosion and other changes could not be owing to malignant disease. In performing the operation, which was duly carried out, the incision on one side invaded the margin of the ulcer, and this was followed immediately by a gush of the fluid characteristic of a retention cyst of the cervix, and the hard and apparently hypertrophied posterior lip at once became flaccid and greatly diminished in bulk. This retention cyst of the cervix was the largest that I have ever seen. The operation was completed, the patient made a perfect recovery, and I heard some weeks afterward, from her medical attendant, that the symptoms which originally caused alarm had subsided, that the uterus appeared perfectly healthy, and it was almost impossible to make out the points of union in the ring of the perfect external os.

As this is a mere preliminary note I do not care to illustrate the method or to elaborate further. I have applied it myself for about ten years, and have never found it to fail. The suitable application of it presupposes a reasonable amount of knowledge of the diseases of the female sexual organs, and the due consideration and appreciation of all the relevant clinical facts in any given case; when any doubt still remains in the mind of the practitioner, the effects produced by the sharp curette or spoon should finally settle the diagnosis.

When the operation of vaginal hysterectomy for cancer was being introduced into this country one of the bogeys raised by some of the senior gynecologists was the extreme difficulty of diagnosing cancer of the cervix sufficiently early. This was merely the play of exaggeration giving utterance to prejudice, an illustration of the usual attitude of the post-climacteric intellect to the newer developments. There never was any such extreme difficulty in differentiation as used to be alleged, and more exact observation of the injuries done to the cervix in parturition, and of the subsequent and resulting changes in the injured parts which may take years to develop, has done much to minimize or remove such difficulty as ever existed. It is only in such cases of injury that doubt as to the benign or malignant nature of the changes is excusable. All the other appearances usually enumerated as simulating cancer have only a superficial resemblance; ignorance and carelessness are essential to mistaken diagnosis.

The use of the curette in the diagnosis of malignant disease of the body of the uterus is better known, but perhaps not so generally adopted as it ought to be. That, however, is another subject.—*Medical Chronicle*.

Book Reviews and Notices.

Lectures on Auto-Intoxication in Disease, or the Self-Poisoning of the Individual. By Ch. Bouchard. Translated by Thomas Oliver, M. A., M. D., F. R. C. P. Philadelphia: The F. A. Davis Company. 1894. [New Orleans: Armand Hawkins Company, 194 Canal street.]

Bouchard's work on auto-intoxication is a clear, systematic exposition of the relations of the retrograde metamorphosis of the tissues and the production of pathological conditions. It has often been said that the practice of medicine is not a science but an unskilful piece of guesswork. That reproach contained at once a confession of failure on the part of many properly to appreciate morbid processes and to apply suitable remedies, and called attention to the hiatus that existed in our medical knowledge. The field of medical science is unlimited, and every advance only shows us that we have still further to journey.

The constant additions made to our stock of knowledge by workers scattered all over the world are taken from time to time by a master-mind and grouped in a systematic manner so as to form a connected whole. Such a mind is Bouchard, and such a work is the one before us. He has digested a vast mass of facts, and has contributed besides a great many himself. He shows how the performance of the normal functions of the viscera results in the formation of products which, accumulating in sufficient quantity, give rise to many morbid manifestations, and may even cause death. He describes in detail the morbid conditions that may arise from disordered renal action; from gastro-intestinal disturbances; from hepatic disease, and from the action of pathogenic micro-organisms. The human system is a laboratory of poisons that are being incessantly generated. A clear conception of these various intoxications enables the physician to understand many obscure points in symptomatology and pathology and strengthens his hands in his battle with disease. Bouchard's work deserves to be carefully studied by all physicians, as it supplies a distinct want in pathology that had only been partially supplied by his predecessors.

A. McS.

The Care of the Baby. A manual for mothers and nurses, containing practical directions for the management of infancy and childhood in health and disease. By J. P.

Crozer Griffith, M. D. Philadelphia: W. B. Saunders, 1895. New Orleans: Armand Hawkins Co., 194 Canal street.

When we recall the frightful mortality among children under five years of age, we feel that a work like the one before us need no apology for its existence. Upon the care of infants depend the future health and strength of a nation. Every mother's devotion can be relied on for tender service; but her efforts are sometimes misdirected though well meant, and it is for the purpose of showing mothers and nurses what not to do, as well as what to do, that Dr. Griffith has written this excellent book. The need of such instruction is often painfully evident. Every mother and every nurse can profit by a study of Dr. Griffith's work, and render themselves better able to discharge their duty toward their little charges.

Diseases of the Ear. A text-book for practitioners and students of medicine. By Edward Bradford Dench, Ph. B., M. D. With eight colored plates and 152 illustrations in the text. New York: D. Appleton & Co., 1894. New Orleans: Armand Hawkins Co., 194 Canal street.

Dench has given to the profession a work that deals more particularly with the practical side of otology, without neglecting those things that go to make up a complete treatise on that branch of medicine. The author has endeavored to place before seekers after knowledge a clear statement of modern methods of investigating and treating diseases of the ear. What strikes the reader very forcibly is the series of excellent illustrations showing the various steps of the recent intratympanic operations to which periodical medical literature has failed to do justice in a pictorial way.

The anatomy and physiology of the ear occupy the opening chapters of the book, following which come the methods of examination. The diseases affecting the various parts of the organ of hearing are fully discussed, and plans of treatment laid down, based upon study and a large experience. His chapters on surgical procedures are especially interesting; his descriptions are clear, and, with the aid of the fine cuts, it is easy to follow him. The chapter on the mastoid operation, which has furnished Dr. Allen with a subject for a small book, is clear enough and full enough to enable any surgeon to relieve one of the most formidable complications of suppurative otitis media without doing any damage to the facial nerve or any other structure that should be avoided.

Dench's work is a valuable addition to otological literature. Though not encyclopedic or bristling with bibliographical references to attest the depth and breadth of the author's knowledge, it yet contains all that is required to equip a man thoroughly for the practice of otology.

A. McS.

Twentieth Century Practice. An international encyclopedia of modern medical science by leading authorities of Europe and America. Edited by Thomas L. Stedman, M. D. In twenty volumes. Vol. I, diseases of the uropoietic system; Vol. II, nutritive disorders. New York: Wm. Wood & Co., 1895.

This is indeed an age of "encyclopedias" and "systems." The time is now quite far in the past when one medical writer could digest the large number of contributions to medical science, and present the fruit of his labors in one or two volumes. Medicine has developed so amazingly in all its branches that it requires a corps of skilled writers to record even briefly the progress made each year. A work on any subject that makes pretensions to comprehensiveness is supposed to portray with reasonable accuracy the state of knowledge on that subject at the time of publication. The inability of any one man to set forth in a proper manner all that is known in medicine, surgery, obstetrics, etc., is too evident to require argument. Various medical publishers have from time to time given to the world comprehensive "systems," by corps of writers of acknowledged merit. A number of French dictionaries of medicine chronicled the state of medical learning at their respective dates. In recent times, Ziemssen's Encyclopedia has been the most comprehensive work offered to the profession. But even that grand work has had its day. The birth of bacteriology, with all that flowed from the new science, opened up new fields of research, and relegated the mine of medical lore treasured up in Ziemssen's Encyclopedia to a place of secondary importance.

The *raison d'être* of this new colossal venture of the enterprising New York publishers is best stated in the opening preface: "To those who realize the many and radical changes that have taken place in the healing art during the closing years of this century no apology is needed for the work here presented. Within but little over a decade a new science has arisen and a new theory of infectious diseases has been established, while the advances made in many branches of internal medicine have been hardly less remarkable. Indeed, it is not too much to say that a new era has begun—one in which the

rational treatment of disease engaged the best thought of the best workers, supplementing, while not supplanting, the study of pathological anatomy by which the preceding era was characterized. The science of medicine has been in great part recast; the time is now ripe for it to be rewritten. To this end the co-operation of many recognized authorities in Europe and America has been secured, the results of whose labors will be presented in the successive volumes of this series."

The first and second volumes, which have already been sent forth, fully bear out the claims made for the grand work. Volume I deals with diseases of the uropoietic system. The contributors are Francis D. Lafield (New York), E. Hurry Fenwick (London), Reginald Harrison (London), Howard A. Kelly (Baltimore), and G. Frank Lydston (Chicago). Lafield discusses the medical diseases of the kidneys; Harrison, surgical diseases and diseases of the bladder; Lydston, diseases of the prostate and the male urethra; Fenwick, diseases of the urine; and Kelly, diseases of the female bladder and urethra. Kelly's method of catheterizing the ureters is well illustrated.

Vol. II. deals with nutritive disorders. Sir Dyce Duckworth (London) treats of Addison's disease and other diseases of the suprarenal bodies; Carl von Noorden (Frankfort-a.-M.), of diabetes mellitus; T. J. Maclagan (London), of rheumatism; Henry M. Lyman (Chicago), of gout; Archibald E. Garrod (London), of arthritis deformans; Dujardin-Beaumez (Paris), of diseases of the muscles; M. J. Oertel (Munich), of obesity.

The array of prominent names connected with the work is alone an assurance that much has been undertaken, and much may be expected. The two volumes already issued realize fully all expectations and foreshadow a complete work that will be a monument to modern medicine of this and other countries, and a cause for pride to the energetic publishers. The task of putting into shape the vast mass of material contributed has fallen to Dr. Thomas W. Stead, of New York, to whose industry and ability the volumes strongly speak.

A. McS.

State News and Medical Items.

DR. W. H. WATHEN, who has been dean of the School of Medicine for many years, has resigned and Prof. S. E. Woody, M. D., has been elected as his successor.

DR. AND MRS. MARTIN, of Lake Charles, La., are congratulated on the arrival of a son last month.

DR. DOUGLAS DUPERIER, of New Iberia, La., has returned from the Battle Creek Sanitarium, Mich., where he has been for treatment. He is much improved in health, and has resumed practice.

DR. J. J. AYO has removed from the city to Raceland, La., and located for the practice of his profession.

DR. ROBERT H. BLACKMAN has located at Bolinger, La. The doctor is a graduate of the University of Louisville and spent the past year at the Charity Hospital at Shreveport, La.

DR. E. P. KLINE, Thomasville, Miss., died suddenly at the bedside of a patient, September 2. The doctor died from a stroke of apoplexy.

DR. R. TRUXILLO has removed from Paincourtville to Dorceyville, La., for the practice of his profession.

DR. R. P. JONES, of Baton Rouge, La., passed through the city on a visit to his brother, Dr. J. Jones, at Quarantine Station.

DR. AND MRS. A. H. MOSS, of Lake Charles, La., spent last month in New York.

DR. TUTTLE, who has been practising near Thibodaux, La., has moved to town and located in the Thibodaux Bank building.

DR. R. T. THIBODAUX has located at Thibodaux for the practice of his profession.

DR. E. PAXTON, a graduate from Tulane of the class of 1895, has located at his old home in Arcola (Miss.) to practise his profession.

DR. R. O. HOLLISTER, of Ponchatoula, La., has returned from a visit to his old home in Michigan.

FRIEND—"Were you successful with your first case?"
The Doctor—"Yes; his widow paid the bill."

THE COOPER PHARMACY COMPANY, of St. Louis, Mo., has removed to 18 Platt street, New York, and incorporated under the name of the Van Ness-Cooper Company. This company sells a large quantity of its preparation in the South.

DR. L. G. LEBEUF, who has just returned from Europe, has removed his office from Algiers to the Medical Building, New Orleans.

DR. ALCIDE LEIGH has moved from Perthshire, Miss., to Laconic, Ark.

THE NEW ORLEANS POLYCLINIC will open its ninth regular session in its new building on March 2, 1896, and hold two terms of six weeks each.

DR. J. R. BRIGGS, who has been the editor of the *Texas Health Journal* for a number of years, has sold it to Dr. A. M. Elmore, its business manager.

THE WILLIAM F. JENKS memorial prize of \$500, under the deed of trust of Mrs. William F. Jenks, has been awarded to A. Brothers, M. D., 162 Madison street, New York, for the best essay on "Infant Mortality During Labor, and its Prevention."

DR. J. B. S. HOLMES, of Atlanta, Ga., extends an invitation to all visiting physicians his office at his home, "The Halycon," 17 West Cain street.

AT a recent meeting of the trustees of Jefferson Medical College, Philadelphia, the honorary degree of LL. D. was conferred on Dr. John Collins Warren, Professor of Surgery in Harvard University.

THE MONROE HOSPITAL, Monroe, La., will open this fall. Four thousand dollars was raised for this purpose by its public-spirited people.

DR. H. H. HUGHES, graduate of Tulane, class of '92, is secretary of the Medical and Surgical Society of Mississippi at Jackson. This society has issued a very neat volume of their transactions.

THE seventh annual meeting of the Tri-State Medical Society of Tennessee, Alabama and Georgia was held at Chattanooga last month. President, R. L. Cunningham, of Birmingham, Ala.

THE average height of man in the United States is 5 feet 10½ inches; in England, 5 feet 9 inches; in France, 5 feet 4 inches; in Belgium, 5 feet 6¼ inches.

DR. HIRAM T. SMITH died August 10, at Preston, La., aged 66 years.

THE Army Medical Museum at Washington, D. C., contains 112,000 bound volumes and about 150,000 pamphlets. It is estimated that this collection comprises three-fourths of the medical literature of the world.

SUPERSTITION IN SIBERIA.

A case of considerable importance was recently tried before the Governmental Court in Tomsk in Central Siberia. At this trial thirteen peasants, belonging to the district of Barnaul, in the same government, were charged with the murder in 1892 of a man, a stranger to the district, who was taken by the peasants for "the cholera." Firm in this belief they killed him. At the trial some curious circumstances were brought out, which throw a strange light upon the mental attitude of the chief actors in this tragedy. The murder was not committed on the impulse of the moment; it was carried out deliberately and with a sort of official sanction, for the *starosta*, or elder (the peasant head of the village), though not himself taking part, sent a representative—a Kirghiz named Tchokin—to assist in the "sacrifice." The unfortunate victim was a peasant from another district, who was passing through the village of Trubatcheva. The villagers were fearing the approach of cholera and conceived that the first stranger who came was the dreaded thing itself. They imagined that he was "destroying the people and their cattle." The fact that he had a passport did not save him, and a paper found on him containing a list of the surrounding villages only confirmed the suspicions of the peasants. They dragged him a hundred fathoms from the village, two of them shot him, the others beat him with sticks, and they then buried the body in the forest. The body was subsequently exhumed, the bullet wounds found, and a number of other hideous injuries, the skull being fractured into as many as sixteen pieces. The court found all the accused guilty; two, being under age, were sentenced to five years and four months' hard labor; the remainder to eight years' hard labor. "Extenuating circumstances" were found in every case, and the matter will consequently be referred to the Senate for final decision. The present case is not an isolated one in the history of cholera epidemics in Russia; it could be paralleled by similar instances from the epidemic of 1892.—*British Medical Journal*.

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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.]

REPORT OF A CASE OF SPONTANEOUS GLUTEAL ANEURISM.

By DR. S. P. DELAUP, NEW ORLEANS, LA.

Considering the rarity of this lesion I thought the report of this case would prove interesting.

Solomon B., a strong, well developed and seemingly healthy negro, 21 years old, was admitted to my service at the Charity Hospital on the 1st of June. On admission he complained of a pulsating tumor of the right buttock, which disabled him for hard work. He was born and reared in northern Louisiana, and has had an outdoor life as a laborer on a cotton plantation. His family history is negative, and to his recollection he has never been ill.

On inspection I found an irregularly defined, fluctuating, elastic, pulsating tumor, unaccompanied by inflammatory symptoms, situated about an inch above the right gluteal fold and nearer the mesial line. The patient's attention was first called to his trouble about three years ago, when he felt a vague, throbbing sensation and a feeling of heat about the affected region after severe muscular exertion. Some time after this he felt a swelling, which has since constantly and steadily grown, especially within the last three months. The heat and throbbing consequent upon continuous muscular ex-

* Read before the Orleans Parish Medical Society, October 12, 1895.

ertion unfit him for his labor; otherwise he enjoys perfect health. He does not complain of pain.

The expansion of the tumor is very easily observed, especially at the lower part of the tumor, where it bulges out more prominently. The right thigh is larger than the left, and the upper and inner branches of the saphenous vein are much dilated and varicose. There is no diminution of the force and volume of the pulse in the arteries of the right leg, as compared with the corresponding vessels of the side of the body.

Palpation reveals a distinct vibrating thrill at the lower part of the tumor, where it appears in consistence like a cyst, and also considerable warmth about the tumor.

Forcible digital pressure at the upper third of Nelaton's line caused the pulsation and thrill to cease; pressure with the closed fist over the abdominal aorta likewise arrested the pulsation and thrill in the tumor. The skin over the tumor appears a little blacker than the rest of the body, which fact could possibly give credence to the statement of the patient that he had a birthmark on that region.

A physical examination of the thoracic and abdominal organs revealed nothing abnormal. The urine was normal, with a specific gravity of 1013 and acid reaction.

Owing to the peculiar thrill a diagnosis of arterio-venous aneurism was made.

As the digital pressure at the upper third of Nelaton's line so easily arrested the circulation in the tumor, an external operation was thought advisable. In order to familiarize myself with the difficulties of the operation, I, with the able and kind assistance of Dr. Parham, performed the operation six times on the cadaver. In the first subject the arteries were not injected, and considerable difficulty was experienced in securing the gluteal artery as it emerges from the great sacro-sciatic notch, as the division of the artery occurred right at the notch. The gluteal artery, the continuation of the posterior division of the internal iliac, emerges from the pelvis, through the upper part of the great sacro-sciatic foramen, and almost immediately divides into superficial and deep branches. The second and third subjects having been injected with colored plaster of Paris, the artery was easily found and all its branches dissected.

From our trials on the cadaver we concluded that an incision five inches long and half an inch below Nelaton's line would meet our purpose. Accordingly, on July 4, with the valuable assistance of Drs. Parham, Souchon and Gessner, I attempted to ligature the gluteal artery through an external incision. The patient, who had been previously prepared for the operation, was put in the prone position and remained so through the operation. The incision made was about five inches in length and a little below Nelaton's line. On reaching the pyriformis muscle at its upper border, a small artery was exposed and a provisional ligature applied, with no effect on the tumor. By dissecting close to the sacrum, in fact exposing to view the great sacro-sciatic notch, another artery was discerned and a ligature applied with no effect on the tumor. After a diligent and laborious but unsuccessful search for the main trunk of the gluteal artery, I requested Dr. Parham to try his hand. The doctor, in his endeavor to dissect an artery appearing at the upper border of the pyriformis and close to the notch, accidentally punctured the vessel. A hæmostatic forceps was immediately applied and the hæmorrhage controlled. The patient, who had been nearly two hours under the influence of chloroform, now showed signs of weakness. It was, therefore, decided to abandon the fruitless search for the main trunk of the artery. The forceps was left in place and iodoform gauze was packed in the wound. Dr. Souchon was of the opinion that in this case the gluteal artery divided high up in the pelvis. The patient recovered from the effects of the chloroform without even nausea.

About twenty hours after the operation the forceps were gently removed without disturbing the gauze. On the second day the gauze was carefully drawn out and fresh iodoform gauze inserted. The wound healed kindly with a little suppuration, which was checked by antiseptic dressing. At first the patient thought the pulsation in the tumor had markedly diminished, but later was sure that the pulsation and the heat were the same as before the operation. So far as I could ascertain, the aneurism remained unaffected. It was my intention, as soon as the wound would allow it, to perform an extra-peritoneal or trans-peritoneal operation for the ligation of the internal iliac.

I, therefore, again prepared for the operation by experimenting on the cadaver. Still with the valuable assistance of Dr. Parham, I ligatured the internal iliac artery by the extra-peritoneal method six times, and the transperitoneal method twice.

Only the first subject was injected, as we found little difficulty in securing the internal iliac artery.

Percival R. Bolton, in Dennis' System of Surgery, says: "Where the point of origin of the aneurism is uncertain, or its size and position are such as to render ligation of the external iliac by the extra-peritoneal method undesirable, or where doubt exists concerning the exact place of application of the ligature, the transperitoneal method may be employed.

"The method has several advantages over the extra-peritoneal operation. It avoids the extensive stripping up of the subperitoneal tissues, and consequently implies a smaller wound, and one which more directly exposes the site of ligation. It allows of choice in the point to be ligated, and that it may be successfully accomplished in the case of the common iliac, or either of its branches, the cases of Banks, of Stimpson and of Dennis will attest."

Notwithstanding this strong commendation of the transperitoneal route, advocated at the present time by the majority of operators, we determined upon the extra-peritoneal route.

I must state, however, that the main reason that influenced us in our determination was the uncertainty of securing thorough asepsis, as the amphitheatre of the Charity Hospital was in process of construction and the temporary operating room could not be made surgically clean.

The wound by the extra-peritoneal operation is undoubtedly large and deep, but when the patient is not too fat this method is not more dangerous than the transperitoneal.

Everything was ready for the operation, when the patient lost courage and declined to be operated on. He left the Hospital on the next day. I have since heard from him, and he has promised me to return next spring for the operation.

In reviewing the literature of gluteal aneurisms, I was impressed with the rarity of this lesion of the arterial system.

By collating such statistics of American and foreign au-

thors as were at my command, I was able to find the records of only two cases of arterio-venous aneurism of the gluteal artery. The first case mentioned by Delbet was operated on by Rebers and reported by Holmes in the *Lancet* of 1874; there exists no more information on this case than that compression was used without effecting a cure. The report of the second case, by Dennis, in his important article in the *Medical News*, in 1886, is used as a convincing evidence of the effectiveness and superiority of the transperitoneal method of ligating the iliac artery, which method he so strongly advocates in the article; this case, a woman 18 years old, was radically cured by the operation.

It is said that the great majority of cases of gluteal aneurism occur between the ages of thirty and fifty.

Dennis states that of forty cases of aneurism of the buttock, collected by Barwell, twelve were spontaneous and twenty-eight traumatic, and of the latter group, sixteen were due to wounds, ten to contusions, and two complicated sacroiliac disease.

Though my case occurred independently of traumatism, and in a young subject, I can not say that endarteritis did not play its usual role.

Of spontaneous aneurism of the gluteal artery, I have succeeded in adding six new cases to Delbet's eighteen.

I have tabulated these cases, and append them to this report.

EXTRA-PELVIC ANEURISM.

No.	Operator.	Bibliographical Reference.	Diagnosis.	Ligature and Result.	Incision or Extirpation.	Result.	Remarks.
1	Bell, J	Discourse of the nature and cure of wounds, 1794, p. 98.	Gluteal				
2	Carmichael	Dublin Journal of Med. Sc., 1833 ..	Gluteal		Incision, ligature of proximal end	Recovery	
3	Carmichael	Dublin Journal of Med. Sc., 1833 ..	Gluteal		Same as above	Recovery	
4	Torrachi	Gaz. Med. Tos-cane, Aug., 1844	Gluteal		Same as above	Recovery	
5	Schuh.....	Wilner Med. Vosen, March 7, 1857	Gluteal		Inc. of sack, could not lig. prox. end, tamponed	Hæm. lig. int.	
6	Syme	Lancet, 1861, Vol. 1, p. 610	Gluteal		Incision, ligature.	Died of indigestion on 41st day	
7	Carmichael	Lancet, 1874, July 11 and 18	Gluteal		Incision, ligature of prox. and dist. ends	Recovery	
8	Bell, J	Lancet, 1874, July 11 and 18	Gluteal		Inc., lig.	Recovery	
9	Holmes, Th	Lancet, 1874, Vol. 2, p. 40	Gluteal (tr a u-matic)		Inc., lig.	Recovery	
10	Torrachi	Lancet, 1874, July 11 and 18	Gluteal		Inc., lig.	Recovery	
11	Syme	Lancet, 1874, July 11 and 18	Gluteal		Inc., ligature	Recovery	
12	Kade	St. Pet. Med. Woschen, 1876, Nos. 8 and 9	Gluteal		Inc., ligature	Recovery	
				Hypogast., failure	Incision of sack.....	Death 2 hrs. after	

13	Gross, P	Am. Jour. of Med. Sc., 1876, Vol. 1, p. 345	Gluteal (intra-pelvic)	Ext. iliac, death			
14	Hussey	St. Barth. Hosp. Rep., 1877, p. 187	Gluteal		Incision of sack	Death	
15	Tillaux	Soc. de Chirurgie, 1879, p. 419	Sciatic		Incised for an abscess, clamped	Recovery	
16	Nicaise	Soc. de Chirurgie, 1879, p. 420	Gluteal		Incision, clamped	Recovery	
17	Kazinski	Med. Record, 1881, Vol. 19, p. 135	Gluteal	Int. iliac, recovery			
18	Poucet	Lyon Medical, 1883, p. 255	Gluteal (diffused)	Ext. iliac, 48 hrs. after lig. was applied pulsation reappeared			
19	Turner	Lancet, 1884, May 3	Gluteal		Incision of sack	Death, tetanus	
20	Dennis	Med. News, 1886, Vol. 49, p. 565	Gluteal (double)	Int. iliac, both; death 4 days after from suppuration			
21	Chew	N. O. Med. and Surg. Jour.	Gluteal (diffused)	Int. iliac, recovery			
22	Howe, A. J.	Eclect. Med. Jour. Cincin., 1892, 52, 10	Gluteal (tr a u matic)				
23	Williams, L. L.	N. Y. Med. Jour. 1892, 56, 211	Gluteal	Int. iliac		Recovered from aneurism	{ Malliven's needles used.
24	Carmichael	British Med. Jour., 1893	Gluteal			Death from abdominal sarcoma	

EXTRA-PELVIC ARTERIO-VEINOUS ANEURISM.

No.	Operator.	Bibliographical Reference.	Diagnosis.	Ligature.	Result.	Remarks.
1	Rebers	Reported by Holmes; Lancet, 1874, Vol. 2, p.76	Sciatic .....	.....	.....	Compression used, but without cure.
2	Dennis, F.....	Med. News, 1886, Vol. 49.....	Gluteal	Int. iliac, transperitoneal method	Recovery .....	.....

BLEEDING PILES (INTERNAL).

BY DR. N. C. MITRA, M. A., M. B., RANCHI, BENGAL, INDIA.

What is the best medical treatment for this affection is a question that seriously concerns the patient. He does not hail the idea of at once submitting to a surgical procedure without trying medical treatment. It is all very well to put him under the known hæmostatics, but separately or in combination, these prove of little avail in the serious cases. Sometimes ergot and hazeline prove of the greatest use, whereas in others it is quite useless. A single case is worth recording to show the efficacy of a particular drug.

In an old patient of mine, bleeding from internal piles was very profuse, and I tried all the internal hæmostatics without producing any appreciable benefit. I then ordered one drachm of pure hazeline for injection twice a day. This proved of some avail, for the quantity of blood became less. But one day, all of a sudden, the blood passed was of such a large quantity that the pulse of the patient was felt to be weak and small. It was quite certain that if the bleeding had gone on in such quantities for some time the patient's life would have been in jeopardy.

Having failed in my results in the use of hazeline as an injection, I combined four drachms tincture ferri perchloridi with four drachms pure hazeline for injection. It had some effect in diminishing the quantity of blood, but the bleeding continued. Next I prescribed tincture ferri perchloridi and hazeline, twenty drops of each in an ounce of water, twice daily, and along with this, injection per anum of tincture ferri and hazeline was kept up. This had a marvelous effect. The bleeding stopped, and the patient is quite free from any such complaint till now, which is more than six months.

I have not seen such a treatment advocated anywhere. In Erichsen's standard work on surgery we find that tinct. ferri, twenty drops in two ounces of water, may be injected per anum, or hazeline internally and per anum. But I doubt whether a combination of tinct. ferri and hazeline has ever been tried both internally and per anum. From the effect of the internal use of tinct. ferri and hazeline it is evident that

either tinct. ferri is the best hæmostatic or that in combination with hazeline it stands highest. Inasmuch as I prescribed in this case:

Ext. ergot liquid.....	℥ ₄₀
Hazeline	℥ ₂₀
Acid gallic.....	gr. xv
Aquæ.....	℥i

and which was given every two hours and continued for some days, there is not least reason to undervalue the efficacy of tinct. ferri as a first-class hæmostatic.

The question next to solve is as to the time for administering the injection. Some prescribe it to be given early in the morning. I would give it at bedtime so that the injection may be retained. If it is given at any other time it is apt to trouble the patient with a call for a motion which not only unnecessarily puts the patient to inconvenience but there is an extra amount of blood lost after the evacuation. Another peculiarity with my patient was that after evacuation of the bowels, the discharge of blood commenced first dribbling, then in streams, then it stopped all of a sudden and finally recommencing in streams it stopped.

A CURIOUS CASE OF COMA WITHOUT APPARENT CAUSE.

BY A. C. KING, M. D., NEW ORLEANS, LA.

We frequently meet with cases of coma that baffle our powers of diagnosis, and not being able to find a cause for the unconsciousness, are forced to content ourselves with treating symptoms as they arise. Such cases are of much interest to the profession generally, and often of value, hence should be reported, as we frequently are called upon to treat cases of this nature, and it is only by comparison that we are enabled to arrive at definite conclusions. Many different diagnoses can be made, but the question is to make a correct one. Quite a number of cases of coma came under my observation during my two years as Interne at the Charity Hospital, but none similar to the following, which I report as a matter of curiosity and interest:

A young man, 18 years of age, healthy dock laborer, returned from work at noon for dinner, hot, perspiring freely,

and feeling rather badly. Drank about half an ounce of whisky and lay down without removing his working suit. Dropped off to sleep and slept soundly for three hours, perspiring profusely the entire time, so much so that his father changed his bedding once. At 3 P. M. his mother endeavored to awaken him, but failed. Thinking he needed rest she did not disturb him for half an hour longer, but attempted at 3:30 P. M. to awaken him. Failing with gentle means she employed harsher measures, and failing again became alarmed. When summoned I found this condition of affairs: Profound unconsciousness, pulse 96, respiration 16 and regular, pupils contracted to about the size of a pin-head, corneal reflex absent, complete muscular relaxation, and a profuse perspiration. The clothing and pillow were soaking, bedding damp. Thinking that possibly he had taken opium in some form, I questioned the family closely regarding his habits, disposition and general character, and about the whisky he had taken. The breath had no alcoholic odor, nor was there the full, bounding pulse and flushed face of alcoholism. No cyanosis and slow respiration as in opium narcosis. His age excluded apoplexy; absence of albumen in the urine excluded nephritis; absence of fever and other symptoms excluded insolation. I could arrive at nothing approaching a satisfactory diagnosis, so proceeded to treat symptoms. Before doing so, however, I endeavored to arouse my patient with aq. ammonia by inhalation and by pressure upon the supra-orbital nerves; both failed.

Gave caffeine citrate, gr. iii, combined with atropia sulph., gr. 1-60, hypodermically, as a safeguard against any element of opium, and to check the sweating. I would have emptied the stomach, but had no siphon at hand.

I remained at the bedside for about an hour, watching the case intently for any favorable signs or symptoms upon which I could base a positive assurance; but the condition remained the same. In the meantime I had immersed both feet in hot water. At this juncture I returned to my office, a block away, for more atropia, directing that the ammonia be continued until my return, but evidently a misunderstanding occurred, for upon entering the room again I found the sister giving my pa-

tient a vigorous shampoo of pure aqua ammonia. How much this contributed to the general process of restoration I am not prepared to say, but some improvement had taken place during the five minutes of my absence. The corneal reflex had begun to return, the patient would wince upon pressure of the supra-orbital nerves and the pinching of the ears, and the perspiration was not so marked. Administered a second dose of atropia, gr. 1-60, to further check sweating, and soon had the extreme satisfaction of finding my patient conscious. He rallied slowly, but was soon able to give an intelligent account of himself. He had taken absolutely nothing beyond the half ounce of whisky, and had not felt particularly ill. He returned to work upon the day following, apparently none the worse for his experience, and is at present in perfect health.

TO WHOM SHOULD PHYSICIANS REFER THEIR PATIENTS FOR THE CORRECTION OF REFRACTIVE ERRORS?

BY W. S. SIMS, M. D., EX-PRESIDENT LAUDERDALE COUNTY MEDICAL ASSOCIATION;
MEMBER MISSISSIPPI STATE MEDICAL ASSOCIATION, ETC., MERIDIAN, MISS.

This question may appear to those who have given the subject but little attention one of no great importance, but when we come to contemplate the immense field for study that the eye to-day affords and the amount of long study and minute investigation that are necessary to master the subject we can at once see the folly of sending them to spectacle fakirs who style themselves "graduated opticians."

The following cases bearing on this point will illustrate very clearly the idea I wish to convey:

CASE 1.—Miss H., age 19, consulted me, at the suggestion of her family physician, in reference to her eyes. She told me she had almost a constant headache, that was at times very severe, especially after reading or sewing. She also stated that she had been told by an optician that her headache was due to eye-strain, and that he could furnish her a glass that would give her perfect relief. But after a few weeks' use they were found to be of no value.

I asked to see the glass and it proved to be a — 1 D. I found on examination that an opposite condition of things ex-

isted and the correction of a compound H. As. was called for that was diagnosed a low degree of myopia.

CASE 2.—Miss C., age —, noticed that her sight was failing and was advised by her physician to see an optician, who had just located in her town.

After repeated trials with his “celebrated lenses,” this very eminent pathologist told her she had atrophy of both optic nerves and that nothing could be done. Soon after this she was advised by a more sensible physician to see an oculist. She acted upon his suggestion, and at her request, I examined her eyes with the result of finding a high degree of myopic astigmatism.

CASE 3.—A gentleman, age 50, consulted me, stating that his vision was failing him very fast, and that he had spent a great deal of money with different opticians in trying to get a glass that would relieve him. I examined his eyes and found that he had chronic glaucoma. Here valuable time was lost to a man whose vision was fast fading away. These are only a few examples of many that are familiar to every physician whose practice is limited in part or exclusively to the eye, but the above will suffice.

Of course no reference is intended to the noble art of the opticians, whose business it is to grind and fill prescriptions, but that form of quackery that is carried on by so-called “scientific opticians,” whose knowledge was obtained at a four weeks’ optical school, or in a jewelry store, should be discouraged.

I. SUPERFLUOUS TOOTH IN FLOOR OF NOSE. II. RHINOLITH.

BY DR. R. F. HARRELL, RUSTON, LA.

On August 29, 1895, W. T. H., aged 34 years, came from Vienna, La., to have me treat him for “catarrh.” He had been a sufferer for about six years, spending, at times, whole nights in wakefulness caused by an excruciating pain which always started in the right side of the nose and radiated from that point to involve the whole of the right side of the face and head. Also stated that his breath was so offensive at times that his wife was disgusted with his presence. He had been

treated by various physicians and had used a number of advertised nostrums for catarrh without the slightest benefit.

Upon examination of the nasal cavity I at once discovered a large white substance springing from the floor of the right nostril, about one inch from meatus, which almost filled the entire lumen of the nostril. I touched it with the probe and found it was hard and firmly fixed. I then caught hold of it with a strong nasal forceps, broke it from its attachment and removed it. It proved to be a perfect tooth, similar in shape to a canine, but somewhat smaller. The mucous membrane was adherent to the tooth in a similar manner to those in the alveolar process. The catarrhal symptoms all ceased.

II. F., a little girl 5 years of age, was brought to my office the same day from about one hundred miles distant for the purpose of having me treat her for catarrh. She had been treated for catarrh about one year. Upon examination I found the right nasal cavity completely filled with a purulent discharge, which I removed by the use of the peroxide of hydrogen spray, and after increasing the lumen of the cavity by the application of cocaine, I was enabled to see a foreign body situated rather deeply in the nasal cavity. I caught hold of it with a pair of Noyes' alligator forceps and removed it. This proved to be a firm wad of paper, upon which was deposited a thin crust of stone, or rhinolith. The child made an uninterrupted recovery.

The first of these two cases presents features of great interest on account of its rarity. In an experience of several years of hospital and private practice in the nose and throat this is the first case I ever saw of that nature.

The history of the two cases impresses us with the importance of making a thorough examination of every case presenting to us for treatment before attempting to prescribe.

I. A SUPERFLUOUS TOOTH IN FLOOR OF NOSE. II. REMOVAL OF MEMBRANA TYMPANI AND OSSICLES. III. ACUTE EMPYEMA OF FRONTAL SINUS; DEATH.*

BY DR. O. JOACHIM, NEW ORLEANS, LA.

I.

This specimen of a tooth is from a patient who was under treatment for specific ulceration of the nasal septum. The removal of some sequestra and the usual specific treatment brought about a cessation of symptoms a year ago. The patient returned for observation on account of a continued and excessive discharge from his right nostril, as though from a cold, as he expressed it. The discharge was not purulent. A thickened mucous membrane covering the inferior turbinated bone was only to be seen. An application of cocaine, to determine whether it was hyperplastic or erectile tissue, permitted a prominent elevation from the floor of the nose to become apparent. On examination with a probe suitably bent, coming from behind forward, a rough surface could be felt. Suspecting a sequestrum I examined into its mobility, using a strong dental hook and found it giving somewhat. After many attempts I succeeded in prying it out from its bed with the aid of this instrument. It still adhered by mucous membrane closely to floor of the nose, and the forceps slipped off many times before I finally removed it. It showed itself to my surprise to be a tooth of the incisor group. In the patient there is no tooth missing and no irregularity in their growth. We must look upon it as a superfluous not an inverted tooth. Its location was one and one-third inches from the bony margin of the nose and two and one-half inches from the tip of the nose.

II.

The indications for the removal of the drum membrane with malleus and incus, or the removal of the stapes alone or in conjunction with its fellows, are not so well defined as to be strictly formulated, nor the results thereof so uniformly beneficial as to be an accepted method of procedure. The method is, however, based upon sound reason, and in the hands of

*Read before Orleans Parish Medical Society, July 27, 1895.

some operators the success has been quite encouraging. This method owes its revival to American aural surgeons, and has had its most earnest advocate in Dr. Sexton. The removal of any part of the conducting portion of the organ is indicated only when all other means of relief have failed or proven inefficient, and we are able to prove and maintain a marked increase of hearing by an exploratory myringotomy. Marked labyrinthine affection contra-indicates any operative interference.

Such can be with certainty assumed to exist when the upper tone limit is markedly lowered, if Rinné's test is reversed with C₂ or 3 tuning fork, with hearing of whispering voice diminished to a yard or less.

In the cases under observation the unfavorable conditions in this regard existed.

I will not go into the details of the examination, but will report that I have operated on three cases. The first, a man of 45 with hearing diminished to 2-3 feet for whispering numbers and words, excessive tinnitus, more in the left than in the right ear. The urgent request of the patient for relief from excessive and intolerable tinnitus induced me, after prolonged treatment, to give him the chance of what benefit there may be in the operation. The drum membrane and malleus and incus were removed under cocaine anæsthesia. The stapes proved to be solidly fixed. The result in this case proved negative after three weeks' observation. The hearing and tinnitus are about the same.

The next case was a young woman of 35 from this city. After prolonged treatment with usual methods, rarefaction, Lucae's pressure sound and catheterization, we removed the drum membrane, malleus and incus of the side most affected, under chloroform. In this case the result has been more satisfactory. What was formerly her bad ear is now her better ear. She can follow conversation with some satisfaction. The tinnitus, which had been a source of distraction to her, is only at times noticed, and she expresses herself as being relieved from a feeling a pressure about the head, which had long troubled her.

In the last case, a young lady of 27, also from this city,

the indications were not so favorable for operative procedure except that her hearing on the establishment of a perforation showed decided improvement. This perforation I attempted to make permanent. It proved, however, extremely difficult to keep the opening from occluding. If I made ever so large a resection of a part of the drum, in less than a week it had cicatrized. It did not help to touch the edges with the cautery or even nitric acid. The rapidity with which the opening healed was remarkable. I decided on establishing a possibly permanent opening by the removal of the ossicles and drum membrane. The incus could not be got into view and its removal, therefore, not effected. In this case the usual improvement as after the myringotomy was noted. I can say nothing about the permanency of this result or the results in the former cases, as not sufficient time has elapsed.

In no case did I meet with any severe or even marked reaction. The operation if done aseptically may be considered to be without danger, if removal of the stapes is not attempted. The removal of the stapes alone would seem *a priori* the most urgent and rational procedure. The removal of the stapes alone, which frequently is impossible on account of its firm fixation and consequent breakage on the attempt of removal, has in other hands not been followed by as good results as the method we have employed.

III.

Patient admitted July 5, 1895.

Some months previous to admission the boy received a blow on the head, which caused unconsciousness. On the following day he seemed as well as usual. For two months he had frequent headaches, which however did not stop him from work. Four days previous to admission had to leave work on account of headache and fever. He had a cough for four months. Two days before admission swelling of the right eye was noticed. Temperature on admission 104. The following morning Dr. Pope opened an abscess over the eye and suspecting a frontal sinus empyema referred patient to me for further care. The evening on which the abscess over the eye was opened the temperature rose to 106.2 and fell next morn-

ing to 100.5. When I saw the patient I found evidences of an acute frontal sinus empyema and proceeded to open it at once according to the method of Gruenwald. The cavity was filled completely with pus under pressure and granulation tissue. The cavity was thoroughly scraped out with the sharp spoon and packed with iodoform gauze. The temperature rose the same evening to 107. Next morning temperature was 102, and the general condition improved. The temperature declined to 99; the following day rose to 102; the next day remained near normal and for the two following days the condition looked favorable. The temperature rose again on the seventh day after the operation to 104. The cavity of the frontal sinus was dressed daily, looked well and remained free from discharge from the first day on. A severe harassing bronchitis disturbed the patient a great deal. With the rise of temperature on the 13th, *i. e.*, the seventh day after the operation, weakness of the left arm was observed. The contractile power was decidedly lessened in left hand, inability to hold the arm up, and severe headaches were noted; the right pupil did not actively respond to light. Examination of the fundus was not made.

On the 14th the temperature showed improvement. On July the 15th the emperature rose again to 104½ and a purulent circumscribed accumulation was noticed on the forehead corresponding to frontal eminence. As cerebral complication was clearly present I made a trephine opening at the site of this purulent accumulation, hoping to strike the seat of the cerebral complication at this point. The bone was clearly but superficially eroded, the dura mater looked normal with no symptoms of extra-dural congestion or purulent accumulation present. I therefore desisted from further procedure. The condition of the boy showed a general increase of symptoms on the following day and with Dr. Bloom decided upon another trephine opening at the side of the orbital incision. The sensorium of the patient was somewhat dulled, *i. e.*, he was rational, only slow in comprehension. To the question at what place he felt most pain, he pointed to the above mentioned location. This corresponded to the place where a slight decrease of resistance was noticed as compared to the other side. The

pus from the abscess over the eye had burrowed in the direction of the ear where a drainage tube was inserted. The trephining at this place was accomplished in a freely bleeding region. The bone was greatly eroded and the dura mater bluish in color. At the second puncture with the aspirating needle pus was evacuated from the brain substance, in the direction of the first trephine opening. The pus was of very offensive odor. After several attempts to find the abscess from the first trephine opening we succeeded and irrigated it with sterilized water. A free opening was made and a gauze-drain introduced. The patient's condition did not improve after operation. The left arm and leg became tonically contracted, and the patient died two days after, at 7 A. M. At 9 P. M. a post mortem showed the following :

Report of Autopsy.—Male corpse of about 20 years, fairly preserved; no external marks on body. Head shaven on its anterior half; drainage tube lying in suppurating sinus, extending horizontally backward, toward the right ear; trephine opening one inch above and to outer side of right eye; a second trephine opening at the height of convexity of frontal bone; an opening made with chisel over left frontal sinus an inch long by one-half inch wide, the orbital plate forming the floor of the cavity. The trephine opening over the squamo-frontal suture, three-fourths of an inch above the zygomatic arch is covered with purulent secretion and the bone structure toward the other opening is eroded. The bone at the external angle of the frontal sinus is soft and easily gives way to a probe. Blue discoloration of squamous portion of temporal bone. At upper trephine opening, free communication exists through dura mater with the brain through an incision carrying a gauze tampon. About one drachm of bloody-looking pus exuded from the incision over the eye which communicates with outer trephine opening. The dura mater is congested along the longitudinal sinus, and somewhat along the meningeal artery, more so on left side than on right. The dura mater shows an area of intense dark blue discoloration over the right frontal convolutions and much thickening. The discoloration the size of an egg was not distinctly defined upward and toward the upper trephine opening. A large cerebral abscess of

irregular dimensions, $2 \times 1 \frac{1}{2}$ inches, filled with fœtid pus with a well defined pyogenic membrane existed; also a smaller abscess to the left of the superior longitudinal sinus. No lesions at the base of the brain.

Proceedings of Societies.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.

The president, Dr. John Neff, in the chair.

Dr. John Neff read the histories of the two following cases of septic infection before abortion.

I. On the morning of the 9th of April, 1894, the patient noticed some slight hæmorrhage and pain, which became persistent and frequent during the day. At midnight she had a prolonged chill, followed by high fever and profuse perspiration. When I saw her early the next morning her temperature was 104 deg., pulse 130. On digital examination I found the os resistant and only slightly pervious, hæmorrhage slight and pains trifling and infrequent. Thinking the abortion might be prevented, as it had not been criminally induced, I enjoined absolute rest and gave anodynes. At my next morning visit the temperature was still 104 deg. and pulse 130; frequent chills had occurred during the night, and now the miscarriage was inevitable, the fetal portion having passed during the night. The os was now patulous and easily dilatable, and the dull curette was used to remove the remaining portions. Intra-uterine douche of permanganate of potash, five grains to the ounce, followed by copious use of sterilized water. Thus, within a brief time after inception of abortion, the uterine cavity was emptied of its contents, which were healthy, and was antiseptically treated, but the temperature remained high and the irregular chills were frequent. During the night arthritic trouble developed in the right shoulder and left knee, the joints becoming swollen, sensitive and painful. Effusion rapidly took place in the knee-joint, distending the joint more and more each day. The fluctuation seemed to indicate a fluid that was purulent in character. Aspiration was already decided upon the 17th, and employed, taking from the part ten ounces of sero-purulent fluid. No more rigors occurred, and the pulse fell to 96 and temperature to 100 deg. within a few hours after the operation. The joint did not refill, but motion was impaired for several weeks, and four months elapsed before nor-

mal restoration occurred. No effusion took place in the shoulder joint, but the arm was painful, and its use impaired for two months.

The effusion into the knee-joint was doubtless of septic origin, as it began almost simultaneously with inception of the miscarriage. There was slight tenderness in pelvic region, but no distention of abdomen or peritoneal investment.

The treatment was sulphide of calcium, three grains every four hours, alternated with salicylate of quinine, five grains. Full nourishment and moderate stimulation. Hypodermics of morphia to allay pain of joints.

II. The other case was Mrs. C., aged 26; mother of two children, the younger being 18 months old. Had missed two monthly periods, and on December 21, the date for its usual return, she noticed slight hæmorrhage and irregular pains. In this condition, took a long shopping jaunt that afternoon and evening; the weather was intensely cold. After retiring, she was seized with a prolonged chill, which occurred a second time, followed by fever and profuse perspiration. When I saw her in the morning, I found her temperature was 105 degrees, pulse 130. The hæmorrhage was still slight, and uterine pains being infrequent and short. The os being impervious, the miscarriage did not seem imminent. During the next twenty-four hours, the irregular chills and high temperature were maintained, and the abortion now seemed inevitable, some fragments of tissue having passed, and the pain and hæmorrhage increasing. The abdominal tenderness was now marked, and the abdomen was tense and most sensitive, especially in the right ovarian region. It now seemed impossible to prevent the abortion, and I dilated and removed the contents, which showed no putrefactive change. Employed intra-uterine injections of hot carbolized water. The lochia continued natural and inoffensive; still, antiseptic vaginal douches were employed daily.

The second day, she complained of pain in her right hip-joint, and I readily recognized the beginning of arthritic trouble, that existed in the previous case, just reported. The pelvic tenderness continued; by palpation, I detected enlargement and infiltration of the right ovary and tubes. The temperature, even with large doses of quinine and antifebrine, continued high, ranging from 103 deg., A. M. to 105 deg., P. M.

The arthritis lasted three weeks in the acute form, and impaired the use of the joint two months. The pelvic tenderness and infiltration subsided with the acute arthritic symptoms, and tedious convalescence began. The treatment employed was large doses of sulphide of calcium and salicylate of

quinine, alternating with salicin and cold water bag on groin and hip when the temperature was highest. Gave nourishing diet and mild stimulation; hypodermic injections of morphia to alleviate arthritic pain and to induce sleep.

Dr. William S. Gardner read the following paper:

THE LESIONS ASSOCIATED WITH DYSMENORRHŒA.

It has been long recognized that painful menstruation is associated with, if not due to, some pathological condition usually of such character that it can be readily recognized and often corrected. There is a limited number of cases where no gross lesion can be detected. And even when there occurs a gross lesion of the internal organs of generation it does not necessarily follow that the dysmenorrhœa is due to the lesion or that the curing of such a lesion as is found will necessarily relieve the painful menses.

But from a careful clinical study of the lesions found associated with painful menstruation we will learn more about the direct causal relations between the lesions and the pain, and consequently learn more about the relief of this trouble, which not only makes many a woman uncomfortable, but unfits her for the duty during from 10 per cent. to 25 per cent. of the active period of her life.

I have taken 120 cases that have complained of painful menstruation and have attempted to classify them according to what appeared to be the most important lesion detected. Among the 120 were eight nulliparæ, who on account of an intact hymen on the presumption of its presence were not examined digitally; this leaves 112 who were examined.

One of the most striking points noted is the very large number of sterile women; forty-four or a fraction less than 40 per cent. belong to this class. Of those who had been pregnant twelve, or over 10 per cent. had never had a child at full term; fifteen more, or 13 per cent. had had a miscarriage since the last full term child was born, leaving less than 37 per cent. of the total number whose last pregnancy had come to full term. Without further examination these figures would indicate that in a large proportion of patients suffering from dysmenorrhœa there were present lesions which also interfered with conception.

A detailed account of all these cases named would be very tedious, and I will give the list of lesions found and then make some comments upon a part of them. It should be borne in mind that the lesion noted was not necessarily the only one present, but was the most marked, and presumably the one to which the pain was due. I say presumably, because we find

these same lesions in patients who have no dysmenorrhœa, but to go into the relations of all these lesions to dysmenorrhœa would lead us further than the limits of this paper would allow. Of the 112 patients examined the following were found:

Endometritis	23
Retroversions	14
Pyosalpinx	17
Anteflexions.....	14
Laceration of cervix and endometritis.....	10
Cervical stenosis.....	3
Constipation	7
Retroflexions	4
Prolapsed ovaries.....	2
Lacerated cervix.....	1
Membranous dysmenorrhœa.....	1
Nothing found	5

 112

Of the 23 in whom endometritis was apparently the most marked lesion, 9 had had their last pregnancies terminate in abortions; 5 are known to have had gonorrhœa, and of the 8 in whom nothing further than a cervical endometritis was noted, it is highly probable that a considerable number had had gonorrhœa. Only one case that was probably a corporeal endometritis was noted.

Of the 18 retrodisplacements, 13 were retroversions in which no adhesions were detected; 3 retroflexions with no adhesions, and 1 retroflexion and 1 retroversion with adhesions. Two other retroversions with pus tubes are in the list of pyosalpinx cases.

Of the 17 cases of pyosalpinx 9 were of gonorrhœal origin, 2 probably puerperal, and the remaining 6 were due to an infection which could not be traced directly either to gonorrhœa or to a puerperal infection.

Ten of the 13 anteflexions had never been pregnant, the other 3 having been pregnant one or more times. At least 1 of the 10 is known to have become pregnant after dilatation, and gauze packing had been used. This patient had also had gonorrhœa.

In 3 of the 8 cases of stenosis of the cervix the lesion was due either to a cicatrix forming after operation on the cervix, or after laceration.

The patient suffering from membranous dysmenorrhœa made but one visit. She brought with her a complete cast of the interior of the uterus and said that she had passed such a cast at each period since her last confinement, which had been five years previous to the visit.

From these cases it is seen that 100 out of 112 patients suffering from painful menstruation, who were examined with

a reasonable degree of care, were found to have some marked organic lesion of the internal generative organs.

The practical conclusion to be drawn is that dysmenorrhœa being due in nearly all cases to some local trouble, the treatment for its relief must be directed toward relieving the local disease.

AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

The American Association of Obstetricians and Gynecologists held one of its most interesting and satisfactory meetings at Chicago, September 24, 25 and 26, 1895. The attendance of members was large. Numerous papers were read relating to obstetrics, gynecology and abdominal surgery and the discussions, as usual in this association, were spirited, forceful and instructive.

The president, Dr. J. Henry Carstens, of Detroit, administered the affairs of the association with great discretion, facilitating the transaction of the large amount of business before it with thoroughness and dispatch.

The following-named were elected officers for the ensuing year: President, Dr. Joseph Price of Philadelphia; vice presidents, Drs. Albert Hawes Cordier, of Kansas City, and George Sherman Peck, of Youngstown, Ohio; secretary, Dr. William Warren Potter, of Buffalo; treasurer, Dr. Xavier Oswald Werder, of Pittsburg; executive council, Drs. Charles A. L. Reed, of Cincinnati; James F. W. Ross, of Toronto; Albert Vander Veer, of Albany; Lewis S. McMurtry, of Louisville, and J. Henry Carstens, of Detroit. Seventeen new Fellows were also elected.

The ninth annual meeting was appointed to be held in Richmond, Va., Tuesday, Wednesday and Thursday, September 15, 16 and 17, 1896. Resolutions of thanks were passed as follows: First, to Dr. J. B. Murphy, chairman of the committee of arrangements, for the efficient manner in which he had provided for the comfort of the Fellows during the meeting, and for the delightful yacht sail tendered the Fellows and guests of the association; second, to the Chicago Gynecological Society, for many courtesies tendered; and, third, to Messrs. Breslin and Southgate, proprietors of the Auditorium Hotel, for the free use of a splendid parlor in which the meeting was held, and for courteous attention to the Fellows who were guests in the house.—*Buffalo Medical Journal*.

NORTH LOUISIANA MEDICAL SOCIETY.

The next meeting of the North Louisiana Medical Society will be held at Minden, on Tuesday and Wednesday, 10th and 11th of December, 1895. The following programme has been arranged and agreed upon:

Dr. J. C. Egan, Shreveport—Military surgery as practised during the late civil war compared with that of more modern antiseptic surgery.

Dr. Atkinson, Arcadia—Puerperal Eclampsia.

Dr. Willis, Homer—Placenta Previa.

Dr. Harper, Minden—Nephritic colic.

Dr. Pollard, Gibbsland—Localization and treatment of injuries of the brain.

Dr. Pennington, Haughton—Malarial Hæmorrhagic Fever.

Dr. Roberts, Ruston—Congestive or the pernicious forms of Malarial Fever.

Voluntary contributions and reports of cases are solicited.

F. M. THORNHILL,

Chairman Committee on Scientific Essays.

THE FIRE AT THE UNIVERSITY OF VIRGINIA.

On October 27, 1895, a disastrous conflagration destroyed the rotunda and assembly hall of the University of Virginia. The medical department was not injured, but the valuable library was almost entirely destroyed, not more than ten thousand volumes having been saved. The University of Virginia is one of the best and most enduring of the works of that great man, Thomas Jefferson. The library was enriched from time by acquisitions from the libraries of various Presidents of the United States, and obtained thus an invaluable collection of autographs. There were some magnificent paintings and valuable manuscripts in the library, which all went up in smoke, and these can not be restored. The many associations clustering around the ruined building will linger in the hearts of all lovers of learning and patriotism, even though the hallowed place is no more. We extend our heartfelt sympathy to our Virginia friends in their calamity, and look forward to a phœnix-like resurrection from the ashes of disaster.

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COLLABORATORS:

DR. F. W. PARHAM.
DR. H. W. BLANC.

DR. R. MATAS.

DR. A. W. De ROALDES.
DR. WILL H. WOODS.

Editorial Articles.

MARAGLIANO'S SERUM-THERAPY IN TUBERCULOSIS—ANTI-PHTHISIN.

An Italian investigator, Dr. Maragliano, has communicated to the Medical Congress of Bordeaux and other medical bodies a report of his investigations in the treatment of pulmonary tuberculosis by means of an antitubercular serum. It does not seem to have made a very marked impression on the medical world in general. The reasons for this are very well set forth by Dr. Bassols y Prim, of Barcelona, in the *Gasetta Medica Catalana*. Maragliano unfortunately makes a secret of his method of preparing and administering the serum, and thus fills the whole medical world with distrust at the very outset. When Koch pursued a similar course he laid himself liable to unfavorable criticism, and brought medical science a little in disrepute with the laity. It can not be urged that the profession is not prepared to receive or appreciate anything that Maragliano have to communicate; the puerility of making a secret of his method on that ground is patent. If he is entitled to any credit, nobody can take it from him; and if his discovery

is not yet ripe, it would have been better if he had not thrust it upon the attention of the profession prematurely.

The proof the pudding, though, is in the eating, and if Maragliano had really produced a notable remedy for consumption we could forgive him perhaps for his lapses in ethics. Has he done so, however? His figures in sixty-eight cases are as follows: 45 cases were incipient cases without extensive deposits; 14 had extensive deposit (second stage of consumption); 9 had cavities. Of these first group (45 cases) he obtained what he called a cure in 29 and improvement in 16. In the second group (14 cases) he obtained improvement. In the last group (9 cases) two were improved, two died, one was still under treatment and four showed no change.

A positive definite *cure* in pulmonary phthisis can not be determined for a long time. A case may be quiescent for a while and then take a fresh start. It is not difficult to say whether improvement has taken place in a given case or not; and when a remedy secures steady amelioration of the symptoms we are justified in ascribing some virtue to it. Hygiene is an indispensable adjunct to the treatment of all cases of phthisis, and sometimes effects a cure, or arrest of the disease, without the extra help of medication early in the attack. The permanency of the results of Maragliano's antitubercular serum has yet to be demonstrated. In the beginning of consumption it is not a very difficult matter to effect a cure, when there is no hereditary history, with ordinary methods of treatment; what is needed in the therapeutics of the fearful malady is a remedy that will restore the normal germicidal power of the blood and renew the tissues of a patient whose face almost tells the story of his disease.

While we are waiting for this desirable remedy we can turn our thoughts to another, made in this country, by a German, whose name occupies an exalted place in bacteriology. Prof. Edwin Klebs has for quite a while prepared from tuberculin a substance which he calls *antiphthisin*. We have already referred to this preparation. (See JOURNAL, May, 1895.) There is no secret about its preparation, and its method of administration is not more difficult than that of the antiphtheric serum. Klebs is the director of the bacteriological laboratory

of Dr. Karl von Ruck's Winyah Sanitarium at Asheville, N. C. Dr. von Ruck, basing himself on a large experience at his sanitarium, claims a highly beneficial effect for it in cases that are not too far advanced. He has not exploited his product commercially; during the eighteen months that he has been using it he has sent but very small quantities to a limited number of physicians, and has not scattered it indiscriminately over the country. He recognizes that it has its limitations and does not like to risk failure and discredit by having it used in unsuitable cases.

The few physicians of this city who have used antiphthisin have obtained very good results. The matter was brought to the attention of the Orleans Parish Medical Society, from which a commission was appointed to investigate the merits of antiphthisin on a large scale. The work of the commission has been helped by the liberality of Dr. von Ruck, and we may look forward for a valuable report on the action of antiphthisin in cases of pulmonary consumption that are not hopelessly sick.

THE A. B. MILES AMPHITHEATRE.

On the 16th of last month the new operating amphitheatre of the Charity Hospital was formally opened and delivered to Governor Foster for the State. It is a splendid piece of workmanship, combining beauty of form with adaptation to all the utilitarian requirements of rigorous asepsis and antisepsis. It is a fitting monument to one who has made for himself a prominent and enduring place in the medical history of Louisiana. The closing days of Dr. Miles, who was cut down in his prime, were devoted to the preparation of plans for the amphitheatre with which his name is now linked. Men build their lives into the things that feel the impress of their individuality; so has Dr. Miles built himself into the Charity Hospital by his labors, extending over a large part of his professional career. The dedication of the last and best of his works to his memory is but a just tribute to one who labored much and faithfully, from those whose intimate contact with him enabled them to know and appreciate his works.

We give elsewhere in this number an account of the ceremonies incident to the dedication of the amphitheatre.

Abstracts, Extracts and Annotations.

SURGERY.

TREPHINING FOR THE RELIEF OF HÆMORRHAGE FROM THE CAVERNOUS SINUS DUE TO FRACTURE OF THE SKULL.

A lad, 19 years old, was struck on the head by a brick thrown from a height of 20 feet. He fell, but immediately rose again, falling on his knees, however, an instant afterward. He then got up and walked across the street, and complained of pain in the right eye and above it. Consciousness was lost after an hour, and did not return until the following morning, although the patient could be roused so as to make motions with the limbs. The left pupil was dilated and did not react; the right pupil was normal. Both extremities of the right side were parietic. The knee-jerks were normal; the paralysis steadily increased, and the loss of consciousness gradually became more profound. A slight, simple depressed fracture could be felt an inch to the left of the median line, just anterior to the coronal suture. A large semi-circular incision was made and a skin-flap reflected. Hæmorrhage was prevented by transfixing the base of the flap with a needle previous to the incision and compressing the base with a piece of tape passed around it and drawn tightly on the shaft of the needle. The skull was trephined over the site of fracture, and a large blood-clot found beneath the opening. The fracture extended in two radiating lines toward the base of the skull, anteriorly to the outer angle of the orbit and laterally downward toward the petrous portion of the temporal bone.

On removing the clot profuse hæmorrhage took place. A channel half an inch wide was rapidly cut through the bone along the anterior line of fracture toward the outer angle of the orbit, and enlarged at its lower end. A large blood-clot was then seen to occupy the whole temporal region, and to extend forward and backward beneath the base of the brain. On removing the clot the respiration, which had become slow, shallow and irregular, at once assumed its normal character. The finger could now be swept over the orbital plate, and the line of fracture could be clearly felt, extending diagonally across it to the sella turcica. From this point arose a profuse hæmorrhage, which, so far as could be determined, originated at the point of junction of the ophthalmic vein and the cavernous sinus. The bleeding from this place was controlled by firm

packing with iodoform gauze. The posterior radiation of the fracture could also be clearly followed from the depression on the vertex well down toward the petrous portion of the temporal bone. From this region also a brisk hemorrhage was taking place, probably from a branch of the middle meningeal artery. This was likewise controlled by firm pressure with iodoform gauze. The ends of the gauze were led through the lower end of the opening into the skull and through a counter-opening in the base of the skin-flap, the edges of which were united with silk sutures. The packing was not removed until the tenth day. The patient made a rapid and uninterrupted recovery. On the morning following the operation he was perfectly intelligent, and complained of no pain or other symptoms. In twenty-four days he was out of bed, and on the twenty-eighth day he was dismissed, well.—*Boston Medical and Surgical Journal.*

MALPOSITION OF THE TESTICLE; PHIMOSIS; ACUTE INSANITY; OPERATION; CURE.

August M—, aged thirteen, a poorly nourished Bohemian boy, was brought to my clinic by Messrs. W. B. Page and D. R. Goode, medical students. Until six weeks before my examination the boy had been remarkably bright, though somewhat excitable. At the time indicated he was badly frightened by a railroad watchman, who threatened him with arrest for some trivial offence, since which date he had been violent and mild by turns, but always irresponsible in his actions and incoherent in his language. He seemed to have no conception of the purpose of the examination, but submitted quietly to my manipulations.

The first condition noted was a firmly adherent prepuce, accompanied by considerable irritation around the meatus. Further examination revealed the presence of the left testicle in the ischio-rectal space. Both conditions were congenital. The left scrotal pouch was normal to all appearances, save for the absence of its usual contents. The misplaced gland was freely movable, and the cord could be plainly outlined from the external ring downward.

It was not known that any previous attempt to transfer a misplaced testicle to its normal location had been successful, but there seemed to be no valid reason why the effort should not be made in this case. Accordingly, on January 9, assisted by Drs. W. W. Stafford and F. H. Lockwood, I circumcised the patient and placed the left testicle in its natural bed.

As this report covers the first successful American case, perhaps the details of the procedure may be of value for future guidance.

An incision about an inch and a half long was made in the centre of the left scrotal pouch; the testicle was then pushed upward as far as possible by an assistant, and the gland carefully exposed by dissection. The cord was next liberated well up toward the ring. Both structures were then wrapped in hot gauze and drawn away from the field of operation. The testicle was found between the superficial and the deep layers of perineal fascia, and was firmly attached to the median tendon of the perineum. The layers of fascia were then united by a double row of plain fine catgut sutures. These sutures simply united the posterior wall of the scrotal pouch, and the testicles were then placed within the scrotum, and the primary incision closed over it with a suture of fine chromic catgut. No drainage was employed. A gauze pad was adjusted snugly against the perineum and the usual dressings applied. Within twenty-four hours a decided mental improvement was noted. This continued without substantial interruption until the boy was perfectly restored to his senses. It is only just to say that this happy result is wholly attributed to the beneficent influence of the circumcision. The left testicle is now securely at home in its natural resting place, and as the union of the tissues has for some time been complete, there remains no doubt of the entire success of the operation. The boy is allowed the freedom of a well person; he is perfectly rational, but for humane reasons he has not been sent to his home, as I feared that his usual supply of substantial hospital food might not be forthcoming under the parental roof.

These cases are comparatively rare. At the time of the operation we did not know that any case had been successful; since that time two cases have been found. The first is recorded in Vol. VI, p. 596, of the *International Encyclopedia of Surgery*, edited by Prof. John Ashhurst, Jr., and is credited to Prof. Annandale. In this case the patient was three years of age, the operation proving a perfect success. Drainage was employed.

The second case is reported in *The Lancet* for 1894, Vol. II, No. 2, the operation being performed by Pollard, of London, upon a child one month of age, with a perfect result. Nothing is said of drainage in this case, and the inference is that it was not employed. The results in these cases would appear to indicate that the unfavorable outcome of the operations referred to below by Mr. Curling were due to constitutional troubles rather than faulty technique, or to the age of the patients.

Professor Samuel D. Gross mentions a few instances of the condition, but on account of the uniform failure of all operative procedures devised for its relief, he advises castration as the only rational treatment.

On page 52 of Mr. Curling's great work on "Diseases of the Testis" is found an admirable illustration of a left testicle lying in the ischio-rectal region. The left scrotal bag is absent. The same author reports some instances where the attempt has been made to transfer the testicle from its position in the perineum to the scrotum, but all the cases were unsuccessful. Mr. Curling operated upon an infant at the London Hospital, in November, 1865, and in 1871 assisted Mr. James Adams in the case of a child of eleven weeks, both cases resulting fatally. Commenting upon these cases, he says: "The results of these last two operations do not afford encouragement to a renewal of such attempts, to transfer the testicle from the perineum to its proper position at the early period of life."

In the adult the absence of the scrotal pouch precludes the possibility of success, and "on this account," says Mr. Curling, "I was led to make the attempt to transfer the testicle by operation soon after birth, before the scrotal pouch had undergone the wasting which ensues from the absence of its proper contents."

The age of my patient (13 years) would appear to indicate that the scrotum undergoes no degenerative changes before puberty, since the left pouch was as capacious and in all respects as normal as its opposite fellow, save only the defect already noted. It would seem, therefore, that in these cases operation might be safely postponed until shortly before puberty, without fear of scrotal wasting.

One feature of my operation has been withheld for purposes of emphasis. The author last quoted mentions the contraction of the cremaster as influencing unfavorably the result in certain cases. This suggestion led me to remove carefully all traces of the muscle, and this precaution should be an essential part of the technique of all similar procedures. It is as yet too early to predict anything touching the future of the transferred testicle, but as the gland and cord were protected from injury, there is no reason to suppose that their functions will not be carried on physiologically after puberty.—*Medical Record.*

TWO CASES OF FOREIGN BODIES (PINS) FOUND IN THE
APPENDIX.

Operations for appendicitis and for peri-appendical abscess have become so frequent that there is very little of special interest attaching to the ordinary case. The literature of foreign bodies in the appendix, however, is one which may certainly be enriched, and I think will be by a brief recital of the two following cases:

CASE I.—A girl, aged 15, in the practice of Dr. Gillette, of Cuba, N. Y., had complained for a number of months of vague and indefinite discomfort in the right iliac region. Finally she was taken with symptoms of unmistakable acute appendicitis, and developed considerable temperature and febrile disturbance. The doctor was alert to the propriety of operation, and called me in consultation. With him I saw the case January 5, and, in spite of falling temperature and general amelioration of symptoms, I advised operation, basing this advice mainly on a somewhat œdematous condition of the tissues in the neighborhood and rigidity of the abdominal muscles. On the following morning the operation was made with the assistance of Drs. Gillette, Allen and Thomas, of Cuba, N. Y.; incision was made parallel to Poupart's ligament—my customary incision. Not far from the surface pus was reached and a cavity was entered which contained three or four ounces of offensive pus. My finger in the cavity detected a sharp point, and identified it as belonging to a pin or a needle, after which without difficulty the foreign body was withdrawn by a pair of forceps and found to be a common pin. In the cavity and through the opening made the appendix was not seen nor found, and it seemed to me unwise to enlarge the incision or disturb tissues further to find it, it being my usual habit (to which, of course, exceptions are made), when the appendix is not found with reasonable ease, to leave it, although I know that this course is open to criticism. Nevertheless, in this instance I contented myself with disinfecting the cavity, draining it and partially closing the wound. Recovery was uneventful.

CASE II.—A patient, 32 years of age, was brought to the Buffalo General Hospital January 25, from Shortwell Creek, Potter county, Pa. In this case there was a history of indefinite discomfort in the right iliac region, which the patient says he has noticed for at least five years. The acute attack dated back exactly one week. When brought to the hospital there were signs of extensive abscess, and the patient's general condition was bad. There was no doubt as to the presence of

pus. This case was operated on immediately after his entrance, by my house surgeon, Dr. Jones. In this instance the abscess cavity was widely opened; the appendix was found and tied off. In the inside of the appendix was found a fecal concretion, three-fourths of an inch long, the diameter of a pencil. Embodied in this by its head end was a common house pin, whose point protruded beyond it to the distance of half an inch. The abscess in this instance had burst into the peritoneal cavity, which was washed out and drained for forty-eight hours, after which the patient proceeded to make an uneventful recovery. This patient denies all knowledge of having ever swallowed a pin, and was as surprised as any one at its discovery.

The coincidence of two such cases within one month seems to be noteworthy, and the cases themselves are considered of sufficient interest to justify report.—*Medical Record.*

MEDICINE.

MICROBES AND RHEUMATISM.

At a recent meeting of the British Medical Association Sir Dyce Duckworth summed up the present ideas relating to the microbic origin of acute rheumatism as follows (*Medical Week*):

“ I propose to express my views concerning the nature of rheumatism, as recognized in its acute form as rheumatic fever, in the following propositions, which I conceive to be justified by clinical observation and tenable by fair argument from analogy:

“ 1. The tendency to suffer from truly rheumatic diseases, though widely spread, is not universal. A certain diathetic predisposition is necessary, and this is as distinctly transmissible and hereditary as is the tendency to gout or tuberculosis. This basic diathesis affords a soil, or tissue-proclivity, in which rheumatic disease may more or less readily manifest itself.

“ 2. Under a condition of lowered vitality, attendant on exhaustion, chills or nervous shocks, persons thus predisposed become a prey to infection by some microbic organism, specific in character, which germinates in the blood and generates a toxin, the ravages of which specially affect the joints, and serous and sero-fibrous tissues generally. (This view has been ably set forth by Maclagan and Bertholon.)

“ 3. No organism such as is here hypotheticated has,

however, as yet been discovered. Its existence is rendered probable by analogy with other kindred morbid conditions. Bacillary activity is known to become aggressive at temperatures near to or below the normal, and exposure to cold draughts of air is found to lower temperature and to favor bacillary invasion.

“4. It is not improbable that a product of this bacillary germination is lactic acid in large amount, the existence of which in rheumatic fever is well ascertained.

“5. The marked beneficial influence of salicylate salts is probably due, as held by Maclagan and others, to its germicide properties, which are practically specific in controlling several of the most marked effects of the peccant material in rheumatic fever.

“6. The associated pyrexia, dependent on bacillary invasion, is, when moderate, a favorable condition for checking its development and virulence, and constitutes in this, as in other like conditions, a determinant toward recovery—a way out of the disease.

“7. Tendency to relapses may be explained by renewed bacillary activity, new generations occurring, owing to inadequate or insufficiently prolonged specific treatment, or else to premature dieting with improper pabula, which favor the developmental activity of the infecting organism.

“8. This infective theory fails, as yet, to explain all the special manifestations and phases of acute rheumatism, and no less does salicylate treatment fail to be available for all of them. Other factors are still to be discovered. No one can doubt the influence of the nervous system, and of certain local conditions, in determining sites of election for the disease. That the acute manifestations of rheumatic fever are due to a specific infection, to which persons of the so-called basic arthritic habit of body are especially, and possibly solely, prone, can now admit of little doubt, and we may be prepared to meet with absolute proof and confirmation of this theory before long.”—*Modern Medicine*.

“DEVIL'S SNUFF” FOR EPISTAXIS.

Dr. T. A. Hall writes as follows: I read an account in the Petersburg *Index-Appeal* of the death of a young man, a student at the University School (McCabe's) from epistaxis, who had eminent medical attention, but death ensued in spite of all that was done.

I write only to say that during a practice of fifty-one years

I have had much experience in such troubles where death seemed imminent, and all the usual remedies failed to give relief, until a very ignorant person told me on one distressing occasion of a whole night that if I would get some "devil's snuff," a species of mushroom—fungus, myces (F.)—it would give relief. I did so within an hour after the information, and the effect was wonderful. The powder was snuffed up the nostrils and the bleeding ceased as soon as contact was made with the point of bleeding. I have used it repeatedly, and have never been disappointed.

The plant comes on thin soils by the roadside and in the vicinity of decaying oak stumps, growing flat on the surface of the ground, sometimes in patches of a dozen in a small space about the size of a walnut. In the fall it begins to dry, and when dry, you may tread upon it and a profuse cloud of dark brown snuff is puffed up from the top of the fungus.

I have known of this plant all my life, but never thought to write about it till I read about the death of the young man alluded to above. I do not know the why, but do know the fact as stated.—*Virginia Medical Monthly*.

CALCIUM CHLORIDE IN PNEUMONIA.

Mr. D. M. Moir is convinced that this drug when given in full doses has the effect of reducing temperature, and keeping it reduced, in certain inflammatory diseases of the lungs. Crombie has shown that in lobar pneumonia (1) calcium chloride reduces the temperature and keeps it within safe or normal limits in spite of the continuance of the physical signs; (2) that there is a tendency for the morbid process to be arrested at whatever stage the drug is given in efficient doses, and that the course of the disease is thus shortened or rendered milder; (3) that there is a singular freedom from all anxiety, distress, and danger, a freedom not usually associated with continuous high temperatures; (4) and that there is a corresponding reduction in mortality. Two cases are reported. The amount of the drug used is from sixty to ninety grains *per diem*, dissolved in water, in from ten to fifteen grain doses—*The Practitioner, American Journal Medical Sciences*.

SUBLINGUAL MEDICATION.

Not only does the sublingual space absorb liquids, but it is well known that the whole body takes up liquids more or less readily in proportion to the vascularity of the region with which the liquid comes in contact.

The skin absorbs liquids quite readily, but not so rapidly as the mucous membrane. That the latter will take no medicaments is well known and has been practised for a long time. All the mucous membrane of the mouth has an absorptive power, but the tongue on its under and especially its upper surface is the chief absorbing organ in the mouth and where absorption is the most rapid.

The sublingual glands continually secrete their production, and the top of the tongue is nearly always bathed in mucus; consequently if the medicament be placed under the tongue it will naturally flow backward to the sides and upper surface of the organ and be absorbed.

The mucous membrane that covers the tongue is copiously supplied with papillæ, which are again covered by a very thin epithelium and filled with a network of blood vessels and nerves, so favoring the osmotic action of the organ.

Medicines having a peculiar effect on the nervous system, like croton oil, will act best by being absorbed by the mucous membrane of the tongue. In cases where the tongue is dry, as in low forms of fever, the absorptive power is less, or may be entirely absent; the secretion from the glands is scanty or has ceased entirely. In such a condition much can not be expected from sublingual medication.

I have employed sublingual medication for a number of years, and found it extremely satisfactory. I have had occasion to prescribe nitro-glycerine a great deal, and always instruct patients to dissolve the granules under the tongue: The full action of the remedy will be felt in about forty seconds. I have given morphine the same way, and personally take calomel by this method, and it usually acts in from one-half to one hour.

The advantage of placing the medicine under the tongue is that it will not be immediately swallowed, but, diffusing itself through the buccal cavity, will be largely absorbed by osmotic action.—*J. E. Engstad in the Medical Age.*

A FEW WORDS TO THE COUNTRY SURGEON.

We have frequently called attention to the deplorable fact that, among the abundant surgical literature of the present day, the contributions of the country surgeon are few and far between, and that by reason of this much valuable and even unique experience is lost to the medical profession. Many striking instances might be adduced in which the innate diffidence and modesty of the country surgeon, perhaps supplemented by a deficiency in literary qualities, have prevented

him from publishing observations of the highest importance. Some time since Dr. J. O. Williams, a physician practising in an obscure town of Texas, submitted to the *Medical News* a report of three cases of symphyseotomy, one of them dating as far back as 1880, and laid claim to having been the first physician to perform this operation in America. For more than a year the editor of that journal, in conjunction with Dr. R. P. Harris, the well known statistical writer, carried on a careful investigation of this claim, which was supported by numerous certificates and sworn statements, and the evidence seems to demonstrate that to Dr. Williams belong the credit of having spontaneously conceived and three times performed symphysiotomy before any American surgeon. To any one unacquainted with the character of the country doctor it seems surprising that so many years were allowed by him to elapse before publishing his cases, but as Dr. Williams remarks, with justice, in a letter to the *New York Medical Journal*: "Judging from literature, I am disposed to believe it the custom of country physicians to adhere strictly to silence, especially when the unusual has occurred. We have a natural disinclination to the publicity and to the scrutiny that may follow, as in this case for instance. We seldom have the pleasure of even a casual meeting, still more rarely of a consultation with a brother doctor." It is against this policy of silence that we would protest, for we believe that any observation which contributes to the relief of suffering humanity should become the public property of the medical profession at as early a period as possible. For many years we have endeavored to make this journal an exponent of practical surgery, and have always welcomed to our pages contributions from the country surgeon. We recognize the fact that frequently contributors have had neither time nor opportunity to couch their thoughts in choice English; but this is a minor consideration. Send us your methods of treatment—it matters not whether your article comprises but a few paragraphs brief notes from practice are often more helpful and valuable than the diffuse, verbose, padded, literary emanations of our ultra scientific writers. Apropos to this subject we would quote the remarks made by Dr. Harris in commenting on Dr. Williams' cases: "In your reports and statistics, wait until you hear from the backwoods. The backwoods are often deficient in literary qualities, and in many of the arts of modern medicine, 'push' and self-assertion included; but they are often profoundly ingenious, and not seldom exhibit an unchronicled heroism quite equal to any that vaunts itself in populous places."—*International Journal of Surgery.*

GYNECOLOGY.

ELECTROTHERAPY AS A MEANS OF DIAGNOSIS IN
GYNECOLOGY.

By DR. G. APOSTOLI (of Paris).

Dr. Apostoli, after a long and thorough trial of his method, has come to the following general conclusions:

1. The faradic current of tension (generated by the coil of long and fine wire) applied to the uterine cavity, according to the rules established by Dr. Apostoli in 1883, relieves, for a longer or shorter time, all ovarian pain of nervous or hysterical origin; but remains powerless or nearly so in cases of ovarian pain caused by inflammatory lesion of the peri-uterine tissue or of the appendages.

2. The same faradic current is therefore useful in diagnosis, inasmuch as it helps us to distinguish the nature of so-called ovarian pain, and to determine rapidly the differential diagnosis between hysterical and inflammatory ovarian pain. Where the two kinds of pain exist in the same patient we are helped to understand their nature by the fact that the one is relieved and the other is not.

3. If, then, the curative effect of the faradic current clears up or rectifies a doubtful diagnosis, it protects us at the same time, from undertaking a useless operation.

On the other hand, if the same faradic current proves ineffective, the lesion being inflammatory, we are led to resort to a supplementary galvanic treatment or to a surgical operation sooner or later.

4. The constant galvanic current, applied to the uterine cavity in doses gradually increases from 50 to 120 milliamperes, according to the rules published by Dr. Apostoli in 1884, and bearing in mind the individual susceptibility and tolerance, will be almost always supported without much pain during the séance, and without febrile reaction afterward, if the parts adjacent to the uterus are free from inflammation.

Simple cystic, peri-uterine tumors, which are neither inflamed nor suppurating (such as ovarian cysts and hydro-salpinx), may also show perfect tolerance of the galvanic current.

The galvanic current is also sometimes perfectly supported by cases in which the uterus is surrounded by old inflammatory products or exudations no longer pathogenic.

5. There are three classes of cases which should be considered as exceptions to the preceding rule, for they bear the galvanic current more or less badly, though they do not necessarily produce much febrile reaction after the séance.

They are:

- A.—Certain forms of hysteria.
- B.—Fibro-cystic tumors of the uterus.
- C.—Enteritis with false membrane.

6. All acute peri-uterine inflammation (of the pelvic cellular tissues, of the peritoneum, and especially of the appendages) will cause the galvanic current to be badly borne when it passes 40 or 50 milliamperes, and will cause intolerable pain and febrile reaction when carried beyond this intensity.

7. The intolerance for the galvanic current is generally proportionate to the extent and gravity of the lesions referred to and increases with intensity of the current employed—especially when it passes 40 or 50 milliamperes.

8. All inflammation of the appendages which is curable (symptomatically at least) without radical operation will bear the galvanic current better and better, and there will be a corresponding improvement of the prominent symptoms such as pain and hæmorrhages.

The intolerance noted at the beginning progressively disappears.

9. All grave inflammatory lesions of the appendages, and notably all suppurative processes which are *incurable (even symptomatically)* by conservative means, show the same intolerance from the beginning to the end of the treatment which was noticed at first, and which is apt to increase instead of diminish if the treatment is continued.

10. Thus, the simple study of the tolerance or intolerance of the intra-uterine galvanic treatment, and especially of the post-operative pain and fever occurring on the evening of, or the day following the treatment, enables us to make the diagnosis. It also, in four or five séances, given twice weekly, informs us of the condition of the appendages, of their possible inflammation and its degree, and in this way it lessens the number of laparotomies and exploratory incisions.

11. The same study of the so-called galvanic reactions also informs us rapidly (in five to ten séances) of the curability of these inflammatory lesions which the electric current has demonstrated, and in consequence of this it tells us in one case to abstain from operation while in another it shows an operation to be urgent.

12. *En resumé*, Gynecological Electro-Therapeutics, carefully, methodically and patiently applied, instead of being opposed to the marvelous progress of surgery, comes to its aid.

Independently, in fact, of the great therapeutic service which it renders every day, electricity serves as a *touchstone*; it assists us in diagnosis, and thus directly serves the interests

of surgery, in one case showing an operation to be useless and dangerous, in another that its necessity is urgent.

Thus many of laparotomies, so-called exploratory incisions and mutilations, practised without due deliberation for the relief of rebellious ovarian pain or for lesions of the appendages of uncertain nature, should be, from this time forth, delayed or formally proscribed until all the resources of *faradic sedation* on the one hand and of the *intra-uterine galvanic effect* on the other, have been tried. Experience has abundantly proved these currents to be innocuous if given with necessary aseptic precautions.—*British Medical Association, London, 1895.*

TWO CASES OF PLACENTA PRÆVIA CENTRALIS TREATED BY MEANS OF CHAMPETIER DE RIBES' BAG.

By JOHN SHAW, M. D. Lond., Obstetric Physician to the Northwest London Hospital.

Through the kindness of my neighbor, Dr. Jessop, I had the pleasure of assisting him with two cases of central placenta prævia in one week, and the facility with which this complication was met by the employment of Champetier de Ribes' bag makes them worthy of record.

CASE I.—Mrs. M., aged 26, a primipara. As an unmarried girl had been regular until the year preceding her marriage, when for some months she lost a small quantity of blood more or less constantly, but without pain or the presence of clots. This bleeding, however, disappeared more than two months before her marriage, during which time she was twice unwell in the regular manner; she had two normal periods, moreover, after her marriage. The last day of the last period was February 18, 1894. Her pregnancy was normal till the end of September, when she had a slight hæmorrhage, which lasted for twenty-four hours. On November 15, she had occasion to get quickly out of bed and to run up and down stairs. When she got back to bed she was sick and felt pain. At 11 A. M., whilst in the closet, had a sudden gush of blood, and during the next hour lost a considerable quantity, but by the time the doctor saw her the hæmorrhage had stopped. When seen in the evening, with the onset of moderately severe pains, there was tremendous loss of blood, which quickly blanched the patient.

At 10:30 P. M., on examining her, I found the os rather larger than a shilling, and occupied entirely by the placenta, though it was possible to reach the membranes by directing the finger toward the left hip. Dr. Jessop gave chloroform, and with antiseptic precautions a Champetier de Ribes' bag was

introduced in the direction in which the membranes had been reached. The foetal heart could not be detected by either of us. By 5 A. M., on the 16th, that is about six hours after its introduction, the bag was found to be well down in the vagina, and probably already escaped from the uterus; it was therefore emptied and withdrawn. The os was almost fully dilated, so that the membranes were ruptured and the delivery effected by forceps without further difficulty, the placenta being expelled about a quarter of an hour after the birth. The after progress of the case was perfectly satisfactory.

CASE II.—Mrs. O., aged 24, third pregnancy. Has had no trouble with her previous labors, and her menstrual periods have always been regular and natural. She has lost count of the date of the last menstruation, but thinks it was at the beginning of March, 1894. All went well till September 20, when the first hæmorrhage took place, and at this time she lost a large quantity of blood and was in bed a week, though the bleeding stopped a day or two before she got about again. On November 11 the next loss occurred, and was very profuse; she got up on the 13th, but had to return to bed, the loss continuing up to the introduction of the dilating bags.

When seen first on November 22, 1894, the cervix was long, though sufficiently patulous to admit the finger tip readily, but as far as I could reach there was nothing to be felt but blood clot, and this smelt rather strongly. The size of the womb pointed to about seven months' pregnancy, and the position of the foetus was recognized as a breech presentation, the head being in the left hypochondrium and the feet somewhere about the umbilicus.

At 4 P. M., after giving a bichloride douche, a Champetier de Ribes' bag was introduced and the patient left. Pains did not come on till 8 A. M. on the 23d., *i. e.*, about sixteen hours after the introduction of the bag. The pains continued steadily till 3:30 P. M., when they entirely disappeared; an hour later a hypodermic injection of ergotine was administered, and at 6 P. M., pains having returned, it was decided to evacuate the uterus. Dr. Jessop administered chloroform. The bag was emptied and withdrawn, and the cervix was found moderately well dilated, though there was still a rim. Nothing but placenta could be felt presenting in any direction, but by passing the hand between it and the uterus the membranes were reached and torn, and the right foot drawn down; a hand then presented but pushed back, and the left foot extracted. There was some difficulty in delivering the head, but with the help of one blade of the forceps this was done, and a female child, apparently of seven months, delivered. After a little trouble it

began to cry lustily. The mother's temperature was 99.4 deg. with a pulse of 100, which fell after the delivery to 84 per minute. The placenta came away a few minutes later without any actual expression, the uterus being simply supported with the hand. The subsequent progress was quite straightforward, though the child died some twenty-four hours after its birth.

With regard to the employment of a dilating bag in the treatment of placenta prævia, the first thing to notice is the importance of antiseptic precautions. The vagina must be well doused with bichloride solution, 1 in 2000 or 3000, and the interior of the cervix also, if this is filled with clot, as it was in the second case. On the completion of the third stage the uterus itself must be well washed out with the same solution. It is probably superfluous to insist that the external genitals must be rendered thoroughly aseptic before undertaking any obstetric or gynecological operation. Secondly, it is important to note that, where labor has actually begun, as it had done in the first case, the bag must be introduced only in the intervals between the pains; and that it is to be passed in the direction in which membranes can be most readily reached, if there be such a spot.

It is interesting to notice that from the moment of the introduction of the bag there was no evidence of fresh hæmorrhage having occurred. In Case 1 there was absolutely no more than a teaspoonful of blood lost from the time that the bag was introduced to the delivery of the child, and in Case 2 such clot as came away suggested blood which had been some time effused between the placenta and the uterus, as it was very dark in color.

The pyriform shape of Champetier de Ribes' bag allows of its lying loosely in the neck of the womb in the intervals between the pains, and the fact that in these two cases the hæmorrhage was so slight after its introduction, would so far lend support to the view that the bleeding takes place in placenta prævia during the pain itself, and that in the present cases this was obviated by the compression exerted by the bag being driven downward on to the placenta by the uterine pains, at the same time as the os uteri was plugged by it. Moreover, the placenta itself is pushed over in the direction in which the uterus is being expanded by its contractions, so that the placenta is actually less severed from its uterine attachments. The great advantage of this bag is that it enables one to leave the patient in the care of the nurse whilst the os is being dilated. Its drawbacks are that, in the case of a head presentation, the bag is very likely to displace it to one or other side, and that the interval between the introduction of the bag and the com-

mencement of labor is sometimes considerable. In spite of these disadvantages, however, owing to the facility with which it can be introduced, and the certainty with which it controls the hæmorrhage, the bag becomes a decided acquisition in the treatment of this complication. In those infrequent cases where severe loss takes place before a finger can be introduced into the cervix, the full-sized bag, as first introduced by Champetier de Ribes would, introduced into the vagina and there distended to its full extent, plug the passage sufficiently to prevent loss, whilst the os was dilating enough to allow of the introduction of the bag within the uterus itself.—*British Gynecological Journal, February, 1895.*—*Annals of Gynecology and Pediatrics September, 1895.*

A FEW APHORISMS RELATING TO OBSTETRICS.

What to do and what not to do in the management of labor, that is the question.

No branch of a physician's practice requires more self-poise, and where so many complications arise, commanding our sympathy and demanding our skill, as that of obstetrics, and when disease and death follow a normal case of labor the cause can be traced to none other than to ignorance or mismanagement.

With these preliminary remarks, Ewing advances a few aphorisms relating to obstetrics.

1. Examine the urine a week or so before the expected confinement. Albumen need not cause alarm, unless present in large quantity, in which case the woman should be restricted to milk diet, given one-tenth grain of sulphate sparteine four times a day, and bowels kept open with cream of tartar, the object being, of course, to relieve congestion of the renal veins.

2. Make no digital examination without first cleansing the hands and nails, together with the external genitals, with a solution of bichloride of mercury (1 to 2000) and ethereal soap.

3. Empty the rectum thoroughly with an injection of warm water.

4. Make as few examinations as possible during progress of labor, and each time dip the hand first in the antiseptic solution.

5. If presenting part emerges slowly from the womb, do not allow your impatience to so get the better of your judgment

as to induce you to "assist nature" by pulling upon the os. Probably all the deep pathological tears, calling for surgical interference, found on the right and upper anterior sides of the cervix, are caused by the finger of the accoucheur.—*Med. Review.*

THE PERSISTENCE OF URETHRAL DISCHARGE.

By EDWARD MARTIN, M. D., Philadelphia.

The customary teaching in regard to gonorrhœal urethritis is that the disease is cured in from six to eight weeks. It is also taught that non-specific urethritis, that is, an inflammation of the urethra not dependent upon the gonococcus, but upon some other microbe, usually streptococcus, or bacillus, runs a self-limited course of from three to twelve days. Indeed, in the absence of microscopic examination, it is commonly held that discharge which ceases within two weeks is certainly not gonorrhœal, whilst one which persists for more than four to six weeks is as certainly dependent upon gonococcus.

Careful observations of many cases have shown me that these ideas are not justified by clinical facts. In the first place a gonorrhœal discharge almost never ceases in six to eight weeks. In the second place, a non-specific urethritis often lasts for three months. It is quite true that if the criterion of cure is the presence or absence of a discharge from the meatus, or of a gluing of the lips of the meatus in the morning, gonorrhœa is usually cured within four to eight weeks, exceptionally, especially in second and third attacks, in eight to twelve days.

It has been many times pointed out that: (1) A moderate discharge from the mucous membrane of the anterior urethra will not appear at the meatus, being washed away with each act of micturition. (2) That this moderate discharge may be extremely virulent. (3) That even a profuse discharge from the posterior urethra will not flow forward, but, after filling this portion of the canal, passes backward into the bladder. Hence a case of urethritis can only be considered cured when pus disappears from the urine. It therefore follows that if ultimate and definite cure is aimed at, treatment must be continued until pus disappears from the urine, and of still greater importance, precautions against the spread of contagion must be continued certainly until gonococci have entirely disappeared from the shreds floating in the urine, preferably until no more of these shreds are to be found.

For practical purposes the presence or absence of pus can usually be determined by directing the patient to report at the morning office hour with a full bladder. The urine should be

passed in a clear glass. For an] absolutely satisfactory test, microscopic examination is necessary, sediment being collected either by gravity (requiring some twenty-four hours) or by means of the centrifuge.

By examinations thus conducted it will be found that inflammations of the urethra persist for many weeks after an apparent cure. In some cases patients who have had no discharge for years will still exhibit pus and shreds. By the test of two urines the posterior urethra will be found involved in these cases, and by the test of the acute exacerbation brought on by silver nitrate, gonococci can often be found for one or two years after all apparent symptoms of inflammation have subsided. As illustrative of this persistence of unsuspected inflammation I take two cases from the many of which I have records.

The first is that of a medical student, perfectly healthy and with a good family history, who, five days after exposure, noticed stinging and burning on urination, and slight gray discharge from the meatus. Immediate examination was made for gonococci. This showed many pus cells, a little epithelium, no gonococci and a few short, thick bacilli. Examination with the aëourethroscope revealed an erythematous blush extending backward about two inches and shading insensibly into the normal mucous membrane.

Excepting in regard to sexual congress this patient was directed to change his manner of life in no way. He drank not at all, exercised moderately and was careful as to his diet. In the first few days of his attack the running became profuse, gray yellow in color and the ardor urinæ extremely painful. Almost daily examinations were made for the gonococci, but none were ever found. On the twelfth day the running diminished slightly in quantity. At the same time there was some frequency and urgency in urination. In this relation it is interesting to note that although shreds appeared in the first and last urines after the sixth day, the symptoms of acute involvement of the posterior urethra did not appear until nearly two weeks from the beginning of the attack. On the seventeenth day the discharge from the urethra ceased and did not reappear. There was not even gluing of the lips of the meatus in the morning. Frequency and urgency, however, continued until the end of the fourth week, but were so slightly marked that the patient stated he would not have paid particular attention to this symptom had he not been especially asked to note whether or not it was present. For four weeks after this, that is two months after the beginning of the attack, the patient was not able to retain his water as long as he

could before his attack (*i. e.*, was forced to urinate every three or four hours), but barring this, had no symptom. In the tenth week the urine was examined and found to contain many pus shreds. In the twelfth week a few shreds were found made up of pus and epithelium. In the fourteenth week shreds were still present, but there was no longer any pus. In the sixteenth week the urine was again perfectly clear and on standing no pus could be collected.

Here, then, was a non-specific urethritis running a course of sixteen weeks.

As to the specific urethritis, it is but a few hours since I was consulted by a man who, having at one time had gonorrhœa, wished to know whether there was any danger in his conveying the disease to a woman whom he intended shortly to marry. It has been three years since his attack of acute gonorrhœa, and one year since he has seen any discharge. He considers himself perfectly cured, but wished to be absolutely sure of this fact before running any risk. The test of the two urines showed that he had a chronic posterior urethritis, both specimens passed being turbid with mucus and pus and filled with shreds. An examination of these shreds failed to show the gonococci, but in so far as staining goes proved the presence of the ordinary staphylococci and streptococci of pus.

Cases such as this are so common that it seems justifiable to insist again and again upon the urine test as the only reliable one by which the cure of specific and non-specific urethritis can be ascertained. When it is recognized that so long as there is the slightest local infection the patient can not be regarded as cured, a more prolonged treatment may prevent many of the complications which result from an essentially chronic and deep-seated inflammation.—*Philadelphia Polyclinic.*

CHILLS FOLLOWING UTERINE INJECTIONS.

Mrs. R., twenty-nine years old, was delivered of her second child after a normal labor, on April 14. Her condition continued favorable until the afternoon of the 16th, when there was slight fever and there was also some tenderness over the left iliac region. The fever increased and the next day was so great and, having associated with it a sense of depression and mental confusion, some alarm was felt, and the physician in charge, from whose notes I have taken the preceding facts, and shall take others, had me visit the patient, some twenty miles from the city.

I found she had an offensive lochial flow, a pulse of about

100 and temperature of nearly 103 deg. Believing the essential indication was to thoroughly wash out the uterus, I did so, employing for this purpose a fountain syringe and a warm mixture of creolin and water. The irrigation was made without the patient suffering pain, scarcely discomfort. She had been placed across the bed, her feet resting on chairs, for the operation. Thirty minutes after being replaced in her usual position, she had a severe chill lasting ten to fifteen minutes, and her temperature rose to 104 deg. I ought to state that in the fluid coming from the uterus during the irrigation there was a small fragment of the membranes, and also apparently a piece of placental tissue as large as half a small marble. The fever subsided somewhat on the morning of the 18th, but as the lochial discharge still continued to be somewhat offensive, upon visiting her in the afternoon I believed a second irrigation indicated, and accordingly it was given. This, too, was followed by a more violent chill and the temperature soon rose to 105 deg.; but the decline of the temperature was earlier and more decided than after the previous operation. On the 20th I found her with a high temperature, considerable prostration and the lochia not yet entirely normal as to odor. It seemed to me that there must still be in the uterus some infecting material, and I determined to use the curette, employing therewith corrosive sublimate in the creolin mixture. I found in the discharge that occurred from the washing a partially decomposed clot probably the size of a small marble. Again the treatment was followed by a still more violent chill, and the temperature went above 105 deg. The fever continued, the temperature varying from 100 to 105 deg. until the 21st, when it almost entirely disappeared. It returned, however, at night and continued through the 22d; in the evening of that day another chill came during a profuse perspiration following the application of twenty minims of guaiacol over the abdomen; the temperature during the chill reached 107 deg., lowering very soon after the cessation of the chill. The fever continued each morning on the 23d and 24th, when it disappeared for twenty-four hours; but it returned the 26th, and continued during that and the next day; the temperature, however, was not high, when it entirely disappeared and uninterrupted and complete convalescence began.

REMARKS.

First, a word in regard to the unnecessary use of intra-uterine as an adjective for injections of the uterus. Uterine is sufficient without the awkward prefix; we never think of saying intra-vaginal injections, and yet the term would be equally appropriate with the former.

Next, here was a case of puerperal infection when all requisite antiseptic precautions had been taken by a wise and experienced practitioner; and such cases will occur again, so let us not be in haste to condemn the obstetrician who meets with such accident, notwithstanding all proper precautions.

But the essential point in the story, the sole reason for here presenting it, is the fact that the uterine injection was followed by a chill. This was my first experience of the kind, though I have in many cases made use of such injections.

Silvestre (*Les injections intra-utérines, et les accidents provoqués par leur emploi en obstétrique*, 1892) states that generally the chill occurs during the first hour following the irrigation; 20, 30 and 45 minutes represent the intervals usually noticed—in one case the interval was an hour and three-quarters. The decline in the temperature and that in the frequency of the pulse usually took place in three to four hours, and these diminutions are never delayed more than half a day. According to this author, too, the chill is independent of the fluid injected; it has occurred after the use of carbolic acid, corrosive sublimate, thymol chloral. A chill has followed a prophylactic injection.

Therefore, the hypothesis asserted by Silvestre, that the chill is caused by uterine contractions, excited by the injection, determining the entrance of septic products in the uterine blood and lymph-vessels into the general circulation, is scarcely tenable in view of the fact last stated.

Kaltenbach has briefly referred to the accident, stating that the case is not at all clear, but suggests, in addition to entrance of septic stuff into the blood vessels, the possible entrance of some of the injected fluid, and also the destruction of blood corpuscles. He further states that usually the chill has no unfavorable significance.

Can we prevent the chill? It has been suggested that the reservoir of the fluid irrigating the uterus should be held only a few inches higher than the patient's hips. It is hardly necessary to insist upon the importance of having a free exit for the fluid from the uterus. I have generally employed the catheter of Bozeman as modified by Fritsch; but there are several other instruments equally good, some of them possibly better, and among these may be mentioned that of Doléris, which I have occasionally employed.

There is possibly a special lesson to be learned from the chills in this case. It will be remembered that one of these occurred, though no injection immediately preceded it; it followed a profuse perspiration caused by the application of guaiacol. May not all of these chills stand for a particular type of

constitution? Are they not the expression of some peculiarity of organization, an intrinsic susceptibility to the action of certain agents or influences? We may call them then, for want of a better name, nervous chills, and make them, including the elevation of temperature, as has been previously suggested, analogous to similar phenomena occasionally occurring after the use of the catheter or sound. But it is doubtful whether any explanation will prove entirely satisfactory.—*Med. and Surg. Reporter.*

VICARIOUS MENSTRUATION THROUGH THE LUNGS AND ITS RELATION TO TUBERCULOSIS.

A case is related by Köber which shows that behind what appears to be a true form of vicarious menstruation there may lurk a latent tuberculosis. It is, of course, well known that many forms of hæmorrhage from the respiratory passages are frequently attributed to vicarious menstruation even when they have no relation to the period of the onset of that function and graver disease is overlooked; and the following observation points to still greater care being necessary when dealing with a case that appears to be genuine vicarious menstruation. The patient was 18 years old, had never suffered from any illness, and had menstruated regularly for two years. The family history disclosed that a brother had suffered from hæmoptysis and a sister died of acute tuberculosis. The patient was well nourished and tall, and was quite well until February 10. On that day the period set in scantily, and only for some hours, to be replaced by a very copious hæmoptysis. This recurred, in spite of treatment, during the next day and the day following, when the patient became very sick and had a continuous feeling of nausea. With the onset of this the bleeding ceased. In the lungs there was slight dullness over the bases behind, and the breathing was harsh and partly bronchial. After three or four days the moderate rise of temperature which was present disappeared, and the local signs cleared up. In about ten days the patient had quite recovered, and nothing could be made out in the chest. Examination for tubercle bacilli in the sputum had been negative. Four weeks after the commencement of this attack, when the onset of menstruation was expected, the patient was again seized with hæmoptysis, occurring in three bouts, which ceased after nausea and sickness came on. The local conditions were very similar to the former attack, and cleared as before, leaving the patient weak and with a slight cough. Several examinations were made for tubercle bacilli, but none were found. As the menses remained in abeyance

on the two last occasions, being replaced by hæmorrhage from the lung, a definite relationship between them was suspected and a not unfavorable prognosis entertained. Every care was, however, taken of the patient; but signs of an apical catarrh on the right lung began to show themselves. Local measures were tried to encourage the re-establishment of the period, and the girl took sitz baths, injections, etc., for several days beforehand. Notwithstanding, it did not set in, but, in its place, as before, an attack of blood spitting, this time slight. In a similar way this was cut short by nausea and vomiting. The inflammatory attack in the bases of the lungs again went through its former course and cleared up. The cough, however, was worse, the general condition deteriorated, and the disease at the right apex rapidly extended. High fever, night sweats, diarrhœa, etc., were precursors of the fatal result, which took place in June. Although no tubercle bacilli were ever found in the sputum, Köber had no doubt of the existence of acute tuberculosis. This case illustrates the advent of pulmonary hæmorrhage due to a fatal disease in the place of the hitherto regular menstrual function, and is an example of vicarious menstruation through a disposition to lung bleeding induced by the tuberculous poison. The patient was, in the best of health, surprised by this hæmorrhage at a time when disease in the chest was not even suspected, and the case teaches a more careful prognosis in vicarious hæmoptysis even when other symptoms are absent, as it may be the expression of an early stage of tuberculous disease. Köber further calls attention to the influence that nausea and sickness has in arresting hæmoptysis. On three occasions in this patient nothing had any effect until vomiting set in, when the bleeding was arrested, and he suggests the administration of remedies which induce nausea in the treatment of obstinate and copious hæmoptyses. It is an old form of treatment that was much used by Graves and Trousseau. The former employed ipecacuanha root, in doses given repeatedly until nausea set in; while the latter gave it in large doses sufficient to establish vomiting. This treatment has been lost sight of to a large extent in modern therapeutics, and Köber warmly advocates its efficacy in severe and persistent cases of bleeding from the lungs.—*Practitioner*.

Obituary.

LOUIS PASTEUR.—1822-1895.

If there were two opinions as to the merit of the work of Pasteur living, there is but one judgment of Pasteur dead—namely, that his memory will ever be cherished as one of the greatest men of his time.

Louis Pasteur was born at Dole, France, December 27, 1822, and died at Garches, near St. Cloud, in the environs of Paris, September 28, 1895. The immediate cause of his death was paralysis, which increased in severity during the last days of his life, culminating in a severe stroke the day before his death, after which he remained comatose until the end. Pasteur early developed a love for the study of chemistry, and entering the *Ecole Normale* at Paris, he followed up his researches in this line of work. Afterward, at Sorbonne, he further pursued his study under the tuition of M. Dumas, whom he succeeded at the French Academy in 1882. Pasteur's first great work was accomplished in 1865-66, when he was called upon to investigate the silkworm plague that was destroying one of the greatest of French industries. He discovered that the cause of the plague was a parasite and that it could be arrested by destroying all the worms and eggs that were affected. He met the ridicule that this statement provoked, when he was told that the pest would still be propagated by spontaneous generation, by denying that there was any such thing, and he proved the truth of his theories by checking the plague after the manner described.

The phenomenon of fermentation next attracted his attention. He alleged that it was caused by micro-organisms and claimed that if all the germs could be excluded fermentation would be impossible. He was again opposed by the same bigotry, but he demonstrated the truth of his proposition by showing that, at an altitude where the atmosphere was free from germs, no fermentation did or could occur.

Pasteur next began to investigate the diseases of men and animals, arguing that the contagious and infectious diseases



(By courtesy of Scientific American.)

LOUIS PASTEUR.

1822-1895.

were probably caused and sustained by the action of living organisms similar to the plague of the silkworm. It is well known to the profession of medicine that he soon sustained his theory and through his researches a large number of diseases have been brought under control.

Of late years Pasteur has turned his attention toward the cure of hydrophobia. While opinion has been and is yet divided as to the merits of his cure, there is yet an ever-increasing belief in its efficacy. Pasteur is entitled to the appellation of father of the germ theory of disease. Under the stimulus of his researches, diphtheria, cholera and hydrophobia are being stripped of their terrors, and it is believed that consumption will soon be under control.

In the following synopsis the principal events of Pasteur's life are given in chronological order: 1840, entered the university; 1843, pupil at the Ecole Normale; 1847, received the doctorate; 1848, professor of physics at Strasburg; 1854, dean of the faculty of sciences at Lille; 1857, assumed scientific direction of the Ecole Normale; 1863, professor of geology, physics and chemistry at the Ecole des Beaux-Arts; same year elected a member of the institute; 1856, awarded Rumford medal by Royal Society of London; 1853, decorated with the Legion of Honor, promoted officer in 1863, commander in 1868; 1869, elected one of fifty foreign members of the Royal Society of London; 1874, granted a life annuity of 12,000 francs by the National Assembly for investigations of fermentation; 1878, grand officer of the Legion of Honor; 1882, admitted into the French Academy. On December 27, 1892, Pasteur's seventieth birthday was celebrated before a representative official assembly at Sorbonne. A mural tablet has been erected to his memory at the Ecole Normale, and he recently declined a decoration tendered him by Emperor William III.

The work of Pasteur has been of a nature, whether judged by its present achievements or prospective results, to rank him as one of the greatest products of the nineteenth century, and his memory will remain immortal in the realms of science.--
Buffalo Medical Journal.

State News and Medical Items.

DR. ISADORE DYER, of New Orleans, has been elected a member of the American Dermatological Association.

DR. W. SCHEPPEGRELL was elected a Fellow of the American Electro-Therapeutic Association, at the September meeting in Montreal.

THE attention of doctors is called to the opportunity to purchase a complete electro-medical establishment, on page 11.

AT a meeting of the Shreveport Board of Health, held last month, Dr. J. C. Egan was elected health officer.

DR. Z. B. J. GRIFFING has moved from King to Vicksburg, Miss.

IT is stated by the *Popular Health Magazine*, of Baltimore, that "redness of the nose" is caused by indigestion, not intemperance. The remedy, it is stated, is to "abstain from over-indulgence in fats and sweets."

DR. AND MRS. CHAS. McVEA, of Baton Rouge, La., were in the city last month.

AT Donaldsonville, La., last month, the doctors of Ascension, Assumption and St. James parishes met to organize a medical association. There were present Drs. W. M. McGalliard, J. C. Legaré, J. D. Hanson, J. D. Richard, John S. Thibaut, J. R. Fridge, R. A. Truxillo, C. M. Davis, E. K. Sims and T. H. Hanson, of Ascension; James McConnell, A. Charlet, P. Thibodaux and J. Lescale, of Assumption; O. Gaudet and B. A. Colomb, of St. James. After a brief statement of the general objects of the proposed association, Dr. McGalliard was unanimously elected president and Dr. Sims secretary, the selection of the other officers being deferred until after the adoption of the constitution and by-laws. A committee of seven, consisting of Drs. Legaré, J. D. Hanson, Thibaut, Gaudet, McConnell, Colomb and Truxillo, was appointed to frame a constitution and by-laws for the government of the association, to be submitted at the next meeting.

DR. ERNEST LAPLACE, LL. D.—At the annual commencement of Georgetown University, Washington, D. C., the degree of LL. D. was conferred on Dr. Ernest Laplace, Professor of Surgery in the Medico-Chirurgical College of Philadelphia.

DR. FELTUS BARROW has moved from Baton Rouge to Bayou Sara, where he will continue the practice of his profession.

DR. A. R. ROBERTSON has moved from Pass Christian to Baton Rouge.

DR. L. G. PERKINS, of East Feliciana, and Dr. T. Y. Aby, of Monroe, were in the city recently

To cut short a boil, apply a 50 per cent. ointment of ichthyol.

DR. J. M. McLAUGHLIN, of Chicago, has moved to Pensacola, Fla.

DR. I. N. LOVE, editor of *The Medical Mirror*, was made the recipient of a handsome gold watch, at the recent meeting of the Mississippi Valley Medical Association.

MEDICAL ETIQUETTE AMONG THE ANCIENTS.—There is an old manuscript in the National Library at Paris which has the following: "On approaching the patient you should assume a calm expression and avoid any gesture of greed or vanity; greet those who salute you with an humble voice, and sit down when they do. Then turning to the sick person, ask him how he is, and examine his urine. To the patient you promise to cure, but immediately on leaving the room you say to the relatives that the disease is grave. The result will be that if you cure him, your merit is greater, and you will receive the greater praise and fee, while, if he dies, they will say that you had no hope from the first." On the subject of table manners for the doctor, it proceeds to say: "When those who preside over the house ask you to the table, conduct yourself in a seemly manner. Each time that a new dish is brought on do not fail to ask for the condition of the patient. This will give him great confidence in you, as he sees that in the midst of the variety of the repast you do not forget him. On leaving the table return to the patient, and tell him that you have dined most

excellently, and that everything was served to perfection. The sick person who was anxious about these points will rejoice at your words."

DR. J. N. GRACE, of Plaquemine, La., and Dr. G. A. B. Hayes, of the lower coast, were in the city recently.

THE A. B. MILES AMPHITHEATRE—FORMALLY OPENED WITH APPROPRIATE CEREMONIES.

The Charity Hospital yesterday presented a holiday appearance, and all day long the famous institution was thronged with visitors. The occasion was the opening of the recently erected A. B. Miles amphitheatre building. A number attended the opening ceremonies, while others, who arrived too late to hear the speakers, were received by Dr. Bloom and his staff and shown over the recent and most important addition to this noble charity.

The formal opening of the department was set for 1:30 o'clock, and at that hour the visitors commenced to arrive, and soon the spacious new amphitheatre was well filled with members of the Board of Administrators, prominent physicians and a number of ladies.

The ceremonies were opened by Vice President Dr. E. S. Lewis, who welcomed the visitors and in a short speech announced the ceremony to be performed.

Dr. E. T. Shepard, chairman of the Building Committee, then offered the following address delivering the building to Vice President Lewis:

"As the acting chairman of the Building Committee, to whom was entrusted the erection and completion of this amphitheatre, it is my pleasant duty, now that our labors are at an end, to convey to Dr. Lewis, the vice president of the Board of Administrators, this building and its appurtenances.

"The committee have labored under many disadvantages, owing to the isolation and distance of our city from other commercial and manufacturing centres, delays in procuring plans and material have been frequent and unavoidable, and the work thus prolonged beyond our expectation. But as it stands today in its completion, I feel I may say that we tender to you a building substantial and convenient, thoroughly appointed for all its purposes.

"I can not let the opportunity pass without especially calling to your attention our absent member, Col. W. G. Vincent, to whose earnest zeal, indefatigable energy and singleness of purpose the committee are so much indebted for the success which attends this occasion.

“I wish also to call to mind and express the committee’s approval and acknowledgment of the ability and skill with which the house surgeon, Dr. Bloom, has selected and distributed the technical appointments for aseptic conditions and antiseptic procedure.

“Dr. Lewis, you will please accept the amphitheatre.”

Dr. Lewis, on receiving the amphitheatre, turned to Gov. Foster and said:

“Your Excellency—Upon the representation of the chairman of the building committee that the Miles surgical amphitheatre is completed, it becomes my pleasant duty to tender it to you as president of the Board of Administrators. It was begun in the spring of 1894, and has but recently been completed. The late house surgeon, the lamented Miles, appreciating the necessity for and the usefulness of such a structure, devoted the last months of his life in aiding and seconding the Board of Administrators in perfecting the plans of which this splendid edifice is the development.

“It is a vast improvement upon the old amphitheatre, which had outlived its usefulness, though tender associations cling to its memory.

“It marks a new era in the surgical work of the hospital. The ample provision for light at all times, and its construction of material readily made aseptic, insures more efficient and satisfactory work. Thoroughly equipped for all operations and all emergencies, it offers greater facilities to the surgical staff and increased security to those operated upon. Having in view the educational advantages offered by this great and charitable institution, generous provision has been made for the seating of over four hundred students, where operations can be witnessed and knowledge acquired, to the great benefit of our State in the better preparation of its physicians. It compares favorably with other buildings of its kind in this country and on the continent, and as an annex to the hospital is second to none in importance and usefulness.

“Erected during your magistracy as Governor of Louisiana, it will serve to perpetuate the memory of your administration and the liberality of the State among grateful hearts who have appealed to the noble charity of this institution, whose portals are ever open to the poor and suffering of every nationality and of every race.”

Governor Foster in his reply complimented the building committee on the most important and complete addition to the great charity that was nearer the hearts of the people than any other charity. He referred in terms of eulogy to the late eminent surgeon, Dr. A. B. Miles, to whose memory the amphi-

theatre was dedicated, and paid a glowing tribute to the famous surgeon both as a physician and a man. Sister Agnes was commended in beautiful language for her life of self-sacrifice and devotion to sufferers, while her able band of fellow workers were referred to in words of highest praise for the work they had done for Christianity.

In closing the Governor complimented the Board of Administration on having completely paid for a building the equal of any of its size in the country constructed for the same purposes.

The building in which the ceremonies took place is a model in every particular. It is situated directly at the back of the old hospital building proper, from which it is separated by a corridor. To the right of the doors leading into the amphitheatre and its adjoining operating rooms there is a slab set in the wall bearing the inscription: "Erected 1895, During the Administration of Gov. Murphy J. Foster." Inlaid in the mosaic tiling that is used in the floor there is also the lettering "Amphitheatre Building, 1895," while as a further introduction to the new building the doors bear the words: "Surgical Amphitheatre." These doors lead to a spacious lobby with the amphitheatre proper at its end. This is a spacious room fitted up with all the very latest surgical appliances and an operating table, while steep tiers of seats offer a capacity for seating 410 students. The entrance for the students, or spectators, is in the corridor outside the amphitheatre, so that late arrivals can never, in any way, interrupt an operation or annoy a patient. It is the intention that the entrance proper to the operating floor will only be used by those at work.

The arrangement of this room is most complete in every detail. A large skylight floods the place with a clear light by day, while both gas and electric fixtures give an equal light for night work. The floor and wainscoting of this room are of mosaic tiling, while a gutter pipe permits a thorough flooding to cleanse the place after an operation. Another device for the general cleanliness of the amphitheatre is a novel one. It consists in two powerful steam sprays that when turned on completely fill the place with steam. The object of this is to effectually settle any dust that might be in the atmosphere. When there is any possibility of dust being in the air these sprays can be turned on, and coming in contact with the particles of dust, the moisture will naturally cause it to settle rapidly. After the amphitheatre has undergone this treatment it is known that the atmosphere is perfectly pure, a most important condition in many operations.

The operating table which is used in this room was designed by House Surgeon Bloom and is of a most improved

character. On a frame of metal there is a plate glass slab that does not reach to the frame, but is supported securely by braces at the corners. Under this slab is hung, fastened to the frame, a rubber sheet that catches and carries to a gutter any discharges incident to operating. In this way there is no possibility of a surgeon soiling his clothes, as was the case in the use of the old tables. The whole table is on rubber castors, which, by a simple pressure of a lever with the foot, can be lowered on to firm, stationary legs or again elevated to the castors. In the designing of the table provision has been made for its conversion into the different forms necessary for different operations.

Back of the amphitheatre proper are three operating rooms, which have all the appliances to be found in the room described. These rooms have been designed with a view of affording a capacity for relieving the injured that the other building did not contain. A feature of the lighting fixtures is that they are all suspended on a ball and socket arrangement that enables them to be pulled out of the way in any direction.

A most important attribute to this new department of the hospital is an electrical table that is on rubber castors and can be wheeled into any of the surgical rooms. This table plays a most important part in surgical operations, and is frequently brought into use. The different services to which the table is put is the furnishing of miniature lamps for the illumination of wounds and internal injuries, etc.; faradic currents, the cautery, boring and drilling, galvanic current and the bullet probe. The table was designed and constructed by the New Orleans Electric Light Company, and is complete in its every detail. The hospital has had printed a guide for the use of the electric appliances, that enables any of the surgeons, by following directions, to use the currents intelligently and without any danger to the patients.

Adjoining the rooms described there are rooms for every preparation and treatment of the patient. One room is devoted exclusively to the treatment of accidents that are of a nature where operations are not necessary. In this room broken or fractured limbs are treated and minor wounds are attended. In this department there are constantly in attendance two Sisters of Charity, two trained nurses and three male attendants. In a sterilizing room is found apparatus for the sterilizing of water, bandages and instruments used. There is a bathroom to cleanse patients, and also for use in the treatment of cases of sunstroke. Another room is used exclusively for the administration of chloroform. The patient is placed on a stretcher, and after the drug has been administered is carried into one of the operating rooms.

Another room is devoted to the storing of the instruments in glass cases, so arranged that every instrument is in plain view. The material room contains the drugs and bandages used in the operating rooms, and is finished in the same complete manner that characterizes the rest of the building. The preparatory room is a room that has been arranged for the use of the surgeons. It contains wash basins and basins for the preparation of the hands for surgical work. One of the features of the new building worthy of especial mention is the ingenious arrangement of the water cocks. There are, naturally, basins in each room, and as a surgeon who has been operating, or one who is about to operate, should not touch anything, the cocks are all arranged with a pedal attachment that produces a flow of water by the pressure of the foot. [For this ingenious device the Hospital is indebted to Mr. John Ponder, who has been engineer of the institution for many years.—Ed.]

A room that is found on the ground floor of the amphitheatre that will be truly appreciated by any one so unfortunate as to require surgical aid, is a waiting room where friends will be permitted to sit. Frequently, when through accident or other cause a patient was brought to the hospital for treatment, there was nowhere that his friends could escape from the prying eyes of the public. This little chamber is intended for use in such cases.

On the second floor of the amphitheatre the bandage room is found. There all the bandages to be used in the hospital will be made, while splints will also be manufactured for use of patients.

Visitors to the amphitheatre yesterday were all struck with the provision for absolute cleanliness in all the departments. The paint used is all of a dazzling whiteness, and plate glass enters largely into the furnishings. Every room has a high wainscoting that is either of plate glass or of mosaic tiling, that permits of perfect cleaning. As far as has been possible corners have been rounded and cases have been given a sloping top, so that the possibility of any dust lodging is reduced to a minimum.

The amphitheatre was appropriately decorated yesterday with a painting of Dr. A. B. Miles, decorated with a wreath of flowers. Some lady, who was too modest to sign her name, sent a beautiful crown of cut flowers that was placed on the operating table, with the following note:

“Will Sister Agnes please have placed over the name on the amphitheatre this crown of flowers, and gratify very much one who can never forget the kindest, most faithful services.
Wednesday, October 16.”

Among those who were present during the ceremonies were Drs. C. J. Bickham, S. R. Olliphant, R. Matas, W. S. Bickham, C. Chassaingnac, H. Bayon, E. D. Fenner, J. F. Schmittle, J. Laurans, Y. R. LeMonnier, F. Loeber, Henry Bezou, Mayor Fitzpatrick, Hon. Matt Lagan, Secretary Edwin Marks of the Board of Administrators of the Charity Hospital, and Messrs. J. T. Gibbons, Joseph Shakspeare, George Seeman, A. R. Brousseau and Judge Fred King, of the Board of Administrators, Mr. H. Robinson and the Misses Robinson, Mrs. Dr. Lewis and the Misses Lewis, as well as several other ladies and gentlemen.

Drs. St. Marc Fortier and W. E. Parker, with the members of the staff of house surgeons, in uniform, acted as a reception committee, while House Surgeon Bloom received Governor Foster and the speakers.—*Times-Democrat*, Oct. 17, 1895.

MARRIED.

DR. FELIX A. LARUE to MISS LOUISE M. REA, on October 16, 1895, at the St. Louis Cathedral.

DR. W. S. KENDALL to MISS TOOKE, of Mt. Lebanon, La., October, 1895.

DR. R. L. HAGAMAN to MISS VERNON DARDEN, at Centreville, Miss., October 22, 1895.

DR. W. F. HAGAMAN to MISS LYDIA A. PURNELL, of Lindsay, La., October 23, 1895.

DR. JNO. N. THOMAS to MISS WINIFRED JONES, at Baton Rouge, La., October 22, 1895.

Book Reviews and Notices.

The Science and Art of Obstetrics. By Theophilus Parvin, A. M., M. D., LL. D., Professor of Obstetrics and Diseases of Women and Children, Jefferson Medical College. Third Edition. Illustrated with 269 woodcuts and two colored plates. 686 pages. Lea Brothers & Co., Publishers. 1865.

This work is divided into two parts—Physiology of Pregnancy and Pathology of Pregnancy.

The section of Part First, which is devoted to the physiology and conduct of labor, is free from a great deal of the unnecessary speculations and theories too often found in textbooks, a failing which serves more to bewilder the student than to aid him. The directions given to properly manage normal cases are easily understood and to the point.

The first section of Part Second treats of ectopic preg-

nancy. This subject being one of the "burning questions" of the day, might have received more attention than is shown it. However, it receives some attention, and the various phases of the condition are fairly well handled. The author terminates this part on treatment as follows: "When one realizes by witnessing how suddenly, in the midst of apparent health, a gestation cyst may rupture, and how swiftly death follows in almost all cases not rescued by surgical operation; and then upon opening the abdomen, he finds sometimes from a rent comparatively small, copious bleeding has occurred, he will hesitate to advise in an ectopic gestation, the diagnosis of which is clear, any delay in its removal, even though the pregnancy may not have lasted a month."

The author is rather emphatic in his directions for treatment after rupture, when the fœtus is living. He says: "If the pregnancy has passed one-half, and the proof that the child is living is certain, the conservative method is absolutely indicated, and we ought not to regard the ovum as a dangerous, still less a malignant disease. Placing our patient in the most favorable circumstances for immediate laparotomy, if this should be necessary, we wait until the infant has the best chance of living outside the maternal organism—that is to say, the ninth month of pregnancy."

The treatment of placenta prævia is thoroughly handled and various methods given. The author appears to prefer the expression "Ectopic Placenta." The term "Pregnancy Kidney" is given to the albuminuria sometimes found during gestation. The prognosis is said not to be unfavorable. In the Charité, in Berlin, in 1888-89 there were 1587 deliveries, with ten cases of "pregnancy kidney," and yet not a single case of eclampsia. Mention is made of the treatment suggested by Borak and Bernheim, that of injecting into the connective tissue a certain quantity of the normal salt solution

Nothing new is advanced as to the cause of eclampsia; no light thrown on this puzzling and horrible condition. "The disease should be regarded as essentially a toxæmia." What the poison or poisons might be is a question unanswered. It is suggested that, possibly, as Auvard hints, there is a renal and a hepatic eclampsia. The subject of eclampsia is exhaustively treated, and although no definite conclusion is arrived at in the matter of its true cause, the most recent theories are presented. The chapter on the Pathology of Labor is opened with an article on the Anomalies of the Forces concerned in Labor; an article which well repays one for the reading. It is divided into excess of uterine force and deficiency of uterine force. In the treatment of the latter we are advised to "carefully distinguish between physiological and pathological labor

pauses, for in the former we abstain from active interference, while in the latter it may be imperative and often must be prompt.

The various obstetric operations receive careful consideration, the use of forceps especially being given a great deal of attention. Symphyseotomy is described. The chapter on puerperal fever is clear and full of force.

The book is certainly practical and up to date. The importance of acquainting one's self with the unusual and more serious complications and accidents of labor is wisely insisted on. Unfortunately the general practitioner is too prone to neglect posting himself in the unusual, leaving to the specialist the task of overcoming the unexpected complications.

The author very correctly says: "The importance of obstetric knowledge is further shown by the fact that very frequently the emergencies which occur in the practice of the art are sudden, and must be met promptly if successfully. They may give no time for consulting books or a fellow-practitioner, but immediate as is the peril must be the means to avert it."

MICHINARD.

Hand-Book of Massage. By Emil Kleen, M. D., Ph. D. Authorized translation from the Swedish, by Edward Mussey Hartwell, M. D., Ph. D. Philadelphia: P. Blakiston, Son & Co. New Orleans: Armand Hawkins Co. \$2.75.

The introductory epistle of Dr. S. Weir Mitchell, which first greets the eye of the reader, at once predisposes him in favor of the book. This favorable inclination is strengthened as he goes through the text, and finds a clear, rational explanation of massage, based upon the latest and soundest views of physiology and pathology. A very interesting chapter on the histology and present status of massage gives one an insight into this adjunct to therapeutics, and shows how ancient and widespread was its use when there were no other remedies to supplant it. Dr. Kleen here touches upon the Swedish movement cure, and takes occasion to repress the undue enthusiasm of certain of the followers of Ling, the celebrated Swedish masseur. A full verbal description of the technique of massage follows, which is, unfortunately, meagerly illustrated; then the physiological and therapeutical effects of massage, and its contra-indications. The twelve chapters devoted to the treatment of diseases in which massage is applicable take up over 200 pages. Dr. Kleen is a very conservative man; he does not make the mistake of allowing his subject to run away with him. His observations are calm, and his statements may well be taken as a safe guide for those who wish to know something of the practical uses and limitations of massage. A. McS.

MORTUARY REPORT OF NEW ORLEANS.

FOR OCTOBER, 1895.

CAUSE.	White	Colored.....	Male.....	Female.....	Adults	Children.....	Total
Fever, Yellow							
“ Malarial (unclassified)....	9	13	13	9	17	5	22
“ Intermittent	1			1	1		1
“ Remittent	3	2	2	3	4	1	5
“ Congestive.....	7	3	7	3	7	3	10
“ Typho	1	2	1	2	3		3
“ Typhoid or Enteric.....	4	2	6		6		6
Puerperal		1		1	1		1
Influenza.....	1		1		1		1
Small-pox.....	1	6	5	2	4	3	7
Measles							
Diphtheria	2		1	1		2	2
Whooping Cough	1	1	1	1		2	2
Meningitis	9	4	9	4	4	9	13
Pneumonia	22	17	24	15	16	23	39
Bronchitis	22	9	19	12	16	15	31
Consumption.....	46	36	57	25	79	3	82
Cancer	17	5	5	17	22		22
Congestion of Brain.....	3	1	3	1	3	1	4
Bright's Disease (Nephritis)	20	12	22	10	29	3	32
Diarrhœa (Enteritis)	18	11	19	10	13	16	29
Cholera Infantum	13	5	10	8		18	18
Dysentery.....	4	4	8		7	1	8
Debility, General	1	2	1	2	3		3
“ Senile	9	16	12	13	25		25
“ Infantile	3	4	2	5		7	7
All other causes	161	90	154	97	178	73	251
TOTAL	378	246	382	242	439	185	624

Still-born Children—White, 16; colored, 14; total, 30.

Population of City—White, 195,000; colored, 80,000; total, 275,000.

Death Rate per 1000 per annum for month—White, 23.26; colored, 36.90; total, 27.20.

L. F. FINNEY, M. D.,
Chief Sanitary Inspector.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

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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.]

TOXIN-THERAPY IN SARCOMA.*

BY DR. J. F. SCHMITTLE, NEW ORLEANS, LA.

I will not burden you all this evening with any lengthy report. My purpose is simply to relate my experience with the toxins of erysipelas and bacillus prodigiosus in the treatment of two cases of sarcoma.

So far, the use of these toxins in my hands has not been followed by excellent results. Still, as I have only used them in two cases, and only for a comparatively short time at that, I am not capable of saying that they have not proved themselves to be a valuable help in our fight with this serious growth, since quite eminent men in the profession report wonderful results attributable to their use.

To begin with, this treatment is not entirely without danger, as deaths have resulted from it.

One of the two cases in which I am using it was inoperable, the other was not so very extensive at the beginning. In the first and worse case I think there is a constant, steady but slow improvement, while in the second the condition became aggravated. Following are the histories of the two cases, with a succinct clinical record :

The first is that of a woman 50 years of age. I saw her

* Read before the Orleans Parish Medical Society, August 24, 1895.

for the first time at the hospital, five years ago, with a large, foul-smelling, spindle-celled sarcoma of the left breast, which was removed, after which she made a rapid recovery.

Four years later there was a return of the growth; it was again thoroughly removed, and she apparently made another good recovery.

About two months ago she returned to the hospital, a year having elapsed since the last operation. This time she was beyond the aid of the knife. The growth had returned near the old cicatrix and now extended over the greater portion of the left wall of the thorax, into the axilla and arm proper, and under the clavicle into the supraclavicular region. There was a large opening near the axilla where it had ulcerated through the skin. Her arm was very œdematous, and she had no use of it; it was as if bound down to her side. She suffered some pain, perhaps due to pressure, and her general condition was very much undermined.

First inoculation was made on the 12th of July. I might here state that the inoculations were always aseptic. The parts were first thoroughly cleansed, and remaining punctured wound covered with collodion. They were made deep into the substance of the growth and each time into a different part.

Twenty-three drops of the toxins, with the same amount of sterilized water, was injected generally every other day. Up to the present time patient has had eleven inoculations.

Two hours after the first inoculation temperature was $100\frac{1}{2}$ deg., and patient felt comfortable. Next morning there was some localized redness, and quite a crop of vesicles had formed about the seat of injection.

About one hour after the second and all succeeding inoculations, she had a violent chill, which lasted almost always half an hour or more. The temperature would then go up to between 103 and 104 deg., and unless reduced by an antipyretic, would remain there for some time and gradually go down.

Since the beginning of this treatment, temperature has never been down to normal. Pulse is always rapid and small, between 90 and 140 to the minute.

At times, shortly after the injections, it was intermittent, showing that the system was fully under the toxic effect of the

toxins. Patient at all times complains of being extremely weak, some days more so than on others, and on this account I sometimes had to postpone the inoculation a day or more.

As regards the appearance of the growth now, I think, as stated in the beginning of this article, there is some improvement.

I can not appreciate any reduction in size exactly, but the open surface has healthy looking granulations.

She has no pain, and is able to use her arm more freely. As patient is anæmic she takes a ferruginous tonic. Strychnia sulphate, hypodermically, and alcoholic stimulants are given continually to keep her buoyed up.

At present writing I have discontinued the inoculations, but only temporarily, on account of feeble condition of patient.

I intend to resume them as soon as patient's condition will permit it.

The second case is that of a young lady nineteen years of age. I saw her for the first time two years ago; at that time she had a small round-celled sarcoma on the side of her neck, which I removed. About eight months after this it made its appearance again, and was once more excised.

A year and a half after this she came to me again; she had a return of the growth in the cicatrix, with a fungous mass protruding through the skin about the size of a hen's egg.

She said a short time after the second excision the growth appeared again and she fell into the hands of a well-known cancer doctor; he applied a salve and the enlargement was the result.

I operated on her again, but in time it returned.

As sarcomatous tumors of the neck almost invariably return, for it is impossible in these cases to remove sufficient of the surrounding healthy structures, I thought this to be an excellent case to treat with toxins.

She received the first inoculation on July 19, and has had altogether seven.

I commenced with fifteen drops, on account of her age, and gradually ran it up to the maximum quantity of twenty-three drops.

About two hours after the first inoculation she had a

severe chill and temperature went up to 103 deg. She became very sick at her stomach, and could not retain anything for twenty-four hours. Her pulse became so miserable that she had to be stimulated hypodermically. Next day she had an intense herpetic eruption about eyes, nose and mouth.

After each and every inoculation she had a chill, but temperature never went as high as after the first. She suffered severe pains for several hours after each one. The case became aggravated soon after the inoculations were started. There was a rapid increase in the size of the growth and four new ones made their appearance in the surrounding fissures.

Now whether this was strictly due to irritation produced by the injections or was merely a coincidence, and the growth would any way have taken on these malignant characteristics, I am not able to say as yet.

However, when the patient learned of this she requested me to discontinue the toxins and operate on her, which I accordingly did.

I hope to cure this case eventually, if possible, by persistently operating, as was done in the well-known case of Prof. S. D. Gross. He subjected a single woman to twenty-two operations in four years; the number of recurrent tumors removed was fifty-one, and varied in size from an almond to a hen's egg. Ten years and nine months after the last operation she was in perfect health.

NERVOUS ERUCTION.*

BY DR. E. M. DUPAQUIER, NEW ORLEANS, LA.

In presenting this patient to you, Gentlemen, I will quote in extenso, Bouveret's article on the subject referred to here (in *Maladies de l'Estomac*, Bouveret, page 609) inserting in the course of the quotation additional remarks suggested by the study of this particular case.

The belching up of gas from the stomach after meals is not uncommon in many cases of dyspepsia. The gases belched forth consist of atmospherical air swallowed and carried with the food into the stomach, or they arise from abnormal fermen-

*Read before Orleans Parish Medical Society, November 9, 1895.

tations which disturb gastric digestion. But the belching up of gas in such cases is not incessant and abundant. No; it lasts only a while; it manifests itself only during the period of digestion.

Far different is the belching up which occurs at times in cases of hysteria, of which the patient I here present to you is a typical example.

In these cases dyspeptic disorders may be wanting entirely; the belching up occurs even on an empty stomach; it is repeated frequently, appears under the form of attacks and spells lasting a long while, persisting during weeks and months; so much so, that evidently here the nature of the phenomenon is absolutely nervous. In short, this belching up of gas is a neurosis of motility.

This affection arises from hysteria very commonly; from neurasthenia and from genital neurosis, more rarely. Not unfrequently the first attack is brought on by a violent moral emotion, fear, anger, passion. In some cases it may be due to imitation, meaning the impression of one upon another hysterical subject.

A gaseous bubble, expelled from the œsophagus, bursts forth suddenly and loudly in the mouth. The noise is more or less prolonged, consisting of a series of secondary noises, caused by the vibration of the velum palatinum. The finger, pressed upon the neck on a level with the pharynx, feels these vibrations. The vibratory noise is ordinarily preceded by another noise, a single noise, much shorter, more sudden, to which our attention will be directed further on. This is what is termed nervous eructation. It comes on at short or long intervals, or it may be repeated ten, twenty or thirty times in one minute. And this unceasing repetition of pharyngeal noise can last from five and ten minutes to one and five hours. Thus are formed the attacks of nervous eructation.

These spells may become so strong and so protracted that they are a cause of fatigue for the patients and of considerable inconvenience for those about them. "One of my cases," says Bouveret, "sought after solitude, afraid to show herself in public."

It persists at times while at table, which is a most unfortu-

nate circumstance for the commodiousness of the guests and table companions, except among the Moors, who are said to manifest their contentment and to return the politeness of their entertaining Amphitryon by loud reports, more or less musical, of guttural and oral belching.

But after our occidental customs and manners it is not so. Sneezing at table is only accidentally pardonable, and in the presence of decent people the innocent baby alone has the privilege of freely discharging gas by the mouth and the anus. Consequently these unfortunate adults who are afflicted with nervous eructation and other windy propensities must live in seclusion, or seek after medical care, and we ought to be able to moderate those æolian explosions.

Luckily for them, during the night they sleep undisturbed by the belching. During the day the belching is started by any trifling emotion—for example, the sight of a person who is not *persona grata*. True, the belching alone may hasten the retreat and exit of the non-sympathetic newcomer. At times the belching is caused by the excitation of certain parts of the tegument acting as hysterogenous zones; for instance, compression of the abdomen somewhat below and to the left of the umbilicus, or the pressure, even slight, of the larynx, or of the seat of a cicatrix.

After the manner of mostly all hysterical phenomena, nervous eructation may appear and disappear suddenly. It is at all times very stubborn. Relapse is frequent. The case I present here is a typical one, the patient suffering for many years, and she had given up all hopes when I met her.

It is to be noted that the digestive functions are usually not at all or but very little disturbed; appetite persists, there is no malaise after meals, general nutrition is intact. The emaciation of this patient here is due not to any dyspeptic trouble, but to an attack of incipient tuberculosis at the right apex, from which she is now recovering.

Now let us consider the pathological physiology of this phenomenon. Whence come the gases in this nervous eructation? Surely they are not secreted by the gastric mucous membrane; neither are they the result of abnormal gastrointestinal fermentations. As stated in such cases digestive

disturbances are absolutely wanting or they are but little extant. The belched up gases are *inodorous*, and it is inadmissible that abnormal fermentations, even very active ones, could produce such an amount of gas. In the case of Pongsen the gas was analyzed by Hoppe-Seyler. It was found to be pure atmospherical air. It is at present generally admitted that this gas belched up so is air which was swallowed and carried into the stomach by the automatic act of deglutition, like frogs swallow air. The deglutition takes place in the interval of the attacks; and according to some it is a common thing in hysteria.

Antiperistaltic contractions of the stomach and œsophagus expel the air into the mouth, hence eructation. Osler presumes, moreover, that the air is carried into the stomach by the act of a veritable aspiration. He compares the stomach with an elastic balloon appended at the extremity of the œsophagus. Upon the contraction of the circular muscular fibres the air is expelled. Upon their relaxation the air is aspirated.

Bouveret proposes a different interpretation, as follows:

“The stomach,” says he, “has but a secondary part in the mechanism of nervous eructation; it is at times even not included in the phenomenon. It is all due to a neurosis of the pharynx.” He reports a case where the movements of deglutition of the pharynx were strikingly evident, being repeated thirty times in one minute, accompanied with a constant noise, carrying into the stomach a considerable amount of atmospherical air. Once in a while the stomach, largely distended, would throw out the air in a series of noisy eructations. The clonic spasm of the pharynx was the chief factor in that singular case, and he called it “hysterical aërophagia.”

In three other cases Bouveret noted the same clonic spasm of the pharynx, and upon a close examination he found thus:

Each movement of eructation corresponded with two noises which came in succession at short intervals, a far shorter interval than that intervening between two eructations.

The second noise is prolonged and vibratory. It is due to the vibrations of the velum palatinum, when the gas swiftly passes from the œsophagus into the pharynx.

The first noise is, on the contrary, single, less loud, very short, almost instantaneous, and corresponds evidently with a rapid movement of deglutition, almost a convulsive movement. The jaws and lips are closed, the larynx rises suddenly. The case here exemplifies Bouveret's interpretations in a very clear way.

In one of the three cases reported Bouveret found the proof that it is in reality atmospherical air that is swallowed. One of his fingers was laid on the larynx of the patient while he kept his ear on the stethoscope, located in the epigastrium. Each time he felt the larynx rising he heard a gaseous bubble burst inside the stomach, causing a metallic and amphoric bruit. Consequently the gas which was belched up was the atmospherical air which had just been swallowed. By stopping the movement of deglutition the eructation ceases on the spot, and that is done by keeping the jaws opened with a cork or by the fingers depressing the tongue.

Thus each eructation consists of two acts, coming in succession as linked together. First, deglutition of air bubbles, and secondly, loud expulsion of these air bubbles.

It is not necessary that the swallowed air should reach the stomach. In many instances it does not pass beyond the cardia, and the contractions of the œsophagus throw it forth. Bouveret does not think that the respiratory muscles interfere at any time either to carry air in the œsophagus, or to expel it, for on close examination of the thorax and hypochondria he never saw any abnormal, convulsive motions of the inspiration and expiration muscles.

During the time air is swallowed respiration goes on as during the normal act of swallowing the alimentary bolus.

To sum up: nervous eructation would be better demonstrated aërophagia. It is characterized by a very active circulation of atmospherical air from the mouth to the œsophagus, and the essential factor of this circulation is the clonic spasm of the pharynx, producing a convulsive deglutition. Occasionally gaseous bubbles may find their way down to the cardia and stomach.

TREATMENT.—What is to be done in nervous eructation? Bromides, arsenic, opium, atropine, have been recommended.

Bouveret found that the bromide of potassium has given him the best results. He tried without success the swabbing of the pharynx and of the œsophagus with cocaine solution. Of course the general treatment of hysteria comes in—moral direction, change of bad habits, rest, hydrotherapy; and of course when dyspeptic disorders complicate the case, proper treatment is also indicated. In this case of mine, bromide of potassium has marked effect whilst it is taken. No doubt suggestion in the hypnotic state ought to be tried, and I will try it. But I can not help thinking it will be a parody of Svengali hypnotizing Trilby, in my efforts to suppress this kind of non-musical, anti-æsthetic, gastro-œsophago-pharyngo-vocalizations.

REMARKS ON THE TREATMENT OF DISEASES OF THE
UTERINE APPENDAGES.*

P. MICHINARD, M. D., NEW ORLEANS, LA.

It is my purpose, in this paper, to present to you as briefly as possible some of the various methods that are being applied in the treatment of inflammation of the uterine appendages, referring occasionally to my personal experience, and to illustrative cases.

It was left to Mr. Tait to recall to the attention of the profession that which was written about and forgotten over fifty years ago—the existence of salpingitis. It was also left to Mr. Tait, in 1872, when he removed a suppurating ovary, to re-establish the operation of oophorectomy. At about the same time that Tait removed this diseased ovary, Battey, of Georgia, established the principle of removing healthy ovaries for establishing artificial menopause. The brilliant results of these two operators appear to have upset the surgical minds of the day. Encouraged by improved antisepsis many fairly experienced surgeons began to remove tubes and ovaries. In a short while the contagion spread, so that the operation was done by men who did not possess the required diagnostic ability. It sufficed for a woman to have epilepsy, or to be hysterical for her to lose her ovaries; if she had pains in her pelvis she lost her tubes. The operated soon were counted among

* Read at meeting of the Louisiana State Medical Society, May, 1895.

the thousands, and the deaths were not very far behind. The question finally presented itself: Are the diseases for which all these operations are performed as dangerous as the operations themselves?

Then there developed a class of conservative and preservative gynecologists. These abandoned the removal of healthy ovaries for the cure of neuroses and applied a system of treatment calculated to cure or relieve the diseased organs without their removal. Among the conservative measures is curettage of the endometrium and application of counter-irritants to parts adjoining the diseased structures.

This curettage is followed by the application of antiseptics to the endometrium, or the establishing of drainage of the uterine cavity.

The counter-irritant is usually Churchill's tincture of iodine applied liberally over the anterior and posterior vaginal fornices, associated or not with tamponade of the vagina. The first part of this system of treatment is resorted to because every case of salpingitis is supposed to be the consequence of an endometritis. That such conservative measures are productive of good there can be no doubt; that they have occasionally cured I can vouch for. The treatment, it is true, is long and tedious, extending sometimes over months. I can recall one specially bad case in which the pelvis seemed filled with a hard, painful mass on either side of the uterus. The patient had been married five years, was sterile and had been confined to her room for several months. After more than a year of treatment she became perfectly well and is now a healthy mother.

I have had a fair number of *perfect cures* from this treatment. I use the expression *perfect cure* to distinguish them from those cases in which the patients are relieved of all or nearly all the pains, but in which the tubes and ovaries do not regain their normal size. They are symptomatically well, although the organs remain somewhat enlarged. But is not that better than entire extirpation of organs at the risk of life? There are cases in which this system entirely fails; but there are also cases in which double salpingotomy entirely fails to give relief. Where the disease is greatest in the mucous mem-

brane of the tube (endo-salpingitis), conservatism will rarely cure; but where the inflammation has extended to the connective and muscular tissue (interstitial salpingitis), or to the peritoneal covering of the tube (peri-salpingitis), leaving the inner lining only slightly diseased, conservatism often will cure. In these cases the tubes are large, tender and sometimes boggy from œdema.

I acknowledge I do not know of any way to differentiate between the different conditions by a vaginal examination. Of course, the task is easy where there is fluctuation. I believe in giving every case the benefit of the doubt and trying conservatism for some time before proposing removal.

Where conservatism has failed I have had recourse to preservation as advocated by Dr. Polk. This consists, where the disease seems to be interstitial and peri-salpingitis, of opening the abdomen, breaking up the adhesions, cleaning the pelvic cavity and leaving the liberated organ remain. I have done this with apparently good results. Sometimes one meets with one or two small abscesses in the midst of lymph between the tube and a knuckle of intestine. These offer no special difficulties.

Where the fimbriated end of the tube is closed and the tube distended with mucus, Polk cuts off the end, washes out the tube with antiseptic solution by means of a small syringe, and then sews the mucous membrane of the tube to the peritoneal covering in such a way as to leave the canal open. He reports good results. I have never done this.

When it becomes necessary to remove the tube this operator, the conditions being favorable, does not apply a ligature about the tube as has been and is still being done. He believes that "many of the recurrent symptoms to which patients are often subjected are due to the ligature upon the tube."

He applies a silk or catgut ligature to the ovarian vessels just outside the ovary and fimbriated end. The tube is then dissected out as far as the uterus, fine ligatures being applied to bleeding points. The ovary is cut away and all bleeding points caught or tied. To the raw surface left in the broad ligament he stitches the round ligament. By an oblique incision he cuts away the tube at the horn of the uterus and op-

poses the raw surface also to the round ligament. This is my understanding of the operation as I read it in the recent work of Keating and Coe. I have never seen the operation performed and have not done it myself. Recently, in a bad pus case, in which I was assisted by Drs. Bloom and Fortier, I cut the tube away close to the uterus, ligated the vessels and sewed the uterine peritoneum over the stump of the tube and all, closing over everything perfectly. This is now the twelfth day and the patient is doing well.

For some cases of simple and suppurative salpingitis, Dr. Emmett has recommended confining the patient to a bed the foot of which has been elevated 18 or 24 inches and the administration of hot vaginal douches with the patient in that position. I have tried the method with both failure and success. One of my successes—the only very good one—was in a case which was treated in ward 43 of the Charity Hospital. The tubes were very large and the suffering so great that the patient asked for operative treatment. I requested my assistant, Dr. J. B. Elliott, Jr., to dissuade her from that notion and to obtain her consent to try six weeks of the Emmett treatment. She left the hospital two months after her admission.

Some time later she sent me the following letter:

“COLFAX, December 12, 1894.

“I feel justified in stating that your treatment cured me. My pains have gone, but I still use the douches of carbolyzed water; have no discharge; am very robust; my weight is 166 pounds; the picture of health. How glad I am that I did stand on my head and did not undergo the operation. Thanks to Dr. Elliott for talking me out of the notion. Have gone to housekeeping since my return home, and am happy and healthy.”

I have not heard from her since. I regret, however, not being able to report other similar good results.

The practice of removing both sets of appendages where only one side is diseased has been abandoned. Where an ovary contains small cysts Polk, Pozzi, Martin and Shroeder have recommended resection of the ovary. About two years ago I first tried this preservation method. The patient applied to ward 43; she was 18 years of age; was engaged to be mar-

ried. One ovary contained a hæmatoma about the size of a large lemon. This one was removed. The other contained a cyst involving about one-quarter of the organ. I cut off the free part of the sac, mopped away the contents, and not being able to stitch together the remaining tissue, scraped the bottom of the sac with the handle of the scalpel, wiped the parts thoroughly and dropped the crippled organ back into the cavity. Two months later she married. Nine months after her marriage she became a mother. A few weeks ago she came to my office when I found her to be in the fourth month of pregnancy and her baby was not more than 4 months old! I was assisted at the operation by Drs. Fortier and Elliott.

In 1892 Pozzi began to practise deep igni-puncture in cases of ovaritis and of many small surface cysts with complete cures. He makes as many as twelve deep punctures in the ovary. I have not yet tried the method.

Galvanism has some adherents; massage fewer. Where pus has gathered in the tubes we occasionally see cures established with simple treatment, and sometimes without any treatment whatever. Not very long ago I saw a case with Dr. S. P. Delaup, in which there was a large fluctuating mass on one side of the uterus, associated with pain and high fever. During the night preceding the day appointed for operative interference there escaped from the uterus several ounces of pus. The patient at once began to improve. Hot antiseptic vaginal douches were then used every day. A rapid recovery followed.

A woman applied to Ward No. 43, a little over a year ago, with fluctuating masses in the pelvis. She was too weak then to admit of operation. She was put to bed, and rest and strengthening treatment applied. A few days later it was noticed that small quantities of pus escaped from the vagina. The uterus was then dilated, when larger quantities of pus escaped daily. Hot antiseptic vaginal douches were administered. She made a rapid recovery. I have since seen her at my office from time to time, and she is still well.

I refer to these cases merely to show what conservatism can sometimes accomplish. But, of course, there are many cases (and perhaps a majority) of pyosalpinx which can not be benefited with anything short of surgical interference.

The surgical treatment heretofore applied was vaginal incision and irrigation of the sac. To-day irrigation is not resorted to until twenty-four or forty-eight hours after the incision. The cases are few in which vaginal incision of the sac is curative. Removal of the suppurating tubes and ovaries through an opening in the abdominal wall—cœliotomy—up to a short while ago was the only other measure applied. The great number of firm adhesions encountered in these cases, frequently causing rupture of the pus sac during the enucleation, have caused the operation to be considered one of the most difficult and most dangerous in surgery. In my experience the danger is greatly lessened by the use of the gauze pads instead of the ordinary flat sponge. If rupture do occur the pus is less apt to penetrate the different layers of the pad than it is the meshes of the sponge. Within the past three weeks I have had occasion to appreciate the value of the pads. In two very difficult cases the sacs ruptured during the manipulating, and yet not a drop of pus appeared to touch the tissues, so perfectly did the pads protect them. Both cases are doing very well.

Recently, or comparatively so, nearly all cases of inflammation of the tubes and ovaries—suppurative and simple—have been treated by removal of the uterus alone, or uterus and appendages, through the vagina by Péan, Segoud, Richelot, Doyen and Jacobs, each operator making certain modifications which bears his name. This method of attacking the diseased appendages has not yet met with much favor in this country, Dr. Polk being about the only enthusiastic convert.

The time allowed me will not admit of my giving you a full description of the different operations, and, therefore, I will ask you to consult the admirable article of Dr. Garceau in the March (1895) number of the *American Journal of Obstetrics and Diseases of Women and Children*. I will, however, say that one surgeon removed the uterus either whole or by morcellation; another removed it by first splitting it on its anterior face; another by splitting the cervix transversely, and another by removing conoidal pieces either anteriorly or posteriorly. Some combine two or three methods. They all use clamps.

“If, during the operation, a pus cavity is opened, the

operator waits until the flow of pus ceases, enlarges the opening with his finger, washes out the cavity with the influx catheter, and proceeds as though nothing had happened." (Garceau.)

"If the cavities have not been opened during the operation they may be searched for after the removal of the uterus. The pus tubes should be incised methodically in order not to soil the peritoneum. A mounted sponge is placed beside and above the tube. This steadies it and makes it bulge into the vagina, at the same time shutting off the serous cavity. Then a cut with a knife opens the tube and the contents flow into the vagina, while a pair of forceps at the same time seizes the mouth of the incision to prevent the sac from retracting upward. The cavity is washed out with corrosive sublimate solution and the tube sac now removed in so far as possible with the fingers, taking care not to tear the viscera."

In speaking of the treatment of adhesion and the appendages, Garceau tells us that when they can be separated from the adhesion it is proper to remove them, otherwise they may remain. "They will atrophy and give no further trouble."

A YOUNG MOTHER

By C. W. GLEAVES, M. D., Wytheville, Va.

I wish to report the case of the youngest mother in Virginia. Annie H— was born in Bland county July 15, 1885, and September 10, 1895, she was delivered of a well-formed child weighing five pounds. She was only ten years and nearly two months old. The girl has no development of a woman, although she menstruated regularly since she was five years old.

The labor was a short and uneventful one, and two hours afterward the child-mother wanted to get up and dress, and would have done so had she been permitted.

There were no developments of the mammæ or secretion of milk; the baby was nourished through its short existence (as it only lived a week) by its grandmother, who had a child only a few months old. The parents of this child, Mr. and Mrs. J. P. H.—, are prosperous, intelligent and worthy people, and there is no doubt of their child's age.

The child is now well and plays about with the other children as if nothing unusual had happened.—*Med. Record.*

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COLLABORATORS:

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DR. R. MATAS.

DR. A. W. De ROALDES.

DR. H. W. BLANC.

DR. WILL H. WOODS.

Editorial Articles.

MALARIAL AND TYPHO-MALARIAL FEVER.

In the *Medical News* for November 23, 1895, Prof. Wm. Osler writes a very interesting paper on the practical value of Laveran's discoveries. Like all other discoveries of real value, they have given precision to certain morbid conditions, and have brushed aside much indefiniteness and ignorance formerly cloaked by the word *malaria*. The labors of Laveran, besides making the diagnosis of malaria in uncinchonized subjects a certainty, have stimulated research in other fields. The germ of Texas cattle-fever, discovered by Theobald Smith, is a direct outcome of the movement started by Laveran; and observations on amœbic dysentery and the protozoal origin of cancer have also multiplied. The cause of the remarkable periodicity of malarial fevers, which puzzled physicians for centuries, was found to be due to the development in cycles of the specific organism of the disease.

In all countries there are cases of atypical fever which baffle diagnosis and classification. This is particularly true of warm climates and crowded communities. The phenomenon

of fever is produced when any toxin resulting from putrefaction finds its way into the system. The detection of the plasmodium in the blood of a patient determines the character of the fever; but there are many, many cases of prolonged fever that resist quinine, and are neither malarial nor typhoid. Dr. Osler lays down the following rules: 1. That the diagnosis of malaria can be made with certainty by the blood examination. 2. That an intermittent fever which resists quinine is not of malarial origin. Intermittency is found in the chills and fever of tuberculosis, and in septicæmia. In the differentiation of the fevers so common in the South, the examination of the blood is destined to assume an important place; and it is to be regretted that this branch of investigation is so little cultivated in this part of our vast country.

Dr. Osler quotes from the vital statistics given in the United States Census Report for 1890. In Baltimore, New York and Brooklyn the number of deaths ascribed to malaria exceeds that due to typhoid fever, which is certainly astonishing, and also incorrect. The hospital records of those cities show the rarity of deaths from malaria, while those from typhoid fever are only too numerous. Dr. Osler thinks that a great many cases of atypical typhoid are carelessly put down as malaria. He refers to the discussion held before the Orleans Parish Medical Society on the long-continued fevers of Louisiana, and notes that the profession in this city is gradually coming to the conviction that many of these cases are cases of atypical typhoid, a view that has long been held by Dr. R. Matas. In one of the Johns Hopkins bulletins, devoted exclusively to typhoid fever, Dr. Osler gave a diagram showing by vertical columns the mortality from that disease in the large cities of this country and several cities of Europe. The shaded column representing the mortality from typhoid in New Orleans was astonishingly small as contrasted with the others; and it called forth a foot note stating that the slight prevalence of the disease in this city was due to our method of storing drinking water in cisterns above ground, the water being supplied by the rain and each house having its own independent store. The diagram was based on official statistics,

but these were supplied before typhoid fever became as generally acknowledged as it now is.

Granting that many cases of continued fever that resist quinine are typhoid, we are not prepared to abandon our belief in a third form of fever, as Guiteras advocates. In city and country, physicians in this section meet with cases of protracted fever that baffle treatment. In the *JOURNAL* for February, 1895, there is a notice of some investigations of Dr. Chassiotis into the etiology of the so-called continuous fever. He eliminated typhoid and malarial infection during life and at the autopsy. He found some changes in the internal organs, but the chief feature was the presence of diplococci in the blood, oval or rounded, and varying in size. We do not know if Chassiotis' views have been confirmed. The question of our continued fevers hangs chiefly upon examination of the blood, without which a lengthy dissertation on these affections is only a new threshing of old material. As the lower tier of Southern States furnishes the largest amount of clinical material of this character, it seems strange that our colleges do not see that their graduates are specially fitted to make a diagnosis with the microscope, instead of waiting for our more aggressive confrères in the Eastern cities to do it for us.

PAQUIN'S ANTI-TUBERCULAR SERUM AND LABORATORY TESTS.

Our readers will recall a former editorial on Paquin's anti-tubercular serum, and a letter from that gentleman protesting against what he alleged to be a premature verdict. In writing as we did we were not animated by any feeling other than a desire to record in a brief manner the virtual outcome of local experience with his preparation. Dr. Hanau Loeb, of St. Louis, Mo., has since published a report in which he claims a beneficial action for the serum. Dr. S. W. Hewetson, of Saranac Lake, N. Y., gives the results of experiments with the serum on tuberculized animals (*New York Medical Journal*, November 9, 1895). His experiments were carried on at the Saranac Laboratory, under the personal supervision of Dr. E.

L. Trudeau. On June 8, 1895, the spleen of a slightly tubercular guinea pig, killed twenty-one days after inoculation, was crushed, and distilled water added and the mixture filtered or strained through cotton cloth. Seven guinea pigs were taken, five being test-animals and two, controls. They were inoculated with ten minims of the above liquid in the right groin.

The test animals received each daily subcutaneous injections of six minims of Paquin's serum, except six days, when the injections were given every other day, but were resumed and kept up until the time of death. The average weight of the test animals at the beginning of the experiment was 442 grams; at the end of twenty days the average weight was 403 grams, and the animals lived, on an average, 50.8 days after the inoculation with the tubercular material. The average weight of the control animals was 545 grams at the beginning of the experiment, and was 477.5 grams at the end of twenty days; and the average duration of life was 58.5 days.

From Dr. Hewetson's experiments it would appear that, though emaciation is retarded, the serum has no influence in prolonging the life of tubercular guinea pigs, and the lesions in no way differed from those usually found.

The laboratory experience confirms the views already expressed in the *JOURNAL*, though we would not feel sorry if the results had been otherwise, for we would then feel that Dr. Paquin had laid the world under an obligation for having given it one new resource in the fight against a formidable disease.

A DEPARTMENT OF PUBLIC HEALTH.

Elsewhere in this number of the *JOURNAL* appears a communication from a committee of the American Medical Association relative to the creation of a Department of Public Health, the head of the proposed department to be a member of the President's cabinet. As Congress has just resumed its sittings, it is an opportune time for physicians to carry out a recommendation of the circular by writing to their respective congressmen urging them to support the bill.

CORRECTION.

By a regrettable oversight, an article on the Technique of Intubation, incorporated in the paper of Dr. A. McShane in the October number of the JOURNAL, was erroneously attributed to Dr. Jos. O'Dwyer. The real author of that valuable paper was Dr. W. P. Northrup, of New York City. The original paper was read before the British Medical Association, Bristol, 1894.

AT the Southern Surgical Association, held in Washington, D. C., November 14, the following officers were elected: President, Ernest S. Lewis, of New Orleans; first vice president, J. Tabor Johnson, of Washington; second vice president, Richard Douglass, of Nashville; treasurer, A. M. Cartledge, of Louisville; secretary, W. E. B. Davis, of Birmingham, Ala. Nashville was chosen as the next place of meeting.

THE last monthly report of the Shreveport Charity Hospital shows: During the month there were treated 170 patients from the State and 70 from the city. Remaining under treatment from last month, 28; received during the month, 130. The total patients to be accounted for was 237. Recovered and discharged, 110; improved, 31; died, 9; remaining under treatment—male, 177; female, 60. This report is very flattering and reflects credit upon the officials of the hospital.

Notes on Dermatology.

BY ISADORE DYER, PH. B. (YALE,) M. D.

PROFESSOR OF DERMATOLOGY, NEW ORLEANS POLYCLINIC; LECTURER AND CLINICAL INSTRUCTOR OF DERMATOLOGY, MEDICAL DEPARTMENT TULANE UNIVERSITY; DERMATOLOGIST TO CHARITY HOSPITAL, ETC.

Satisfactory results are reported in the use of serum treatment of syphilis. Dr. Vievirovsky, of St. Petersburg, has

subjected several cases in the eruptive stages of syphilis to inoculations with serum obtained from the blood of other patients affected with syphilitic gummata. The serum was filtered, and one-half of 1 per cent. of carbolic acid added. The injections employed were about ten cubic centimeters, which were made into the subcutaneous tissue beneath the angle of the scapula. From twenty-one to twenty-three injections were made in each case. (Med. Week., Vol. III, No. 40, p. 480.)

At the recent meeting of the American Dermatological Association, it was the opinion of the majority present that ichthyol afforded the best results in the local treatment of erysipelas.

Unna (of Hamburg) uses the following paste to limit the inflammation following erysipelas for hypertrichosis and nævi: Ichthyol, gr. xx; starch, gr. xx; albumen, gr. i; water, gtt. xxx; M. Sig. To be painted on at night.

It has been recently suggested that women with sensitive skins disposed to the formation of bullæ on exposure to sunshine should wear veils of some yellow material, on the ground that the production of these lesions was due to the ultra-violet rays of light which the yellow would intercept.

It may be accepted as an axiom in dermatologic therapy that ointments or oily applications are contra-indicated in vesicular or bullous eruptions. Dusting powders, desiccant lotions or pigments are far more efficacious.

The Board of Health of Hawaii have undertaken a systematic investigation of the amenability of leprosy to treatment. A special committee of the board has been appointed, with headquarters at Kalihi, in the outskirts of Honolulu. Dr. N. B. Emerson, at this address, is the corresponding secretary. A number of well marked cases of leprosy have been separated, and have been placed under the most favorable hygienic and sanitary conditions. Ample provision for medical and other baths has been made. It is intended to experiment with all modern suggestions in the therapy of this disease. With such a preparation something favorable in the treatment of the leper should result, even if amelioration should only be obtained.

Dr. Geo. T. Eliot (New York) has demonstrated the micro-organism responsible for seborrhœic dermatitis beyond refutation. The fungus has been isolated, cultivated, inoculated and the disease reproduced. As dandruff is most often the result of this disease, the frequency and obstinacy of that condition can now readily be understood. As seborrhœic dermatitis (the *seborrhœic eczema* of Unna) causes alopecia (in 99 per cent. of those who are bald, says Eliot), it would be well to begin a crusade for the sake of the next generation.

The barber shop and community use of the hair brush at home and abroad are probably the more salient points of attack.

Mr. W. B. Saunders, of Philadelphia, will publish within the next six months "An American Text-book of Genito-Urinary and Skin Diseases," to be edited jointly by Dr. W. A. Hardaway, of St. Louis, and Dr. L. Bolton Bangs, of New York.

Dr. Gustav Singer, of Vienna, argues the relationship of scleroderma to myxœdema, because he noticed, in a case reported, that there was marked decrease in the thyroid gland associated with the scleroderma. A certain resemblance exists between scleroderma and the pachydermia of myxœdema. Histological examination of the thyroid gland pointed in the same direction. At the autopsy the connective tissue was found to be much more than is normal in both lobes of the gland. The doctor concludes that the rational treatment of scleroderma consists in the administration of the thyroid preparations (*Med. Week*, Vol. II, No. 45).

Gottheil (*N. Y. Med. Jour.*, Sept. 28, 1895) relates two cases of lesions resembling chancres, one a non-specific sore, which became indurated from cauterization, the other a gummatous syphilide. He uses these as a basis for a classification of "pseudo-chancres," in which several possible conditions are related.

He concludes, that (1) there is no characteristic sign, and no characteristic combination of signs, that enable us to diagnose a chancre from a lesion alone; (2) only the advent of other syphilitic symptoms enables us to form an opinion as to the presence of systemic infection; (3) almost all the alleged cases of syphilitic reinfection are of doubtful validity (rather a strong proposition from so small a premise—Dyer), and most of them are pseudo-chancres belonging to one of the possible accidents named.

Sabaraud has succeeded in 100 cases of alopecia areata with the following treatment:

1. Apply cantharidal collodion. The next day incise and trim the blister formed.

2. Apply to the raw surface a solution of nitrate of silver, 1 in 15.

Cantrell speaks well of the oil of copaiba in the treatment of psoriasis. He administered five minims three times a day. (*Therapeutic Gazette for June, 1895*).

Chloral hydrate in oil, kept applied, is recommended for aborting furuncles.

In the November number of the *Journal of Cutaneous and Genito-Urinary Diseases*, Dr. P. A. Morrow reports an in-

teresting case of urticaria pigmentosa of over twenty years' duration. At the beginning of the case there was a distinct history of its occurrence within a month or two after vaccination and apparently associated with this as a morbid factor.

Cases of pigmented urticaria are rare in themselves, and the occasion of a chronic vaso-motor disturbance is seldom isolated from the history. In the light of our present observation with reference to vaccination eruptions, the history and detail of Dr. Morrow's case are interesting.

A new work on leprosy has just been published by John Wright, Bristol, England. The authors are Drs. Armand Hansen and Looft. Anything that Dr. Hansen (the discoverer of the bacillus lepræ) may contribute to this subject must be valuable, as the reviews would indicate.

Abstracts, Extracts and Annotations.

MEDICINE.

PSEUDO-CONTINUED FEVER.

By DR. JOAO VINCENTE TORRES HOMEM.

The sole difference between pseudo-continued and simple remittent fever is, that in the former the diminution of temperature is barely some tenths of a degree (Centigrade), rarely more than half a degree, so that it is very difficult and at times impossible to verify the existence of remission. I have observed cases where high fever continued during two, three, or more days, without any explanatory lesion or the manifestation of any other symptom leading to the presumption that it was a case of even mild typhoid fever in the first stage. It is in such cases that a dose of quinine, given after the promotion of profuse perspiration by means of diaphoretics, clears up the diagnosis, the pyrexia becoming manifestly remittent.

The pseudo-continued type in malarial fevers is very rare with us, and, in proportion as genuine typhoid is becoming more frequent it grows rarer still. Yet it is incumbent on us not to lose sight of it, inasmuch as the omission of appropriate treatment in such instances means the death of the patient within a few days. I saw, in the hospital of Nossa Senhora d'Ajuda, a young Brazilian, twenty-four years of age, who had had fever for two days, and who complained of an acute and very intense pain in the right hypochondrium; the liver was

enlarged, and, believing it to be a case of acute hepatitis, I treated the patient accordingly. Two days after the use of leeches at the verge of the anus, wet cups and fomentations with mercurial ointment applied to the hepatic region, and calomel and nitre in large doses, all the local phenomena had disappeared, but the fever continued without appreciable remission. I then decided to give three twelve-grain doses of quinine in the course of the day, dissolved in sulphuric lemonade. After the third dose the thermometer fell to 97.2 deg. and the patient's body was bathed in profuse perspiration. I then ordered two tablespoonfuls of *Agua Ingleza* every hour, and good meat broth. The next day at 10:30 A. M. the temperature was 98.6 deg.; I gave twelve grains of quinine; between 5 and 6 o'clock in the afternoon the young man had shivering-fits and head pains, and the temperature rose to 101.6 deg. There was not the least doubt that it was a case of malarial infection, revealed at its beginning by a continued fever and afterward by an intermittent paroxysm—thanks to the effect of specific medication. The following morning the thermometer indicated 98.6 deg.; the patient took eighteen grains of quinine, and convalesced rapidly without further paroxysms.

A young mulatto entered the clinical ward of the hospital, presenting a very intense febrile reaction, with all the characteristics of the fever which precedes the manifestation of variola. Two days elapsed, and the fever continued with the same intensity without the eruption appearing, in spite of the therapeutic measures adopted to that end. The tongue, which at the beginning was still rosy and moist, became furred and dry. I ordered the patient a purgative of calomel, and, after it had operated, resorted to quinine. A few hours after the second dose of this drug the temperature, which until then had stayed at 104.4 deg. fell to 101.5 deg.; it remained at this point until 9 A. M. of the next day, when the patient took eighteen grains more of quinine, and in the afternoon the thermometer indicated 99.1 deg. The specific treatment was employed on a decreasing scale for three days longer, not because any paroxysm had appeared, but for the purpose of making the cure radical and certain.

In certain cases pseudo-continued malarial fever is accompanied by congestion of some important viscus, like the brain, cord, lung, etc., and diagnosis at the outset becomes very difficult. Pleuro-pulmonary hyperæmia especially leads the physician to think of a simple pneumonia, inasmuch as the patient complains of severe stitch in the side, cough and dyspnœa, and spits blood; if together with these symptoms we take the in-

itial chill, which is almost never wanting, and a temperature of 104 deg. or 104.5 deg., the error of diagnosis becomes pardonable. Yet there is, in these difficult and embarrassing cases, one circumstance of great value, to which the physician should always attend, for it greatly enlightens his judgment, or at least puts him on his guard—namely, the absence of physical signs, especially those furnished by auscultation, which are present in a true pulmonary inflammation. There is no fine crepitation, even when the patient coughs; there is no bronchial respiration nor bronchophony; the ear barely perceives a very fine friction sound, superficial and circumscribed (due to the dryness of the pleura), and weakening of the respiratory murmur (due to the diminution in capacity of the pulmonary vesicles, connected with excessive fullness of the vessels which pass over their walls).

There entered the hospital of Nossa Senhora d'Ajuda a patient in exactly this condition; he had an intense and prolonged chill; an acute and pricking pain below the right nipple, cough, dyspnoea and extreme febrile heat (105.5 deg.) were present. The interne who received him (one of the most distinguished students of the sixth year of our university), in spite of the absence of the characteristic physical signs, diagnosed a pleuro-pneumonia and prescribed accordingly. The next day I diagnosed pseudo-continued malarial fever complicated by pulmonary congestion, and prescribed the sulphate of quinine exclusively for the space of four days. The patient, who was a young negro and very robust, recovered promptly.

In February, 1873, I saw a patient in Sao Christovao who presented a very singular array of symptoms which envired the diagnosis with serious difficulties. He had high fever, which dated from forty-eight hours back, was somewhat delirious, and had incomplete paralysis of the upper and lower extremities and the bladder, accompanied by general hyperæsthesia; the slightest pressure made on any part of the body, particularly on its upper half, excited cries of pain. There was slight congestion of the liver and spleen, the tongue was slightly furred and the bowels constipated. At first sight it seemed a case of spinal meningitis; but the absence of opisthotonos, the high degree of fever (105.2), the hepato-splenic congestion, and above all the very important circumstance of these symptoms having appeared rapidly, reaching their maximum gravity in two days, led me to believe that it was a malarial pyrexia of a continued type, attended by hyperæmia of the parts contained in the spinal canal. The treatment I advised, and which produced splendid results, was as follows: Twelve leeches to the verge of the anus; twelve wet cups along the spine; calomel

in purgative doses; and then half a drachm of quinine in solution, given in three doses. Twenty-four hours after this treatment the patient was extraordinarily improved. The quinine was continued for several days, in diminishing doses, and convalescence was manifest twelve days after.

In the treatment of continued malarial fever, quinine should be given as soon as the diagnosis is established, even though the febrile reaction be intense. But it is important for the physician never to forget that before administering the precious specific he should fulfil certain previous indications—a condition at times indispensable to the absorption and action of the drug: he must combat the gastro-intestinal disturbance by means of an emetic and cathartic; remove visceral congestion by blood-letting, general or local, profuse or moderate, in accordance with the extent and severity of the hyperæmia, age, sex, temperament, and other individual peculiarities of the patient, and according to the condition of the pulse and date of the disease.

There are continued and pseudo-continued pyrexias observed in Rio de Janeiro which are not of malarial origin. The fevers denominated by the older authors synochal, angeiosthenic, gastric and bilious, are likewise met with here, produced by general morbigenic causes. Chill, insolation, dampness, irregularities of diet, indigestion, etc., often give rise to the appearance of febrile reaction, ordinarily of little severity, accompanied by various symptoms connected with the organs, the functions of which are by preference deranged. The digestive system is that most frequently compromised in these cases; sometimes it is the stomach that suffers, and the patient presents all the symptoms inherent to gastric disturbance (gastric fever); sometimes it is the biliary system, and then there is an excess of bile thrown into the small intestine, part of which flows back into the stomach; the furred tongue assumes a yellowish color, there is great bitterness of the mouth, frequent nausea, and at times bilious vomiting and diarrhœa; the liver is a little enlarged (bilious fever, gastro-bilious fever). In other cases the temperature is very high, the face becomes flushed and red, the eyes injected and weeping, the headache is intense, the pulse strong, full, hard and frequent (angeiosthenic fever of the older authors, inflammatory fever). It is not rare to meet in practice with a certain number of persons who, under the influence of the most insignificant causes, become feverish for several hours, without presenting any morbid symptoms except elevation of temperature, frequency of pulse, and a certain degree of malaise which obliges them to seek repose (*febris ephemera*); this morbid condition is nearly

always due to sudden checking of perspiration from a chill, and yields promptly as soon as the functions of the skin are re-established.

Simple gastric fever, according to the view expounded in the preceding paragraph, yields in twenty-four hours, or two days at most, after the use of emetic-cathartics and acid diluent drinks. An emetic of ipecac and five or ten centigrammes of antimony—thirty or forty grams of sulphate of magnesia in case the first prescription does not produce large evacuations—and lemonades afterward, are the means to which the physician should confine himself. If in spite of these methods the fever continues, with exacerbations at certain hours of the day, the use of quinine becomes necessary. Any one waiting for the febrile reaction to become clearly remittent or intermittent before resorting to this remedy will oftentimes be painfully undeceived by seeing a series of grave symptoms due to a pernicious paroxysm make their appearance. In many cases, as soon as the emetic and cathartic have acted, I make use of quinine, even though the disease dates from a few hours only; it is a method of prudence and precaution the more commendable according as the patient's condition is satisfactory and the axillary temperature near the normal. In a city like Rio de Janeiro, where the malarial element is always predominant in the medical constitution, and where the complications produced by it in the course of acute diseases are so frequent as well as so symptomatically various, where malarial poisoning at times reveals itself by a single simple febrile paroxysm, and a pernicious paroxysm follows this with nothing to foretell it, the practice which I pursue, and which I always counsel to my pupils, can not be without advantage. After the first dose of quinine—never less than one gram for an adult—we should wait for the further progress of the disease to indicate whether or not to insist upon the use of the remedy. How often does a patient present himself with a simple fever, apparently not of the slightest gravity, attributed by him to the checking of perspiration (commonly termed a cold), which notwithstanding is the expression of a paroxysm due to malaria! How often does the sulphate of quinine, opportunely administered—not as being imperatively demanded, but as a simple precautionary measure—prevent a pernicious attack!

There entered the University Hospital a Portuguese lad, fourteen years old, a clerk in the Prahia dos Mineiros, with fever and pain in the head. Except the high temperature (102.6 deg.), the frequency of the pulse (104), and the frontal headache (which was not severe), no morbid symptom was observed. The abdominal viscera were normal; the

tongue was slightly coated. The disease dated scarcely eight hours back. The interne who received the patient prescribed at 5 P. M. a diaphoretic mixture, which produced copious perspiration. At the visit next morning I found the boy entirely apyretic and without headache; he considered himself well and asked for food. I prescribed one gram of sulphate of quinine, which was taken in my presence, for he refused it on the ground that there was nothing more the matter with him.

This circumstance happened before a large number of students, and was noticed on account of the severity with which I threatened to punish the child, who obstinately rejected the vessel containing the remedy, not knowing that he was rejecting life. At 3 P. M. the patient was seized with an intense chill, followed by fever; the interne found him somewhat delirious, with the liver a little congested, and an axillary temperature of 103.6 deg.; a severe paroxysm had appeared, notwithstanding the dose of quinine taken at 9 in the morning. Is it not probable that this paroxysm would have been very grave, if not even fatal, had not the drug been prescribed? The third attack was manifested only by some elevation of temperature (100.8 deg.). At the end of ten days the lad left the hospital, cured.

Let us suppose for a moment that my patient had had nothing but an ephemeral fever, caused by suppression of perspiration, and that the dose of quinine he was forced to take was unnecessary; what harm would have resulted? Absolutely none. This and many other cases I have observed, in private practice as well as in hospitals, led me to give my pupils the following advice: "Whenever you observe high febrile reaction unaccompanied by any lesion which can account for it, give the patient a dose of quinine as soon as he becomes apyretic; you will never have occasion to regret such procedure; on the contrary, you will avoid cruel deceptions for your understanding, and acute tortures for your conscience."

When the fever assumes the bilious character, without, however, being the bilious remittent fever of the tropics, calomel in purgative dose should be employed at once, or podophyllin, the cholagogue properties of which are well known. After the appearance of bilious stools thus produced, we should have recourse to drinks containing nitre and to strongly acidulated lemonades. If the liver is greatly enlarged, due to active congestion of its parenchyma, the physician can not dispense with the use of wet cups to the hepatic region, followed by resolvent applications of mercurial ointment and extract of belladonna. Ipecac is always indicated in this case, before or after the calomel, when the tongue is thickly coated.

Although I recognize that mild bilious fever, very different in its course and its gravity from the so-called bilious fever of the tropics, may in some cases be due to other causes than the malarial miasm, and the patient's cure be effected without the use of quinine, yet, from fear of a pernicious paroxysm, which may supervene insidiously without being announced by simple intermittent attacks, it is very rarely that I do not resort to this heroic treatment after the vomiting and bilious stools produced by ipecac and calomel.

This practice, which I have always followed, is that followed by the most eminent practitioners of Rio de Janeiro; even those who most fully embrace the opinion of Felix Jacquet, who admits the existence of a malarial bilious fever and a climatic one, do not lay aside quinine.

In a great number of cases irritability of the stomach does not allow the administration of the drug by the mouth, since it is immediately rejected by vomiting; we should then resort to enema, dissolving the quinine in a small amount of fluid, and adding a few drops of laudanum.

In the inflammatory or angeiosthenic fever—so termed on account of the strength and fullness of the pulse, the high temperature, intensity of the headache, redness and flushing of the face, and injection and brilliancy of the eyes—the physician is often obliged to resort to blood-letting, especially when the patient is young, robust, and of sanguine temperament. General bleeding is only exceptionally employed; depletion is almost always effected by means of leeches applied to the verge of the anus.

Tartar-emetic in the dose of ten centigrammes, calomel and nitre are of great service in this species of pyrexia; sulphate of quinine is almost always employed among us, either because the course of the disease renders it indispensable, or as a measure of prudence and precaution for the reasons already set forth.—*Medical Age*.

THE REAL VALUE OF THE MEDICINAL PEROXIDE OF HYDROGEN PREPARATIONS FOUND IN THE MARKET.

In this valuable article the writer states that a standard solution of medicinal H_2O_2 must answer the following tests:

1. It should contain at least fifteen volumes of available oxygen.

2. The quantity of free acids contained in 100 cubic centimeters should require not less than 1 cc. and not more than 3 cc. of normal volumetric soda solution, to be made neutral. Such a small quantity of free acid is not objectionable.

3. It should not contain any soluble baryta salts.

4. It must be free from sediment.

The different brands which he found on the market being submitted to the above tests, gave the following results:

BRANDS OF H ₂ O ₂ SOLUTIONS.		Volume of Available Oxygen determined by means of a solution containing 5.665 Grammes of Permanganate of Potash per liter of distilled water	Residue obtained from 100 CC. of Peroxide of Hydrogen dried at 120 degrees C.	Acidity expressed in Cubic Centimetres of Normal Volumetric Soda Solution for 100 CC. of Peroxide.	Baryta found in Soluble Baryta Salts contained in 100 CC. of Peroxide.
No. 1.	John Bene's H ₂ O ₂ (Medicinal)	10.50	0.1886	2.19	None.
No. 2.	HYDROZONE.....	27.35	0.2180	3.11	"
No. 3.	Larkin & Scheffer's H ₂ O ₂ (Medicinal)	9.65	0.1206	6.75	"
No. 4.	Mallinckrodt's " "	9.55	0.1408	1.43	"
No. 5.	MARCHAND'S " "	16.55	0.564	1.29	"
No. 6.	McKes-on & Robbins' " "	10.95	0.0540	0.44	"
No. 7.	Merck & Co.'s " "	0.50	0.2418	4.57	"
No. 8.	Oakland Chem. Co.'s " "	10.50	0.0382	0.34	0.0017
No. 9.	Peuchot's " "	10.60	0.4674	1.77	0.0018
No. 10.	Powers & Welghtman's " "	8.40	0.0830	2.03	None.
No. 11.	Pyrozone, 3 per cent. " "	11.20	0.0534	0.76	"
No. 12.	Rosengarten & Son's " "	3.10	0.1002	0.25	"
No. 13.	Smith, Kline & French Co.'s " "	6.15	0.0880	2.6	"
No. 14.	E. R. Squibb's " "	12.40	1.004	12.04	"

By referring to this table it is easily noticed that brands No. 7 and No. 12 are valueless.

The brands No. 8 and No. 9 are not fit for medicinal uses, owing to the fact that they contain traces of soluble baryta salts.

The brand No. 3 has a heavy sediment of sulphate of baryta, which may be considered inert toward the system, but it is certainly detrimental to the keeping qualities of this preparation.

Brand No. 14, which is sold as a ten volume solution, is really twelve volumes, but it is too acid.

Brand No. 5, which is sold as a fifteen volume solution, is really 16.55 volumes, viz.: About 10 per cent. above the standard.

The brand No. 2, which is sold without any mention of volume, is really a 27.35 volume solution, viz.: Ninety per cent. above the standard.

None of the other brands come up to the standard, but, on the contrary, they run from 35 to 55 per cent. below.—*Philadelphia Times and Register, December 15, 1894.*

LACTOPHENIN: ANTIPYRETIC AND ANALGESIC.

In Sajous' Annual (1895) of the Universal Medical Sciences, Dr. Dujardin-Beaumetz, editor of the department of therapeutics (Vol. V, A, page 92), gives this estimate of the therapeutic availability of lactophenin:

Lactophenin.—This substance is allied to phenacetin, both chemically and therapeutically. It is a crystalline powder, with a somewhat bitter taste, and is very slightly soluble in water. According to Landowski, who tried it in Proust's clinic,* it acts precisely like phenacetin, when both are given in 0.6 gram ($9\frac{1}{4}$ grains) doses, but 1 gram ($15\frac{1}{2}$ grains) of lactophenin produces a decided hypnotic effect. Von Jaksch,† who employed it in doses of from $\frac{1}{2}$ to 1 gram ($7\frac{3}{4}$ to $15\frac{1}{2}$ grains) in typhoid fever, found that it always rapidly reduced the temperature, and also that it exercised a calming effect when there was restlessness and delirium. Jaquet, of Basel,‡ employed it in pneumonia, erysipelas and influenza, and found it nearly always reduced the temperature rapidly, and for some considerable time, without any serious symptoms being produced; especially there was never any weakness of the heart's action or of respiration, nor any dyspnoea or collapse observed, and the pulse, as a rule, became fuller and slower, while the breathing remained unaffected. The great advantage of this drug appeared to be its calming, hypnotic effect, together with its reduction of the fever. The hypnotic value of lactophenin, Jaquet estimates as intermediate between that of sulphonal and that of urethane. The usual dose employed by him was from 0.5 to 0.7 grams ($7\frac{3}{4}$ to $10\frac{3}{4}$ grains). H. Strauss§ tried the drug as an antipyretic in twenty-five cases, finding it preferable to any other on account of its harmless nature. In typhoid fever it seemed to have a special calmative effect on the nervous system. Roth|| used it in several cases of acute rheumatism, finding it equal to the salicylates. The pain and swelling disappeared within twenty-four to forty-eight hours, the temperature continued low, and no unpleasant effects were observed, though large doses were given.

RATIONAL THERAPEUTICS OF CHOLERA INFANTUM.

By DR. GUSTAVUS BLECH, M. D., St. Louis.

No strict rules can be given for the treatment of disease. It is for this reason that so many physicians say we do not

* Lancet, London, April 21, 1894.

† Centralblatt für Gynäkologie, Leipzig, Nov. 14, 1894.

‡ Correspondenz-blatt für Schweizer Aerzte, Basel, May, 1894.

§ Therapeutische Monatshefte, Berlin, September, 1894.

|| Wiener Klinische Wochenschrift, Vienna, September, 13, 1894.

treat a disease, but we treat an individual. True enough, we treat the individual, but what we have most of all to consider is the disease. The individual will dictate us alterations and modifications in our treatment.

A general plan of treatment may be outlined, however, and I will try to do so in regard to one of the most fatal diseases of babyhood—cholera infantum. There is a certain philosophy in therapeutics which I would frame in the three following rules: (1) Remove, if possible, the disturbing causes; (2) treat symptoms which *per se* are liable to endanger the life of the patient; (3) sustain vitality.

Clinical experience, shows that this disease is of a grave character, producing death in a large proportion of cases. Heat *per se* is not the immediate cause of this disease, but it influences its course considerably. Therefore, gastric or intestinal disturbances in summer demand a closer attention than those which occur during the colder season. Cholera infantum is a disease met even in the palaces of the rich, although not so often as in the tenement houses of the poor, which fact proves again that bad air, filth and lack of ventilation are also of a predisposing influence, as well as an obstacle to a quick cure. The mortality in the tenement houses is larger than that of the richer parts.

If we consider the aforesaid, we shall first of all, as regards the treatment of this disease, have to restrict diet.

As soon as called to a case of cholera infantum, prohibit, for the first day, any food whatever. Mothers have no right to nurse the little patient either. Strict instructions must be given in that direction, because the timid mothers are often inclined to quiet the crying babies by putting them to the breast.

Remedies are of very little value. Beginning with calomel, salol, and all the newer antiseptics, finishing with subnitrate of bismuth—they have all proved a failure, for none of them work quickly enough.

The treatment as outlined by Dr. Elmer Lee, of Chicago, in his cases of typhoid fever, proved a success in my hands during last summer, and under this treatment I have lost only one patient out of twenty-three, while the monuments of my skill, exercised during the year 1893, are decorating the cemeteries of the State of Connecticut.

So far as I knew, the best antiseptic (which has also a strong tendency to reduce local inflammation) was peroxide of hydrogen (medicinal), until hydrozone was used by me. Hydrozone being twice as strong as Marchand's peroxide of hydrogen (for economical reasons), the latter drug is preferred by me. This remedy can be administered internally as well as externally.

I add a tablespoonful of hydrozone to a pint of water for washing out the stomach. The vomiting ceases, after the first washing, as a rule. If necessary, this procedure can be repeated. If the vital power of the little patient is not too low it can produce no harm. But in every case, no matter how far advanced, I do not omit an irrigation of the bowels, for which purpose I use a soft rubber catheter attached to a common bulb syringe. The catheter is introduced as high in the colon as possible. It is unnecessary to say that the water must first be sterilized. I do not agree with Dr. Lee in using hot soap water. On the contrary, I use cold water, and add to each quart about two ounces of hydrozone. The improvement after the first or second irrigation is marked. If necessary, these irrigations can be repeated every two hours.

Among other remedies there are only two to be employed, morphine and strychnine. Both ought to be administered hypodermically. Their indication is too well known and they are about all we need. No antipyretics should be given. If the fever is very high and if the irrigation of the bowels does not reduce it, the whole body should be washed with alcohol.

The diet for the next twenty-four hours should be very light indeed. Sweet, strong Russian tea is all I allow.

Each individual case will teach us when food can be allowed again.

Since the adoption of this mode of treatment I have met with the most remarkable success, and no honest practitioner should refuse it a trial.—*N. Y. Medical Journal, March 2, 1895.*

FOOD-INFECTION WITH TOXICOGENIC GERMS.

By VICTOR C. VAUGHAN, M. D., and GEORGE D. PERKINS, M. D., Ann Arbor, Mich.

Within recent years there has apparently been a great increase in the number of instances of food-poisoning. This increase has been partly real and partly only apparent. The actual increase has been due to the larger consumption of preserved foods and the wider distribution of food from a given point. When we recognize the fact that the scientific principles of bacteriology are involved in the preparation of every can of preserved food and that this work is done wholly by those who are grossly ignorant of these principles, we can only wonder that harm does not come to the consumer more frequently than it does. Moreover, diseased and damaged articles of food can be worked in preserved preparations and sold as prime goods when they could not be so disposed of other-

wise. We do not claim that this is a fraud frequently practised, but that it has been occasionally resorted to, both in this country and in Europe, has been abundantly demonstrated.

It is not our purpose in this paper to discuss the use of tuberculous meat and milk, or of any other food invaded by specific infection, but we wish to give our attention to those cases of food-poisoning in which the infecting agent is a saprophytic poison-producing micro-organism.

The apparent increase in the number of instances of this kind is due to the fact that the medical profession has but recently learned to recognize this form of food-infection as a cause of illness, or, at least, has been in the possession of the knowledge necessary to convert suspicion into demonstration.

Only a few years ago we were seeking for the cause of the summer diarrhœas of infancy in mysterious telluric and meteorologic conditions, but now we know that these diseases are solely due to infected, and consequently poisonous food. Formerly many cases of food poisoning were supposed to be due to the accidental or criminal addition of some metallic or vegetable poison to the food, and unjust accusation, possibly in some instances unjust punishment, has resulted. Now we know that not only the symptoms of gastro-intestinal irritant, inorganic poisons, but those of typhoid fever and typhus fever, scarlet fever, and other acute exanthemata, and even those of pneumonia, may be closely simulated by the symptoms induced by infected foods.

The effects of poisonous foods as gastro-intestinal irritants are too well known to demand illustrative examples. The production of a continued fever closely simulating typhoid has been repeatedly observed. The following brief extract of a case reported by Gaffky will serve as an illustration:

D., the chemist of the Hygienic Institute at Giessen, did not feel well on the morning of October 10, but in company with assistant B. he visited Frankfort. During the day he had a severe headache, no appetite, and frequent chilly sensations. On returning to Giessen at night he was scarcely able to walk. On the next day he refused all food, was slightly delirious, and had one watery stool. On the 13th his condition showed serious infection. His face was red, his eyes sunken, his temperature 105.2 deg, and he lay in a half-unconscious state. The tongue was heavily coated; the abdomen distended, and painful on pressure. He had five dark brown, later greenish, stools. The urine was concentrated, and contained 2 per cent. of albumen, as determined by Esbach tubes; it gave the diazo-reaction and the indican-reaction and contained white blood corpuscles and numerous granular casts.

From the 13th to the 17th the patient was stupid, but not delirious. The abdomen was greatly distended, and from twenty to twenty-four stools were passed each day, with great tenesmus. The temperature remained high notwithstanding repeated one-gram doses of antipyrin. Sleep was broken and one grain of sulfonal was given at night. The urine remained as before, and the pulse varied from 92 to 100.

From the 18th to the 20th the mental dullness was less marked. Appetite was somewhat improved and the number of stools decreased from eight to ten in twenty-four hours. The amount of albumen in the urine was somewhat decreased and microscopic examination showed fatty casts and white blood corpuscles. Small doses of opium were given by mouth and in suppositories.

On the morning of the 21st hæmorrhage from the bowels, about 300 cc. in amount, occurred. Several doses of opium were given and ice-bags were kept on the abdomen. After the hæmorrhage there were three slightly bloody stools. From this time the improvement was slow, but fairly constant. The fever disappeared October 29.

After recovery, marked anæsthesia of the anterior surface of the thigh developed and remained for some weeks, the anæsthetic area gradually becoming smaller. The hair fell out, mental activity tired, and the eyes were easily fatigued for some months. Two workers in the same laboratory were affected in the same manner, but less severely. The only food or drink which these three men had in common was some uncooked milk taken on the morning of October. 9 D. ordered the milk sent to the laboratory, drank the greater part of it himself, giving B. a small cupful, and the servant drank a little left by the others. The cow that gave this milk was suffering from a bloody diarrhœa. Gaffky found in the stools of the cow, and in those of the patients, a small, highly virulent form of bacillus coli, and to this he ascribes the ill effects. He supposes that some of the liquid discharges from the cow fell on the udder, and thus found its way into the milk.

Gaffky suggests that the epidemic in Christiania in 1888, in which 6000 persons sickened within three weeks, was probably due to milk-infection. Hausemann states that this epidemic was regarded as *morbis sui generis*. It was evidently neither cholera nor typhoid fever. Half of those affected were children, and yet nurslings escaped altogether. However, milk, as an etiologic factor, seems not to have been considered by the attending physicians.

A case of food-poisoning resembling scarlet fever was seen by one of us two years ago and may be briefly reported as follows:

K., a very vigorous man of 34, ate freely of canned salmon. Others at the table with him remarked that the taste of the salmon was peculiar and refrained from eating it. Twelve hours later K. began to suffer from nausea, vomiting, and a griping pain in the abdomen. Eighteen hours after he had eaten the fish Dr. Vaughan saw him. He was vomiting small quantities of mucus, colored with bile, at frequent intervals. The bowels had not moved, and the griping pain continued. He was covered with a scarlatinous rash from head to foot. His pulse was 140, temperature 102 deg., and respiration shallow and irregular. The stomach and large intestines were washed out thoroughly, and ten grains of calomel, soon followed by twelve ounces of solution of magnesia in citrate, were administered, for the purpose of cleansing the small intestines. After these medicines had acted freely K. began to improve. The next day the rash had disappeared, but the temperature remained above the normal for four or five days, and it was not until a week later that he was able to leave his house. The remainder of the salmon was submitted to various tests. The absence of inorganic poison was demonstrated. It was found that the subcutaneous injection of twenty drops of the fluid expressed from the salmon caused evident illness and suffering in a white rat. The only germ that could be found either by direct microscopic examination or by the preparation of plate-cultures was a micrococcus, and this was present in the salmon in great numbers. This germ grew fairly well in beef tea, but the injection of five ccm. of beef-tea cultures of different ages failed to affect white rats, kittens, or rabbits. However, this micrococcus when grown for twenty days in a sterilized egg, after Hueppe's method of anærobic culture, produced a most potent poison. The white of the egg became thin, watery, markedly alkaline, and ten drops sufficed to kill white rats.

The resemblance of the symptoms of food-poisoning, in some instances, to epidemic pneumonia, is well illustrated in the Middlesborough pneumonia epidemic which has been reported by Ballard, and is too well known to require further mention, except to state that 490 deaths resulted.

That Winckel's disease, a septic pneumonia, may be due to infection of the food with the bacillus enteritidis, first discovered by Gärtner in poisonous meat has been demonstrated. Lubarsch has reported such a case in an infant.

The stools were greenish and of bad odor. The child became cyanotic and the respiration increased to sixty per minute. Auscultation and percussion were negative in results. The breathing was wholly costal and the abdomen distended.

The urine contained neither albumen nor hemoglobin. Post-mortem examination showed pneumonia of the left lower lobe, bilateral purulent bronchitis, atelectasis of the right lung, parenchymatous cloudiness of the kidneys, fatty infiltration and engorgement of the liver, and slightly enlarged spleen. All other pathologic conditions were believed to be consequent upon the septic pneumonia. Plates made from the diseased organs developed only the bacillus enteritidis.

It is quite impossible to draw any sharp line between intoxication and infection in the study of the symptoms of food-poisoning. Some of the bacterial poisons are slow in producing their effects, and even when a germ-free preparation is used in our experiments upon animals, it sometimes happens that many hours elapse before any effects are observed, even in cases ultimately resulting fatally. The relation of the germ to the production of the untoward symptoms may, according to the case, be stated in one or the other of the following ways: (1) The chemic poison is generated only and wholly in the food before it is taken; (2) The infecting organism may begin the elaboration of its poisonous products outside, and continue the same within the body. (3) The infection may not result in the production of poisons until the food is taken into the body. The first of these conditions is well illustrated by the "Iron Bridge" cases reported by Ballard. The infecting germ would not grow at a temperature above 86 deg. Of course, animal inoculation with this germ was wholly without result, but cultures grown at 60 deg. were markedly poisonous. It is probable that this condition holds good in a larger number of instances than we suspect. The second condition is the one existing in some cases of poisoning with milk and its products. However, in these the infecting micro-organisms do not thrive in the body unless they be supplied with the food especially suited for them. The complete withdrawal of milk as a food leads to their speedy disappearance. The violent vomiting and purging which result are curative means and should not be checked unless there be danger of death from exhaustion. The most dangerous cases of cheese-poisoning are those in which vomiting and purging do not occur. Some months ago one of us saw some twenty persons who had been poisoned with cream. All but two were vomiting and purging and complaining most vehemently. These were sure that they would die. The two exceptional ones were uttering no complaints. In fact, they were practically comatose, and thorough washing out of the stomach and intestines was resorted to before they realized that they were in danger.

When the third condition mentioned exists, a true infection results. Such is the case most probably in those instances already cited as resembling typhoid fever and pneumonia.

We have been frequently called upon to examine food suspected of having caused untoward effects, and the method followed in these examinations may be of some interest. Whenever there is the slightest possibility that any metallic poison may be present, tests for the same are made. This is always done with canned foods. However, when a teaspoonful or less of ice cream causes vomiting and purging, the idea that these effects can be due to zinc sulphate dissolved in the freezer or to artificially prepared vanillin used in flavoring is simply too preposterous to be entertained by any one acquainted with the quantities of these substances necessary to induce such effects. Ten years ago we went through with all the tests for metallic poison in many samples of poisonous cheese and ice cream, but we no longer waste our time in this manner.

The examination of foods for bacterial poisons can not be made except in a properly equipped bacteriologic laboratory. It is our purpose to merely point out at this time the methods that may be followed. We take it for granted that the one who undertakes work of this kind is already familiar with the ordinary technic of bacteriologic research. The line of procedure will vary somewhat with the kind of food to be examined, the form in which it has been prepared, and the quantity supplied the analyst. All samples should be examined with as little delay as possible after the article has become the object of suspicion. When delay is unavoidable, further bacterial growth should be retarded in the meantime as far as is possible by keeping the suspected article at a low temperature. Germs not present at the time of the supposed poisoning may be accidentally introduced, or non-toxicogenic bacteria may multiply to such an extent that the detection of the harmful organisms is rendered impossible.

As a rule the quantity of food supplied the analyst is not sufficient to allow of the detection or the isolation of the chemic poison directly. To try to find the poison in a few ounces of cheese or a small bit of meat by direct extraction is a task that would be undertaken only by one quite ignorant of the nature of these poisons. In all but exceptional instances in which many pounds of the food are supplied, the portion that reaches the laboratory can only be regarded as the bearer of the germ to the activity of which the poison is due. This germ must be detected, isolated, grown in pure culture, and its toxicogenic properties demonstrated upon lower animals. It should be clearly understood that the most thorough study of the mor-

phologic characteristics of the germ and of the chemic properties of the poison will not suffice without an accompanying determination of the toxicologic action of the cultures. The infectious nature of the bacterium should also be studied.

It should always be borne in mind that the article of food has probably been through several hands before reaching the analyst, some of which may not have been germ-free. In the examination of pieces of meat and cheese the surface should be sterilized with a broad, heated knife or other piece of iron. It has been shown that bacteria deposited on such surfaces penetrate slowly. Then with other sterilized knives sections should be made and one or more small bits taken from the interior should be placed in sterilized bouillon. Not less than a dozen tubes should be inoculated in this way. Three of these should be grown aerobically at ordinary temperature; three aerobically at 37 deg. C.; and three anaerobically at 37 deg. C. It is quite essential that all these conditions of growth should be tried. Some of the toxicogenic germs grow best at relatively low temperature, from 20 deg. to 25 deg. C., and fail wholly to develop at 37 deg. C. Others have their optimum growth at the last-mentioned temperature. Some develop only when freely supplied with air, and others only when the air is excluded.

In the examination of liquid and semi-liquid foods, such as milk, custard, cream, broths, and jellies, small bits or a few drops should be placed in sterilized bouillon and grown under the conditions already mentioned.

A growth having appeared in one or more of these tubes, the bacteria should be examined in hanging drops and in stained mounts. If more than one organism be present, plate cultures should be made, and each germ should again be grown under the conditions mentioned.

The infectious character of each organism should be tested on the lower animals: (1) by feeding; (2) by subcutaneous inoculation; (3) by intraperitoneal inoculation; and (4) by intravenous inoculation. The animals generally employed in these experiments are white mice, white rats, guinea pigs, kittens and rabbits. A given germ may be toxicogenic to one of these animals and not to the others. Mice and kittens are specially suitable for feeding experiments. Young kittens are quite susceptible to most of the bacterial poisons found in milk and its products. The quantity of the bouillon culture, 24 hours old or older, first employed should be relatively large, from one to ten ccm., according to the animal and the method of infection. If these amounts prove active smaller quantities should be tried until the limit is reached.

Next, the action of cultures from which the bacteria have been removed by filtration through porcelain should be tested, and, if these prove active, the effect of different degrees of heat on the toxicity of the cultures should be determined.

If, by the experiments already mentioned, a toxicogenic germ has been discovered, its morphologic, cultural, tinctorial and pathogenic properties may be studied as thoroughly as the investigator may desire. The study of the bacterial poison may also be carried to the same extent.

THE LUNGS OF ONE OF KOCH'S EARLIEST TUBERCULIN PATIENTS.

The appearance found at the autopsy of a Finnish patient who was one of the first to undergo tuberculin treatment at the hands of Professor Koch, in Berlin, are reported by Adami, in the *Montreal Medical Journal* for September, 1895.

The patient was a highly intelligent man, 33 years old, who was treated by Professor Koch at the Victoria Hospital, in Berlin, for fifty-two weeks, in 1890. He had been suffering from hemoptysis, night sweats and progressive emaciation. Marked improvement took place under the treatment; he returned to Finland, and his health was apparently restored. In June, 1893, he came to Canada, where he was employed as a skilled mechanic in the engineering laboratory of McGill University, and remained apparently in perfect health until January of the present year, when his cough, night sweats, etc., returned. He was seized with severe and recurrent hæmorrhages, from the effects of which he died on April 18. At the autopsy firm adhesions were found at both apices, with extensive fibroid changes, together with well encapsulated caseous masses and small contracted cavities with dense envelopes. These changes were undoubtedly signs of the arrest of a fairly extensive tuberculous process which was coincident with the treatment of tuberculin in 1890 or 1891. That the process had only been arrested, and not cured, was evident by the lesions which were distributed through the remainder of the lungs, which consisted of rather large miliary tubercles, broncho-pneumonic in their distribution, together with a large cavity, in the walls of which was found the eroded artery which had been the source of the hæmorrhage. The fact that the recent tubercles were more numerous in the vicinity of the old disturbance makes it almost certain that the second attack of tuberculosis was not a second fresh infection, but a lighting-up of the trouble in one of the old foci, spread by dissemination through the air-passages.

The interesting point about the case is the fact that a tuberculous process as extensive as was indicated by cessation, tubercular pleurisy, and the formation of five or six cavities at the apices had been arrested for four years by a year's treatment in the Berlin hospital.—*Boston Medical and Surgical Journal*.

ANTRAL EMPYEMA OF TUBERCULOUS ORIGIN.

A case of antral empyema, apparently of tuberculous origin, is recorded by J. Kekwick (*British Medical Journal*). The patient, a woman, aged 30, complained of the usual symptoms indicative of antral empyema. The left upper second bicuspid was extracted and a free opening into the antrum made through the socket. For twelve months local treatment combined with change of air and the administration of tonics was carried out, but to no avail, the patient's condition remaining practically unchanged. The pus being of a curdy character and the history of the patient led to a suspicion of tubercle, etc., and on the discharge being examined microscopically, the tubercle bacillus was found in large quantities. Constitutional treatment for tubercle, combined with the insufflation into the antrum every day of powdered iodoform led to rapid improvement in the patient's condition, the discharge becoming less, and the hectic condition which the patient had commenced to acquire being lost. The following reasons are given in support of the diagnosis: (1) The chronic course of the case, with no local causes, such as loose sequestra; (2) the tuberculous character of the pus; (3) the amenability of the disease to iodoform; (4) the history of the patient (uncle died from phthisis; sisters suffering from phthisis, no signs of tubercle in the patient herself, but a queried history of tuberculous cervical glands—cicatrices); and (5) the bacilli in the pus which was washed directly out of the antrum through the nose.—*Medical Record*.

PASTOR KNEIPP'S MEDICAL PRACTICE.

The *Westminster Gazette* of recent date contains an account of the way in which Father Kneipp, of cold water fame, treats his patients at Woerishofen. He could give points, as regards rapidity of diagnosis, to many a dispensary doctor in New York, for the average time which he devotes to each patient is about twenty-four seconds. When receiving patients on a busy day the pastor sits at a long table in a large, plainly furnished room, smoking a huge cigar. He dictates his "pre-

scriptions" to an assistant in a solemn tone, as if he were presiding at a religious ceremonial. Men, women and children of every station in life file past him. In an hour and a quarter he gets through 180 without difficulty. There is no examination and few questions are asked. Indeed, there is little necessity, for cold-water baths and bandages and walks on wet grass with bare feet exhaust the worthy pastor's pharmacopœia. There is one exception—an ointment composed of honey and medicinal herbs for those who suffer from disease of the eye. But then the ointment is a sovereign one for everything, and so Pastor Kneipp manages to break the record as an oculist as well.—*Med. Record.*

TWO CONSECUTIVE ATTACKS OF SCARLET FEVER.

A. T. S., a boy aged 5 years, was taken ill on May 13 last, and when seen, the day following, presented all the symptoms of scarlet fever. The rash was well marked, the temperature high, and the tonsils swollen and injected. It ran a moderately severe course, and desquamation began about the ninth or tenth day, and continued until the eighth week.

At the tenth week, having apparently quite recovered—no kidney trouble having supervened, the urine being free from albumen throughout—the patient was allowed out for a short time, and whilst out was overtaken in a shower of rain, and probably took a chill, as he complained the same night of his throat, and vomited twice during the night. Next morning both tonsils were found to be much enlarged and congested; the temperature was 104 deg., and again a punctate scarlet rash appeared on the chest and back, and rapidly spread over the whole body. It was deep red in color as before and of the boiled lobster type. With this second attack bronchial catarrh and a certain amount of bronchial congestion was present, due, no doubt, to the boy's exposure to the weather. Altogether this second attack was of a more severe character. Desquamation, which was as well marked as before, commenced about the end of the first week, and lasted till about the end of the eighth week, that is to the middle of September, eighteen weeks from the commencement of the first attack.

The case appears to me to be of interest from the somewhat rare occurrence of second attacks of scarlet fever, and in the fact that the rash in the second attack was both present and well marked, and desquamation as perfect and characteristic as in the attack which immediately preceded it. In corroboration of both attacks being genuine scarlatina, I may mention

that in addition to the other well marked symptoms present the rash, which lasted three days and no longer, was in each case followed by desquamation of the ordinary furfuraceous kind on the body, and the usual large flakes from the extremities.—*British Medical Journal*.

FERRATIN; IRON TONIC AND FOOD.

In Sajous' *Annual of the Universal Medical Sciences*, 1895, vol. V, A, 1890-91, Dr. Dujardin-Beaumetz summarized the record of ferratin, the new iron food and tonic reconstructive, as follows: Ferratin is the name given by Schmiedeberg (1) (2), of Strasburg, to that combination of iron which is found in the normal tissues and which is stored up in the latter as a reserve from which it may be drawn from for the formation of blood. He has succeeded in producing this substance, by artificial means, in the form of a fine powder of red-brown color, like oxide of iron. Two forms are known to commerce, the one simple and insoluble in water, the other a sodium compound which readily dissolves on stirring after being allowed to stand a little while in water. The latter must be as free as possible from lime, otherwise an insoluble calcium compound is formed. Ferratin, in contradistinction to those compounds of iron hitherto in use, is readily assimilated and does not produce any unpleasant disturbances in either the gastric or enteric functions, even when used for a lengthy period; indeed, in some cases its exhibition seems to produce improvement in the appetite and regularity in defecation. As a portion of the substance is decomposed by the acid gastric juice and also by sulphuretted hydrogen, a sufficient quantity of ferratin must be ingested to leave a surplus in the bowel-tract so that the organism may pick up as much as it requires. There is no necessity whatever to anticipate overloading of the organism with the iron, as absorption and excretion appear to be mutually controlling. Excretion does not take place through the kidneys. The daily dose for adults is 1 to 1.5 grams ($15\frac{1}{2}$ to $23\frac{1}{4}$ grains). Acids should be avoided, but no other restrictions are necessary. Schmiedeberg points out that ferratin is first and foremost a food, and its use is indicated in all cases in which nutrition and blood-formation are unsatisfactory.

Banholzer, of Eichhorst's clinic (3) (4), relates his clinical investigations with this preparation. In anæmia following

(1) *Archiv für Experimentelle Pathologie und Pharmacie*, Leipzig, 23, Nos. 2 and 3.

(2) *Provincial Medical Journal*, Leicester, Eng., April 2, 1894.

(3) *Centralblatt für Klinische Medizin*, Leipzig, January 27, 1894.

(4) *British Medical Journal*, February 17, 1894.

acute disease, the hæmoglobin was quickly increased (over 5 per cent. in eight days), as also the number of red cells. In chlorosis the same results were visible even in a more marked degree. The general condition was improved, and the increase in weight, in most cases, considerable. The good effects on the appetite were obvious. When compared with Bland's pills, which also give good results, ferratin was found to lead to a greater increase in the hæmoglobin. John Harold (5) found that in three cases of severe anæmia the preparation appeared to exert a remarkable hæmatinic effect; it did not interfere with digestion, or produce any constitutional disturbance. In one of the patients, iron, in the form of a scale-preparation, or as reduced iron, had been previously given for twelve months without apparent benefit.

Germain Sée (6) has also tested ferratin, and finds that it can be employed in men apparently healthy, or in children and chlorotic subjects, the curative action not being interfered with by injurious secondary effects, as is often the case when ordinary ferruginous preparations are used. The dose used by him is from 0.05 to 1.5 grams ($\frac{7}{8}$ to $23\frac{1}{4}$ grains) two or three times a day. Each dose contains about 7 per cent. of iron. Marfori (7) states that care should be taken not to associate it too closely with acid materials. Hugo Wiener (8) reports twenty cases, in which it produced favorable results.

PRELIMINARY NOTICE ON THE SOURCE OF MALARIA.

By IRVING H. BACHMAN, PH. D.

The investigation on the source of malaria has had the writer's attention for over two years, and in that time a large amount of clinical testimony has been collected from all known malarial districts in North America; the final report, however, will hardly be ready for publication before next year, but from the work already completed certain facts have been obtained which will be embodied in this short notice.

The introduction of artesian wells, first by the railroad companies who desired a larger supply of water than had hitherto been available, and the accidental use of that water by the people in the immediate vicinity, soon produced a marked diminution of malarial trouble in those localities. The artesian supplies were, on the whole, so satisfactory to the railroads that their introduction became very rapid, and in a few years

(5) Practitioner, London, August, 1894.

(6) La Presse Medicale, Paris, August 25, 1894.

(7) Anali de Chimica e di farmacologia, Milan, February 1, 1894.

(8) Prager Medizinische Wochenschrift, Prague, April 18, 1894.

most of the South Atlantic lines depended upon this source of water supply. The evidence that in the exclusive use of the deep-seated waters there was entire immunity from malarial trouble was apparently so incontestible that I determined upon a critical examination of all waters known to produce malaria and those that in malarial districts were proof against it; this examination is not only chemical, but biological and pathological.

In the present state of our knowledge we do not expect to be able to draw a sharp line between waters that produce malaria and those proof against it by purely chemical analysis, nor, on the other hand, can we hope to identify by biological examination the protozoa producing that trouble; but we may by the former succeed in isolating certain toxic products peculiar to those waters only, and by the latter a certain line of testimony that, in conjunction with the chemical investigation, will yield very valuable results. The work thus far has proven satisfactory beyond expectation, and, from the work already done and the character and amount of evidence before me, I am justified in stating that the long-current belief that the source of malaria is in the air is in error.

The germ, which is of soil-origin, is strictly a protozoa, and reaches its highest development in low, moist ground, with a favorable temperature. Surrounded by the proper soil-conditions, this protozoa passes from one stage of life into another with considerable rapidity; so that in the present state of our experimental knowledge it is impossible to identify it, nor is it probable that by culture we shall be able to produce the accepted Laveran germ outside of the human system.

As a rule, the potable water from the malarial districts is derived from driven wells not over twenty-two feet deep, in soil with clay or some other impervious substrata, which water is generally cool and palatable, often sparkling clear, but more frequently a little turbid. This water is filled with an incalculable number of these germs in all stages of development, and it used as a potable water they naturally find their way into the system through the alimentary channel. This protozoa passes through so many forms or stages of life that in some stages it is light enough to float and be transported by the moist air of low grounds, but in this state it is comparatively harmless except under most extraordinary conditions; it is not until the surface-water is used that the real mischief begins, when, by reason of higher development, it has become much more virulent than that floating in the air. A very short period of incubation is sufficient to develop a severe case of malarial fever in the new-comer who uses the surface-water.

From personal observation I know that the exclusive use of pure, deep-seated water affords entire immunity against malaria in sections of country where no white man dared live using the surface-water. Nor must it be understood that the exclusive use of pure water simply fortifies and strengthens the system against the attack of the germ. The water is the primary cause of infection, which acts as the direct carrier of the germ into the system through the intestinal tract.

The impression that malaria is caused by purely atmospheric influences has become so fixed in our minds that, unless we come in actual contact in the evidence produced in the use of pure water as against that heretofore used, the physician will, in all probability, be very slow to allow himself to be convinced that the word malaria (*mal*, bad; *aria*, air) is a misnomer, and that malaqua (*mal*, bad; *aqua*, water) is the word that should be used to convey the pernicious effects known under the name of malarial fever.—*Medical Bulletin.*

THE TREATMENT OF FŒTID EXPECTORATION BY THE VAPOR OF COAL TAR CREASOTE.

Dr. Arnold Chaplin has made an important communication on this subject (*Brit. Med. Journ.*, June 22, 1895). The treatment of fœtid expectoration, especially when occurring in bronchiectasis, has hitherto been extremely unsatisfactory. The administration of drugs by the mouth has proved of little service. Ordinary inhalations are of no use. The mode of treatment by intra-laryngeal injections of antiseptics, such as guaiacol with menthol and olive oil, while attended with benefit in some cases, has not been altogether a success. Seven cases have been treated by Dr. Chaplin's method at the Victoria Park Hospital with great benefit. In all of them the general condition so far as regards cough, amount of phlegm, dyspnoea, hectic and bodily strength has manifestly improved. In six the fœtor of the expectoration entirely disappeared, and in two had not returned two months after the treatment was terminated. The treatment consists in submitting the patient, in a small room made as air tight as possible, to the fumes of the vapor of coal tar creasote. The inhalation at first lasts half an hour, and later is increased to an hour or an hour and a half. The vapor is penetrating and capable of reaching the dilated bronchus; it is irritating, and by inducing cough causes expulsion of the retained and decomposed matter, and it is antiseptic and does something toward rendering the bronchiectasis free from the putrefactive germs which cause the

fœtor. Under the influence of the vapor the patient coughs up a large quantity of phlegm even when the tubes are supposed to be empty. This residual phlegm is horribly foul, and continues to be expelled during the sitting. At the first two or three sittings the phlegm is profuse and fœtid, but subsequently it becomes smaller in amount and less foul, until after one to four weeks the odor has nearly disappeared and the amount expectorated is only trifling in amount. At the end of the treatment the amount of expectoration sinks almost to zero and the fœtor quite disappears. If the chest of a patient who has undergone this treatment be examined, it will be found that where before there were only occasionally the physical signs of a bronchiectasis, the latter are now constantly in evidence. There are some practical difficulties in the way of carrying out the treatment which it is well to know. The fumes have an intensely irritating effect on the nasal and ocular mucous membranes. The fits of coughing at first induced are very troublesome. There is considerable difficulty in inducing the patient to continue the treatment after the first or second sittings, or to remain exposed to the vapor longer than five minutes at first. On this account the medical attendant must be prepared to make a martyr of himself and remain with the patient during the first few times. The nostrils may be plugged with cotton wool, and the eyes protected with watch glasses fastened with rubber plaster. The creasote smell clings to the hair and clothes. To obviate this the hair may be covered with a towel, and an old dressing gown may be used to protect the clothes. Sometimes neuralgia of the fifth nerve results from the treatment.—*The Practitioner.*

TREATMENT OF THE CATARRH CONSEQUENT UPON THE ADMINISTRATION OF POTASSIUM IODIDE.

It is often observed that patients taking potassium iodide suffer in a marked degree from "iodism," the chief symptoms being coryza, with a sometimes profuse discharge, sneezing, pains over the frontal sinuses, swelling of any part of the mucous membrane of the mouth, and a sense of heat in the chest. The foregoing phenomena are identical with those attendant upon the inhalation of free iodine; and it has been observed that one is more likely to be attacked with catarrh if the iodide of potassium contains free iodine as an impurity. This seems to justify the belief that the catarrh of iodism is due either to iodine being secreted by the salivary glands or to the circumstance that iodide of potassium is broken up in the mouth after its secretion, and free iodine liberated.

The latter view is supported by Schmiedeberg, who has proved that potassium iodide, in the presence of carbonic acid, is decomposed, the latter being abundant in the expired air in the region of the salivary glands.

The author has been able to stop the catarrh in three well-marked cases by adding to the mixture (being in each case ten grains of iodide of potassium and half an ounce of water) five min. (0.3 cc.) per dose of tincture of belladonna, with the object of reducing the salivary secretion, and in each case the result was satisfactory. Any antisialagogue would doubtless have a similar effect, but belladonna is, in his opinion, the most useful, as it can easily be given in the form of a mixture with the iodide, and it somewhat counterbalances the so-called "depressant" action of the potassium.

SURGERY.

TREATMENT OF SALIVARY FISTULA.

The great difficulties attending the satisfactory treatment of salivary fistula are universally recognized; it has therefore, occurred to me that the few following remarks may be of interest respecting a case lately under my care, which was brought to a successful issue:

On August 9 a gentleman consulted me respecting an abscess which had opened externally on the left cheek, and from which there was a copious flow of saliva. The abscess, I found, was due to the presence of two decayed teeth, which I advised should at once be extracted. That a very considerable communication into the duct had been established was made evident from the facility with which fluids could be injected through the external opening into the mouth.

Having treated the abscess antiseptically until a healthy condition was established, I pared the edges of the wound and scraped the interior, on the chance of getting primary union, which, however, I scarcely expected. I then brought the edges together by means of two harelip pins introduced at right angles one-eighth of an inch from the margin, over which a figure of 8 was made with carbolized silk, exercising at the same time as much pressure as possible, and finally sealing up the opening with gauze and flexile collodion. This dressing was allowed to remain undisturbed for forty-eight hours, during which time the patient was directed to lie on the opposite side, and not to move the jaws either by speaking or eating, the food given being of the most nourishing description, but in a semi-fluid state.

At the expiration of this time the dressing was carefully removed. The pins were found to have set up some irritation, so they were taken out and reintroduced in a similar manner but in fresh places; they were allowed to remain for another forty-eight hours, when they were removed finally. Unfortunately union had not taken place, but the flow of saliva was stopped and the parts looked healthy. The strictest quiet was enjoined, and the cavity was lightly plugged with gauze steeped in a solution of zinc sulphate gr. ij to ℥j, with the addition of a small quantity of compound tincture of lavender. A pad of lint steeped in boracic solution was applied over all and kept in position by means of elastic suitably fitted. This was continued till October 30, when the cavity had filled by granulation; skin was forming, and he was now practically well.

Of course this treatment is only applicable when satisfactory evidence exists as to the parotid duct being unobstructed. Had it failed I should have been obliged to establish a fistulous opening through the cheek into the mouth in the usual way, and endeavor to direct the flow of saliva from the outside opening into it—a very troublesome proceeding if it can be avoided.—*British Medical Journal*.

TENDON GRAFTING—A NEW OPERATION FOR DEFORMITIES
FOLLOWING INFANTILE PARALYSIS, WITH REPORT
OF A SUCCESSFUL CASE.

At a meeting of the New York State Medical Association October 15, 1895 (*Medical Record*, October 26), Dr. Milliken presented a boy eleven years of age, upon whom twenty months before he had successfully grafted part of the extensor tendon of the great toe into the tendon of the tibialis anticus muscle, the latter having been paralyzed since the child was eighteen months old.

The case which was presented showed the advantages of only taking part of the tendon of a healthy muscle which was made to carry on the function of its paralyzed associate, without in any way interfering in its own work.

The brace which had been worn since two years of age was left off, the patient walked without a limp, the talipes valgus was entirely corrected, and the boy had become quite an expert on roller skates.

Dr. Milliken predicts a great field for tendon grafting in these otherwise hopeless cases of infantile paralysis, who have heretofore been doomed to the wearing of braces all their lives.—*Samuel E. Milliken, M. D., New York, in Medical Record, October 26, 1895.*

Book Reviews and Notices.

Formulaire des spécialités pharmaceutiques, composition, indications thérapeutiques, mode d'emploi et dosage, à l'usage des médecins. Par Dr. M. Gautier, ancien interne des hôpitaux, et F. Renault, pharmacien de 1re classe, lauréat de l'École de pharmacie. 1 vol. in-18 de 300 pages. Paris: Librairie J.-B. Baillière et Fils. 1895. [3 francs.]

Pharmaceutical specialties are known in every country in which progress in the art of prescribing is going on. The many palatable preparations of unpalatable drugs help the physician in many cases in which the action of a necessary medicine is almost neutralized by its unpleasant effect on the stomach. Progressive pharmacists come to the physician's aid by furnishing him with palatable or convenient preparations, devised either by themselves or culled from the tried prescriptions of experienced physicians. But the number of formulas is appalling; in France there are 1500 such specialties, which are urged upon the attention of medical men, apart from official preparations. Dr. Gautier's work gives those that are most used, with their doses and indications; and it is valuable to any physician who possesses a knowledge of French, and desires to select agreeable formulas for use in his daily work.

A. McS.

An Essay on Malaria and Its Consequences. By Robert Lindsay, A. M., M. B., F. R. C. S. E., Retired Surgeon Army Medical Department. London: H. K. Lewis, 136 Gower street, W. C. 1895 (116 pages).

If it be true that there are some things that had better be left unsaid, it is equally true that there are some books that had better be left unwritten, and to this class of publications we think Dr. Lindsay's belated book belongs. If it had been given to the world thirty or even fifteen years ago it might have been seasonable; but in the present state of our knowledge of the active causative agent of malaria Dr. Lindsay shows a most surprising disregard for the opinions of men who march forward with science when he advances such views as are contained in his little book.

On the second page he says: "The poison is not an infection, is not due to any communicable germ or bacillus" * *

The infecting organism is so well known that it is now a routine practice in Johns Hopkins Hospital and many others to examine the blood for the plasmodium simply for diagnostic purposes, just as sputum is examined for tubercle-bacilli. Again, Dr. Carlos Finlay, of Havana, Cuba, has established that the malarial infection can be carried on the proboscis of a mosquito from a malarial patient to a healthy individual; the same mode of propagation of yellow fever has also been claimed by the same investigator.

Dr. Lindsay says in his preface that the most of the contents of his booklet were thought out and roughly thrown together about a dozen years ago. He has had a good deal of experience with the disease, and he himself suffered severely. It is unfortunate that the views which crystallized as the result of his many years of observation have effectually shut out the light of progress. In these days of rapid march on the part of science Dr. Lindsay's book seems like an echo from a distant past—and yet it is printed in 1895.

Dr. Lindsay's view of malaria is that it is the carbon dioxide of the atmosphere in undue proportions, arising from local conditions: moisture (in air or soil), decomposing organic matter, etc. He ignores the plasmodium, and does not see that the local conditions which result in an excessive production of carbon dioxide are the very conditions needed for the development of the organism discovered by Laveran. Dr. Lindsay is a man with an idea, an antiquated one, unfortunately; and it was an error of judgment on his part to publish his book at the present time.

A. McS.

Practical Uroanalysis and Urinary Diagnosis: A Manual for the Use of Physicians, Surgeons and Students. By Charles W. Purdy, M. D., Queen's University; Fellow of the Royal College of Physicians and Surgeons, Kingston; Professor of Urology and Urinary Diagnosis at the Chicago Post-Graduate Medical School. Second revised edition. With numerous illustrations, including photo-engravings and colored plates. In one crown octavo volume, 360 pages, in extra cloth, \$2.50 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street. [New Orleans: Armand Hawkins Co., 194 Canal street.]

Dr. Purdy's work has already become a standard textbook on the subject of urinary analysis. The issue of a second edition ten months after the first expresses the endorsement of the work by the profession. Dr. Purdy's long experience as

a teacher of urinary analysis, and as a practical physician, peculiarly fits him for the task of discoursing on the urine in health and disease.

The work is divided into two parts: (1) Analysis of urine; (2) Urinary diagnosis. In the first part, the physical characters of urine are discussed, and each constituent of normal and abnormal urine is fully described, in its relations to the body, significance, etc. In the second part the diagnosis of the diseases characterized by abnormal urine is given as concisely as is consistent with clearness.

Dr. Purdy's book is a good statement of our present knowledge of urinary analysis and its value to the physician. An appendix on urinary examinations in life insurance will aid a physician in doing justice to the applicants while protecting the company.

A. McS.

The Medical News Visiting List for 1896. Weekly (dated, for 30 patients); monthly (undated, for 120 patients per month; perpetual (undated, for 30 patients weekly per year); and perpetual (undated, for 60 patients weekly per year.) The first three styles contain 32 pages of data and 160 pages of blanks. The 60-patient perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book, with pocket, pencil and rubber. Seal grain leather \$1.25. Philadelphia: Lea Brothers & Co. 1895.

The *Medical News Visiting List for 1896* has been thoroughly revised and brought up to date in every respect. The text portion (32 pages) contains the most useful data for the physician and surgeon, including an alphabetical table of diseases, with the most approved remedies and a table of doses. It also contains sections on examination of urine, artificial respiration, incompatibles, poisons and antidotes, diagnostic table of eruptive fevers, and the ligation of arteries. The classified blanks (160 pages) are arranged to hold records of all kinds of professional work, with memoranda and accounts. The selection of material in the text portion and the arrangement of the record blanks are the result of eleven years of experience and special study. Equal care has been bestowed upon the mechanical execution of the book, and in quality of paper and in strength and beauty of binding nothing seems to be left wanting. When desired, a ready reference thumb-letter index is furnished, which is peculiar to this *Visiting List*, and which will save many fold its small cost (25 cents) in the economy of time effected during a year. In its several

styles The Medical News Visiting List adapts itself to any system of keeping professional accounts. In short, every need of the physician seems to have been anticipated in this invaluable pocket companion.

Physician's Visiting List for 1896. Forty-fifth year. Lindsay & Blakiston.

This well-known Visiting List presents several improvements in the new edition for 1896. More space has been allowed for writing the names and to the "Memoranda Page" a column has been added for the "Amount" of the weekly visits and a column for the "Ledger Page." To do this without increasing the bulk or price, the reading matter and memoranda pages have been rearranged and simplified. The lists for seventy-five patients and 100 patients will also have special memoranda page as above, and hereafter will come in two volumes only, dated January to June and July to December. While this makes a book better suited to the pocket, the chief advantage is that it does away with the risk of losing the accounts of a whole year should the book be mislaid. The publishers announce that before making these changes they have personally consulted a number of physicians who have used the book for many years, and have taken into consideration many suggestions made in letters from all parts of the country.

Materia Medica and Therapeutics: A Practical Treatise with Especial Reference to the Clinical Application of Drugs. By John V. Shoemaker, A. M., M. D., LL.D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital, Philadelphia. Third edition; thoroughly revised; reset with new type and printed with new electrotype plates. Royal octavo, pages ix, 1108. Extra cloth, \$5 net; sheep, \$5.75 net. Philadelphia: The F. A. Davis Co. Publishers, 1914 and 1916 Cherry street. New Orleans: Armand Hawkins Co., 194 Canal street.

Dr. Shoemaker's work on materia medica appears in one volume in this the third edition. It has already established its claim to a high position among works on materia medica and therapeutics. A preliminary section of 78 pages treats in a general way of pharmacy, the materia medica, prescription writing, poisons and antidotes, and general therapeutics and

classification of drugs. The bulk of the work, taking up nearly 800 pages, is devoted to the individual drugs, their actions, uses, etc. In this part of the book Shoemaker differs from most writers on materia medica in the arrangement of his text. The drugs are arranged alphabetically, as in the Pharmacopœia, and not in classes according to their action. This arrangement is very useful for reference, though it does not bring out the relations of allied remedies. All of the newer drugs are described, and a concise notice of the use of animal extracts, secretions and juices is given, including serum therapy. A third section of 220 pages deals with non-pharmaceutical remedies, which, though not drugs, are sometimes of service when medicines are of no avail: electricity, massage, climate, baths, etc.

No controverted matter finds place in Shoemaker's book, which is eminently a practical treatise, and deserving of the success it has attained.

A Compend of the Practice of Medicine. By Daniel E. Hughes, M. D. Fifth physicians' edition. Philadelphia. P. Blakiston Son & Co., 1895.

A Manual of the Practice of Medicine, prepared especially for students. By A. A. Stevens, A. M., M. D. Third edition, revised. Philadelphia: W. B. Saunders. (New Orleans: Amand Hawkins Co., 194 Canal street. \$2.50.)

These two works are concise manuals for medical students, to whom they serve as an introduction to the more voluminous text-books. In such works no debatable matter can find a place to worry a student, and the definitions and directions have necessarily a dogmatic air. A student needs a good stock of well ascertained facts before diving into controverted subjects. The text-books of Dr. Hughes and Dr. Stevens answer not only the needs of the student but are also useful to a busy physician who desires to obtain a rapid survey of a subject that may be unexpectedly presented to him for consideration.

Immunity, Protective Inoculations in Infectious Diseases, and Serum-therapy. By George M. Sternberg, M. D., LL. D., Surgeon General, U. S. A. New York: Wm. Wood & Co., 1895.

In this book of 320 pages, Dr. Sternberg gives a thorough presentation of all that is definitely known at present on the new branch of medical science developed by bacteriology. As

Dr. Sternberg is the author of the largest and most comprehensive text-book on bacteriology in the English language, and is a constant worker and student in that branch of medicine, it is seen that he is, above all other men in this country, qualified to present a digest of the vast literature, home and foreign, that has grown up around serum-therapy and immunity. The physician who has not the time or opportunity to digest and extract what is good from current literature on the subjects in hand, will find the work already done for him thoroughly by Dr. Sternberg.

Sternberg has not been content with being merely a compiler and recorder of other men's ideas; he has done a great deal of original work, and is entitled, among other things, to much credit for having explained the phenomenon known as *phagocytosis*, three years before Metschnikoff's first paper on the subject was published (1884). Sternberg, unfortunately, neglected to give his idea a name and a local habitation, but the priority as to the idea itself belongs to him.

Sternberg's present work discusses, at some length, natural and acquired immunity. After giving general notions on these subjects, he takes up twenty-two infectious diseases, found in man and the lower animals. They are: Anthrax, chicken cholera, cholera, diphtheria, foot-and-mouth disease, glanders, hog cholera, hog erysipelas, hydrophobia, influenza, influenza of horses, pleuro-pneumonia of cattle, pneumonia, rinderpest, small-pox, swine plague, streptococcus infection, symptomatic anthrax, tetanus, tuberculosis, typhoid fever, yellow fever.

The chapter on yellow fever is particularly interesting to physicians in this section, but every part abounds with well considered facts bearing upon the most recent advances in the latest phase of medical progress.

A. McS.

Twentieth Century Practice. An International Encyclopedia of Modern Medical Science, by leading authorities of Europe and America, edited by Thomas L. Stedman, M. D., New York City. In twenty volumes. Vol. III. Occupation diseases, drug habits and poisons. Vol. IV. Diseases of the vascular system and thyroid gland. New York: Wm. Wood & Co., 1895.

The third and fourth volumes of Wood's colossal encyclopedia have been published. In Vol. III Dr. Norman Kerr, of London, treats at considerable length on alcoholism and drug habits. Alcoholism has always been with us, and we know its extent and dangers. The use of drugs, other than morphine

and chloral, is increasing among the laity, particularly anti-pyrine and its congeners, which are frequently resorted to for relief of headache and neuralgia. Dr. George F. Shrady deals with shock and collapse, so important in surgery. Dr. Albert L. Gihon, U. S. N., tells all about sea-sickness, except how to cure it or prevent it—which no one else can tell. Dr. Gihon also contributes articles on Heat-stroke and Frost-bite. Dr. George H. von Liebig, of Munich, describes mountain-sickness, so often observed in persons climbing mountains too rapidly. Dr. W. T. Councilman, of Boston, deals with osteomalacia in a brief article. Dr. James Hendrie Lloyd, of Philadelphia, has a long article on diseases of occupation, which would make a valuable text-book of itself. As diseases of occupation increase with increasing complexity of civilization, they form a very important part of medicine and are of especial interest to the sanitarian. Dr. Lloyd gives a synopsis of the laws placing restraints upon the employment of women and children in the United States, and is interesting as showing how preventive medicine can be applied on a large scale. As such children become men and women in time, and constitute a part of the body social, it is the duty of the thoughtful legislator and sanitarian to provide all possible safeguards to protect the moral and physical welfare of those whose hard necessities sometimes compel them to embark on careers that tend to grow into a source of public danger. An interesting chapter on poisoning by Dr. Beaumont Small, of Ottawa, closes the third volume of a valuable publication.

Vol. IV is devoted to diseases of the vascular system and thyroid gland. Dr. James T. Whittaker, of Cincinnati, discusses the diseases of the heart and pericardium. His section comprises 454 pages of this volume. Like some other sections of this great work, Dr. Whittaker's would of itself make a complete treatise on the subject allotted to him. Dr. Arthur Ernest Sansom, of London, has nearly 200 pages on diseases of the blood-vessels. Dr. Bertrand Dawson, of London, has a brief but interesting section on diseases of the lymphatic vessels. Dr. George R. Murray, of Newcastle-on-Tyne, closes the volume with a treatise on diseases of the thyroid gland, including myxœdema, cretinism, goitre, etc.

It is impossible and unnecessary to give a summary of the various articles, for each one is a complete monograph of the subject discussed.

A. McS.

ANNOUNCEMENT.

Mr. W. B. Saunders, of Philadelphia, Pa., will issue the "American Year Book of Medicine and Surgery," the first

number of which will be ready in January, 1896. Dr. Geo. M. Gould, the talented editor of the *Medical News*, will edit Mr. Saunders' new publication.

A new journal, *Pediatrics*, has made its appearance, under the able editorship of Dr. George A. Carpenter, of London. Dr. Dillon Brown, of New York, is the proprietor.

The Texas Sanitarian changes its name with its fifth volume to the *Texas Medical News*.

PUBLICATIONS RECEIVED.

- Pregnancy, Labor and the Puerperal State. By Egbert H. Grandin, M. D., and George W. Jarman, M. D. Philadelphia: F. A. Davis Co., 1895.
- A Practical Treatise on Materia Medica and Therapeutics. By John V. Shoemaker, M. D., LL. D. Philadelphia: F. A. Davis Co., 1895.
- A Manual of Syphilis and the Venereal Diseases. By James Nevins Hyde, A. M., M. D., and Frank H. Montgomery, M. D. Philadelphia: W. B. Saunders, 1895.
- Electro-Therapeutical Practice. By Chas. S. Neiswanger, Ph. G. Chicago: 1895.
- Elementary Technique in Histology and Bacteriology. By Ernest B. Hoag, A. B., B. S. Chicago: E. S. Colegrove, 1895.
- Practical Urinalysis and Urinary Diagnosis. By Chas. W. Purdy, M. D.; second edition. Philadelphia: F. A. Davis Co., 1895.
- Some Physiological Factors of the Neuroses of Childhood. By B. K. Rachford, M. D. Cincinnati: The Robert Clarke Co., 1895.
- An Essay on Malaria and Its Consequences. By Robt. Lindsay, A. M., M. B., F. R. C. S. E. London: H. R. Lewis, 1895.
- Twentieth Century Practice. Volumes III and IV. New York: Wm. Wood & Co.
- Principles and Practice of Medicine. By Wm. Osler, M. D. New York: D. Appleton & Co., 1895. Second edition.

State News and Medical Items.

DR. D. T. COURTNEY, of Coulee Croche, was murdered by three negroes without any provocation. He was 27 years old and a graduate of the Memphis College Hospital.

DR. A. J. PENNINGTON has moved from Haughton, La., to Gibsland, where he will continue to practise.

Dr. WM. H. WATHEN, so long dean of the Kentucky School of Medicine, has resigned his position on account of stress of work, and Dr. Sam E. Woody succeeds him.

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 Senor Alvarenga, and amounting to about \$180, will be made on July 14, 1896, provided that an essay deemed by the Committee of Award to be worthy of the prize shall have been offered. Essays intended for competition may be upon any subject in medicine, but can not have been published and must be received by the secretary of the college on or before May, 1, 1896. Each essay must be sent without signature, but must be plainly marked with a motto and be accompanied by a sealed envelope having on its outside the motto of the paper and within it the name and address of the author. It is a condition of competition that the successful essay or a copy of it shall remain in possession of the college; other essays will be returned upon application within three months after the award.

The Alvarenga prize for 1895 has been awarded to Dr. Guy Hinsdale, of Philadelphia, for his essay entitled "Syringomyelia."

DR. J. L. POSEY, died November 6 in this city, aged 42 years. He was a graduate of Tulane and had been a resident student of the Charity Hospital.

THE *Virginia Medical Monthly* will be issued as a semi-monthly and its pages enlarged, beginning in April, 1896.

DR. W. F. KENDALL died November 7, aged 54 years.

THE charge for cremating the body of an adult in New York City is \$35, and for that of a child \$25. Urns or vases vary in price from \$6 to \$45. The former are of bronze and white metal, the latter of serpentine stone, marble, etc. For \$25 a niche may be bought in the crematory where the urn will be cared for, or it may be taken possession of by the family.

DR. THEO. ENGELBACH, who spent the summer in Europe with his family, has returned and opened an office at 828 Canal street.

PORTUGAL has held a congress of tuberculosis. That country has a population of 4,500,000, with 20,000 deaths from consumption annually.

THE *Clarion-Ledger*, of Jackson, Miss., reports the following: "Some months ago Dr. Peter Fairley, superintendent of the Blind Institute, sued the Western Union Telegraph Company for damages for failure to deliver a message calling him to the bedside of a patient. The case was taken through the Circuit Court, and the doctor lost his suit on the ground brought by the telegraph company that he had no right to practise his profession, being a State officer and receiving a salary as superintendent. The case was carried to the Supreme Court of Mississippi, and Judge Chrisman's decision was put aside, as has heretofore been stated. This decision amounts to the issuance of a license to practise medicine by the Supreme Court of the State, something that was perhaps never done before in the United States, and affects not only Dr. Fairly, but Dr. Mitchell, superintendent of the lunatic asylum of this city, and Dr. Buchanan, of the East Mississippi Insane Asylum, at Meridian."

At the last meeting of the Leper Board Dr. Wailes' report showed that three patients had been received during the past month.

DR. J. J. WRAY was shot and instantly killed at Dallas, Texas, October 21, by a man named Hardcastle, cause unknown. Dr. Wray was 36 years old and a graduate of Tulane University.

DR. H. DE MAHY, of St. Martinsville, La., paid a visit to the city recently.

It is said that 40,000 patients visited Carlsbad last year.

THE second Pan-American Medical Congress will be held in the City of Mexico, Christmas week, 1897.

LOW TARIFF.

The cost of drugs and medicines
Are having such a fall,
Cut prices will bring sickness
Within the reach of all.

MARRIED.

DR. R. P. JONES, of Baton Rouge, and Miss Lucia Aldrich were married on Monday, November 18, 1895.

DR. W. W. HARPER, of Selma, Ala. and Miss Rosa Frantz, November 20, 1895.

SHELLFISH AND WATERBONE DISEASE.

At the opening of the winter session of the Hull Scientific and Naturalists' Club, held on October 31, Mr. Hollingworth, the president, delivered his presidential address on the "Artificial Cultivation of Edible Mollusks." He said that in recent years the natural supply had fallen short of the demand, and artificial cultivation of those shellfish most consumed had been resorted to. He then dealt with the mode of cultivation adopted in the case of oysters, mussels and cockles, showing how liable these were to contamination by sewage matter when laid down in proximity to towns, harbors and river mouths. In this connection he showed how the conveyance over their beds of sewage matter containing germs of cholera and typhoid was capable of being a source of grave public danger. Basing his argument upon the government reports of the cholera outbreaks in England in 1892 and 1893, he showed that, while in 1892 35 cases were imported into British ports, in every case the local sanitary precautions were sufficient to prevent any extension of the disease beyond those importing it, and that in 1893 13 cases were imported, with no extension in 11 cases. But in that year cholera broke out in 50 separate localities, attacking 287 persons, of whom 135 died; and out of these 50 localities, in 42 only single cases occurred, a circumstance hitherto unprecedented in the history of cholera, and pointing to special modes of infection. Of these cases 40 per cent. had eaten or handled shellfish within twenty-four hours of being attacked, and in most cases that shellfish had come from the Grimsby and Cleethorpes beds. All the cases (except the imported ones) occurred after the middle of August; that was subsequent to the date when cholera was known to have been imported into Grimsby. He next showed on maps the relative position of the oyster, mussel and cockle beds, and the different sewage outfalls at Grimsby and Cleethorpes, pointing out how strong was the presumption that infection of these beds by sewage matter was not impossible. He pointed out, too, what he considered a dangerous practice, namely, that of placing oysters and other fish in fish docks and near sewer outfalls, as

occurs in many places, in order to "fatten" them for the market. In this way he accounted for several outbreaks of typhoid in different parts of the country, details of which he gave. Fish, being the natural scavengers of our coast, would be, he believed, more commonly a source of infection to consumers if they were not rendered innocuous by the process of cooking; but in the case of oysters, which were usually, and of mussels, which were commonly, eaten raw, this did not obtain. Mr. Hollingworth closed by urging the great importance to local authorities of taking steps to prevent any infection of local food industries.—*British Medical Journal*.

A COMBINATION OF SCIENCE AND SUPERSTITION.

There is now a Chinaman practising in Los Angeles, Cal., who is well versed in medicine, having been a student of the English Mission Medical School. The man first studied a Chinese translation of *Gray* by Dr. Dudley and the translations of *Bartholow's Practice*, and other medical works by Dr. J. G. Kerr. He is a very bright fellow and an observing student. Being of a business turn of mind and learning of the insatiable appetite for occultism and for the marvelous that existed in the United States, he studied English systematically and emigrated to America to fill a long-felt want. Were he to practise Western medicine in an open manner he would find a great practice among his own countrymen, who invariably prefer intelligent medicine; but Americans pay far better, so he assumes to practise Oriental medicine and carefully keeps in the unseen background both his knowledge of medicine and of English. Were it known that he practises intelligently he would soon lose all of his American *clientèle*. This man certainly practises under many advantages, as he brings to his aid all that scientific knowledge or skill can give, supplemented by all the psychological influence that the mind and imagination through suggestion can exercise over the individual. He has here a great advantage over his Chinese brother-practitioner of Chinese medicine, who is completely at sea as to scientific medicine, or over his American fellow-practitioner, who can neither impress nor mystify the imagination of his patient. Like his Parisian *confrère* with the astrolabe, magic mirror, and of occult and mystic surroundings, he can perform cures or miracles which are not given to be performed by either ignorant pretenders or by educated men. To admit that this combination is right and proper or necessary, as some might conclude, is to admit that our masses have not risen above the level of the general human understanding of the masses of the

sixteenth century, when magic of all sorts formed the basis of medical practice, and when demoniacal possessions were common beliefs both in the practice of medicine and in the exercise of the theology of the times.—*The National Popular Review*.

A MINIATURE HOSPITAL IN THE HOME.

In the *Practitioner* for September, Dr. Malcolm A. Morris, of London, favors the proposition that in planning a house, regard shall be had for the future needs of the occupants in the time of sickness. His recommendation is that one room should be set apart in design as the sick room. This room should be shut off as much as may be from the common atmosphere and common noises of the dwelling—or, rather, it should be so arranged that it can be shut off at any time—and there should be a bath room and water closet close at hand. The walls and floors and other services should be impervious, so as to harbor no impurities and to admit of ready cleansing, and the furniture and fittings should be simple, with the same object. If in addition there should be a second room available for the nurse's use, the essentials for the proper seclusion of infectious cases are provided, as far as possible, in a private house. A miniature hospital is then ready at hand, and at ordinary times it can serve as a spare room or even as a bedroom in regular use, differing only from any other room in its adaptability to the special purpose in question. This plan should be especially welcome to the paterfamilias in whom the home feeling is active, and whose olive branches sprout out thick and fast. To such an one the little private ward may be a positive and blessed economy in saving the doctor's bills that are apt to pile up where the children's diseases—as they are improperly called—take a run through the family. This incentive is apart from the higher economy that may also take place, namely, the saving of the lives of some of the juniors of the family.—*Journal American Medical Association*.

DEPARTMENT AND SECRETARY OF PUBLIC HEALTH.

To the Members of the American Medical Association:

The American Medical Association at its session in Washington, in 1891, adopted unanimously a resolution favoring a Department and Secretary of Public Health—said secretary to be a member of the cabinet of the President of the United States; and appointed a committee to urge upon Congress the passage of a law for the creation of such a department and secretary. This committee has been continued, with slight changes, up to this time, and have prepared and presented to Congress a suitable bill, and by such methods as were open to

them have endeavored to secure its passage. This bill is now pending in both houses of Congress.

In the meantime the association has pledged itself anew at every annual meeting since 1891, and notably at the annual meeting in Baltimore last May, to continue the work necessary to secure the desired legislation. Many State medical associations and many local medical societies have passed resolutions approving of the end in view, and these resolutions have, presumably, been sent to the senators and representatives of the respective States.

As the result of these measures, considerable interest has been excited in Congress in favor of the pending bill, but not enough to secure its passage.

Under these indicated circumstances it becomes our duty to make still further effort, and we appeal to members of the association everywhere to give us all the help they can. It certainly seems to us that if the hundred thousand doctors in the United States would unite as one man and earnestly request of Congress the passage of the bill to create a Department and Secretary of Public Health, that the enterprise could not fail of success. Surely, whatever a hundred thousand doctors would ask for would be granted.

We therefore recommend:

1. That every State medical association and every local medical society shall, as promptly as may be, pass resolutions favoring the adoption of our bill, and that such resolutions shall be published in the medical journals, and copies forwarded to the members of Congress.

2. That every doctor in the United States shall address a private letter in advocacy of our bill to the senators and representatives in Congress from their respective States. Every citizen has the right to appeal to his representatives, no matter whether he is acquainted with them personally or not. Can any one believe that if all the doctors in any State were to unite in soliciting the senators and representatives of said State to pass this bill, that such solicitation would not bear good fruit?

3. The medical journals of the country, as a rule, have heretofore given us generous assistance, and we heartily urge upon them a continuance of their efforts in our behalf.

(Signed) JEROME COCHRAN, Chairman, Montgomery, Ala.

C. G. COMEGYS, Cincinnati, Ohio.

N. S. DAVIS, Chicago, Ill.

J. C. CULBERTSON, Cincinnati, Ohio.

LISTON H. MONTGOMERY, Chicago, Ill.

CHARLES DENISON, Denver, Col.

U. O. B. WINGATE, Milwaukee, Wis.

W. B. ATKINSON, Philadelphia, Penn.

MORTUARY REPORT OF NEW ORLEANS.

FOR NOVEMBER, 1895.

CAUSE.	White.....	Colored...	Male.....	Female....	Adults ...	Children.	Total
Fever, Yellow							
“ Malarial (unclassified)....	9	13	13	9	17	5	22
“ Intermittent	1			1	1		1
“ Remittent	3	2	2	3	4	1	5
“ Congestive.....	7	3	7	3	7	3	10
“ Typho	1	2	1	2	3		3
“ Typhoid or Enteric.....	4	2	6		6		6
Puerperal		1		1	1		1
Influenza.....	1		1		1		1
Small-pox.....	3	5	3	5	5	3	8
Measles							
Diphtheria	3	2	2	3		5	5
Whooping Cough	1	1	1	1		2	2
Meningitis	9	4	9	4	4	9	13
Pneumonia.....	22	17	24	15	16	23	39
Bronchitis	22	9	19	12	16	15	31
Consumption.....	46	36	57	25	79	3	82
Cancer	17	5	5	17	22		22
Congestion of Brain.....	3	1	3	1	3	1	4
Bright's Disease (Nephritis) ...	20	12	22	10	29	3	32
Diarrhœa (Enteritis)	18	11	19	10	13	16	29
Cholera Infantum	13	5	10	8		18	18
Dysentery.....	4	4	8		7	1	8
Debility, General	1	2	1	2	3		3
“ Senile	9	16	12	13	25		25
“ Infantile.....	3	4	2	5		7	7
All other causes	169	66	154	81	178	57	235
TOTAL	389	223	381	231	440	172	612

Still-born Children—White, 35; colored, 31; total, 66.

Population of City—White, 195,000; colored, 80,000; total, 275,000.

Death Rate per 1000 per annum for month—White, 23.93; colored, 33.45; total, 26.70.

L. F. FINNEY, M. D.,
Chief Sanitary Inspector.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XXIII.

JANUARY, 1896.

No. 7.

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.]

ON THE DIFFERENTIAL DIAGNOSIS OF VARICELLA AND VARIOLA, WITH THE REPORT OF A CASE IN POINT.*

BY ISADORE DYER, M. D., NEW OLEANS, LA.

In studying the eruption of diseases which affect the skin, there are certain essential points of consideration. These apply to all skin diseases and to the exanthemata as well.

Before going into the details of these points of diagnosis, I wish to make the general propositions: first, do variola and varicella differ, and, second, if so, in what do they differ?

In all eruptions, then, the location, the distribution, and the arrangement of the eruption are important, while the characteristics of the component lesions determine the disease.

The duration, course, history and attendant symptoms are important, but secondary considerations.

In considering variola and varicella along these lines, we see at a glance important differences.

Location.

Variola—face and extremities, particularly.

Varicella—trunk, particularly; face and extremities, unusually.

* Read before the Orleans Parish Medical Society, December 14, 1895.

Arrangement.

Variola—closely aggregated lesions, often confluent, particularly in the vesicular stage, clusters frequently seen.

Varicella—either single, widely separated lesions, never inclined to confluence, or in groups of two or three, maintaining throughout the integrity of shape and form.

Characteristics of the Individual Lesions.

Variola begins as a hard, shot-like papule, as an efflorescence, even involving the mucous membranes. After a distinct period, these change to vesicles, all lesions undergoing this change—umbilication customary. Lesions not umbilicated unusual in variola—vesicles change altogether into pustules, always deep seated, beginning always in the papillæ themselves, heal as scars, or pits after a long period of time.

Varicella lesions large, irregular in shape, spherical in form, globular at times, superficial always, rubbing off the skin easily. Papular stage indefinite, so short as often to be missed, and lesions seem to begin as vesicles. Often dry as vesicles, pustulating uncommon, umbilication rare, exceptional when it does occur, and then only in a few of a number of lesions. Eruption of lesions heals by drying, or peeling, leaving, at most, only a slight pigmentation—never scars, unless abscess from secondary pus infection. Pitting is never seen.

Course of the Eruption.

Variola—slow, periodic changes in eruption from papular to vesicular or pustular; never find pustules and papules together. Never under three weeks, even in mild cases (Hebra, Liveing, Kaposi, Morrow). Usually four weeks or longer.

Varicella—rapid and irregular course, recurrent crops. May begin to heal on second day of eruption; find papules, pustules and vesicles side by side. No periodic change; usually completed in fourteen days. Sometimes less, rarely more.

History and Attendant Symptoms.

Variola has prodromata more or less severe, but always present characteristic fever, angina common, headaches, fever marked by exacerbation as the eruption becomes pustular.

Depression throughout, more pronounced as the disease advances, and at the pustular change.

Finally varicella is not an uncommon disease, occurring independent of season and place.

Variola is epidemic and not occurrent otherwise, and is not a common disease. Is occurrent most in colder weather.

Varicella does not protect against variola.

Variola protects against variola, and recurrent cases of variola are rare, and occurring, occur in a modified form.

There is no case on record of a relapsing variola.

I have presented these different points, to the more saliently bring out the main features of the case I am about to report.

That there is some reasonable purpose in this report will likely appear to all, and I wish to ask the free discussion of the case as one of importance, not only in its own clinical features, but as exercising some direct reflection upon the individual physician's position in his relation to the official health authorities.

There may perhaps be some who believe that the patient deserves consideration also.

On November 8, I was requested by the visiting physician of one of the wards of the Charity Hospital to see a case of skin disease, to express an opinion upon it and to prescribe.

On entering the ward of the hospital, I met one of the house officers, who additionally invited me to see the case.

With the house officer and Dr. Menage, my associate at the hospital, I made a careful clinical examination, with the following result:

The patient was a negress, about 20 years of age, in good physical condition, with the following skin manifestations:

I.—*The eruption* was distributed in discrete lesions over the chest, abdomen and back. On the face, there were a number of lesions, single, and widely separated. On the arms and legs, the lesions were fewer and sparsely located. On the tongue and over the hard palate, there were likewise discrete lesions.

II.—*The eruption* consisted of irregular-sized vesicles on

the body and face, while the lesions on the tongue and the mouth were for the most part pustular. I called the attention of the gentlemen with me to this phase of the eruption, and also to the fact that there was an absence of any other evidence of inflammation in the mouth and throat.

The lesions were rounded, hemispherical, and irregular in shape. It was only after a careful search that any umbilication was found. This could be seen only on two or three lesions on the right side just below the region of the floating ribs.

On questioning and cross-questioning the patient, it was discovered that she had experienced no prodromic symptoms whatsoever, and felt at the time of examination in excellent health.

The eruption had been out, she said, only two days and had come out gradually. The lesions were more carefully examined, and were found to be loose walled, some even flabby. In touching one, on the belly, the walls gave way under my finger, the top slipped off, leaving a smooth, reddened spot behind, when the exudate was wiped away.

An unqualified diagnosis of varicella was made by me, which was concurred in by the house officer and by Dr. Menage.

The case was received by the hospital and admitted.

On the morning following I again saw the patient. There was plain evidence of resolution of the condition. Fully half the lesions on the face had dried. Those on the body had in many places been reabsorbed, leaving behind the little crumpled epidermis, which is customary after the resolution of a vesicle.

The general condition of the patient had not changed.

I advised treatment, and said that the case needed no especial watching, giving a prognosis of a few days.

The same night I learned that the patient had been sent by the Board of Health Inspectors to the small-pox hospital.

At the invitation of the President of the Board of Health, who had resented my repeated expressions of opinion in the case, namely: "that a case of varicella had been sent to the

small-pox hospital," I visited the pest-house on the 12th of November.

I found the patient in bed, in a room with another, sick with small-pox, I conclude.

She rose with ease at my request, and I for the third time made a careful examination.

I found the following state of affairs:

1. There were no lesions on the face. Some pigmented spots, dark or whitish red, marked the site of the desiccated lesions.

2. There were no lesions of any sort in the mouth and no evidences of eruption except a little red spot on the right underside of the tip of the tongue, where a lesion might have been.

3. The body presented both vesicles and pustules in stages of disintegration, some flabby, some half peeled, some already dried and some having peeled, leaving whitish, smooth spots behind.

All the lesions on the arms and legs had dried.

4. There were no constitutional symptoms. In spite of repeated questioning and cross-questioning, the patient denied sore throat at any stage or time of the disease, and at this examination there was still no evidence of it.

I reiterated my expression of opinion in the case and passed the comment that such a clinical picture on the sixth or seventh day confirmed beyond peradventure my original diagnosis of varicella. I insisted that a case of varicella had been sent to the small-pox hospital, where she was confined.

The case remained at the pest-house notwithstanding.

On November 24 the patient applied at the Charity Hospital for admission in another service. On the following day the patient was the second time transferred to the small-pox hospital with a diagnosis of variola.

A few days subsequently I learned she was in the hospital with confluent small-pox. Within the past few days I was told that this patient had died of small-pox.

I might dismiss this subject without further comment, but I prefer, if not trespassing too much upon your time, to draw a few conclusions.

I would call your attention for consideration to the following points:

1. The character of the eruption in the case when I saw her.
2. The history and course of the eruption.
3. The date of admission and discharge from the small-pox hospital (November 9, November 18).
4. The date of re-admission to the small-pox hospital (November 26).
5. The more than improbability of a recurrent attack of variola.

First. Because the patient was discharged from the pest-house not later than the 18th (if earlier, all the more argument, for variola even in varioloid types never runs a course of less than three weeks).

Second. The small-pox was manifested on the 25th, or just seven days after the discharge from the pest-house, and just sixteen days from the date of first admission to the pest-house.

The period of incubation of small-pox is from ten to fourteen days.

6. This suggests that small-pox was contracted in the pest-house.

7. It would be an unique case in medical literature to find a "mild case of varioloid," as diagnosed by the sanitary inspector, followed within a week or eight days by a typical case of true variola, confluent in type, and malignant in its history and outcome.

Gentlemen, we are entitled to differences of opinion, and the weight of proof rests with those who have the weaker side. I believe I have made a fair presentation of this case and its history.

When there is a reasonable doubt in such an instance much harm may result to the patient, and much discredit reflect upon the health authorities if a mistake is made in sending one with a similar disease to a hospital for small-pox, where death may be the forfeit of the patient.

A CASE OF COLLAPSE FROM CHOLERA MORBUS RESTORED
BY INTRAVENOUS INJECTION OF SALINE SOLUTION.*

BY JOHN CALLAN, M. D., NEW ORLEANS, LA.

The immediate and marked improvement and the rapid recovery of this collapsed man induce me to give the history of this case that you may readily understand the extremely critical condition of the patient.

On the night of May 26, 1895, Capt. C. partook of a heavy fish supper. He was unable to masticate the food because his upper teeth had been extracted a short time before and had not been replaced by false ones. About 5 A. M. of the 27th he was seized with cramps, soon followed by vomiting and purging. He persisted in staying at his engine house and would not let his men seek medical attention for him. All morning the vomiting of undigested food and the watery purging kept on, accompanied by intestinal pains. After eight hours of suffering he fell down insensible from exhaustion. He was carried home and shortly thereafter I reached his bedside.

On rousing him only after vigorous shaking he complained of cramps of the stomach and intestines and of extremities. Cold sweat, cyanotic skin, depression of eyes, sharp features, weak voice, sighing respiration and almost imperceptible pulse which could not be counted told too plainly of the collapsed condition of the patient. Temperature $96\frac{1}{2}$. Ordered hot bottles to extremities and trunk and had him vigorously rubbed with mustard. Immediately gave hypodermic of morph. sulph. gr. $\frac{1}{4}$, atrop. s. gr. $\frac{1}{50}$. Gave small quantities, frequently repeated, of cold seltzer water and occasionally whiskey mixed with seltzer. After waiting about twenty minutes and not finding any improvement in his condition I gave $\frac{1}{60}$ strychnia sulphate. Then successively tried atropia $\frac{1}{50}$; nitroglycerine $\frac{1}{100}$, which was repeated three times in sixty minutes. Another dose of atropia s. gr. $\frac{1}{100}$, strychn. s. gr. $\frac{1}{30}$, all of which were given hypodermatically; also ʒiv whiskey. Two large enemata of warm salt water were given, both of which he retained. Patient was losing ground. Pulse could

*Read before the Orleans Parish Medical Society June 8, 1895.

not be counted, there being nothing more than an occasional slight wave through the radials. Temperature fell to $95\frac{1}{2}$ deg. I suggested intravenous injection of salt solution as the only means left that afforded any hope of restoring the man. The wife consented. I telephoned to Dr. Bloom, house surgeon Charity Hospital, who responded at once, bringing the apparatus with him. I had the solution made on his arrival. The solution was made of one heaping teaspoonful of common table salt to a pint of warm water that had cooled down from the boiling point. This was strained through a piece of cloth. Three pints of the solution were injected into the circulation through the cephalic vein at the middle of the arm. Temperature of solution was 106 deg. at funnel end of apparatus. Before the third pint was used the patient became conscious. After injection the radials gave a good, steady and full beat of 84 per minute. Temperature reached $98\frac{1}{2}$ deg. He complained of intense thirst, which was allayed with seltzer and ice. One hour after injection was seized with a chill of about five minutes' duration. This was followed by rise of temperature to $101\frac{1}{2}$ deg., pulse 99, full and hard. Gave quinine and salol by mouth. On visit next morning patient was sitting up smoking a cigarette. Two weeks have nearly elapsed since and he is entirely well, having been walking about since the third day.

MORBID ACTION OF THE INTESTINES UPON THE LIVER.*

By DR. E. M. DUPAQUIER, NEW ORLEANS, LA.

This long and exhaustive paper, of which a brief extract was read before the Orleans Parish Medical Society with synoptic tables, is given here in *extenso*, being a translation of the remarkable report made by Hanot at the Congress of Medicine held at Bordeaux, August, 1895.

A. Parasitic Diseases of the Liver.

The intestines, where the portal vein originates, wherein the choledoch duct empties itself, form a gateway widely opened, by which the parasites, carried with water and food, penetrate into the liver. So close are the connections of the

*Read before the Orleans Parish Medical Society, October 12, 1895.

two structures that at times the parasites enter in the liver directly, breaking into it burglariously, says Weigert. For example, the *tænia echinococcus*, the ordinary tenant of the liver cysts, emigrates from the intestines and makes for the liver, either along a branch of the portal vein or straight forward from place to place after perforating the duodenal membranes. However, it apparently avoids the biliary ducts, because whenever it goes that way by chance it is destroyed by the bile.

There are other parasitic worms which pass from the intestines into the liver in man; firstly, five species of distoma: *d. hepaticum*; *d. lanceolatum*; *d. conjunctivum*; *d. sinense*; *d. japonicum*. Also, the *cercomonas hominis*, the *coccidium oviforme*.

The cysts containing the *coccidium* are ingested by an animal. Reaching the intestines the cysts break open and set free the falciform corpuscles (first stage of the *coccidium*), which, by amœboid movements run up the choledochus and smaller bile-ducts. They dilate these, break down the hepatic tissue upon their surface and form veritable bags filled with a cheesy and purulent fluid. In those bags, epithelium cells and encysted *coccidia* swim, in numbers. Those cysts are carried away by the bile, flow into the intestines, and are then expelled with the *fæces*. This a good illustration of the to-and-fro motion, the reciprocating motion between the liver and the intestines and *vice versa*, an oscillation which is notable in the most various morbid conditions.

The distoma and the *coccidia*, also, penetrating into the biliary ducts may cause suppurative angeiocholitis and start the process of cirrhosis.

Cirrhosis caused by worms is one of the types of hepatic lesions originating from the intestines. This parasitic cirrhosis caused by macroscopical agents is analogous to the microbial infectious cirrhosis caused by microscopical agents. Both cirrhoses are the result of a similar lesion, the only difference consisting in the size of their agents. In man, the worm parasite which most commonly emigrates from the intestines toward the liver, is the *ascaris*. It penetrates into the biliary ducts and the lesions it causes, particularly catarrhal or suppurative angeiocholitis, are well known.

In the case recently reported by Machiafava, a man who had died of malignant icterus, autopsy revealed a large ascaris in the choledochus, which was dilated and completely obstructed by the worm, and also by biliary concretions. The anterior surface of the liver presented two cysts containing fragments of calcified ascaris. This case is recalled here with a view of illustrating in a magnified picture the new pathogenic theory of biliary lithiasis originated by Galippe, and which will be considered further on, viz.: biliary lithiasis caused by microbes.

It is easy enough to understand that where the large size parasites pass the microbes can also pass.

Of the large number of micro-organisms composing the intestinal kingdom, some have no definite pathogenic action; others of a neutral character in the physiological state become virulent when the natural defenders of the organism against infection are impaired, viz.: the intestinal, the hepatic and the rectal epithelia. Others finally are, in their essence, pathogenic.

Of that class of microbes, physiological tenants of the intestinal tractus from the mouth to the anus, which are neutral in the normal condition of the organism whilst they become pathogenic under certain circumstances, the *BACTERIUM COLI* ranks first. Circumstances under which it becomes pathogenic and emigrates from the intestines into the liver, damaging it more or less, have been already determined. For instance, Achard has observed in appendicitis the migration of the bacterium coli from the diseased gut to the portal vein and subsequently into the liver, causing adhesive or suppurative py-
lephlebitis and subsequently abscess of the liver. Usually the bacterium coli does not go up by the biliary route or ducts; it is found usually at the terminal part of the choledochus only. But, when the bile flow is sluggish, and the bile itself is altered, the bacterium takes advantage of the liver's incompetency and shoots thick and fast higher up in the biliary system and infects it, causing then angeiocholitis and cholecystitis, isolated or associated, suppurating or not, according to its degree of virulence. (Gilbert and Girode, Charrin and Roger, Gilbert and Dominici.)

However, in his work Achard showed by many cases reported that the areolar abscess of the liver, described by Chauffard, is not always of biliary origin. It can be found around the veins as well, originating from the portal or the hepatic venules. "This areolar structure," says Achard, "is merely an accidental occurrence that may be observed in the various suppurations of the liver."

Achard again presumes that this infection in a milder form may, instead of a pyogenic process, cause a slow sclerosing process, giving rise to a simple pylephlebitis only. This presumption should arrest our attention in future. It seems natural enough, as we know the part that gastro-intestinal infection exhibits in the causation of cirrhosis of the liver. Achard recalls, *a propos*, a case of Letulle. A youth, sixteen years old, died of perforating appendicitis, caused by a pin. Autopsy revealed a portal annular cirrhosis, which at that time could not be accounted for. True it is that in that case sclerosis may have been caused by auto-intoxication as well as by infection. Again, we know that in this sclerous process the bacterium coli is not the sole factor. Other pathogenic microbes are associated with it, and hepatic infection is not the only manifestation of the bacterium coli infection in *primis*; with it other manifestations break out contemporaneously, viz.: peritonitis, pneumonia, pleurisy, endocarditis, etc.

In the majority of cases, of course, infection is limited to the liver only, which retains, so to say, the microbes by its remarkable defensive power against infectious and toxic agents. Yet the microbes may conquer and trespass beyond the hepatic bulwark, encroaching on the defences until they reach the hepatic veins, or they may make a change of front, and, wheeling, encroach on the system by way of the peritoneum, ganglia and lymphatics, causing metastatic foci all over, chiefly in the lungs.

Clinically speaking, hepatic troubles are very difficult to trace up. As a rule, it seems that insidious appendicitis, latent in its beginning and course as well, is the fountain head. For, not uncommonly does appendicitis remain undetected, eclipsed, as it were, by the predominating hepatic disorders.

Even these are unperceived at times; so, finally, no diagnosis can be made out, and autopsy only reveals at the same time the original appendicitis and the consecutive hepatic complications. Clinically, it seemed the case was one of typhoid fever, of suracute pulmonary tuberculosis (granulie) or of meningitis. When the liver is damaged in such a manner it is almost completely beyond the reach of therapeutics. Exceptional it is that a solitary abscess results, which then could be successfully treated by operation, as in Koerte's case. Nearly always the abscesses are multiple and there are more or less extensive vascular lesions which render any operative attempt useless and illusory. It is therefore in the early cure of the original appendicitis only that the safety of the patient lies, and we know that an early diagnosis of appendicitis is not always possible.

But this infection of the liver by the *b. coli commune*, particularly in its virulent form, demands necessarily a protopathy of the liver. For instance, again, in malignant icterus caused by the *b. coli commune* the liver is found to be primarily damaged. In four cases of malignant icterus reported with temperature below normal, the *b. coli commune* was found during life in the blood from the arm and liver, at autopsy in the capillaries and cells of the liver, and in one instance in the bile itself. Three patients were drunkards and the other one had cancer of the biliary ducts. The *b. coli commune* had ended in causing malignant icterus, the destruction of the liver started by alcoholism and epithelioma.

In the four cases alluded to the onset of malignant icterus occurred in the midst of intense gastro-intestinal manifestations which evidently pointed to the intestines as the origin. Malignant icterus, like typhoid fever, is, in many cases, traced to the drinking of contaminated water, so its intestinal origin is undeniable. Of course malignant icterus is not caused only by the *b. coli commune*. Cases reported were due to the streptococcus and staphylococcus (Babès' three cases with streptococcus). But these infections caused malignant icterus with high fever, whereas the infection with *b. commune* produces a hypothermic malignant icterus.

The digestive tube contains, in health, other microbes

besides the coli commune, usually innocuous, but, under certain circumstances, pathogenic, becoming so particularly by associations with others, the result of which is the formation of pus. Netter, Besançon and Widal have observed the presence of the streptococcus in the mouth of the healthy. It can spread down and occupy the whole intestinal tractus (Jablowski) and then becoming virulent under provoking conditions, exercise subsequently its energy on the liver. Thus is explained the formation of those streptococcal abscesses of the liver which can not be traced to any visible lesions of the intestines. But ordinarily the pus-agent comes from a very plain ulceration of the intestines; and without going into the study of abscess of the liver let it be recalled here that of the intestinal ulcerations giving rise to abscess of the liver the dysenteric ranks ahead; the typhoid fever ulceration is far less productive of abscess of the liver. *Apropos*, it is notable how infection and auto-intoxication as well are less active in the duodenum as compared to the large intestine, and how exaggerated was the opinion formerly held that typhoid fever tells so importantly on the liver in a general way.

For instance, tuberculosis, even in acute forms, tells more on the liver than typhoid fever does. What is it due to? Is it dependent on the virulence of the microbe? Probably so. The treatment followed in cases of typhoid fever may explain this, as when milk diet is strictly adhered to, it surely reduces intestinal fermentation and consequently relieves the liver. E. Romberg has gathered only nineteen cases of abscesses of the liver consecutive to typhoid fever. In five only there was suppurative pylephlebitis, and in two other cases the abscess came from an ulceration of the biliary ducts and from pus located in another region. Yet, according to some, in warm countries abscess of the liver is frequently seen after attacks of typhoid fever. In tuberculosis, it is true, among the liver complications abscess is rare, because the vessels around the tubercular intestinal ulceration become obliterated. Regarding abscess of the liver, let it be recalled that the intestinal fissure which opens the way to the pus microbes may be so small as to be imperceptible, as in appendicitis due to a foreign body. Again, the fissure, the starting point, may be in the

stomach ; abscesses of the liver due to gastric ulceration have been reported by Andral, Louis, Murchison. Of course, we again take it for granted that a certain protopathy of the liver is indispensable as a preparatory inducement to infection in all these cases of secondary pus formation in the liver; for example, the facile suppuration of the liver when it is already damaged by alcohol and cancer. To close this synopsis of abscess of the liver relative to its intestinal origin, we will quote Zancarol's conclusion: "The entrance of the micro-organisms causing abscess in the liver is *somewhere* on the intestinal surface."

In nurslings the whole of the intestinal tract is a rich ground for microbes. Daemberger has shown that notwithstanding strict antiseptis, the mouth of the nursling is planted with lively streptococci, and Fischl has studied in nurslings of a few weeks only a streptococcal pyæmia due to the streptococcus pyogenes alone or associated with the staphylococcus aureus.

This propensity of nurslings is accounted for by the fact that at that stage of life the umbilical vein takes the place of the portal vein as the rector of infectious germs. Chauffard has cleverly explained by that transitory condition in the nursling's anatomy the mode of development of inherited syphilitic hepatitis.

Considering now those micro-organisms which are essentially pathogenic, which are carried from the intestines into the liver by the portal vein, a word only will be said of *actinomycosis*, often seen in animals. Evidently here the entrance into the organism is through the digestive tube. Of all the cases of secondary actinomycosis, hepatic actinomycosis is the most frequent. The portal vein carries into the liver loose fragments of actinomycosis from the primary focus, and these rapidly multiply in the parenchyma, the more easily as the liver offers the best condition for the growth of anaerobic germs.

Koch's bacillus ranks first among the essentially pathogenic germs now considered. What becomes of the sputum swallowed by tubercular patients? The gastric juice acts on it as an antiseptic; but Strauss and Wurtz, who have studied this point, say that the antiseptic action obtained in their experiments is brought to a maximum which never occurs in

ordinary digestion. Miller has proven that two parts per thousand of hydrochloric acid is necessary to arrest microbial fermentations in the digestive tract. Therefore a number of bacilli pass down into the intestines. Says Lauth: "The bacilli are stored up by the liver, which stops their course, as the lymphatic glands do, otherwise the unfortunate patient who swallows his sputum would pretty soon suffer from general dissemination of the bacilli and be carried off in a short time."

Weigert has published two cases of tubercles in the portal and splenic veins, not followed by generalized tuberculosis. He showed (1) that the existence of tubercular ulcerations of the intestine is not indispensable to account for the presence of tubercles in the liver, or in the lymphatic glands of the mesentery; (2) that the portal vein and the lymphatics can absorb the bacilli directly, without any intestinal lesion. Delvoklonski has recently made the same statement. It appears, consequently, that if the liver and the intestinal membranes are intact, the bacilli reaching the liver become innocuous. In 1884, Gilbert and Hanot found, in sectioning the liver of an executed criminal, one typical miliary tubercle, around which the liver appeared absolutely normal. No tubercle could be found elsewhere. Cornil and Ranvier, Cornil and Babès have also found tubercles and bacilli in the liver alone. Gilbert and Hanot have observed two clear cases of fatty tubercular hepatitis which had developed primarily and separately. When the intestinal mucous membrane is scooped out with tubercular ulceration, fragments of tubercular material run through the liver constantly: bacilli, toxin, histological elements, and yet not always do we find there tubercular lesions. It is a fact that the liver does not present in all consumptives an equally propitious ground for the implantation of the infectious germs. However, it is usually more or less touched, and offers the different forms of hepatic tuberculosis described by Gilbert and Hanot. In such case, it is not always the bacillus itself that starts the pathological change—it seems that the toxin alone has been the factor of irritation and degeneration.

An objection may be raised to Hanot's pathogeny of tubercular cirrhosis on the ground that guinea pigs inoculated with tuberculin do not show any sclerogenous process, and that

patients treated during several months with Koch's remedy in increasing doses were never apparently affected with cirrhosis. But, it seems irrational to compare tuberculin injections with the constant resorption of infinitesimal tubercle toxin originating in the intestinal ulceration. Again, in ordinary conditions the liver receives both the toxin and the bacillus, and, further, the special condition of intestinal absorption can not be compared with subcutaneous injection. In the intestines are incessantly springing up a number of poisons and toxins. They flow toward the liver, and they certainly combine their action upon the liver with that of any intercurrent infection or intoxication, the result of which combination is what we discover probably in sections of tubercular livers, the changes not being strictly caused by the tubercle bacillus alone. Pilliet and Hanot have remarked in livers of consumptives the same infectious nodules that they found in the livers of typhoid fever cases, these nodules appearing in all cases where intestinal ulceration existed.

Therefore the pathology of the liver is most closely brought under the influence and action of the intestines. Among the conditions that favor the yielding of the liver under such influence and action we must place in the first rank alcoholism. Lancereaux, in his remarkable work on hepatic pathology, shows that alcoholism invites the implantation of tubercle on the peritoneum and in the liver. Next to alcoholism comes *arthritis*, any taint of which, inherited or acquired, plays a similar part in the liver's facile infection. Do we not find in children, who are usually not alcoholized, tubercular cirrhosis, acute hypertrophy and fatty degeneration of the liver? At any rate, the fact is that in hepatic tuberculosis the bacillus ordinarily passes from the intestines directly into the liver by way of the portal vein more frequently than by the arterial and lymphatic routes. Gilbert and Lion have obtained hepatic tuberculosis by injecting tubercular material into the mesenteric veins, and Weigert has given the clinical description of tubercular portal or pylephlebitis. Saboureaux reports a miliary tuberculosis of the liver and spleen in a new-born child whose mother had pulmonary tuberculosis. Here the umbilical vein had been the germ vector. Bau and Renon have reported the

presence of Koch's bacilli in the blood of the umbilical veins of fœtuses from tubercular women.

Many other lesions occur in the liver during the various general infectious diseases, showing direct importation of the germ from the intestines, as the degeneration of the hepatic cells occurring in cholera. In all such infectious diseases it is natural that the cells are first irritated and consequently an extraordinary flow of bile follows (hypercholia); in a second stage, where the cells are more deeply damaged and finally degenerated, the secretion of bile is arrested (acholia). Closing this section of the paper we will say that Koch's bacillus, like the coli commune, the streptococcus, the staphylococcus, can emigrate from the intestines and lodge itself directly on the peritoneum, causing tubercular peritonitis; and, according to some, the process extending to Glisson's capsule and following it along the portal canals, may secondarily cause in this manner tubercular cirrhosis.

A number of pathologists hold that biliary lithiasis is of microbial origin, as if Linne's adage: "*Lapides ab animalibus,*" were also true regarding micro-organisms. If the formation of gall stones is due to micro-organisms of the biliary ducts, if a micro-organism is actually the primordial nucleus of gall stone, the natural inference must be that biliary lithiasis is partly of intestinal origin, being that the microbes of the biliary ducts are in a large number of intestinal origin.

The following are the documents upon which this new theory is, at present, erected:

The starting point arises from the study of the relations between typhoid fever and biliary lithiasis. It is generally admitted nowadays that biliary lithiasis may follow, as the other well known sequelæ, an attack of typhoid. Observations upholding this view are not rare, and Hanot reports two cases where the filiation does not allow of discussion. What is the nature of this relationship? Bernheim says that the gastro-intestinal catarrh of typhoid fever spreads to the biliary ducts and causes the formation of stones according to the old theory of gall stones. In 1886 Galippe announced that he had found micro-organisms in gall stones and he proposed the following theory: "The physiological variations in the organism afford a

suitable medium to the growth of microbes which actually produce chemical changes in the fluids, catalysis or rather double decomposition or precipitation of substances that are normally maintained in solution." From the time of the Tenth Congress at Wiesbaden in 1891 the microbial theory of biliary lithiasis has gained considerable credit.

Naunyn upheld it in his masterly manner. One of the conclusions of the discussion in which Schroeder, Furbringer and Mosler participated, reads as follows: "The early angeiocholitis which starts the precipitation of the first elements composing the stone, may arise from infections of various nature, to which the bile opposes but a feeble antiseptic action. These infections come from various sources, which Bouchard, Netter, Gilbert and Girode have recently studied. Two conditions are essential: 1. The stagnation of bile. 2. Infection."

Chiari states that he has nearly always found Eberth's bacillus in the gall bladder during an attack of typhoid fever; he advances that it even multiplies there and may not only cause a recurrence of typhoid fever, but also gall stones. Gilbert and Dominici have injected the typhoid bacillus and found that it actually causes gall stones. Gilbert and Fournier presented to the Society of Biology a report of a case of typhoid fever complicated with double parotiditis and followed by biliary lithiasis. In 1891, Hanot and Letienne published a case wherein the gall bladder, impervious to the bile, contained calculi and microbes: bacterium coli, staphylococcus albus, and a bacterium of the megatherium type, seldom found in the bile, and which apparently came from food. Was not the relationship between the microbes and the calculi in this case that of cause and effect?

Again, it is a fact that biliary lithiasis is frequent in the herbivorous animals. Now then, fodder contains a number of microbes, pathogenic ones, too, as, for example, the streptococcus and the diplococcus pneumo-enteritis, well-known agents of the pneumo-enteritis due to fodder. It is hardly necessary to remark how the new theory of biliary lithiasis will change its hygiene and therapeutic management. If the intestinal catarrh of typhoid fever, spreading to the biliary

ducts, becomes a lithogenous catarrh; if, in other words, the germ of typhoid fever is capable of causing biliary lithiasis, the microbial origin of biliary lithiasis does not allow of discussion. The question is rightly closed. There remains yet to find what microbes, outside of that or those of typhoid fever, are the factors of lithiasis in the normal and in the course of other diseases. Possibly any microbe, from the fact that it can multiply in the mucus of the biliary ducts, is, therefore, capable of causing chemical changes leading to the precipitation of mineral principles.

Galippe has seen microbes growing in saliva cause the formation of crystals of carbonate of calcium. Therefore, biliary lithiasis depends on the mode and number of microbes reaching the biliary ducts, and chiefly on the more or less liability of the mucus to decompose and to afford precipitation of mineral elements. If this be true, finally the old view of diathesis would yet predominate over the germ. For biliary lithiasis, then, would not be an accidental phenomenon, but would still remain the exponent of a predisposed state of the organism some inherited or congenital modification *totius substantiæ*, or, in other words, the expression of a diathesis.

B. Hepatic Congestions and Cirrhosis from Intoxication of Gastro-intestinal Origin.

Up to a few years back, aside from short remarks by Saunders, Portal, Broussais, Andral, the condition of the liver in diseases of the stomach was only briefly indicated. Budd is the first one who clearly asserted that cirrhosis of the liver may be caused by gastro-intestinal toxins. In his treatise, we read: "Cirrhosis is seen in people of sober habits, and it may arise from other causes than indulgence in spirits. Some of the many substances so infinitely various which the stomach receives by ingestion or the products of impaired digestion may be carried by the portal vein into the liver, and cause cirrhosis, like alcohol."

At the present time, a few facts in connection with this subject are due to Leven, Poncet; but Bouchard was the first one who methodically studied the condition of the liver in gastric dilatation. "In 389 cases of gastric dilatation observed by

myself," he says, "I have found 89 times a dilatation of the liver (23 per cent.). This enlargement is variable; it increases, it decreases and disappears as the case grows worse or better. It recurs with facility, attended by soreness or weight in the hypochondrium, and complicated at times by jaundice. While I have not ascertained it on the cadaver, I infer from these signs that this enlargement is probably due to congestion. In cases of gastric dilatation only, I have found a congestion of the liver, similar to that accompanying certain chronic diseases. In these, the enlargement is still more pronounced and persistent; it varies in size more slowly, it causes neither pain nor jaundice. The changes in the liver's histology corresponding with these clinical signs are entirely unknown to me. Apparently, the alteration may simply consist of an enlargement of the cells. But to avoid prepossession, I merely call it 'large liver.' This large liver is seen only in a limited group of chronic diseases: diabetes mellitus, obesity, gout, and it is very rarely seen in the other chronic diseases. The large liver in the chronic diseases mentioned above is directly connected with them, yet we remark that those afflicted with diabetes mellitus, obesity and gout are usually dyspeptics, so the large liver spoken of may be considered as partly due to dyspepsia." Since writing the above words quoted, Bouchard has handed to Boix his statistics in detail, as follows:

Gastric dilatation and large liver.....	240 cases.
G. D. + L. L. + Peptonuria	44 "
G. D. + L. L. + Glycosuria	13 "
G. D. + L. L. + Diabetes	60 "
G. D. + L. L. + Obesity.....	25 "
G. D. + L. L. + Gout.....	12 "

Legendre, in sixty-one cases of gastric dilatation (dyspeptics), found twenty-four large livers, some permanent, some changing; their limit from the costal arch varying from one to five fingers in width, surface smooth, no pain. Hayem also believes that gastropathies play a most important part in the genesis of hepatic diseases. He remarks that duodenitis is frequent in gastropathies, and again, that hypertrophic cirrhosis is often seen in hyperpeptic gastritis, whilst atrophic cirrhosis, on the contrary, is often seen in chronic gastritis, in which intense hypopepsia, even apepsia, exists. In 1892, Hanot, in his monograph on hypertrophic cirrhosis with

chronic jaundice, stated that while its origin was yet hypothetical, he thought it may be an infection coming from the intestinal or the biliary tracts, and in that direction he advised investigations to reach a solution of the problem. Millon recently wrote about the livers of children who frequently suffer with gastro-intestinal disorders, and noted the most surprising variations in its size, these being enormous in the course of twenty-four hours. The liver in childhood is, so to say, elastic; in two days it can swell and extend six centimeters below the arch, then decrease and rise to nearly the normal line, and swell to decrease again, a repetition of the phenomenon occurring at three or four days' interval. This congestion of the liver in children coincides with the passage of food, and manifests a defect in its elaboration.

The clinical history of hepatic congestion of gastro-intestinal origin is briefly given: malaise, soreness deeply felt in the right hypochondrium, irradiating toward the right scapula, enlargement of the gland painful on palpation, subicteric color of the conjunctivæ and teguments, constipation, offensive stools, urobilinuria, deposit of uric acid colored by uroerythrin, alimentary glycosuria, etc. Brunton has given in detail the mode of its production. He lays stress on the composition of the blood in such cases, and the influence it has on the circulation in the liver. The plasma, altered by the products of impaired digestion, runs sluggishly through the intra-hepatic capillaries. In addition to this mechanical factor, the toxins, acting upon the vaso-motors, paralyze the unstriped muscular fibres of the capillaries, which consequently dilate, circumstances commonly seen in fermentative dyspepsia. To these factors, in a number of cases, the heart adds its influence a later period, when it weakens. However, this question of pathogeny regarding hepatic congestion is not yet clearly established. To what extent should we impute the damaging influence to the poisons ingested like alcohol, to the products of fermentative dyspepsia like the acetic, lactic, etc., acids, to the microbes or their toxins? For example, a ptomaine may be microbiophile as Courmont puts it, and consequently it may prepare a first rate culture ground all over the gastro-intestinal surface. Then microbes, which are usually found to be

innocuous plants, will become poisonous, and growing in vitality will spread to the liver and damage it, causing congestion among other things. Again, the liver may be so prepared as to yield under the microbes by the products of some gastrointestinal lesions, such as the cancerous ulcer of the stomach, traversing it. Hanot describes a variety of cancer of the liver, having the clinical aspect of a septicæmia in which the liver swells and becomes painful, this being due to a severe streptococcal infection overtaking the cancerous liver.

Gastric cancer tells upon the liver either by spreading through and through and by means of embolus, or by causing enlargement of the lymphatic glands in the transverse portal fissure, thus compressing the hepatic duct. Hence enlargement of the liver, of the gall bladder, and chronic jaundice. In a similar way, biliary congestion is caused also by cancer of the pylorus, cancer of the head of the pancreas, and cancer of Vater's ampulla, the duodenal opening of the common bile-duct and pancreatic duct. Variations in the size of the liver have a practical bearing in cases of gastric cancer. Usually, as general wasting increases, the liver slowly retracts; at the autopsy, it is shrunken and slightly sclerous. But, at other times, it is enlarged during life two or three inches below the arch; at the autopsy it is hypertrophied, smooth, brownish or yellowish, and in this case the cells have undergone fatty degeneration. The liver when enlarged from intoxication or infection in cases of gastric cancer, varies in size from one day to another. Hanot in his clinical lectures compares it with an accordeon, and this may lead to error in diagnosis. A case illustrates the fact. A physician calls in consultation two eminent confrères for his father-in-law, who had suffered with dyspepsia for several months, and was losing flesh. They found his liver very large and the diagnosis was pronounced "hydatid cyst of the liver." An appointment was made with a surgeon for the operation. The surgeon on examining the patient failed to detect any enlargement of the liver—it had gone back to the normal limit. Soon after signs of gastric cancer were undeniable. The cancer, which was first covered by the enlarged liver, was soon felt after the liver had changed size, hematemesis came on, and the patient died in marasmus.

Gastro-intestinal dyspepsia causes hepatic congestion, but is there not also some *cirrhosis* in those large livers spoken of? Hanot believes there is, and he, with Boix's collaboration, called attention to these non-alcoholic cirrhoses of the liver at the Congress of Rome. The case they reported then presented after the histological examination made by Suchard *diffuse generalized interstitial hepatitis with a mono-cellular tendency*. The analogy between the histological structure of this case of cirrhosis and that of fatty hypertrophic cirrhosis in tuberculosis made an impression on the observers, and Boix justly recalls as potent factors in the latter case, the toxic actions and dyspeptic disorders invariably attached to tuberculosis. Boix, in his thesis for the degree of doctor of medicine, has collected all the observations of hepatic cirrhosis caused by auto-intoxication which Hanot and himself possessed, and he related in detail his experiments on rabbits, positively causing cirrhosis in these animals by the ingestion of butyric, lactic, acetic, valerianic acids. "Butyric acid alone," says he, "causes lesions in the liver which experimentally realize the clinical atrophic cirrhosis of Laennec. The lactic and valerianic acids have not afforded as complete a demonstration, but nevertheless it was strong. Acetic acid also afforded a well marked cirrhosis. It seems of the four acids to possess the most sclerogenic power. Indeed, while butyric acid could be administered during three months, acetic acid, not tolerated by the animals, has afforded in thirty-six days lesions nearly as extensive as those in the butyric acid case. It also kills quicker than butyric acid, for its action on the cell is more toxic. Therefore, of all the poisons of the digestive tube acetic acid is the most dangerous because it is at the same time irritating and degenerating in a high degree."

Boix investigated also the lesions in the liver consecutive to ingestion of fatty acids, acetone, aldehyde, oxalic acid, living cultures of bacterium coli, colitoxines, extract of fæces.

With fatty acids not the least connective tissue proliferation was obtained. Acetone, which rapidly kills by acetonæmic nephritis, chiefly impaired the hepatic cells, and in those animals that resisted a longer time it had started embryonic infiltration

around the veins and the gall vessels in the spaces between the lobules, probably the starting point in diabetic cirrhosis. Aldehyde showed only a weak sclerogenic power, and it also destroyed the hepatic cells. But while they undergo fatty degeneration with alcohol, they with aldehyde undergo the granular degeneration. Oxalic acid, which rapidly causes parenchymatous nephritis, starts gastro-intestinal inflammation, consequently ascending angiocholitis, and later on granular change in the cells and sclerosis in the spaces.

Pepper (*pipernigrum*) caused in one month a very clear case of sclerosis in the spaces encroaching upon the lobules, and also granular degeneration of the cells.

The culture of *bacterium-coli* and the various colitoxines experimented with have given the following results, briefly stated: Nearly always ascending angeiocholitis, sclerosis of the interlobular spaces, endarteritis at times, sclerosis at others, but always some embryonic proliferation in the middle and small sized interlobular veins and bile ducts, and also in the intralobular vein. The cells present granular necrosis, their nuclei are vesicular, where, of course, the toxin-infection has been intense; in such cases are also seen hæmorrhages of the liver, kidneys, lungs, ecchymoses on the gastro-intestinal mucous membrane.

Extract of fæces has given results nearly similar to those of coli-toxines.

Boix again observed that all the animals which took alcohol with toxic chemicals not only lived longer—even a year longer than those which took none, but that sclerosis in them was less pronounced, at times absent, at any rate the predominating cellular change was steatosis, and not sclerosis.

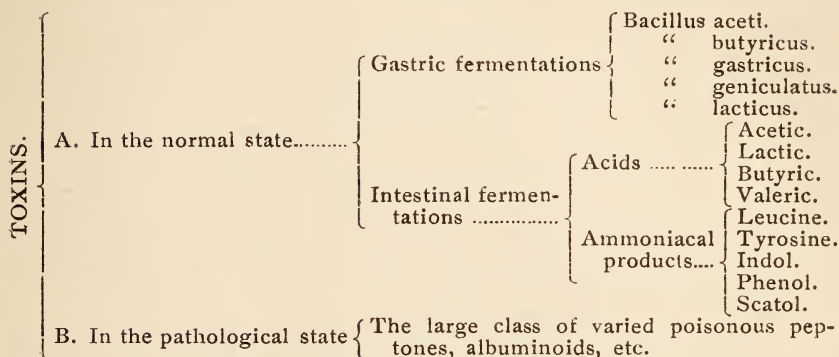
To sum up: These interesting investigations prove that the organic acids of digestion can produce cirrhosis of the liver, particularly when ingested in very small doses for a long period.

Normally the liver struggles against those every day poisons, but if it weakens, or if it is weak *ab ovo*, their toxic action prevails, and there results cirrhosis by auto-intoxication of gastro-intestinal origin.

TABLES ILLUSTRATING DR. DUPAQUIER'S PAPER.

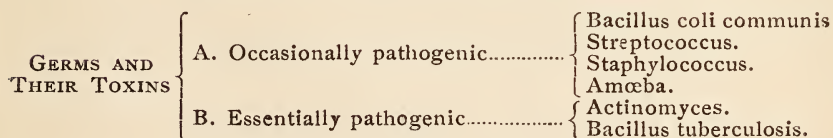
I.

Auto-intoxication of Gastro-intestinal Origin.



II.

Infection of Gastro-intestinal Origin.



III.

Diseases of the Liver due to Auto-intoxication and to Infections of Gastro-intestinal Origin.

- | | | |
|---|---|--|
| A. Due to Auto-intoxication of Gastro-intestinal Origin.... | { | 1. Congestion (<i>Bouchard</i>).— In children (<i>Millon</i>). |
| | | 2. Cirrhosis (<i>Budd, Hanot, Boix</i>). (Organic acids, etc., and alcohol.) |
| | | 3. Hepatic fever (<i>Mouneret, Charcot, Beaumetz</i>). (Pseudo-malarial.) |
| B. Due to Infections of Gastro-intestinal Origin..... | { | 1. Congestion (typhoid fever, dysentery). |
| | | 2. Hypertrophic cirrhosis (<i>Hanot</i>). |
| | | 3. Icterus: simple and malignant. |
| | | 4. Pylephlebitis: angeiocholitis, cholecystitis (adhesive, suppurative). |
| | | 5. Hepatitis. |
| | | 6. Actinomycosis. |
| | | 7. Tuberculosis. |
| | | 8. Biliary lithiasis. |

REPORT OF SEVEN CASES OF APPENDICITIS.*

BY DR. E. L. MCGEHEE, NEW ORLEANS, LA.

My object in bringing this subject to the attention of this society, where vital progressive questions of the day are intelligently considered, is to give color, if not shape, to the professional opinion of this section by a consensus of opinion clearly expressed to-night. We hope that a free discussion will follow so that each of us may leave here with conservative determination yet with more distinct ideas as to what cases require surgical interference and *when* should it be done; for here, as in post-partum hæmorrhage, every point should be considered, and the line of action, as far as possible, determined, before we are brought face to face with this erratic, insidious, and often fatal malady.

Our knowledge of the diseases of the cæcum and appendix has been increased greatly year by year. The term appendicitis has replaced typhlitis, perityphlitis, paratyphlitis, as used in olden works, applied to inflammations in the right iliac fossa. As our knowledge of the pathology increases new terms may yet be adopted, but for the present the above appellation is a good one, since it indicates the origin of nearly all inflammation in that region.

Since a certain number of these cases requires prompt and immediate action from the surgeon, the question of early diagnosis is of paramount importance. Though we are now much better able to recognize pathological conditions about the appendix than we were a few years ago, yet much has to be done before we can lay down rules that will enable us, when suddenly confronted with the patient, to answer: 1. Is operative procedure demanded? 2. When shall it be done?

Operation made during life, and conditions recognized during operation, are the factors upon which we shall depend for future improvement.

A concretion of fæces within the appendix, orange or grape seed, coffee berry, prune stone, date seed, etc., appears oftentimes to be the starting point of an inflammation of the lining membrane; this may continue until the coats of the intestine

* Read before Orleans Parish Medical Society, August 24, 1895.

may give way and rupture, causing fatal hæmorrhage, as in the first case we report. When pus forms it is not always intra-peritoneal.

Attack may be sudden; stoppage of bowels and pain not always in same locality, but generally in right iliac fossa; pulse and temperature both rise; rigidity of abdominal muscles often seen; temperature not always high, but higher in rectum. The pulse is best index of patient's condition; constipation so marked as to be taken for obstruction; this paralysis of intestinal wall is in consequence of inflammation. A change from constipation to diarrhœa, brought about by medicine, is seen in abscess rather than in diffuse peritonitis, a welcome change, which often aborts a general septic peritonitis. Tympanites appearing early is not favorable; vomiting indicates peritonitis.

No œdema of abdominal wall is met only where abscess is unusually superficial. Tumor in right iliac fossa is not found in commencement of attack, later is due to adhesive inflammation or formation of pus; if inflammation is not shut off from abdominal cavity tumor is wanting and case generally terminates unfavorably. Digital examination by rectum should not be neglected. What cases presenting such symptoms will subside without suppuration, or in what cases will pus be circumscribed, or will there be general peritonitis, perforation, etc., are pertinent questions. In no class of cases is good judgment more valuable to the patient, and in no class is correct judgment more difficult to form. If perforation occurs it is generally in first three or four days, hence to forestall fatal rupture operation must be early. Then what are the indications?

(1) Pulse progressively increasing; (2) temperature rising or remaining high; (3) acute pain on pressure; (4) constipation present with or without swelling in right iliac fossa, are symptoms which may be held to indicate operation.

There is usually some fever together with the constant pain in right iliac fossa (unless this be masked by opim), which mark a departure from ordinary obstruction. With the uncertainty that hangs over the diagnosis in early stages of appendicular disorders the expectant treatment is the most prudent, constantly watching the patient, for in a few hours the inflammation set up in the wall of the canal may lead to perforation,

extravasation of the contents, shock and diffuse peritonitis; hence the dividing line may be suddenly crossed where masterly conservatism was needed. On the other hand, the obscure stage may result in a circumscribed involvement of the surrounding tissue with adhesive inflammation characteristic of serous tissue, which shuts in the exudation from the cavity, and thus forms local abscess.

How can that dividing line be determined when the case passes into that not well defined condition which threatens perforation and requires prompt action on the part of the surgeon? Some aggressive practitioners have advocated an exploratory operation to determine the seat and character of the disturbance whenever there are local and constitutional disturbances indicating progressive appendicitis. Notwithstanding our justifiable confidence in antisepsis, we hardly think it proper to make an exploratory incision in an acutely inflamed peritoneal cavity, in view of these facts, (1) that 90 per cent. of all cases of appendicitis get well without surgical interference, as shown by a report of the London Hospital; (2) that a large majority of successful cases are operated on after the acute inflammation is circumscribed; (3) when perforation occurs it is generally within the first three days; (4) serous membrane when inflamed sometimes protects itself by exudation that will shut off any suppurating fallopian tube or appendix and thus protect the general cavity and avert a fatal termination.

Consideration of these facts forbid the endorsement of the rule so emphatically expressed, "that upon recognizing the signs of local inflammation with constitutional disturbance the operation is demanded." A faithful record of all successful and *unsuccessful* cases operated on during the acute inflammatory stage will suggest more conservative measures.

Within the past six or eight years much has been written on this disease, the nomenclature of which was not known by surgeons ten years ago, and yearly our knowledge increases as recorded facts accumulate. Until the rules that should guide the surgeon in these cases have been established beyond controversy, it behooves each of us to add our quota of clinical experience.

CASE I.—On Thanksgiving day of 1893, a noble, brave boy of 17 years, while on a fox chase, partook of the "Black Jack," a dry, pungent indigenous berry. These degenerated grapes have a seed about the size of barley. Many of these were swallowed. About six hours later he complained of pain in the right iliac region, which steadily grew worse; brisk purgation with calomel followed by castor oil was effected without relief of pain. The family physician was called, who relieved the pain with opium and tried to relieve congestion with blisters and iodine. Temperature was never above 102 deg. F., pulse rapid, bowels constipated. At McBurney's point a tumor could be felt that was painful. There was no tympanites nor swollen condition of the abdomen.

I was called in consultation on the ninth day, just in time to witness his death by hæmorrhage from the bowel.

This seems to have been a case where prompt surgical interference gave the only hope.

When should it have been employed?

CASE II.—In August, 1895, I was called in consultation with Dr. O'Reilly, formerly of Fort Adams, Miss., now of this city and a fellow of this association.

J. B. M., age 34 years, after prolonged fast and great physical exercise, partook freely of indigestible articles of diet. Had previously had good digestion and fine health. He had obstinate constipation, pain in right iliac region, vomiting, rapid pulse, elevated temperature. Purgatives and enemas availed nothing for four days. Pain was relieved by opiates and chloroform. Pain grew less as peritonitis, which became general, advanced. Distention of abdomen so great as to confine respiration to thorax, hurried and shallow. Pulse rapid. We earnestly advised an operation, thinking there was no hope without it. But the friends refused. Salines, mag. sulph., and enemas were freely and persistently used. On the fourth day a brisk diarrhœa set up, peritonitis subsided and pulse improved. Yet a tumor remained in the right iliac region, which was painful on motion and on pressure. As soon as the patient was strong enough to travel he came to New Orleans and consulted Dr. A. B. Miles, who did not think it necessary to operate for the removal of the tumor, as it was di-

minishing in size and patient was gaining flesh and strength daily. Patient returned to the country, and after a few weeks the abscess was opened through the abdominal wall, two inches above Poupart's ligament. Complete and permanent restoration to health is the result.

What would have been the result had the surgeon's judgment and not the friend's affection directed the treatment?

CASE III.—In October, 1893, was called in consultation with Dr. James Leake, at Bayou Sara, La. He was suffering from circumscribed peritonitis, originating in the appendix. This was the sixth day of the attack, and patient was doing fairly well. We agreed to continue medicinal rather than employ surgical treatment, which consisted in the free use of saline cathartics and application of cold. One by one the grave symptoms disappeared, and the patient was kept in bed, absorbents internally and locally used until the induration and tenderness about ileo-cecal valve entirely disappeared. There has been no return and twenty-two months have passed. Appendicitis, followed by peritonitis, does not always end in suppuration, even after repeated attacks, for this trouble is often recurrent, the parts will be found matted together by thick adhesive bands, yet the inflammation stops short of pus formation, unless the patient be tuberculous.

CASES IV AND V.—Are two similar cases in young men that are still under observation with recurrent appendicitis. In one case it is more than eighteen months, in the other nine months, since the first attack occurred. There were the usual symptoms, tumefaction and tenderness under McBurney's point. After absolute rest in bed for days, free purging, liquid nourishment and local applications of plaster of mercurial ointment applied every day as long as there is hardness or pain; they recovered and indulged in the usual active sports of boys. In both of these cases there has been a return of inflammation, but as each attack is less severe, I have not suggested an operation, but watch them with intense interest, fully appreciating the suddenness with which an acute attack of the gravest nature may occur.

As these patients are not tuberculous, the plastic exudation may eventually end in resolution.

CASE VI.—In January, 1895, with Drs. Kelly and Pratt, of this city, I treated Mr. H. A., aged 24, German. A few hours after he had eaten imprudently as to quantity and quality he had intense pain in the right iliac region. It required repeated and large doses of hypodermic injection of morphine to enable him to remain in bed. Notwithstanding frequent doses of cathartics, chloroform, and with large enemas, the bowels were obstructed for ninety hours. Rapid pulse, nausea, with great prostration.

On the third day, in the judgment of the physicians, a surgical operation was indicated, but the extreme condition of the patient did not justify it.

The case went from bad to worse; pulse rapid and weak; rapid breathing due to abdominal distention; tenderness and tympanites over entire abdomen; temperature 103 deg. As little opiates as would meet the demand was given, for the true condition is always masked by this drug. Small doses of salines were continued at short intervals and enema repeated, when on the fourth day the obstruction was overcome, or rather the tonicity of the bowel was restored, when free and copious evacuations greatly reduced the enlarged abdomen and relieved other grave symptoms. This extensive inflammation culminated in the formation of large quantities of pus. A free opening, drainage, and daily injection of peroxide of hydrogen was continued for days; other remedies as indicated and liquid nourishment employed.

This patient is now stouter than ever before, and at his usual avocation. No tenderness or induration about his side.

Surely if his condition had allowed the operation at the time suggested during the acute stage of the inflammation the result could not have been better.

CASE VII.—E. S. Carroll, of East Texas, age 29 years, a physician attending post graduate course, was operated on a few weeks ago for recurrent appendicitis after rupture. For seven years has had attacks of intestinal colic. Six or eight months ago had soreness in right iliac fossa, and felt a small tumor one and one-half inches in diameter which did not increase. Never any fever or diarrhoea. Had colic every day for two weeks, when on October 23, had sharp pain like renal

colic. Came to hospital after breakfast to attend clinical lectures, when he suddenly felt something give way in side. Walked about four blocks with great pain and prostration. Opium and sinapisms relieved pain. Temperature rapidly rose to $103\frac{1}{2}$; tumor doubled in size in twenty-four hours; pulse 120, circulation bad.

October 25. Could not lie on left side; tumor distinct; temperature remained up, 101 to 103; cold hands and feet; pain or soreness increased; movement unbearable.

October 25. Operated on by Surgeons Matas, assisted by Drs. E. Souchon and Martin. Appendix inflamed and pus and feces found in the abdominal cavity. Thorough irrigation with peroxide of hydrogen and free drainage were employed, and recovery was uneventful; temperature did not rise above $101\frac{1}{2}$ F. It is probable that the small sac of pus emptied while at the hospital, and the prompt operation rescued his life.

It is difficult to account for the origin of this case, unless as the doctor-patient suggests, about seven years ago he was engaged in severe physical labor that caused him to press the elbow forcibly and frequently on the right iliac region, since that time the violent and unprovoked colic appeared. He has always been prudent about diet, and has not suffered from constipation for the past seven months.

He has had pain in the right leg whenever fatigued, and pressure over the small tumor (which felt like an indurated gland) would cause pain.

Within the past few months we have known of two cases (though we had no professional responsibility in either, hence do not feel at liberty to report the details) that were operated on by two of our most skilled surgeons in the early stage of the disease, with trained assistance and excellent environment and results were not favorable.

In our conservatism we would not appear hostile to progress or turn a cold shoulder to the brilliant triumphs of antiseptic surgery, but in the light of our limited experience we can not endorse the idea that "in all cases of recent occurrence in which suppuration has not appeared, but there exists an inflammatory process of the appendix, it should be removed." And it does appear that "exploratory operation

in the presence of peritonitis in the active stage is fraught with great danger.”

CONCLUSIONS.

1. The majority of cases of appendicitis do not require an operation.

2. Urgent must be the symptoms that justify an operation during the active stage of acute inflammation.

3. If pus be present it should be removed by free incision, and irrigation, followed by gauze drainage.. Attempt should not always be made to remove the appendix in these cases, for it is fair to infer that the canal is closed.

4. In recurrent cases, the quiescent stage, the interval between the attacks is the best time for surgical interference.

5. In acute perforating appendicitis operate at once. It is upon this class of cases, a small proportion fortunately, that the advice is based to “operate in every case.”

6. If recurrent attacks increase in severity or frequency the appendix should be removed; though each case must rest upon its own merits.

ORLEANS PARISH MEDICAL SOCIETY.

At the annual meeting of the Orleans Parish Medical Society, December 14, 1895, the following officers were elected for the year 1896:

President: Dr. Edmond Souchon.

Vice Presidents: Drs. E. D. Martin, John Callan, H. D. Bruns.

Recording Secretary: Dr. H. B. Gessner.

Treasurer: Dr. S. L. Théard.

Librarian: Dr. S. P. Delaup.

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DR. R. MATAS.

DR. A. W. De ROALDES.

DR. H. W. BLANC.

DR. WILL H. WOODS.

Editorial Articles.

CHLOROFORM ANÆSTHESIA.

In a recent discussion before the Orleans Parish Medical Society on the relative value of chloroform and ether as anæsthetics, many interesting facts were brought forward, culled from the personal experience of those who took part in the discussion. In the Northern States ether is used much oftener than chloroform, but in the South chloroform still retains its hold on the affections of the profession. The casualties from chloroform are relatively more numerous than those from ether. The statistics of the German Surgical Society, as quoted in *Sajous' Annual*, give a mortality from chloroform of 1 in 2645 administrations; from ether, 1 in 26,268; from chloroform and ether mixture, 1 in 8014, and from Billroth's mixture (alcohol, chloroform and ether), 1 in 4890. Chloroform furnishes relatively ten times as many victims as ether, as the statistics of four years of German experience would show. As our German brethren are thorough and conscientious in all they do, we may accept the above summary as a fair ex-

pression of the relative danger of the anæsthetics when administered in the most careful and scientific manner.

In the discussion above alluded to, two points were brought up which deserve careful consideration. Dr. E. Souchon touched on the influence of the action of the vapor of the anæsthetic on the nasal mucous membrane in causing a fatal result; and Dr. F. Formento's experience on a number of battle-fields in our late Civil War also points a lesson which is being heeded in the construction of improved inhalers for administering anæsthetics.

Dr. Souchon called attention to Paul Rosenberg's discovery of the fact that in tracheotomized rabbits, chloroform could be safely administered through the tube in quantities that invariably killed them when inhaled through the nose. The reflexes of the nasal mucous membrane were credited with causing death, and they were eliminated by previously cocainizing the mucosa with a 4 per cent. solution sprayed into the nose. A rabbit thus cocainized could stand as much chloroform when inhaled through the nose as a tracheotomized animal through the canula. The clinical application of this observation is an important step in the history of anæsthetics, as it is destined to diminish the dangers of the more agreeable of the two great general anæsthetics.

Bardeleben (*Sajous' Annual, 1895*) never had a death from chloroform in nineteen years' experience; and Wagner only one death out of 16,000 cases. The great differences in mortality, as shown by the figures of prominent surgeons, may in a measure be explained by the differences in modes of administration. The need of uniformity in the administration of anæsthetics by well trained anæsthetists, when practicable, is becoming constantly more apparent. An anæsthetist is a very important person; and if he is unable to recognize the danger-signals, or allows his attention to wander from the anæsthetic to the operation, the chances of a casualty are very much increased. The selection of the anæsthetic to be used in given cases is a matter of great importance; the conditions indicating the one to be used are pretty clearly defined, and when an anæsthetist has examined the patient to determine what should

be used and how administered, he relieves the surgeon of a load of responsibility, and protects the patient who places himself completely at the mercy of others.

In our late war Dr. Formento administered chloroform thousands of times to wounded soldiers suffering from injuries of all grades of severity. He could not command in a field hospital the facilities and elegancies of a modern, well-built hospital; but he never had a death from chloroform, and even did not observe any alarming symptoms from the action of the anæsthetic. While admitting that vigorous soldiers have more vitality than many hospital patients, Dr. Formento attributed the absence of casualties to the free dilution of the chloroform-vapor with air whenever he administered it. The "drop-by-drop" method of administering chloroform, which is so safe, enables the patient to take in a due amount of oxygen without interfering with the action of the anæsthetic.

In field surgery, with improvised cones, it is impossible to estimate the amount of the anæsthetic used, as a great deal of it is lost by evaporation. It is important, however, to know how much a patient is taking. For the purpose of administering chloroform safely and economically, two inhalers have been devised by physicians of this city, which enable the anæsthetist to know how much is being given, and without wasting a drop.

The appointment of trained anæsthetists at our hospitals, the preliminary cocainization of the nasal mucous membrane, and the use of well constructed inhalers that are virtually instruments of precision, will go a great way toward equalizing the relative mortalities from the two great anæsthetics, and provide the patient with the safeguards that humanity demands and science offers.

AN AID TO OPERATIVE SURGERY.

Dr. Warren S. Bickham, Demonstrator of Operative Surgery upon the Cadaver, in the Medical Department of Tulane University, is engaged in experimenting upon "A Method for Simulating Blood-pressure, Blood-flow and Tissue-distention in Operations upon the Cadaver." Briefly outlined, this method consists in (1) arresting post-mortem stomach

digestion of that organ, by filling the organ (through the nose or mouth) with a concentrated solution of bicarbonate of soda, immediately after death, to prevent the giving way of gastric vessels (and lowering of vessel-tension), in the subsequent steps; (2) injecting the cadaver, through the aorta, with the German solution of water, glycerine, methylic alcohol, alum, salt, nitrate of potash, and arsenic, prior to storing in ice refrigerators for future use, this injection being used to render and keep the tissues more life-like in appearance and texture, and to reinforce the preservative power of the refrigerators; (3) propelling through the aorta, at the time of operating, with a rubber syringe, acting upon same principle as the heart in its constant flow with intermittent pulsations, of a blood-like fluid made of a solution of perchloride of iron, sulphocyanide of potassium, hydrochloric acid and water—the regulation of the tension of the vessel-system being controlled by regulated flow of the outlet tube from the right auricle of the heart. By this method, the ordinarily shrunken, hide-bound tissues of the cadaver are considerably distended, and the vessels, when cut, bleed and spurt as in life. This new application of an established principle has never been put into practical use in the above way, as far as is known, and Dr. Bickham will write more at length upon the result of these experiments at the end of the present course of the class in operative surgery upon the cadaver. A modification of this method has also an application in dissections.

Abstracts, Extracts and Annotations.

MEDICINE.

ANIMAL AND HUMAN DIPHThERIA.

Dr. Degire (*Medical Week*, Vol. III, No. 18), before the Academy of Medicine of Belgium, Saturday, April 27, 1895, makes the following suggestive remarks on this subject:

I have been requested to report on a paper by Dr. Léon Gallez (Châtelet), in which he endeavors to prove that the ques-

tion as to the identity of animal and human diphtheria is by no means solved as yet. The partisans of the non-identity of the two affections urge in support of their views principally the following arguments:

1. That the bacillus of human diphtheria differs from that of animal diphtheria.

2. That the symptoms of the two affections also differ.

Now, these assertions are far from proved. As a matter of fact, there is a great uncertainty as to the pathogenic agent of animal diphtheria, and a truly specific microbe of this disease has yet to be discovered. Moreover, even admitting that the two diseases are determined by different micro-organisms, it does not necessarily follow that they are distinct morbid entities, and that animal diphtheria can not be transmitted to man. Many bacteriologists, indeed, support the theory of the polymorphism of microbes, and it is, therefore, by no means impossible that the bacillus found in diphtheritic exudations in animals is only the Klebs-Löffler bacillus, the characters of which have been modified by its living in a different medium.

Taking into account on one hand this polymorphism, and on the other the fact that the possibility of the transmission of human diphtheria to animals and back to man is generally admitted, Dr. Gallez formulates the following theory, destined to reconcile bacteriological data with the frequent contamination of human subjects by animals:

Diphtheria was originally transmitted to animals by man, but the specific bacillus has been modified by this change of medium, both in respect of its biological and morphological characters. This explains the discovery of different microbes in the diphtheritic products in man, pigeons, fowls, calves, etc., and also the transmission of diphtheritic contagion from animals to man, inasmuch as animal diphtheria is nothing but human diphtheria transferred to animals and constantly reproduced in the latter with the special characters acquired under the influence of the organism affected by the disease. When transferred to man the pathogenic agent naturally recovers the characteristics which it possessed in the human species.

Nor are arguments based upon the symptoms of the two diseases more conclusive. The slight differences observed in the symptomatology of diphtheria in man and animals are of but little importance, and are easily accounted for on the assumption that it is manifestly impossible for dissimilar organisms to react exactly alike under the influence of the same cause. Moreover, the fundamental symptoms of diphtheria are identical in man and animals, viz.: First, localization of the evil, then general intoxication, and ultimately paralysis.

The interest of the monograph is enhanced by reference to numerous instances of the transmission of diphtheria from animals to man.—*North American Practitioner*.

THE WAYS IN WHICH EXTENSIVE BURNS AFFECT THE GENERAL SYSTEM.

Drs. Boyer and Guinard (*Gazetta Medica di Roma*, Anno XXI, Fasc. 7) submitted dogs to the action of boiling water, and carefully studied their condition. At first blood-pressure rises, the respirations are accelerated, and the animal is violently agitated. This phase is only passing, and soon a rapid lowering of pressure, and of temperature and a slowing of respirations are noted.

Sonnenburg maintained that the depression was due to the rise in temperature of the blood, but these experiments seem to show that unless under exceptional circumstances this was not a factor in the results.

Immediate immersion of the scalded animal in cold water caused the suppression of the primary rise of the temperature, but seemed to add to the severity of the consequences of the burn.

The animal may fall into immediate collapse, the result of nervous "shock."

At the end of the first stage there comes a second more interesting one; the temperature rises, respiration remains tranquil, there is diarrhœa, vomiting, restlessness, delirium, spasms, even convulsions, finally prostration. Meantime there develop multiple hyperæmias all over the body, in the meninges, the brain, medulla, lungs, pleura, intestinal tract, liver, peritoneum, kidneys, etc.—hyperæmias that become congestions, even inflammations. In a word, there are all the symptoms and lesions of the severe fevers, or of poisoning by toxines.

Many authorities have found in the organs, in the blood and especially in the urine, toxic substances which they have isolated and tested by inoculations. Drs. Boyer and Guinard have obtained similar results in studying the toxicity of the urine of dogs in whom one whole side of the body had been scalded. They have collected urine from such cases which killed rabbits when injected in the proportion of 147, 81, 70, 12 and even 9 cubic centimeters to each kilogramme of body weight.

The urine in these cases is diuretic, causes torpor, interrupted at times by spasms and convulsive phenomena. It also causes contraction of the pupil, exophthalmos and dyspnœa.

With the urine of men who had been burned they succeeded in producing the same effects.

The organism of a burned person manufactures toxins in large quantity and of characteristically noxious quality. These are produced by tissue that is destroyed, or in process of destruction, by changes in the tissue juices, and especially by blood changes that have been noted by a number of authors.

As regards the asphyxia that is said to be produced by the blood changes, they found that the total quantity of gas in the blood was diminished, but the carbonic acid was diminished even more than the oxygen, showing that there was an arrest of metabolism, but not asphyxia.

They came to the following conclusions:

The burned person is first threatened with collapse, and then comes the danger of intoxication.

The first indication is to combat the pain, the nervous shock, and the depression; the great contra-indication is not to bring on a chill by the use of cold. The diffusible stimulants, ether and caffeine, are indicated, and there may be a question logically of transfusion or of the injection of artificial serum. If the blood-pressure is sufficiently high, bleeding should be thought of, and this method is, perhaps, too timidly praised.

It will be very useful to provoke by every possible means an abundant diuresis; while the slowing of the processes of oxidation and the presence of the toxins call for the repeated use of inhalations of oxygen.—*University Medical Magazine.*

THE USE OF PANCREATIN FERMENT IN THE DETECTION OF TUBERCULAR BACILLI.

In cases of suspected tuberculosis where examination of the sputum has failed to demonstrate the specific bacillus of that disease, Spengler suggests the use of pancreatin thus: The sputum for twenty-four hours is rendered alkaline by the addition of lukewarm alkaline water. To this is added from two to fifteen grains of pancreatin, when it is allowed to digest at the body temperature in some form of incubator for two or three hours, when carbolic acid is added to prevent putrefaction. The sediment that forms is drained of its supernatant fluid and more alkaline fluid and digestion may be allowed if desired. When freed from extraneous matter the bacilli may be easily found though of small number in the specimen. Fix, strain and examine in the usual way.—(*Am. Jour. Med. Sci.*) *Deutsche Med. Woch.* No. 15, 1895.

SURGERY.

ARISTOL IN NASAL OPERATIONS.

It is generally recognized that in order to derive the best results from surgical treatment in nasal affections, efforts should be made to secure as thorough antiseptics of the nose as possible before and after operation. The difficulties in the way of maintaining an antiseptic condition of the nasal mucous membrane after operative procedures are quite manifest, since the field of operation is constantly exposed to the action of pathogenic microbes inhaled with the air. The best method of securing antiseptics is to carefully cleanse the parts with alkaline and antiseptic sprays, as bichloride solution or peroxide of hydrogen, and then cover the surfaces of the wound with an antiseptic dusting powder. For this purpose Aristol is highly recommended. It is an effective antiseptic and cicatrisant, but perfectly innocuous and devoid of the slightest irritating action upon the nasal mucous membrane. Owing to its lightness it can be readily insufflated, and being very adhesive can not be removed by sneezing and coughing. The following, taken from an article on abnormalities of the nasal septum by Dr. P. L. Anderson (*N. Y. Med. Jour.*) will serve to illustrate the manner of using aristol after surgical procedures in the nose: "With a powder insufflator project upon the cut surface finely powdered aristol, which not only is an antiseptic of known value, but firmly adheres to the surface and prevents the constant oozing of blood and serum from the wound. Cleanse the parts daily for the next ten days with an alkaline spray of hydrogen peroxide, of half strength, and then dress with aristol powder." Under this treatment Dr. Anderson finds that no reaction occurs and that the patient does not lose a single day from business in consequence. In place of the insufflations of the powder some authors prefer a spray of a solution of aristol in a liquid petroleum product as benzoinol, in the proportion of 30 grains to the ounce, or this solution may be applied with a cotton probe.

AN EASY AND READY METHOD OF CIRCUMCISION.

Dr. John W. Ross (*Medical Record*, August 31) says: Retract the foreskin; insert the glans penis up to the corona into the open mouth of a glass test tube; draw the foreskin well forward over the end of the tube; tie a strong, small silk

cord very tightly around the foreskin immediately in front of the flange of the tube; amputate the foreskin one-eighth of an inch in front of the constricting cord by a circular sweep of the knife; unite the mucous and cutaneous edge of the stump of the prepuce by eight or ten fine interrupted sutures; cut the constricting cord; remove the tube; cover the cut edges well with powdered iodoform; encircle the anterior half of the penis with a roller bandage of iodoform gauze, allowing the meatus to project slightly; and keep the patient in bed with the penis elevated for from twenty-four to forty-eight hours.—*Maryland Medical Journal.*

GYNECOLOGY AND OBSTETRICS.

THE INDUCTION OF LABOR IN NEPHRITIS, WITH REPORT OF CASES.*

By DR. WILMER BRINTON.

I have been induced to bring the subject of the Induction of Labor in Nephritis to your notice by the reading of a paper on "The Significance of Albuminuric Retinitis in Pregnancy," written by Dr. R. L. Randolph, of this city. Dr. Randolph reports five cases of albuminuric retinitis occurring in pregnant women whom he has seen during the past two years, in which cases he decided by ophthalmoscopic examination whether it was the proper treatment or not to induce labor for the purpose of saving the eyes and perhaps the life of the woman. In the cases related not only were the eyes saved where labor was induced, but in the cases where he advised the continuation of pregnancy, the women escaped eclampsia. Judging from the first case reported by Dr. Randolph there must be some difference of opinion even among oculists as to when premature labor should be induced, for the report of this case which I shall now read will show that the first oculist consulted advised a different method of procedure from that recommended by Dr. Randolph.

Case: Mrs. M., 31 years old, three children living, and up to the fourth month of her third pregnancy had enjoyed good health. In the early part of the fifth month she began to have violent headaches, which could only be relieved by strong anodynes. They persisted for two weeks, when she noticed that her sight was growing dim. It continued to grow worse until she was practically blind in one eye, and the sight of the other

*Read before the Maryland Clinical Society, December 7, 1895.

but little better. At this time an oculist was called in, who pronounced it albuminuric retinitis and found the urine rich in albumen and some casts present. The induction of labor was advised, performed, and a dead child born. The woman had convulsions, but recovered with complete restoration of sight. One year later she again conceived and in the fourth month was attacked with similar headaches. Fearing that her sight would again become bad, she consulted an oculist again, who advised that if she waited for normal labor she would lose her sight and probably her life. Dr. Kelly was sent for to induce labor, but referred the case first to me. I found the vision 20-15ths in both eyes, and a low grade of hyperopic astigmatism. I found absolutely nothing to denote progressive disease in the fundis. The question was whether or not to induce premature labor. There was a faint trace of albumen in the urine, but no casts. I concluded that the evidence did not justify the operation. My advice was followed and the patient sent home to give birth a few months later to a boy.

The conclusions of this interesting paper were as follows: 1st: Visual disturbances occurring in the first six months of pregnancy, and especially when associated with violent headaches, frequently mean albuminuric retinitis, and if this condition is found, to *save sight* pregnancy should be at once terminated. 2d: Visual disturbances showing themselves in the last seven weeks of pregnancy, while indicating the same retinal lesions, are of less gravid import in so far as sight is concerned, and unless they are very pronounced and associated with widespread ophthalmoscopic changes, should not in themselves call for the induction of labor. 3d: The occurrence of renal retinitis in one pregnancy does not mean that the woman will be likewise affected in a subsequent one. And even though headache be present, and albumen found, so long as the fundi are free from signs of existing retinitis the question of sight will not be considered.

The very grave prognosis in cases of eclampsia occurring in the pregnant woman, the woman in labor, or the parturient, makes the question of nephritis a very interesting one to the obstetrician. Experience and statistics prove that women who have chronic nephritis conceive and carry their children to full terms without having convulsions. Indeed it seems that if they do not abort they are less liable to eclampsia than women who for the first time develop kidney disease during pregnancy. Cases of nephritis occurring in the pregnant woman, whether chronic or acute in character, must make the physician in charge anxious about the outcome of the case, for the rates of mortality vary from 25 to 40 per cent. for the mother

and from 50 to 75 per cent. for the child when we have eclampsia occurring during pregnancy, or before the completion of pregnancy. The question comes to us for decision whether we shall follow conservative treatment, which at best will only ward off impending danger, or whether it is best to place the patient at once in a position of comparative safety by the induction of premature labor. Dr. Lusk says: "The weight of authority seems to me favorable to procrastination, the interruption of pregnancy being regarded as an extreme measure justifiable only in case of utmost peril. But my own convictions are clear that so soon as grave cerebral symptoms develop the period of folded hands has passed."

The four cases I shall report have come under my notice during the past eighteen months, and while in only two cases was premature labor induced, previous to convulsive movements, yet in the other two, although only seen first when in convulsions, premature labor was induced, as they were not at full time.

CASE 1. Mrs. R., mother of nine children and between seven and eight months advanced in her tenth pregnancy. Her physician had watched her closely for some weeks and made diagnosis of nephritis. He found albumen and casts in the urine, specific gravity 1010. Eyesight very much impaired and rapidly growing worse; headaches violent for days and several times had had convulsive movements. At my first visit we decided upon premature labor, and, under strict anti-septic precaution, I introduced a bougie at 4 P. M. on Friday afternoon. At midnight of the next day she was delivered of a living child. During the time of the induction of labor she had to be kept under the influence of potassium bromide and chloral hydrate. For a week or two both mother and child did well, but finally all her symptoms grew worse, she became totally blind, went into coma, and died, two months after the birth of a child.

CASE 2.—Mrs. A., 40 years of age; pregnant for the ninth time and supposed to be eight months advanced. She was blind, œdematous, pulse rapid and urine full of albumen. There were very marked indications of beginning convulsions. Treatment had been: infusion of digitalis, compound jalap powder, and chloral hydrate and bromide of potash. I introduced a bougie as in Case 1. Hot vaginal douches were given, and some eleven hours after the mother was delivered of a living child. Some nine months after, her physician writes me that the child died within a month, but that Mrs. A. recovered with good sight.

CASE 3.—A colored out-patient, with a history of eleven

convulsions before my assistant saw her. An examination showed pregnancy of eight months. Child living, woman aged 17. She was removed to the hospital, chloroform, bromide of potash and chloral hydrate given to control convulsions. Bougie was introduced, but later we had to dilate with the finger. Simpson's forceps were applied, and after great traction a dead child delivered. The mother never regained consciousness. Died four hours later, having had fifty or sixty convulsions.

CASE 4.—Mrs. V. C., in her first confinement. All during her pregnancy had been well. Had been on the street the day previous and slept well that evening. In the morning, while at breakfast, she suddenly clapped her hands to her head, cried "I can not see," and fell to the floor in violent convulsion. Within thirty minutes she had six more. Chloroform was given during the convulsions, and chloral every hour during the intervals, when the patient had intelligence enough to swallow when told to do so. With the assistance of Dr. Watson dilatation was made by the finger, Simpson's forceps applied and a living child delivered. The woman had in the next thirty-six hours about ten severe convulsions, and was practically unconscious for forty-eight hours afterward. Hypodermics of morphia of one-third of a grain were used, and we saw marked results for good after each dose. She gradually grew better, but complained of bad sight and violent headaches for nearly two weeks. She has done well ever since.

In the brief report of these cases I have only mentioned a few of the many methods of inducing premature labor, but in closing I wish to commend the method of dilating the cervix with the finger.

ON THE TECHNIQUE OF THE INTRODUCTION OF PREMATURE LABOR.

Müller (*Munchener medicinische Wochenschrift*), XXI, 4, (1894) reports the following case: Mrs. F., aged 41 years, rachitic, having diagonal conjugate of 9.5 centimeters, severe struma, XIV-para, delivered three times by artificially-induced premature labor. Her children, except one boy, died in birth, soon after or within two and a half years. The previously induced premature labors, which were induced by the passage of a bougie, lasted five days fourteen hours, thirteen hours, and eight days nine hours respectively. The fifteenth pregnancy was interrupted at the seventh month by Pelzer's method of injecting 100 grammes of sterilized glycerine. Ten minutes after the injection there was vomiting, the bowels acted, and a

rigor of one hour's duration occurred. With severe dyspnœa the temperature mounted to 40.5 deg. C. (10.4 deg. F.), and the pulse to 156. Twin birth occurred. After eighteen hours, the first child, weighing 790 grammes, was expelled, and died in one and a half hours. Forty-eight hours after, the second one was expelled dead, and weighing 850 grammes. The temperature dropped quickly to 38 deg. C. on the second day. The patient was discharged on the seventh day. During labor and a few days afterward, the urine was a dark reddish-brown color, produced by the presence of methemoglobin and hematoporphyrin.

Regarding the quickness of action, the Pelzer method in this case corresponded to Müller's expectations, but the reaction was so trying that it appears clearly indicated that one should use a less quantity of glycerine in the future.

Müller considers that the reflex stimulation of the heat centres through the irritation exercised upon the uterus was the cause of the repeated rising of temperature.—*University Medical Magazine.*

Book Reviews and Notices.

System of Surgery. Edited by Frederic S. Dennis, M. D., assisted by John S. Billings, M. D. In four volumes. Published by Lea Brothers & Co., Philadelphia, 1895.

Three volumes of this admirable system have now been issued, and all three have borne out the promise of the prospectus. It would be impossible, in the limited space allotted, to review in an adequate manner the three volumes now before us. Most of the articles are written by acknowledged authorities, and the subjects are so grouped by the editors, Drs. Dennis and Billings, as to make it almost a systematic treatise written by one master hand. The work of the editors has, indeed, been well done. Where there is so much to praise, it seems fault-finding to try to point out any defects. It would seem, however, not hypercritical to say that the arrangement of subjects might have been in some respects improved.

The first volume embraces the history of surgery, surgical pathology, symptomatology, diagnosis and treatment of inflammation, and its events, gunshot wounds, fractures and dislocations, anæsthesia, antiseptic and aseptic technique, and operative surgery. The volume opens with "The History and Literature of Surgery," by Dr. John S. Billings. The subject could not have been assigned to better hands. The monu-

mental labor of Dr. Billings in making up the catalogue of the Surgeon-General's library especially fitted him for writing a succinct yet sufficiently comprehensive history of surgery. The article occupies 144 pages, and should be read by all who have not the time or inclination to read such a voluminous work as the "History of Medicine," by Baas.

The next article is by W. T. Councilman, on "Surgical Pathology, including Inflammation and the Repair of Wounds." This title would suggest that inflammation was to be only incidentally treated in the chapter, whereas it is the opening section and is given just prominence. The article is well written and up to date. It might have been better to have left the consideration of tuberculosis and tubercle for a separate chapter, as its importance certainly called for more than the brief ten pages given to it in Dr. Councilman's article.

Then follows General Bacteriology of Surgical Infections, in which Dr. Welch discusses, in a thorough and painstaking manner, the distribution of bacteria on exposed surfaces of the body, including the skin and the mucous surfaces of the eye, digestive, respiratory and genito-urinary apparatuses; the internal and external sources of the surgical bacteria, where he maintains that wound-infection through the blood must be very exceptional if it occurs at all, expresses himself as not entirely satisfied that the air may be quite disregarded as a source of infection, and insists upon the necessity of "using moist cloths in removing dust and in cleansing a room," a precaution which is too often overlooked; the portals of entry and their defenses; the elimination of bacteria; the conditions favoring development of surgical infections and general considerations concerning pyogenic bacteria; and, finally, an admirable, comprehensive review of all the bacteria of surgical infections. The article deserves close study, written as it is by a man who can speak with authority. We believe that the surgical world is beginning to recognize the necessity of bacteriological knowledge, although few, perhaps, are quite ready to agree with Warren in saying that "no young practitioner can be regarded as thoroughly equipped for surgical work who is not both a good pathologist and an expert bacteriologist." Few men, however well posted theoretically, would have the time to keep themselves expert bacteriologists; but such articles as this of Dr. Welch certainly tend to arouse enthusiasm in the surgeon for this kind of work and to make many lament that their medical education did not include systematic bacteriological training.

The next article, on inflammation, abscess, ulcer and gangrene, might better have been entitled wounds and special in-

inflammations, so as to have included all the subjects treated of in this chapter. The article is a good résumé of the subjects, but might easily have been embodied in other chapters of the work.

The subjects of the next two articles might have best been considered in one systematic article immediately following the bacteriological article by Dr. Welch; the first, by Dr. Carmalt, on septicæmia, pyæmia and poisoned wounds, and the second, by Dr. Warren, on traumatic fever, erysipelas and tetanus, are both good presentations of the subjects, but lose something of their value by being thus detached.

The article on rabies, hydrophobia, lyssa, by Dr. Biggs, is a well considered article, but we should have preferred to see a more positive commendation of the method of Pasteur than that involved in the admission that there is "comparatively little danger from the inoculation itself, and that the mortality after treatment in persons bitten by dogs known or suspected to be rabid is far lower than it has ever been before." One seizes with eagerness in the last paragraph of the article the "bright hope" that an antitoxine will ultimately be secured from the blood of animals rendered immune, as foreshadowed in the experiments of Chantemesse, Tizzoni, Centanni and Babes.

Gunshot wounds are discussed in a very thorough article of seventy pages by Dr. Conner. The views here expressed are the most modern, and will in the main be endorsed by most surgeons of experience. He advises conservative treatment in joint wounds, excision and amputation to be undertaken only when the injury has not been extensive, the experience of the late wars showing very unsatisfactory results of excision, and conservative treatment often giving very serviceable limbs. We can endorse the statement that the majority of pistol-shot wounds of the chest in our hospitals recover, and the cases that die generally die quickly. The treatment is conservative eminently, attention being given to shock and to the securing of rest, general and thoracic. He advises strongly against probing, and believes that a ball found lodged after passing through may be left until the danger of opening up the other end of the track to infection has been provided against by a healing of some portion of the track. He advises closure of wounds by aseptic gauze, but says nothing of collodion, and commends immobilization of the side by plaster of Paris. Other recommendations are equally sensible.

In abdominal surgery we believe his views are likewise sound. He strongly opposes the do-nothing system, and attempts to formulate the indications demanding surgical inter-

ference, asserting that the question at the present time is not whether we shall interfere in gunshot wounds of the abdomen, but "whether it shall be done always and as soon as possible." He admits the difficulty of deciding this question, but few will take issue with him, at least as to cases in the four categories mentioned by him. The decision, if based entirely on these data, would exclude some cases possible to save by surgical interference but otherwise certainly fatal. Shock is so unreliable and the determination based on objective observations so unsatisfactory, in our experience, that we are constrained to believe that surgeons will be forced ultimately to exclude visceral damage in the large majority of cases by actual examination through an incision, which, after all, affords the only certain information. But the article is so excellent and sound that we have little else than commendation for it.

The article headed "Fractures" includes also dislocations, and is a systematic discussion of both subjects by the editor himself.

The article on anæsthesia, by Dr. H. C. Wood, is one of the best in the volume. It will well repay any practitioner to read it, and it is especially commended to those who have frequently to act as anæsthetists.

The article of Dr. Gerster on the Technique of Aseptic and Antiseptic Surgery presents the subject in a comprehensive and thorough way.

The concluding article of the volume is Operative Surgery, by Dr. Stephen Smith. The article is concluded by a section on Compensative Appliances, which is very judicious in the main, but entirely too brief to do adequate justice to the growing importance of the subject. An extremely interesting and instructive addition to such a volume would have been a thorough discussion by an educated and competent mechanic of the subject of prosthesis from the prosthetic standpoint.

Vol. II maintains the excellence of the first. The article on Minor Surgery, by Wharton, is an excellent article, abounding in useful hints and wrinkles, as Fothergill was wont to say.

Fowler's article on Plastic Surgery is comprehensive and easily comprehensible, by reason of the well executed illustrations accompanying the text.

Military Surgery is written by Deputy Surgeon General Forwood, of the United States Army.

The article by Senn on Diseases of the Bones is thorough but concise, and is a splendid review of the whole subject.

Orthopædic Surgery is systematically considered by Dr. Gibney, who does the subject as adequate justice as the limited space would permit.

Aneurism is treated by Stimson, and special aneurisms very thoroughly by Bolton, whose name is not in the table of contents.

Surgery of the arteries and veins (exclusive of aneurism) written by the editor, Dr. Dennis, is an excellent article.

The surgery of the lymphatic system is carefully written by Gerrish. The relation of tuberculosis and scrofula is discussed, and the opinion is expressed that tuberculosis now expresses the pathological condition and that there is "nothing left for the word 'scrofula' to do." The diseases of the lymphatic vessels, including filariasis, elephantiasis, lymph-scrotum, etc., and of the lymphatic glands, including Hodgkin's disease, which he does not regard as identical with lympho-sarcoma, are well described. Very useful diagrams of the lymphatic vessels accompany the article.

Diseases and Injuries of the Head constitutes the longest article in the volume. The affections are classified, beginning with the scalp. The article is by Roswell Park, and is a volume in itself. It is an exhaustive discussion of the whole subject and would merit a special review.

Surgery of the Spine is admirably presented by Keen. The surgery of the nerves by Roberts is also an excellent article, and these two articles, with that by Park, bring the surgery of the nervous system up to date.

The third volume includes the Surgery of the Larynx and Trachea, Mouth and Tongue, Salivary Glands, Neck, Chest, Eye, Ear, Jaws and Teeth, Skin, Genito-urinary System and Syphilis.

The articles of this volume are well written by authors of recognized ability and thoroughly maintain the standard established by the first two volumes. Of special interest to the general surgeon are the chapters on the mouth and tongue, neck, chest and genito-urinary apparatus. We are glad to note that Dr. Dennis gives credit to Dr. Warren Stone for the suggestion of Estlander's operation, although he never actually performed it. We were not aware of the fact that Dr. Stone suggested this, but rather that of removing a section of rib with the trephine for giving exit to pus in the pleural cavity.

The article by White on diseases of the Genito-urinary apparatus, is very thorough. The operation of castration for enlarged prostate is discussed at length, as we believe it should have been, for although the operation is yet on trial and the final dictum of the profession has not yet been pronounced, still we can not agree with the views of a prejudiced reviewer of another recent work, when he compliments the article on the Bladder and Prostate as being "short and to the point,

especially in so far as he omits all reference to the absurd method of castration for enlarged prostate." We venture to object that nothing can be considered absurd that is done by sensible men, after a consideration of all the facts in the case. Whether the operation is to be retained as a permanent addition to surgical therapeutics time alone can tell.

In conclusion, we can only say that the three volumes we have thus far examined indicate that the completed work will be a monument to American surgery, embalming as it will some of the best work of our best men.

F. W. P.

Annual of the Universal Medical Sciences. A yearly report of the progress of the general sanitary sciences throughout the world. Edited by Charles E. Sajous, M. D., and seventy associate editors, assisted by over 200 corresponding editors, collaborators and correspondents. Philadelphia: The F. A. Davis Company, 1895.

Sajous' *Annual* has become a fixed and important factor in American medical literature. The present issue is the eighth. It long ago passed through its period of probation successfully, and is now an almost indispensable part of the library of the progressive physician. A complete collection of the *Annual*, from the beginning to the present time, forms a comfortable library of forty volumes, which contain concise summaries of all notable contributions to the progress of medicine during the respective years. Much of what is written in current medical literature has but an ephemeral existence. The task of threshing the wheat out of such a mass of grain is a colossal one; but it is ably performed by Sajous and his corps of assistants, who place before the busy every-day doctor the precious metal that has been extracted from a mountain of ore. It is gratifying to learn that the profession of our country has not been blind to the merits of this great work, but has shown a substantial appreciation that must be pleasing alike to collaborators and publishers.

A. McS.

Electro-therapeutical Practice. A ready reference guide for physicians in the use of electricity. By Chas. S. Neiswanger, Ph. G., Professor of Electro-physics, Post-graduate Medical School of Chicago, 1895.

This small book of eighty pages is a concentrated *practical* work. The plan of the text is very simple and convenient; diseases are arranged alphabetically, like the drugs in a dis-

pensatory. The directions for the use of electricity in a given affection are brief and to the point. Thus for trigeminal neuralgia: "Galvanism. No. 1 on positive over lesion. No. 3, on negative over upper cervical vertebræ, 3 ma. for five minutes two or three times daily." The No. 1 and No. 3 refer to figures of instruments of which over a hundred are given, and all of them, by a strange coincidence, bear the stamp of a well known firm of manufacturers of electrical and surgical instruments of Chicago. A very brief summary of the effects of the galvanic and faradic currents concludes the text, and the illustrations of the instruments referred to in the text follow. Mr. Neiswanger's book presupposes a certain knowledge of electricity and its technique on the part of the reader. The author confines himself strictly to galvanizing, faradizing and static electricity; the galvanic cautery does not come within his scope. In making his work a practical one, we fear that Mr. Neiswanger has condensed it too much to be of much benefit.

Elementary Technique in Histology and Bacteriology. By Ernest B. Hoag, A. B., B. S., Instructor in Zoology and Physiology, Throop Polytechnic Institute, Pasadena, Cal., and H. Kahn, Phar. M. (Mich.). Chicago: E. H. Colegrove & Co., 1895.

Hoag and Kahn's little book of 120 pages is a handy companion and guide to those who are beginning to do practical work in histology and bacteriology. It will also serve as an introduction to more elaborate treatises, but it contains much more practical information than the average medical student succeeds in assimilating. Those who seek information concerning the simpler manipulations in histology and bacteriology can find what they want in the book before us.

The Medical Record Visiting List and Physician's Diary for 1896. New Revised Edition. With Calendar, Table of Doses, Tables of Equivalents, Directions for Emergencies, Antiseptic Disinfection, Special Memoranda, Cash Account, etc. Thirty and sixty patients per week; bound in black or red morocco leather with flap, \$1.25 and \$1 50. Circular on application. William Wood & Co., Publishers, New York.

This Visiting List is one of the oldest in market, and its continued popularity shows conclusively the esteem which its

convenient arrangement, good materials and attractive make-up merit. The thirty closely printed pages which precede the Visiting List proper have just been revised and brought completely up to date, and the Tables of Equivalents, Posological Table, Tables of Formulæ for various purposes, of Poisons and their Antidotes, together with many other memoranda on subjects of daily interest to physicians, are most complete. The paper is fine, and the arrangement for recording visits and memoranda and cash account is excellent.

As usual, the Medical Record Visiting List is published in two sizes, for thirty and sixty patients per week, and either dated for 1896 or without dates, so that it may be used indefinitely.

Messrs. Baily & Fairchild Co., of New York, announce to the medical profession the establishment of the *Doctor's Story Series*, to be issued quarterly at \$2 per year, 50 cents a number. Each number will consist of a complete work of fiction by medical authors. Only such works as are of established value will be reproduced in this popular form. King's "Stories of a Country Doctor" will be issued in January, 1896, to be followed in March by Dr. Phillips' wonderful novel "Miskel," and later by a novel now in preparation by the same author.

Dr. William Osler, of the Johns Hopkins Hospital, Baltimore, will begin, in the January number of the *Montreal Medical Journal*, the leading Canadian medical journal, a series of articles on medical topics of the day, under the title of "Ephemerides."

PUBLICATIONS RECEIVED.

Transactions of the Texas State Medical Association, 1895.

Report of the Board of Health of the State of Alabama for the year 1894.

Outlines of *Materia Medica* and Pharmacology. By H. M. Bracken, M. D. Philadelphia: P. Blackiston, Son & Co., 1895.

Correspondence.

Editor New Orleans Medical and Surgical Journal, City:

DEAR SIR—Recognizing the fact that many physicians object, on ethical grounds, to prescribing trade-marked or secret preparations, I send you the formula lately published in the Northern papers of a *non-trade-marked* and inexpensive analgesic and antipyretic, to which the easily memorized name of *Kamna-Fuga* (from Kamna and Fuga) has been given:

Acetanilid, U. S. P.....	50 grams.
Caffeine, U. S. P.....	2 grams.
Tartaric acid.....	3 grams.
Sodium bicarbonate.....	45 grams.
Mix thoroughly.	

This may be dispensed by any pharmacist, either in powder or tablets, at a cost to the patient very much less than that of a trade-marked nostrum of similar composition.

Any of the manufacturers of compressed tablets can supply tablets of Kamna-fuga. The sample sent herewith was made by Wyeth & Brother, of Philadelphia.

Yours respectfully,

R. N. GIRLING.

State News and Medical Items.

MARRIED—November 20, at Woodville, Miss., at the residence of the bride's father, Dr. Isaac Siess, of Pollock, La., to Miss Helen Berger.

DR. WIER, formerly of Burke, La., has located at Houston, Tex., after taking a course in the New York Polyclinic.

DR. W. R. JACKSON, of Mobile, Ala., is now in New York taking a special course in surgery and gynecology.

DR. F. M. GAYLE, who was practising dentistry at Lake Charles, La., was accidentally killed while out hunting last month.

DR. J. E. REEVES, of Chattanooga, Tenn., a well known physician and president of the Republic Health Association,

and an authority on microscopical science and technique, died recently.

THE next meeting of the Tri-State Medical Association of Georgia, Alabama and Tennessee will be held at Nashville, October, 1896. The following are the officers: President, Dr. J. B. Murfree, of Murfreesboro, Tenn.; vice presidents, Dr. R. J. Trippe, Chattanooga, Tenn.; Dr. R. H. Hayes, Union Springs, Ala.; Dr. R. R. Kime, Atlanta, Ga.; secretary, Dr. Frank Trester Smith, Chattanooga, Tenn.; treasurer, Dr. George R. West, Chattanooga, Tenn.

DR. L. G. WILLE, of Loreauville, La., spent several days in the city last month.

DR. R. M. LITTELL, president of the State Medical Society, has moved from Opelousas to New Orleans and opened an office at 840 Canal street.

DR. G. H. PROTHRO, of Robeline, La., has removed to Natchitoches to practise medicine.

DR. GEORGE DOCK, at present professor of Practice of Medicine and Pathology in the University of Michigan, Ann Arbor, has been elected professor of Pathology and Bacteriology in the Jefferson Medical College.

ST. LOUIS ACADEMY OF MEDICINE.—On November 6, 1895, the St. Louis Academy of Medical and Surgical Sciences was organized. The constitution of the society subscribes to the Code of Ethics of the American Medical Association. The membership is limited to fifty.

No one can become a member of the Academy unless he possesses a good literary and medical education. As evidence of his literary qualifications and ability as a scientific worker he must deposit with his application, a thesis, a pathological specimen with descriptive text, a drawing of a normal or abnormal specimen with text, or some other evidence of his worth. The evidence is passed upon by the Committee on Credentials. If the evidence is accepted the ballot is taken. Two negative votes will defeat a candidate.

The following officers were elected for the ensuing year:

President, Geo. W. Cale, Jr., M. D., F. R. M. S., London.

Senior vice president, James Moores Ball, M. D.

Junior vice president, Arthur E. Mink, M. D.

Secretary, Emory Lanphear, M. D., Ph. D.

Treasurer, Wellington Adams, A. M., M. D.

Orator, Thomas O. Summers, A. M., B. S., M. R. C. S.,
Eng., M. D.

Curator, George Howard Thompson, A. M., M. D.

THE NEW ORLEANS SANITARIUM AND TRAINING SCHOOL FOR NURSES.

In 1889 a combination of public-spirited women undertook to organize the New Orleans Training School for Nurses.

To-day twenty-six graduate nurses are every day demonstrating the unselfish purpose of the originators and founders of this school.

In a few months it became necessary to establish some hospital facilities in connection with the Training School for Nurses, and the same public-spirited women established the Women and Children's Hospital.

In spite of the broad purpose of the work and the inferior location, at that time on St. Joseph street, this hospital succeeded fairly.

When the original purpose of establishing a training school had been realized, the ladies interested made a complete transfer of the twin institution to a corporation, composed of about thirty of the prominent physicians of New Orleans. This was in 1893. With the change of management the institution changed its name and became known as the New Orleans Sanitarium and Training School for Nurses, a private hospital for both sexes and a model school for a limited number of nurses, enabling the management to select the best applicants.

That this was a wise disposition was at once evidenced by the general improvement of the Training School and of the private hospital connected with it.

In response to the growing demands upon the institution, arrangements were planned for the removal to a better location.



NEW ORLEANS SANITARIUM AND TRAINING SCHOOL FOR NURSES.



OPERATING ROOM.



PATIENTS' ROOM.

A site was finally selected in a central locality, convenient alike to the physician and to the patient.

Not far from the new Hennen building, the St. Charles Hotel, and only a short walk from Canal street, is the new Sanitarium, on Carondelet street, between Girod and Julia streets.

A little back from the street, the building stands, daintily painted in a modest gray and brown.

In front, the little old-fashioned garden only adds to the freshness of this home for the sick. A native mimosa, with sycamores and a blossoming magnolia, while down in the flower beds themselves, the assortment of decorative plants and flowers, changing with the seasons, all create an impression of homefulness, pleasant to all. The building itself is of stucco finish, with an irregular architecture, of three stories and an attractive front. A porch encircling the building almost all the way adds to the attractiveness and affords a comfort to the convalescent.

While the front of the building is scarcely fifty feet across, the depth of the building fully compensates for this. Shaped like a huge letter T, the building runs back fully 100 feet, while on either side there is fully twenty feet of open space between the building and the party lines.

This building almost *in toto* was built expressly for the Sanitarium, and its whole arrangement effected under the supervision of the Sanitarium executive officers.

The details, therefore, were in accordance with the Sanitarium's needs.

On entering the building the immediate impression is one of freshness and of quiet. The customary odors of a hospital are missing. There is, instead, the air of a private residence.

On the ground floor, the parlor, resident physician's office and apartments, with the dining room of the house and nursing staff, are in the front portion, while in the rear are the lecture rooms, the offices of officers, the various departments of the household and cuisine, with the store-rooms.

All of the second floor and part of the third are devoted to the sick.

All the rooms are furnished with modern furniture,

and, while sufficient for comfort, plainly and with a view to obtaining the best surgical and medical results.

Fine brass and enameled iron beds, with oak and cherry furniture, handsomer as the price and location of the room determines, constitute the furnishing of the rooms.

While the capacity for accommodation is small, no extravagant rates are charged, these being fixed at from \$2 to \$5 per day.

The arrangement of the building, already mentioned, is such that all the rooms are exposed to both daylight and sunlight. The rooms themselves are larger than commonly provided in the ordinary private hospital.

Open fireplaces in every room, a sanitary measure, add to the cheerfulness and comfort of the patient.

While part of the third floor is reserved for patients, the most of it is devoted to the nurses' apartments.

On this floor also is the operating room, a model of its kind. It has been arranged with particular care, and with a view to meeting all requirements for any surgical practice.

An excellent skylight adds to the other well arranged windows, giving light from all sides, thus enabling the room to be used at any time of day, while ample provision is made for lighting at night.

The detail of this operating room shows a careful equipment. The walls have been finished in white enamel paint, while a flooring of Schillinger cement has been used to allow frequent cleansing, so necessary where much surgical work is done. It allows as well, to a marked degree, careful antiseptics in the room, as it can readily be given a complete flushing.

Immersion washstands of the McBurney pattern, enamelled iron tables, with ground glass tops, and modern hospital-operating furniture complete the description of this room.

Directly adjoining the operating-room and connected by a sliding door is a conveniently arranged ante-room, or preparatory room.

Here the surgical dressings, instruments and electric appliances are kept ready for use. Sterilizing apparatus for dressings, etc., and stationary washstands with hot and cold water, are among the appliances of convenience. In this room

the patient is made ready for the operation, is anæsthetized, and here the physician prepares himself for the operation. To meet the requirements of physicians who make use of electricity in operating or in treatment, a perfect electrical apparatus has been arranged for galvanic and other currents, for illuminating cavities—in fact to meet any modern demand in such apparatus.

Besides these provisions for the careful accommodation of the sick there is a modern electric elevator, of the Otis pattern, running to all floors, for the convenience and comfort of patients and visitors.

Telephone and messenger calls are arranged for the use of patients and for facilitating the working of the Sanitarium.

In perhaps no city in the United States is there just such a sanitarium as this one.

In the first place, it is free from any religious or other sectarian management.

Owned by some of the best of the medical profession in the city of New Orleans, the interest of each one being too small to make of it a business concern, the whole purpose of the institution is to maintain the pioneer training school of New Orleans and to assure necessary conveniences to all physicians who have patients to send or to recommend.

While the rate charged covers the nursing, medicines, surgical dressings, room and board, it is an invariable rule that the patient must employ a physician of his or her own selection, as the Sanitarium will neither provide nor make arrangements for one.

A resident physician, however, is always at hand in case of emergency, or for the sake of convenience in assisting physicians, both in operations and in other exigencies which may arise, without extra charge therefor.

When the cost is considered, the accommodations provided are certainly elaborate. The cost of a private nurse alone would in severe cases, medical or surgical, more than equal the whole cost of a stay at the Sanitarium. More than this, the dangers of surgical operations are reduced to a minimum through the constant attention and ready services of the nursing staff in the same building.

Not infrequently, patients come to the Sanitarium for care and treatment, who have comfortable homes, but who realize the conveniences and superior advantages of an institution devoted exclusively to the care of the sick.

It is the constant purpose of the executive officers to make the cuisine of the Sanitarium a point of merit. Compared with other and similar institutions, this department holds its own. Weekly meetings of the executive committee of the owners of the institution, assure a care in the detail not barren of results. In addition, individual members of the committee make diurnal visits to ascertain the detail of management and to see that the machinery of so complicated a concern is kept well in motion.

The nursing in the Sanitarium is done by such nurses from the Training School as have been found sufficiently proficient for this service.

The nursing staff is kept constantly at twelve, and this affords ample provision for any number of patients the Sanitarium may have to care for.

In fact, there is probably no institution where there is so constantly a provision for nursing, where the patient may be assigned, two, three, or more nurses, as the exigency demands.

The nurses are neatly uniformed, and are always seen in their regulation costumes about the institution.

While the resident chief nurse watches carefully over their bedside instruction and training and over their domestic welfare, the nurses enjoy the privilege of a specially arranged course of lectures delivered at the Sanitarium by a faculty composed of well known members of the medical profession.

These lectures embrace the subjects of anatomy, physiology and hygiene, surgery, medicine, the administration of drugs, diet, etc., and extend through the entire winter and spring. An examination on these branches is required and a certain standard must be attained before the nurse is graduated from the training school. Two years must be spent at the Sanitarium by the nurse before she can apply for graduation.

That the Sanitarium is a factor in the medical and surgical world of the State of Louisiana at least is attested by the fact that surgical operations of all degrees of magnitude are per-

formed here, and in the history of the institution no case of sepsis has occurred. The increasing patronage is another assurance of the popularity of this welcome enterprise.

This brief review of the New Orleans Sanitarium and Training School for Nurses has been written and published in the JOURNAL, because the management deserves the public mention of the success of this home institution.

Its success has come from the smallest of beginnings, from the seed of discouragement almost, but has none the less grown into the appreciation and support of all who had occasion to visit, operate or live within its walls.

THE JOURNAL OF EXPERIMENTAL MEDICINE.

In January, 1896 will appear the first number of the *Journal of Experimental Medicine*, a periodical devoted to original investigations in physiology, pathology, bacteriology, pharmacology, physiological chemistry, hygiene and medicine.

A suitable medium for the publication of articles embodying the results of original research is one of the most important conditions of fruitful scientific activity. The investigator in any department of science not only must know where to look for the literature of his own subject, but he needs a journal which shall furnish prompt and worthy publication of his own work, which shall supply good reproductions of all needed illustrations, and which by the character and excellence of its contributions shall circulate widely among all workers in the special field of research embraced within its scope.

Within recent years scientific medicine has made great progress in this country. The standards of medical education have been elevated, well equipped laboratories devoted to the various medical sciences have been established, and the number of well trained investigators has steadily increased. With these greater opportunities the contributions to the medical sciences by American investigators are rapidly becoming more numerous and important.

Hitherto we have been deprived of the great assistance which can be rendered by a journal devoted exclusively to the medical sciences above specified. We ourselves, and still more foreigners, do not know where to look for many of the widely-scattered original contributions of American investigators to physiology, pathology, bacteriology and other medical sciences. A large part of these contributions are published in journals devoted mainly to the practical branches of medicine.

Much of the best work is now sent to various scientific journals of Europe.

The time has come when we should have an American journal devoted exclusively to the publication of original work in the experimental medical sciences. Such a journal is an urgent need of our scientific workers in medicine. It should secure, both here and abroad, due consideration of work done in this country. It should stimulate scientific investigation, and should extend the influence of scientific medicine. The practitioner who wishes to keep abreast of the times will appreciate the value of such a publication.

It is the aim of the *Journal of Experimental Medicine* to meet the needs which have been described. The journal is to be devoted exclusively to the publication of articles containing the results of original work in physiology, bacteriology, pathology and the other sciences mentioned in the first paragraph of this announcement. Especial care will be taken to supply good illustrations whenever needed.

The *Journal of Experimental Medicine* will appear in, at least, four numbers during the year, and doubtless oftener. Whenever sufficient material is ready a number of the Journal will be issued. A volume of six or seven hundred papers will be published annually, with many plates and diagrams.

Papers for publication may be sent to the editor, Dr. William H. Welch, 935 St. Paul street, Baltimore, or to any one of the associate editors in the department to which the paper belongs.

Contributors will receive, gratis, fifty copies of their papers; additional copies may be obtained at the author's expense.

The subscription price will be \$5 per volume. Subscriptions may be sent to the publishers, Messrs. D. Appleton & Co., New York, or to Mr. N. Murray, Johns Hopkins University, Baltimore.

WORLD'S CONGRESS OF MEDICO-CLIMATOLOGY.

Organized at the World's Columbian Exposition, held in Chicago in 1893, and made permanent at that time; delegates being present from all parts of the world.

The object of the congress is to make a thorough, careful, scientific and systematic classification of the climates and resorts of the world, and particularly of the United States, as regards their therapeutical value in all forms of disease. Also to examine into the merits of mineral waters and properly classify them.

It is well known by the medical profession that up to the present time no reliable scientific data are obtainable. This

work is to be done under the auspices and direction of the profession, through their regularly organized societies acting in co-operation with the congress. Our membership is composed of ten (10) representatives appointed by the secretary or proper officer of each of the various State medical societies, and of physicians of good standing in the profession, who are passed upon favorably by the Committee on Membership. Nearly all of the State medical societies have already appointed their ten representatives; these delegations consisting of the very cream of the profession. Delegates are appointed for five years. A national meeting of the congress will be held every year. An international meeting every five years; the national being merged into the international the fifth year. Next international meeting will be held in 1900. All delegates are invited to attend. A national meeting of the congress will be held in San Antonio, Texas, beginning February 20, 1896, and continuing for three days. Papers will be read by many of those in attendance, and the proceedings of the congress will be very interesting and instructive. All physicians in good standing are invited to attend. Membership fee is only \$5 for five years, payable in advance. Printed copies of constitution and by-laws will be sent upon application, with other matters relating to the congress.

Nearly 700 representatives have been appointed by the various State societies to date.

All members have equal rights and privileges.

A FEW REASONS FOR JOINING THE CONGRESS.

1. To acquaint you with facts in climatology as relating to the etiology of diseases and as a therapeutical agent.
2. Enabling you to apply this knowledge so as to give your patients the benefit of it.
3. To set forth the advantages of your own section or State as regards its climatic advantages.
4. To enable you to become acquainted with your brother practitioners in other sections of the country, and exchange views with them.
5. To afford you the opportunity to investigate climates and health resorts for yourself, when attending the annual meetings which will be held in various seasons of the year in different sections of the United States, and at the same time enable you to see the country.

So that you may at least once a year take a much-needed vacation.

Until further notice address all communications to W. S. Rowley, M. D., Corresponding Secretary, Menger Hotel, San Antonio, Texas.

MORTUARY REPORT OF NEW ORLEANS.

FOR DECEMBER, 1895.

CAUSE.	White	Colored...	Male.....	Female...	Adults ...	Children.	Total
Fever, Yellow							
“ Malarial (unclassified)....	4	3	4	3	6	1	7
“ Intermittent		1	1			1	1
“ Remittent	3	1	2	2	3	1	4
“ Congestive.....	2		2		2		2
“ Typho	6	1	2	5	6	1	7
“ Typhoid or Enteric.....	9	2	9	2	9	2	11
Puerperal	1	1		2	2		2
Influenza.....	6	1	2	5	7		7
Small-pox.....	4	3	4	3	5	2	7
Measles							
Diphtheria	8		4	4		8	8
Whooping Cough	2		1	1		2	2
Meningitis	8	2	3	7	4	6	10
Pneumonia.....	40	35	48	27	64	11	75
Bronchitis	10	10	13	7	9	11	20
Consumption.....	38	25	33	30	63		63
Cancer	10		6	4	10		10
Congestion of Brain.....	3	2	4	1	4	1	5
Bright's Disease (Nephritis)	21	11	21	11	31	1	32
Diarrhœa (Enteritis)	22	11	22	11	17	16	33
Cholera Infantum	5	4	4	5		9	9
Dysentery.....	4	2	3	3	4	2	6
Debility, General	2			2	2		2
“ Senile	18	10	11	17	28		28
“ Infantile.....	6	8	9	5		14	14
All other causes	210	134	203	141	251	93	344
TOTAL	442	267	411	298	527	182	709

Still-born Children—White, 43; colored, 25; total, 68.

Population of City—White, 195,000; colored, 80,000; total, 275,000.

Death Rate per 1000 per annum for month—White, 27.19; colored, 40.05; total, 30.93.

L. F. FINNEY, M. D.,
Chief Sanitary Inspector.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XXIII.

FEBRUARY, 1896.

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.]

THE ERUPTIONS OF VACCINATION AND RE-VACCINATION.*

BY ISADORE DYER, PH. B., M. D., NEW ORLEANS, LA.

Vaccinia is a disease *sui generis*, not at all infrequent in the lower animals, particularly the cow, dog, sheep, pig, horse, goat and monkey (Shoemaker). The history of its discovered similarity to variola, and the application of this discovery in the prophylaxis and prevention of small-pox, is familiar to all of us. In studying the eruptions of vaccination the simplest and best method would be to arrange the eruptions etiologically. Malcolm Morris has done this so well that I can do no better than reproduce his suggestions for the division of vaccination eruptions into groups.

He first of all makes two general subdivisions, into:

1. Eruptions due to pure vaccine inoculation.
2. Eruptions due to mixed inoculation with vaccine, with which an additional virus, or several viruses, has become mixed.

In the first group, he arranges the several eruptions which attend and follow the local inoculation. I believe that in some instances this grouping can be expanded, and, with this end in view, I propose taking up in detail Morris' subdivisions.

* Read before the Orleans Parish Medical Society, November 9, 1895.

I. Eruptions due to inoculation.

First in this class comes the lesion of vaccination itself. Following the constitutional impression, this lesion begins with itching and formication, to appear as a papule, in size about that of a pin's head. As the local inflammatory process progresses, this lesion expands, fills with fluid, growing more and more distended, until a lesion of bullous character, about as large as the thumb nail, is developed. Around this an areola begins, gradually increasing in breadth to as much as two or three inches. The bulla becomes a pustule; this in time breaks, crusts; the crust falls, and the vaccination is in time marked by a slightly depressed scar, with irregularly defined edges, and, at times, here and there a pit or two in the body of the scar. This is the normal course of vaccination from start to finish. This is, however, not always the rule.

The original lesion of vaccinia may not develop into its completed scar. The lesion may abort at the papule, the vesicle may dry and scale instead of going on to crusting. There may be no pustulation, and consequently there will be no scar—only a pigmented spot to mark the site of the bulla, and that, only a temporary marking.

Instead of a simple pitting and scarring, the process may involve some of the adjacent tissue, induce a more pronounced inflammatory process, still close to the normal, resulting in a hyperplasia of the connective tissue element, causing a temporary ulcer with infiltrated, almost indurated, edges, which give the lesion a crateriform appearance. There is no wonder, then, that as the process is completed, there results a marked keloidal development at the site of vaccination. All that is required is that the process shall go deeply enough into the corium.

As the vaccine virus is at work before the vesicles are developed, acting as a vaso-motor disturbant, producing reflex disturbances, among which temperature, malaise, pain, itching, etc., are numbered, the second division of the first group of vaccination eruptions is manifested.

B. Eruptions following within the first three days before development of vesicles.

(1) In this division, urticaria is perhaps the most common

unavoidable complication. It may appear in the small papular, or in the large wheal variety.

(2) Erythema multiforme next in frequency may manifest itself. Here there may appear simply a roseolous eruption, either limited to one region, or it may be diffuse. On this, papules of various sizes may develop. Even discrete vesicles may form with no particular arrangement or distribution.

They may be pemphigoid in size and characteristics.

In this group Crocker defines a "vaccine lichen," corresponding, however, to these varieties of erythema multiforme just described.

When the vesicle has become apparent in the local region, or when the vaccine virus has become more fully impressed upon the general economy, we see another division of this group, viz.:

C. Eruptions following after development of vesicles.

(1) Marked diffuse dermatitis may occur, resembling the roseola of measles or the erythema of scarlatina. Even a purpuric eruption may occur (Morris).

(2) Just here, as a minimum limit, up to the time of pustulation, the generalized vaccinia may occur. In this generalized eruption the lesion of vaccination is reproduced, pursues the same course as the usual vaccine inoculation, and may result in the same kind of scarring. More often the lesion is shorter lived, less severe and more superficial, acting more as the lesions of varicella do.

This finishes the divisions of acute eruptions attending, *unavoidably*, vaccination.

As sequelæ of a normal vaccination, however, there may be eruptions lighted up, as it were, such as eczema, particularly of the papular and pustular type, and of the reflex variety. Chambard reports (class D) a case of psoriasis determined by vaccination—not at all improbable, as psoriasis is now largely referred to neuropathic origin. Finally, the urticaria determined by vaccination may persist in a chronic variety.

In the general group referred to above as that in which the eruptions were due to mixed inoculation, there may be separated two general classes:

1. Where the additional virus is introduced at the time of vaccination; and
2. Where the virus is introduced subsequently into the wound.

Subdividing the first class, we must recognize :

- (1) Eruptions due to a local skin disease; and
- (2) Eruptions due to constitutional diseases.

In the first subdivision, the condition of more frequent occurrence is impetigo contagiosa. Of such frequent occurrence, in fact, is this complication, that it often misleads, and for a time excites a suspicion of variola. The finding of the staphylococcus pyogenes aureus and citreus in vaccine lymph readily accounts for the production and dissemination of impetigo, which is directly due to and spreads after the local contact of the staphylococcus pyogenes aureus.

Incident with the infection of the vaccine lesion at the time of inoculation, an abnormal erythema may develop, spreading over the whole arm, or even to other regions, due to septic origin.

In the second subdivision are included such constitutional diseases as may be inoculated at the time of vaccination. Syphilis takes the first place in rank, and numerous cases of vaccinal syphilis are in evidence. Fournier has contributed an exhaustive work on this subject.

While the question of contagiousness of leprosy is still in abeyance, the quotation of leprosy as one of the constitutional diseases which may be transmitted by vaccination will, perhaps, be received with a question mark. Nevertheless, popular resistance to community laws regulating vaccination is still strong in those leprosy countries where it is still the custom to vaccinate from person to person. Beaven Rake, of Trinidad, reported fully on this subject only last year, arguing that vaccination was a contributing cause in the spread of leprosy. Bacilli lepræ have been found (Arning, Journ. Lepr. Inves. Com. No. 2, February, 1891, p. 131) in the vaccine lymph taken from a leper. On the other hand, however, the infrequency of leprosy is incomparable to the frequency of vaccination, and even in leprosy centres the existence of leprosy

would or should make the vaccinator more careful in selecting his vaccinators.

Finally, tuberculosis may be transmitted in this way, either evidenced by a localized tuberculosis cutis, or in a general infection.

Each of these conditions just described presupposes, of course, that vaccination has been done from humanized lymph or by means of instruments, used on successive cases of infection. With the more modern preparation of bovine virus and its general use, with individual points, these constitutional accidents must, perforce, be reduced to a negative quantity.

The second class of our second group is meant to include such accidental, and avoidable conditions as may arise from the introduction of additional virus, or infection, at some time subsequent to the vaccination.

This class includes such appreciable conditions as :

1. Erysipelas, at and near, or even remote from the wound.
2. Cellulitis, more or less extensive, depending upon the social scale and habits of the patient, and upon the tone of health of the patient.
3. Furuncle, or furunculosis.
4. Gangrene, for the occurrence of which, the bacillus septicus has been held accountable, and its presence demonstrated in the original lymph even.
5. Finally pyæmia, with all the complications it may entail, is a possibility.

Thus the course of a developing vaccination lesion may be attended with any, or all, of a series of eruptions, each different, but each referred directly to the wound as a causative factor.

Nor is this the end. Sequelæ of an abnormal vaccination are by no means few. The senses may be involved in a reflex reaction. So the nervous system may be involved. We have seen that recurrent attacks of urticaria may follow. Likewise pemphigoid eruptions may from time to time occur. The pyæmia may entail nephritic conditions temporary or permanent.

In this category belong cases of herpetiform eruptions, with classical distribution, symmetrical and bilaterally so, made up of distinct bullæ, grouped in crescents and in clusters, suggesting a peripheal irritation of nervous reflex, or of vasomotor origin, which could be referred to any toxine as a causative factor, and particularly to that of pus infection, maintained in any organ of such functional activity as the kidneys.

In a case of mine there was a clear history of vaccination in a child placed in the worst possible conditions of hygiene, followed, three weeks after the cicatrix was formed, by an eruption of bullæ, the distribution and extent being plainly shown in the photograph presented.

Concerning the question of revaccination, there remains but little to be said. Opinion is freely expressed by some authorities that revaccination runs a milder course than the original, and that a keloidal condition is more apt to supervene than the customary cicatrix with pitted centres.

Be this as it may, it is acknowledged that any vaccination may run a mild course, abort even, as I have said above, at the papular or vesicular stage. Keloidal scars will occur in any vaccination where connective tissue hyperplasia has been stimulated.

In my own experience and from my own observation, I must say that I find little difference in the course or the result in original or repeated vaccination. I have vaccinated myself four or five times, always successfully and always with a pit. Up to the time that I began using myself as a subject, I was vaccinated at least four times, successfully, as the scars attest. The eruptions otherwise, of revaccination, should in all reason be identically the accidents of original vaccination.

In conclusion, for a clinical interest I would like to relate that quite recently I have vaccinated two persons who had had small-pox some ten or fifteen years back. In both cases the vaccine lesion ran a typical course, with characteristic vesiculation, areola and pustulation, scabbing and healing with a pit.

NOTES ON A TRIP TO THE MEETING OF THE AMERICAN SURGICAL ASSOCIATION IN NEW YORK, MAY, 1895.

BY EDMOND SOUCHON, M. D., NEW ORLEANS, LA.

On my way to the meeting of the American Surgical Association last May, I stopped in Montgomery, Ala., where, through the courtesy and kindness of several of the local physicians, but especially of Dr. F. M. Thigpen and Dr. Waller, I was enabled to accomplish a pilgrimage, for many years close to my heart, to the places rendered famous by their connection with Dr. J. Marion Sims. Dr. Thigpen was so generous as to have the photographs of these places taken, and to him we owe the happiness of contemplating the humble places from which the young eagle sprang to take its flight and carry higher and farther than any the genius of American surgery. These places are: the house of the first patients, free negroes who sent for him when he came to Montgomery; the office which he occupied and in the rear yard of which was erected the forever famous little hospital in which he experimented upon Lucy, Betsey, Anarcha, and finally cured them; the hardware store where he bought the legendary pewter spoon from which developed the great and celebrated duck-bill speculum; the jeweler's store where the first silver wire for sutures was drawn; the second house in which he lived, and in which he was living when he determined to leave Montgomery to go to New York.

In New York the meeting was held in the superb building of the New York Academy of Medicine. There was gathered the flower of American surgery. The discussions were most interesting. They were particularly noticeable for a courtesy and modesty in the speakers, which would have conveyed a most salutary lesson to many. The first discussion was on the radical cure of hernia, in which took part Drs. McBurney, Mudd, Owens, Packard, Halsted; the second discussion was on double castration for hypertrophied prostate, by Drs. W. W. White, Pilcher, Park, Halsted. As this ended, the folding doors in the rear of the hall opened and displayed a beautiful lunch, offered to the members by Dr. Robert Abbé, who fulfilled his role with his usual grace.

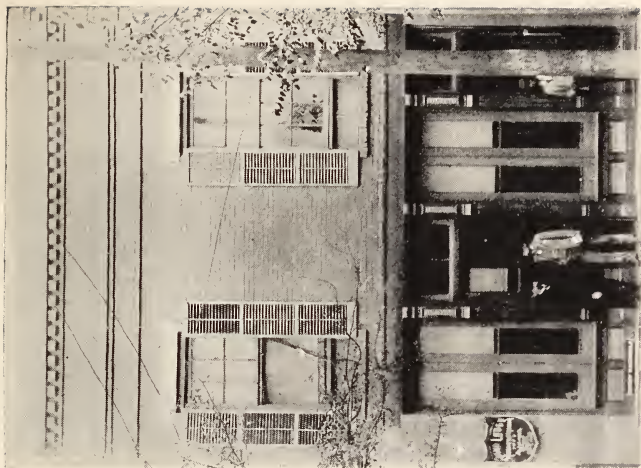
After the lunch tally-hoes were in readiness, and conveyed the members to Bellevue Hospital, where the surgeons of the staff and other surgeons exhibited patients who had undergone successfully remarkable operations. The venerable Dr. Sayre consented to appear and exhibit the first case on which he operated years ago for resection of the head of the femur. It was most impressive to see these knights of American surgery seated on benches like students, and most touching to see the once bold and daring surgeon, now bent by age and infirmity, come to lecture to them and by his past example urge them on forward. Dr. Sayre received from this unique class such a greeting which so overwhelmed him that the tears rolled down his cheeks, whence he wiped them with a trembling hand, that right hand once so firm, so bold and so determined; he was several minutes before he could steady his voice and speak so as to be understood. Then the valiant old war-steed warmed up and pranced around, aided by his invalid cane, and explained his first operation. The patient, now a buxom, quickly moving, fine woman, was present and the region of the operation exhibited. Other patients were also shown that are now strong, hearty, fat men who use their limb as anybody else. This exhibition of operated cases was a feature of this memorable meeting and a most interesting one. Dr. Phelps showed several operations of suturing of the fragments of the patella; also for rupture of the patellar ligaments of the tendon of the triceps from the patella. Dr. Fluhrer explained his remarkable case of gunshot wound of the brain. Dr. Alexander presented several pieces of prostatic tissue enucleated from an enlarged prostate, through the perineum; the bladder had been opened above the pubis to press down the prostate; the advantage of that procedure was to remove the hypertrophied tissue without any solution of continuity of the mucous membrane, hence very little bleeding. Dr. Markoe exhibited cases of pyelitis diagnosed by catheterizing the ureters and cured; also a case of removal of kidney.

When this part of the programme, conducted by Dr. F. Dennis, the President of the Association, was concluded, a boat took the members to Ninetieth street, thence in tally-hoes that were in readiness, to the beautiful Presbyterian Hospital. There



No. 1.

House in which lived the "free niggers" who were the first patients of Dr. Sims when he moved to Montgomery, Ala., in December, 1840. (Story of My Life, p. 207.) The place is situated on Hanrich street, between Whitron and Heron. It was identified by Mrs. Dr. Rush Jones, the sister-in-law of Dr. Sims, who was in Montgomery at the time that Dr. Souchon was there, in May, 1895.



No. 2.

Office of Dr. Marion Sims, in Montgomery, Ala., in 1840-1853, No. 19 Perry street, between Walnut and Court—now occupied by a plumber. It was identified by Dr. Henry, still living in that city, and the last surviving student of Dr. Sims in that very office.

"I had a little hospital of eight beds, built in the corner of the yard, for taking care of my negro patients and for negro surgical cases; and so when Lucy came I gave her a bed." (Story of My Life, p. 230). Here Lucy, Betsey and another were the first patients experimented upon and cured.



No. 3.
Building which was occupied by the Hardware Store of Hall, Mares and Roberts, where was bought the pewter spoon, 1845, which developed into the duck-bill speculation. It is situated at No. 104 Dexter avenue, between Perry and Court. (Story of My Life, p. 234.)

The place was identified by Col. B. Wyman (now living at 213 Decatur street), who was then a boy-clerk in that store and perhaps himself sold the spoon.



No. 4.

Building which was occupied by the Jewelry Store of Swan, at No. 108 Dexter avenue, between Perry and Lawrence, and in which was drawn the first silver wire which cured Anarcha, in June, 1849, and finally assured the thorough success of the operation of vesico-vaginal fistula. (Story of My Life, p. 245.) The wire was drawn by a workman by the name of Lewis Owens. The place was also identified by Col. Wyman.



No. 5.

House in which Dr. Sims was living at the time he left Montgomery for New York, in May, 1853. (Story of My Life, p. 266.)

It is located at 322 North Lawrence, corner of Columbus. It was also identified by Mrs. Dr. Jones.

Dr. Briddon and Dr. Wright presented most interesting cases. Dr. Lewis Pilcher showed a patient with a recent compound fracture put up in apparatus that enabled that patient to walk about as if he had not had his leg broken a few days before. The principle is represented by a stirrup-like splint that comes up along the two sides of the limb and butts against the prominences below the knee: the weight of the body rests on the stirrup and is thence transmitted to these prominences, so that the focus of the fracture suffers no pressure of any kind. Dr. McCosh exhibited, among other things, a very fine operating table.

The members spent the evening at a vaudeville performance at Koster & Bial's; they were the guests of the courteous and painstaking president, Dr. F. Dennis. The evening was a most enjoyable one, all the proscenium boxes being occupied by the members, who visited each other between and during the acts.

The second day's proceedings opened at the Academy of Medicine by the discussion of the Operative Treatment of Cancer, by Drs. Gerrish, Homans, Conner, Wright, Gerster, Weir, Bull, Hartley, Murray, Tiffany, Mastin and Pilcher. Thence the members proceeded to the New York Hospital, where Dr. Arpad Gerster showed a very fine case of eversion of the foot due to a loss of bony substance, which was corrected by lowering the upper extremity of the fibula and anchoring it against a notch in the tibia. Also a case of removal of a brain-cyst in which the loss of the dura was compensated by the wearing of a film gold plate which had been worn two and a half years, when it could be removed. Also a most interesting case of malignant disease of the cord in the inguinal canal; it was followed in the pelvis as far under the bladder as possible, and the operation completed by opening the perineum, reaching the base of the bladder and taking out the whole string of diseased tissues, which involved also the seminal vesicles. Also a case of resection of five and a half inches of the rectum with preservation of sphincter. Dr. Robert Weir exhibited several of his wonderful nose cases, one in particular, where a depressed nose had been straightened by inserting under the depression a properly shaped piece of sterilized cel-

luloid, which acted as a pad or cushion. Also the unique case of the very man on whom he had removed the two testicles and replaced them by celluloid testicles; indeed, unless one was suspicious of this he could not detect it upon superficial examination. A celluloid plate was also exhibited which had been worn by a patient after the removal of a brain tumor. Dr. Hartley showed a very fine case on which he had operated for a pediculated cyst of the posterior wall of the stomach.

Dr. Robert Abbé presented several cases of the highest interest and value. First, a very fine girl, of about sixteen, who had been operated in extremis for a perforation occurring during typhoid fever. Next, a case of thrombosis and abscess of the internal jugular vein and of the lateral sinus. Also a case of trephining, where a small piece of gutta-percha tissue had been used to take the place of the dura mater. Next, a stricture of the œsophagus, cured by the author's ingenious method of string dilatation. Lastly, a young child, from whom had been removed a very large sarcoma of the kidney.

Dr. William Bull exhibited some very remarkable cases of autoplasty of the hand and of the shoulder.

Dr. Murray presented a case of almost total extirpation of the tongue, there being left only a little stump of tongue, and yet the patient could talk fairly well; it was a woman, though. Also a most rare case of aneurism of the circle of Willis, diagnosed at the autopsy.

After this most interesting part of the programme, the members took the elevated road and repaired to the gorgeous Metropolitan Club, the millionaires' club, where they were the guests at lunch of the munificent Dr. McBurney. A grander affair had never been recorded. As soon as this had been disposed of, in the best of spirits, the association went to the Syme Operating Theatre, where Dr. F. Lange exhibited a case of cured thrombosis of the internal jugular vein, and also a case, a very rare cure, of the tubercular breast in the female. Dr. Fowler showed a very fine case of operation for auricular appendages. Dr. McBurney brought a very beautiful case of removal of an epithelioma of the tonsil through the zygomatic fossa. Also a case of rupture of the quadriceps tendon on both sides; also of the resection of the lower jaw,

where a most ingenious spring was used; finally the doctor exhibited a case of extensive pelvic fracture, resulting from a fall from a horse with the patient under the horse; extravasation of urine necessitated drainage tubes through the perineum and also above the pubis. Finally a patient was introduced on whom Dr. McBurney's new method of operating for appendicitis had been applied, which method consists in separating the muscular fibres of the different layers, instead of cutting through them, thereby diminishing the risks of ventral hernia.

The second evening was spent at the Standard Theatre, where "Too Much Johnson" kept the members in merriment all the time. The association was there the guest of Dr. Robert Weir, who crowned his congeniality by a "kneippe" that was all that could be desired.

The third and last day was filled by the reading and discussion of the following papers: "Present Status of Anæsthesia," by Drs. Geo. W. Gay and Robert Weir, discussed by Drs. Prewitt, Wharton, Rushmore, Abbé, Lang; "Restoration of Joint Functions After Fracture," by Drs. Carmalt, Sayre, Dandridge, Roberts, Bradford, Ashhurst; "The Bacteriological Aspects of Pus and Suppuration," by Dr. Roswell Park, discussed by Drs. Halsted, Tiffany and Parmenter; "Gunshot Wound of the Heart," by Dr. Mastin; "Injuries to Pneumogastric and Phrenic Nerves," by Dr. Roswell Park; "Dislocations of the Ulnar Nerve at the Elbow," by Dr. Henry Wharton; "Immediate Suture of the Gall Duct and Gall Bladder After Extraction of Stones," by Dr. J. W. Elliott; "A Case of Cholecystotomy," by Dr. S. H. Weeks; "Personal Experiences With Mad Dogs," by Dr. Basil Norris; "Hernia of the Bladder as Met With During Operations for Inguinal and Crural Hernia," by Dr. Christian Fenger; "Radical Cure of Hernia by a New Procedure," by Dr. John H. Packard; "Ligature of the Spermatic Duct in the Treatment of Hypertrophy of the Prostate;" "A Case of Congenital Œsophageal Pouch, Excision, Immediate Suture and Recovery," by Dr. J. S. Mixer; "Influence of Ether Narcosis Upon the Genito-Urinary Tract," by Dr. John A. Deaver, of Philadelphia.

The personal intercourse was of the most agreeable and

elevating character and one returns from such meetings and associations bettered and more ambitious to contribute also his mite to the advancement of our noble and beloved profession.

Dr. Souchon spoke to several of the leading members with a view of inducing the American Surgical Association to meet in New Orleans the year after the congress in Washington, D. C.—*i. e.*, in 1898, and he secured sufficient graceful encouragement which led him to believe that he will succeed, especially when aided by the well known courtesy of the profession of New Orleans.

THE RATIONAL TREATMENT OF AMYLOID INDIGESTION.

BY J. A. STORCK, M. D.

Starch, $(C_6 H_{10} O_5)_n$, ⁽¹⁾ looked at in relation to animal alimentation, may be regarded as by far the most important of the bodies of the whole carbohydrate group.

Raw starch is almost indigestible to man, but when previously subjected to the operation of cooking it is digested with great facility, under normal conditions. Even at the temperature of the body diastase has but a feeble action on the unbroken starch granule.

The researches of Musculus and O'Sullivan have shown that the sugar produced by the action of the saliva and pancreatic juice on starch is not grape sugar (dextrose), but maltose, $C_{12} H_{22} O_{11}$.

Dr. J. H. Kellog, at a meeting of the American Medical Association, showed as a result of his observations on no less than 4000 cases of dyspepsia, that the failure to digest starch is one of the most common forms of dyspepsia.

⁽²⁾ As a rule, the diastasic ferment does not exist in the saliva and pancreatic juice of infants, except in minute quantities, before the teeth are cut.

⁽³⁾ While fasting, a small quantity only of saliva is poured into the mouth; it is also diminished during inflammations of the salivary glands and occlusion of their ducts by concretions (salivary calculi); also by the use of certain drugs, ⁽⁴⁾ and

(1) Pavy, Physiology of the Carbohydrates. (2) Roberts' Digestion and Diet.
 (3) Foster's Physiology. (4) Landois and Stirling, Human Physiology.

during fever, as the fever increases the diastatic action of the saliva diminishes, and it becomes acid. When the fever is very high, no saliva is secreted.

The saliva is acid in catarrh of the mouth and in diabetes mellitus.

The digestion of starch is often checked or delayed in the following conditions: hyperacidity of the gastric juice, dyspepsia nervosa (Leube); neurasthenia gastrica (Burkart); also in the condition called "nervous gastraxynsis," (Rossbach); alcoholic excesses; also, the taking of hot food and drink.

The amylolytic ferment of saliva is destroyed when mixed with gastric juice; even on neutralization the mixture is unable to convert starch into sugar at the temperature of the body.

The amount of free hydrochloric acid in healthy gastric juice may be stated to be about .2 per cent. Chittenden states that the formation of sugar ceases as soon as the amount of acid reckoned for hydrochloric acid reaches 0.01 per cent.

(⁵) Pavy found a considerable amount of carbohydrate matter possessed of the power of reducing cupric oxide, in the stomach contents of ten rabbits, killed during digestion. He does not state the acidity of the contents.

Fresh bile has feeble diastatic action.

(⁶) Pancreatic juice and the aqueous infusion of the gland are always capable of converting starch into sugar (chiefly maltose), whether the animal from which they were taken be starving or well fed.

(⁷) The intestinal juice converts maltose into grape sugar. It seems to continue the diastatic action of saliva and pancreatic juice.

The bearing of subjects here discussed will be seen later on.

In commencing treatment remove the cause if possible.

Examine the mouth for dental caries and inflammatory lesions; note the reaction of the saliva and test its diastatic value.

The various organs of the body should be examined minutely; also the condition of the urine, gastric juice and fæces.

(5) *Physiology of the Carbohydrates.* (6) *Foster's Physiology.* (7) *Human Physiology, Landois and Stirling*

As in all dyspeptic conditions, commence treatment in the mouth. The food must be of the right kind and properly prepared. Instruct patients to masticate their food thoroughly.

We are now to consider what to do for our patient, and my plan is as follows:

If any lesions exist in the mouth, I treat the condition and prescribe an alkaline mouth wash:

Rx	Sodii boras.....	.5
	Sodii bicarbon.....	4
	Aqua menth. pip. q. s	250 C. C.
M	Ft. Solutio.	

Sig.—Use as mouth wash three times daily, at meal times.

If hyperacidity of the gastric juice exists, I treat it. In the way of food, I order gruel prepared from oatmeal, pearl barley or arrowroot. The gruel should be well boiled and strained to separate the lumps. The gruel can be made with water, milk or some kind of meat broth. When the gruel is sufficiently cool to be tolerated in the mouth, one tablespoonful of Roberts' standard malt infusion, or one teaspoonful of pancreatic extract is added to every 250 c.c. of gruel. After continuing this treatment for several days, I prescribe the following diet: Bread which breaks "short," is porous and crumbles easily, and the crumbs of stale bread, and dry toast, vegetables reduced to the form of purées, a small quantity of very mealy potatoes. Along with the above the following can be used: broth, or clear soup (bouillon); milk; eggs, raw or very slightly cooked. About 250 c.c. of vichy water with each meal.

The malt infusion or pancreatic extract is now taken during meals. The temperature of the food must not be above 60 deg. C.

As the condition of digestion improves, the diet can be increased.

(⁸) Tea and acid wines retard salivary digestion the most powerfully.

The distilled spirits, coffee and cocoa, as used dietetically, may be pronounced to be indifferent.

(8) Roberts' Digestion and Diet.

The mitigating effects of bicarbonate of soda on tea, and of the commercial table waters on wines, appear to be well worth bearing in mind.

I have found the treatment here laid down to answer in all my cases.

I will also state that Taka-Diastase, Merck's Diastase of Malt and various proprietary malt preparations are decidedly inferior to the infusion of malt and pancreatic extract here recommended in the treatment of amyloid indigestion.

The malt infusion is made as follows: .90 of crushed malt is placed in a wide-mouth bottle with 250 cc. of cold water. The mixture is allowed to stand twelve hours and strained through several folds of muslin until it comes through clear.

The above quantities yield about 90 cc. of product. The pancreatic extract should be made from fresh pig pancreas.

Proceedings of Societies.

CLINICAL SOCIETY OF MARYLAND.

The 315th regular meeting of the Clinical Society of Maryland was called to order by the president, Dr. J. M. Hundley.

Dr. L. McLane Tiffany read a paper on "Gunshot Wounds of the Peritoneal Cavity and Contained Viscera."

DISCUSSION.

Dr. Randolph Winslow—I am on the card to open this discussion and will simply report the cases I have seen in the University of Maryland since 1888. During the last three years of my service there we have had four cases of gunshot wounds of the abdomen. Three were operated upon by me and one by Dr. Spruill. The first case upon which I operated has been previously reported to this society and is as follows:

CASE I.—Man, *æt.* 60. On the 21st of December, 1893, about 6:30 P. M., while stealing coal, was shot by a watchman and received a number of wounds of the small intestine. He was brought to the hospital about 1:30 A. M. the next day, and

I saw him at noon. There was no evidence of shock and his condition was pretty good. There was a small, blackened area about the external wound, which was situated in the right flank. His temperature was 101 deg., pulse 104. He was anæsthetized, properly prepared for operation, and on exploration the wound was found to lead into the peritoneal cavity. The abdomen was opened and flushed out with hot water. Four wounds were found in the bowel and some fecal matter in the peritoneum. The intestines were washed, sewed up and put back and the abdominal wound packed with gauze, because owing to the free oozing it was thought best not to close it. The bullet could be felt under the skin, near the crest of the ilium, having passed entirely through the bone. The patient was somewhat shocked, but rallied promptly and eventually recovered.

CASE 2.—This case occurred last year while I was in Cumberland attending the meeting of the State Faculty. The man, who had been shot twenty-four hours previously, was in a septic condition and had general peritonitis when brought into the hospital. Dr. Spruill promptly opened the abdomen and sewed up the wounds, which were nine in number, but the patient did not rally and soon died.

CASE 3.—White man, æt. 58. On July 4, while crossing a vacant lot, some boys fired a cannon filled with big shot, and the man was hit, though at the time he did not feel it. The shot struck him on the left side, below the apex of the heart. He walked home and to the hospital. Dr. Spruill examined him, and on introducing a probe found that the bullet had entered the peritoneal cavity. He had vomited some blood clots. An incision was made in the left hypogastric region and the stomach exposed. The bullet was found to have passed through the wall of the stomach, and the wound was closed by a plug of mucous membrane. No extravasation had occurred. The hole was closed by interrupted sutures. After the operation he vomited blood clots several times. His temperature was 101½, pulse 88. He developed a bronchitis on the fourth day. The external wound suppurated, but the peritoneum was not invaded and the patient got well.

CASE 4.—This case was not so fortunate. On the 7th of September this man was shot and brought to the hospital within an hour. The bullet had entered the abdominal cavity, and, besides five wounds of the small intestines, there were a number of the mesentery. Laparotomy was performed, the bleeding vessels ligated, perforations closed, the cavity flushed with sterilized water and the incision closed. The operation was performed at midnight. The patient was collapsed and in

such a condition that it was feared he would die on the table, consequently as careful a search as was desired could not be made. The wounds that were found were supposed to be all that were present, but that proved to be a mistake. On September 8 the patient was doing well. September 9—Some pain in the lower abdomen. September 10—Vomited frequently. Gave enema, to cause free movement of the bowels, and administered strychnia hypodermically. September 11—Five movements, upper abdomen distended and vomited frequently. September 12—Seemed better. Had not vomited for twelve hours. Taking milk and lime water and calomel every two hours. Died that night. Autopsy showed a hole in the cæcum. The wounds that were sutured had held firmly. Unfortunately, one hole had been overlooked.

My attention was first called practically to penetrating wounds of the abdomen in July, 1881. On the 4th of July of that year, a colored man was admitted to the University Hospital with a pistol wound, the ball entering the left side of the abdomen at a point $1\frac{1}{2}$ inches from the linea alba and 3 inches from the umbilicus, making a circular hole, with clean-cut edges, about the size of the end of the little finger, through which about an inch of omentum protruded. There was no hæmorrhage and but little pain, the temperature was normal and the pulse 80, full and strong. As I could not replace the omentum, it was ligatured and the redundant portion cut off. The wound was slightly enlarged and a drainage tube introduced. Two ice bladders were applied to the abdomen, and a grain of opium administered every three hours. On the third day his temperature rose from 99 in the morning to 101 3-5 in the evening, the pulse from 80 to 126, and the respiration to 32; his abdomen became tympanitic, but there was very little tenderness on pressure. The onset of peritonitis was feared, but the next morning the temperature dropped to 99 4-5, and the pulse to 104, and subsequently no alarming symptoms occurred, and the man was discharged from the hospital in thirty days entirely well. This case came under my care just previous to the publication of Dr. J. Marion Sims' famous article advocating laparotomy in this class of injuries, and the favorable result is to be attributed to good fortune rather than to good treatment. It is evident that the ball spent itself in penetrating the abdominal wall and did not wound the intestines.

CASE 2.—Pistol wound of epigastrium. June 3, 1894, S. P., negress, was shot with a large revolver, the bullet entering the epigastrium $1\frac{1}{2}$ inches from the linea alba and 3 inches below the ensiform cartilage. From the situation of the wound

it was thought that the stomach, or large intestine, was injured, but there was no vomiting of blood, nor bloody stools. There was some pain, but no elevation of temperature, and she was let alone. She lived five days and two hours, and died with symptoms suggestive of peritonitis. At the autopsy no peritonitis was found, nor any wound of the abdominal viscera. Some fluid was found in the peritoneal cavity and the peritoneum detached, with an enormous blood clot under it. A long slit was found in the aorta below the cœliac axis, and a counter opening opposite the third lumbar vertebra. There were thus two large openings in the aorta, and yet she lived five days and two hours.

CASE 3.—Pistol wounds of small intestines. Twenty-seven holes in intestines and bladder; death in eighteen hours. C. W., admitted on the same day as above. Was shot in the hypogastric region, over the pubes, with a large pistol. One wound was in the hypogastrium and a bullet was cut out from the integument one inch distant. Another wound was found upon the buttock near the anus, and a bullet was removed from the skin three inches distant. Was admitted to the hospital during the night. Pulse good and shock not marked. Urine bloody. When seen by me the next day was in collapse, pulseless, vomiting, and in great pain. Autopsy: The bullets were found to have pursued nearly parallel courses, one entering in front and lodging under the skin of the buttock, the other entering behind and lodging beneath the skin of the abdomen. The peritoneal cavity was filled with blood, fæces, pepper pods and cherry stones, the lower portion of the small intestine for about six feet was riddled, there being twenty-five holes in the bowel, one in the mesentery, one in the top of the bladder and one in the base; altogether twenty-eight wounds as the result of these two bullets.

Laparotomy should have been performed in both of these cases, though there is scarcely a chance that a favorable result could have been obtained. I only saw the last case when he was in collapse.

CASE 4.—Pistol wound of liver; death in eighteen or twenty hours. D. G., colored, was shot on the same day as the two preceding cases. The wound was on the right side in the anterior axillary line, about two inches from the nipple, in the fifth intercostal space, and the ball ranging downward fractured the sixth rib and entered the abdomen between the sixth and seventh ribs. Much bleeding and marked shock followed. Local pain and pain in the right shoulder. There was no escape of bile from the wound. The patient vomited the contents of the stomach, but no blood. A wound of the liver was

diagnosed. The patient never rallied from the shock, and died in the evening of the same day. Autopsy: The bullet was found to have passed through the upper surface of the liver and to be embedded in the substance of the diaphragm.

CASE 5.—Pistol wound of back; perforation of small intestine; death in twenty-nine hours from peritonitis. W. G., colored, shot whilst running away from a policeman, the bullet entering his back one inch to the left of the second lumbar vertebra and a probe could not be made to follow its track. Seven hours after injury the pulse was 82, respiration 32, temperature 98.8, and there was no shock. Soon pain about the umbilicus set in and rigidity of the abdominal muscles, vomiting and a bloody alvine dejection, and there was numbness of the parts supplied by the left anterior crural nerve. The temperature began to rise and in twelve hours reached 100.2, pulse 90, respiration 48 and thoracic in character, the abdominal tenderness remaining. A consultation was held in regard to the propriety of performing laparotomy in this case, but the consultant was opposed to it. The patient died of peritonitis in twenty-nine hours. Autopsy: The ball entered the back opposite the second lumbar vertebra, grazed the third lumbar vertebra, then passed into the peritoneal cavity, piercing the small intestine in two places and finally dropped into the pelvis. Fæces had escaped and an intense general peritonitis was set up. Laparotomy ought to have been performed in this case.

CASE 6.—Gunshot wound, supposed to have penetrated the abdominal cavity. Operation declined. Recovery. Michael Kane, æt. 45, admitted December 2, 1893. He was shot a short time before admission with a pistol, the bullet entering three inches to the left of the sternum and one inch below, just over the left costal margin. Dr. Spruill examined him under an anæsthetic and thought the ball had gone into the peritoneal cavity. After examining the man I recommended an exploratory laparotomy, which he declined. No serious symptoms supervened and he left the hospital December 20. The highest temperature reached was 101 and pulse 80.

After a consideration of these cases I agree with Dr. Tiffany that a person who comes in contact with a case of penetrating wound of the abdomen has not done his duty if he fails to give that patient an opportunity for life by performing section. A certain number of cases will recover without operation, but such treatment is simply working in the dark and in those cases it is probable that the viscera have not been injured. If they have been injured it is almost inevitable that death will follow. No surgical rule is better established than that such wounds should be treated by an exploring section, and if nec-

essary by the sewing up of the wounds and ligation of vessels that have been ruptured. There are many points in regard to the technique of such operations which I will not now take up your time in considering, but I wish again to express my opinion in thorough conformity with what has been said that a surgeon is not justified in permitting a patient to go without laparotomy who has received a penetrating wound of the abdomen. There is but one thing to do in these cases and that is to perform laparotomy and be further guided by the circumstances of the case.

Dr. J. W. Chambers—I had been very much interested in these cases, and think the position taken is the proper one that every case of penetrating wound of the abdomen demands a laparotomy. One important point in the consideration of these cases is that no one can draw any deduction whatever from the amount of shock present. There is no relation between the shock and the injury. I have seen recently a man with perforating wounds walking into the hospital with but slight assistance. Another strong point in favor of the operation is you do not know anything about what has been injured until you open the abdomen. While there is a rule ordinarily accepted that a bullet entering this cavity and traveling from side to side makes many wounds, while one from before back will make but few, it can not be relied upon at all, as is shown in one of the cases related by Dr. Winslow. Only occasionally does a patient recover without operative interference, and the operation should be done early. It will be a long time before we can draw conclusions from the cases reported, as they vary so in character. Within the last six months I have operated upon three cases, and all recovered, but previously to that I had operated upon four and all died. All of my last three cases were operated upon after the injury, while the others were not seen early enough.

Dr. B. B. Brown—Some of us remember the paper read here by Dr. J. Marion Sims. He was the first to advise laparotomy in these cases, and I was especially impressed by Dr. Tiffany's résumé, which varies but little from the rules laid down by Sims, I think in '81, some fourteen years ago. This mode of treatment was at first severely criticised; now, however, the best surgeons recognize it as perfectly correct, and it shows one more important truth brought forth by that great man.

H. H. Biedler—I have had some little experience in these cases and recently have had several unfortunate ones. In one, a colored boy, who had been shot by one of his companions, an extensive laparotomy was performed, the abdomen being

opened and the incision, which commenced at the sternum, ended at the pubes. Only one wound was discovered in the viscera and that was closed, the bullet not found. The boy died, and at the autopsy the bullet was found beneath the right nipple. The question arises whether laparotomy had not more to do with the termination of that life than had the injury. I have seen a large number of cases where this operation was done and followed by decided benefit. Another case I saw was that of a man brought into the Baltimore University Hospital with a gunshot injury, which I took to be a penetrating wound of the abdominal cavity. He presented evidences of shock, and by the way, I am not inclined to agree with what has been said to the effect that shock does not play any part in the estimation of what shall be done with the case, but on the other hand, am inclined to think that if the viscera are injured the patient will have a decided amount of shock. This patient died within a very short time, and at the autopsy he was found to have a penetrating ulcer of the stomach and a general peritonitis.

I think, as all have said, it is wise to make an exploratory incision wherever you have such injuries to deal with—that has been the the tenor of the best surgeons for many years. As to the results, and whether it is best to do it in a given number of cases, no one can tell.

Dr. J. M. T. Finney—I am sorry I was too late to hear Dr. Tiffany's paper, but his opinions, as I get them from the discussion, are in accord with the best surgeons of the day. Since the day when Dr. ——— paper appeared in 1887, in which he reviewed the literature of the subject, there has been very little diversity of opinion as to the advisability of this method of treatment. I subscribe to it most heartily.

Dr. J. C. Jay—I agree with the practice generally pursued as stated by those who have spoken before me, and consider it right to follow this line of treatment.

Dr. L. McLane Tiffany—The only point I would speak of now is the question of shock. In my paper I quoted Miles in reference to that shock which occurs with the injury. If the shock is progressive it means internal hæmorrhage. When a patient is first seen he may be profoundly shocked and not be much disturbed, but if he continues to become more shocked it means hæmorrhage, and is all the more demand for operation. Shock at the time of injury does not mean hæmorrhage, but later on it does.

Dr. Randolph Winslow reported a case of "rupture of the liver"—laparotomy—death.

H. E., white, æt. 25, admitted to the Maryland Uni-

versity Hospital on September 30, 1895, Whilst riding on the shaft of a loaded cart about 8:30 A. M. he attempted to get off, and, his foot becoming entangled in the reins, he fell and the wheel passed over his abdomen obliquely, from the right hypochondrium to the left iliac crest. He was brought to the hospital at once, greatly shocked with pain in the abdomen, quick and weak pulse, and temperature of 95 degrees. I saw him at 11 A. M. Face blanched, temperature 96, pulse fairly good, some pain in the abdomen, some bruises over the right side, but none on the abdomen. There was marked percussion dullness over the lower portion of the belly. A rupture of some of the abdominal viscera, probably the liver, with hæmorrhage, was diagnosticated and laparotomy advised. The operation was performed at 1 P. M. An incision was made in the linea alba, from the ensiform cartilage to the pubes, and even before the peritoneum was opened the dark color of the tissues indicated the presence of blood in the peritoneal cavity, which gushed out to the amount of a quart or more when the peritoneum was incised. The intestines were examined and found to be uninjured, but the liver was extensively lacerated on its posterior and inferior aspect in two places. The belly was thoroughly washed out and the lacerations of the liver packed with gauze. The patient stood the operation well and seemed to rally somewhat afterward, but died the same night about twelve hours after the operation. At the autopsy the peritoneal cavity was found to be filled with blood, showing that the packing had not prevented hæmorrhage. I consider laparotomy to be urgently demanded in this class of cases, though the outlook for a successful result is very poor.

DISCUSSION.

Dr. J. W. Chambers—I would report a case of this character, which occurred to me some six months ago. A young man racing across the street with a friend fell, and it was supposed struck his right side on the curb. His friend thought that he was not seriously injured, and did not call for medical assistance. He was carried into a store and kept all night. He rallied toward morning and was then carried home. When I saw him his abdomen was distended, but no dullness could be made out. An operation was suggested to the family, but refused, and he died twenty-one hours after the fall. At the autopsy it was shown that the liver was practically torn to pieces. It was crushed, and one part was hanging way down, but not absolutely separated. The gall bladder was not ruptured. There was an immense amount of blood in the cavity.

In another similar case a gentleman was crossing the

street ahead of a cab, and it is supposed was struck by the pole, though those who saw the accident were not sure that he was struck. I was at the hospital when he came in. He was dead when he arrived. At the autopsy most of the liver was found in the pelvis. Scarcely half an ounce of fluid in the cavity. His heart was probably stopped when he was struck, and he died at once. There was no appearance of injury on the surface and no hæmorrhage.

SOME MEDICO-LEGAL POINTS IN REGARD TO MALPRACTICE.

The following points with regard to a physician's liability in suits for malpractice are given in the *General Practitioner*:

1. A physician is guilty of criminal malpractice when serious injury results on account of his gross ignorance or gross neglect.

2. A physician is guilty of criminal malpractice when he administers drugs or employs any surgical procedure in the attempt to commit any crime forbidden by statute.

3. A physician is guilty of criminal malpractice when he wilfully or intentionally employs any medical or surgical procedure calculated to endanger the life or health of his patient, or when he wilfully or intentionally neglects to adopt such medical or surgical means as may be necessary to insure the safety of his patient.

4. A physician is civilly responsible for any injury that may result to a patient under his care, directly traceable to his ignorance or his negligence.

5. A physician is expected by the law to exhibit in the treatment of all his cases an average amount of skill and care for the locality in which he resides and practices; further than this he is not responsible for results, in the absence of an express contract to cure.

6. A physician is not relieved of his responsibility to render skilful and proper treatment or reasonable care and attention by the fact that his services are gratuitous.

7. A physician is not obliged to undertake the treatment of any case against his will, but having once taken charge, he can not withdraw without sufficient notice to allow his patient to procure other medical assistance.

8. A physician having brought suit and obtained judgment for services rendered, no action for malpractice can be thereafter brought against him on account of said services.

9. A physician is relieved of all responsibility for bad results in connection with the treatment of a case when there can be proved contributory negligence on the part of the patient.

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EDITED AND PUBLISHED BY
AUGUSTUS McSHANE, M. D.

COLLABORATORS:

DR. F. W. PARHAM.
DR. H. W. BLANC.

DR. R. MATAS.

DR. A. W. De ROALDES.
DR. WILL H. WOODS

Editorial Articles.

ANNOUNCEMENT.

Dr. A. McShane has transferred the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL to a corporation of physicians entitled THE NEW ORLEANS MEDICAL AND SURGICAL JOURNAL, LIMITED. They will begin their management of the JOURNAL with the next number. The editor begs to assure subscribers and advertisers that the new management will have their interests at heart, and hopes for a continuance of the mutual good feeling existing between the JOURNAL and its patrons.

The editors under the new regime will be Drs. Chas. Chassaignac and Isadore Dyer. The retiring editor will let them speak for themselves in the March number.

IRRIGATION OF THE PERITONEAL CAVITY THROUGH THE UMBILICUS.

Dr. John T. Pitkin describes in the *Buffalo Medical Journal* a new method of irrigating the peritoneal cavity, which is notable for its simplicity and freedom from danger. When pus

has found its way into the peritoneal sac it is imperative to remove it; to accomplish this Dr. Pitkin strongly advises the re-opening of the umbilical fenestrum, the insertion of a soft rubber drainage tube, through which the pus may escape, and free and repeated irrigations be made.

Dr. Pitkin calls attention to the anatomical features of the umbilicus; the abdominal wall is thinnest at that point, consisting largely of cicatricial tissue perforated by the cord-like remains of the umbilical vessels. The strength of the abdominal wall at the umbilicus varies very much in different subjects; there is no muscular or adipose tissue there, and for surgical purposes the region is practically non-vascular.

He obtained from some of his colleagues reports of three cases of general suppurative peritonitis in which the navel opened spontaneously, discharged for several days, was allowed to close again, followed by fatal consequences. The history of a little patient of his own, treated by umbilical irrigation, offers a cheerful contrast to the expectant plan of treatment:

Julia M. K., aged 4, German descent; previous personal and family history good; only child. September 29, after excessive gastronomic indulgence, enteritis ensued with twenty to thirty movements per diem. October 10, stools infrequent, general peritonitis developed. November 1, inflammatory processes subsided, patient allowed freedom of house. November 6, small bunch, size of hickory nut, protrudes from navel. Physician being undecided as to its nature was dismissed from the case. November 9, bunch has continuously increased in size, now as large as a lemon; constipation alternates with diarrhœa. Second physician called. Diagnosis—from location, serous covering, crepitation and reducibility—umbilical hernia. Truss recommended. November 10, rupture of bunch took place, considerable fetid matter liberated. November 18, purulent discharge decreasing, opening at navel growing small, obstipation and emesis pronounced. November 19, 20, 21 and 22, complete obstruction, all food rejected by the stomach, emaciation marked, medicines of no avail; prognosis of physician, child must die. November 22, 10:30 P. M., as a last resort the writer was summoned to the patient's bedside. The little face was drawn and pinched, pulse hardly perceptible at the wrist. For five days vomiting had been unabatable, nothing had passed the bowels, urine very scant and high colored—nearly suppressed—emaciation was extreme, little more than skin and bone remained of an interesting child.

Her abdomen was greatly distended and tympanitic; most marked over the small intestines, dullness in hypogastrium. Diagnosis, pyoperitoneum and obstruction to lower small intestines by pressure and adhesions. Treatment: reopened navel, liberated large quantity of foul matter. Inserted soft rubber drainage-tube, through which liberal injections of warm water, sterilized by boiling and rendered alkaline, and antiseptic by the addition of Seiler's tablets, six to the pint. Similar injections were administered per rectum, peptonized food by mouth and rectum. Peritoneal irrigation was performed daily for over a week, then with longer intervals until the wash water returned perfectly clear. The navicular opening was then allowed to close, the patient making an uninterrupted recovery. By the process employed all foreign matter was removed from the peritoneum, its cavity cleansed and the adherent surfaces separated from each other by hydrostatic pressure.

Are we not led to conclude that the navel is a semi-normal passage, a sealed abdominal os, the reopening of which may be frequently indicated and accomplishable, either by natural forces or the surgeon's knife, with the danger of shock and collapse reduced to a minimum, and that thorough repeated aseptic irrigation of the peritoneal cavity may be demanded as a life-saving measure whenever that structure has been invaded by bacteria or their products?

Abstracts, Extracts and Annotations.

MEDICINE.

THE RELATION BETWEEN PLEURISY AND TUBERCULOSIS.

The relation existing between pleurisy and tuberculosis has for a long time attracted considerable attention. It is observed that pleurisy frequently follows fully established phthisis, and that phthisis in many instances develops after an apparently cured pleurisy. Of ninety cases of acute pleurisy treated by Henry Bowditch, of Boston, between 1849 and 1879, thirty-two died of or had phthisis (Osler's "Practice of Medicine," 1892). These clinical observations are confirmed by post-mortem records. In the Shattuck Lecture for 1893 (*Boston Medical and Surgical Journal*, July 20, 1893), Osler

stated that an analysis of the post-mortem records of 101 successive cases from the wards of the Johns Hopkins Hospital in which pleurisy was found showed that thirty-two, or nearly 32 per cent., were definitely tuberculous.

Where pleurisy and tuberculosis of adjacent structures co-exist in the same patient, it is generally admitted that the one may hold one of four relations to the other: (1) the pleura may have been involved simultaneously with the other structures in the tuberculous process; (2) a primary tuberculous pleurisy may have infected secondarily adjacent organs, such as the lung; (3) primary tuberculosis of the lung or bronchial glands may have excited a pleurisy; (4) a primary, non-tuberculous pleurisy may have so reduced the resistance of the lung that the latter became a favorable soil for the development of phthisis. In many cases the tuberculous nature of the pleurisy is apparent, the disease being undoubtedly secondary to advanced tuberculosis elsewhere, as in the lung, bronchial glands, peritoneum or Fallopian tubes. In other instances, however, what appears to be a simple primary pleurisy is followed sooner or later by the symptoms of pulmonary tuberculosis. In the latter group of cases the initial lesion, generally in the lung or thoracic lymph gland, may have been so small as to escape detection, or the pleurisy may have been primarily tuberculous, or the phthisis may have resulted from injury to the lung induced by a simple pleurisy. The last view, although not unreasonable, has little but tradition to support it. The view that pleurisy, apparently simple or idiopathic, is most frequently caused by tubercle bacilli which have invaded the pleura directly, or have gained access through the medium of an unrecognized tuberculous focus elsewhere, although asserted by many competent observers, has been criticised on the ground that most patients with acute pleurisy are completely restored to health, and that, moreover, a bacteriological examination of the pleuritic exudate rarely reveals the bacilli. These objections, however, lose much of their importance when it is remembered that tuberculosis has not the same fatality in all parts of the body. Patients with tubercular adenitis, osteitis, or peritonitis frequently recover. Again, tubercle bacilli are rarely discovered in the exudate of pleurisy known to be tuberculosis. Of nine cases of serous pleurisy studied by Ludwig (*Deutsche Archiv für klinische Medicin*, Vol. L, 1893) two were caused by pneumococci, two by staphylococci, and five were free from bacteria. Of the last, however, four were tuberculous.

Recently an important contribution to the subject under consideration has been made by Eichorst (*Correspondenzblatt*

for *Schweizer Aerzte*, No. 13, 1895). This observer, in order to prove conclusively that pleurisy is often excited by tubercle bacilli, made a series of experiments on guinea pigs, injecting into the abdominal cavity of the animals one cubic centimeter of the exudate from every case of serous pleurisy. After six or eight weeks the animals were killed and their organs critically examined. Of the eleven animals inoculated only one developed glandular tuberculosis. As one animal, however, remained healthy after being inoculated with the serum of a patient who had pronounced pulmonary tuberculosis following shortly after an attack of acute pleurisy, the author concluded that the experiments were faulty in that he had not injected a sufficient quantity of the serum. A second series of experiments was therefore undertaken, the exudate being obtained from twenty-three patients who had been in good health when they acquired the pleurisy and in whom no tuberculous lesions could be detected after the most careful examination. In the latter experiments fifteen cubic centimeters of the serous exudate were injected into each guinea pig, and as a result fifteen of the twenty-three animals, or 62.2 per cent., developed tuberculosis, while only eight, or 34.8 per cent. remained healthy. These results indicate that nearly two-thirds of all cases of acute serous pleurisy are of a tuberculous nature. Eichorst believes that in most instances tuberculous serous pleurisy has its origin in tuberculosis of the bronchial glands. These experiments not only throw light upon the etiology of pleurisy, but also suggest an aid to diagnosis in obscure cases, especially when the nature of the disease is not indicated by the history, method of onset, clinical course, character of the fluid, or by bacteriological examination.—*University Medical Magazine*.

CONCERNING THE USE OF ANTITOXINE IN DIPHTHERIA.

CONSULATE OF THE UNITED STATES, }
 HAVRE, FRANCE, January 7, 1896. }

SIR—My attention having been called to the discussion now going on, both in Europe and America, in regard to the success obtained by the use of the antitoxine treatment of diphtheria, some contending that the results are "certain," others that they are "probable," and others again that they are "harmful," I have, in view of the importance of the subject, second only to the effects of vaccination in small-pox, taken some pains to gather the most reliable information to be had, and now submit a brief report on the subject, which will be interesting, not only to the medical profession, but to the pub-

lic generally, and especially to communities where this scourge of childhood is liable to prevail.

The authorities, it will be seen, have come to the conclusion that the serum treatment exercises a favorable influence on the course of the disease and that the continued employment of it is justified.

I am, sir, with high respect, your obedient servant,
C. W. CHANCELLOR,
United States Consul.

Hon. Assistant Secretary of State.

[Inclosure.]

REPORT ON THE EFFICACY OF ANTITOXINE IN DIPHTHERIA.

The municipality of Havre has just opened a micro-biological laboratory for preparing and testing antitoxine serum, particularly that intended for the cure of diphtheria, which has received the endorsement of the Academy of Medicine of France. In this laboratory trials are regularly made of serum drawn from an immuned horse. This is effected by the aid of several guinea pigs, which are inoculated with the curative serum in variable doses after diphtheria has been communicated to them by injections of the toxine or diphtheria poison.

On entering the laboratory one sees in a compartment set aside for the purpose a series of cages, each containing a guinea pig, except the first, which is empty. This cage, we are told, had been occupied some days before by the unfortunate victim which served to demonstrate the virulence of the poison. The animal had received an injection of 10 centigrams of the toxine and died twenty-one hours after. In the next cage was an animal which had at the same time received an injection of 98 centigrams of the toxine and 2 centigrams of the antidiphtheritic serum to be tested. This small quantity of the serum, it appears, was sufficient to save the life of the animal in spite of the large dose of toxine administered, from which it had suffered no inconvenience, except a slight œdema or swelling at the point where the poison had been introduced.

Other animals were successfully treated by gradually weakened doses of the poison with increased quantities of the serum, even to the extent of 90 centigrams of the former to 10 centigrams of the latter. These several tests serve to establish the purity and efficacy of the serum, which is afterward distributed for use on the human subject.

This is the principal work of the laboratory, but in addition to supplying the serum, it also places at the disposition of

physicians prepared bouillon, or some other culture fluid, in which to place bits of suspected membrane from the throat of a patient. The culture being returned immediately to the laboratory, a microscopic analysis is made in less than twenty-four hours, which reveals the presence or absence of the bacillus of croup or diphtheria, and enables the physician to decide positively as to the specific nature of the malady, and whether the serum treatment should be used or not. Of course, in well defined and severe cases there is no necessity for the microscopic examination, but the injections should be made without delay.

It is not necessary to repeat here all the marvelous effects claimed for this serum in the treatment of croup and diphtheria, but it may not be out of place to give some statistical information which has been recently furnished by Dr. Monod, chief of the sanitary bureau of France, which shows very conclusively the influence the antitoxine treatment has on the mortality from diphtheria and its congener, croup, in France.

The Pasteur Institute distributed the serum very freely during the months of November and December, 1894, and January, 1895, aggregating about 50,000 tubes. After this, the serum was reproduced and generally used all over France. Since then, Dr. Monod has compared the statistics of mortality from diphtheria and croup in 108 cities in France, having more than 20,000 inhabitants, during the first six months of 1895 with the average mortality during the same months for the seven preceding years from 1888 to 1895. The average mortality, per six months, for the latter period was 2627, while that for the first six months of 1895 was only 904, a decrease of 65.6 per cent.

MORTALITY.

First six months, 1888 to 1895.	Deaths.	First six months of 1895.	Deaths.
January.....	469	January.....	205
February.....	466	February.....	187
March.....	499	March.....	155
April.....	442	April.....	160
May.....	417	May.....	113
June.....	334	June.....	84
Total.....	2,627	Total.....	904

While the foregoing figures are not quite sufficient to establish with entire accuracy the full value of the remedy, the results clearly demonstrate that at least 15,000 lives may be saved annually in France by systematically employing the sero-therapeutic treatment in diphtheria and croup.

Some interesting details as to the success of the antitoxine treatment of diphtheria are also supplied from official statistics drawn upon the initiative of the German ministry of medical

affairs, which addressed its inquiries to physicians, both in public and private practice.

Answers to the number of 1349 were returned, dealing with 6626 cases, of which 2460 were treated in hospitals. Out of the total of 6626 patients 86.5 per cent. recovered and 12.9 per cent. died, while the remainder were still under treatment. Of the hospital patients 80.5 per cent. recovered and 19.5 per cent. died. In 4871 cases the physicians expressed their views as to the value of the antitoxic serum. In 55.6 per cent. of these cases the remedial effects of the serum are characterized as certain, and 30.8 per cent. as probable, while in 13.6 per cent. the method apparently produced no effect. The serum was described as "decidedly harmful" in only sixty cases, of which forty-two recovered and eighteen died, and as "innocuous" in 4544 cases.

At the recent Congress of German Naturalists and Physicians, Professor Behring, of Marburg, read a statistical report on the efficacy of the antitoxine serum, of which he is the original inventor. The number of cases from diphtheritis in Berlin for the twelve months, ending August 31 last, was 6087, of which 3319 were treated in hospitals—figures of which showed that the epidemic character and the extent of the dread disease were rather greater than the previous year. While, however, formerly the death rate varied between 30 and 40 per cent., this percentage in the Berlin hospitals where the serum treatment obtains has been reduced to 16 per cent. In 821 cases, where the serum could be given within the first forty-eight hours, the mortality did not exceed 5 cent. But for the fact that in many instances the doses given were too small and that the most dangerous cases are chiefly sent to the hospitals, the results would have been still more favorable. The mortality at the Berlin Charité, where the treatment with the serum is carefully adhered to, was 16.7 per cent., while in the Bethanien Hospital, where no serum is given, it rose to 43.1 per cent. In some of the hospitals where the treatment was suspended only one day, the mortality actually rose to twice the average figure.

Professor Virchow heartily indorsed Dr. Behring's statement.—*Public Health Reports, February 7, 1896.*

C. W. CHANCELLOR, *U. S. Consul.*

BROMIDES IN EPILEPSY.

Mr. Antony Roche, M. R. C. P. I., of Dublin, Ireland, reports on the use of the strontium salt in epilepsy as follows: It has been "found in some cases to afford some relief in reducing if not curing the manifestations of the condition. I re-

gret the number of cases is limited, and that therefore no general deduction can be drawn from them; but I think they are sufficiently encouraging to induce others to give this bromide a trial in suitable cases. My attention was drawn to the use of bromide of strontium some two years ago by reading some reports from the French medical papers in which it had been found useful when the other bromides had no beneficial effect or could not be borne. I determined to give it a trial in a case I had then under my care, and found the results so satisfactory that I have since used it alone or in combination with the other bromides in four cases."

He then relates his cases in detail, giving in one case the strontium salt alone, while in the remaining three he gave the potassium and strontium salts in combination. He concludes as follows: "None of these cases were cured, but all of them much relieved. In all of them other bromides had been employed before, and the combination of the strontium seemed to be more beneficial. It has long been noticed that a combination of the bromides act more favorably than any one, and I would advise you to impress on the patient that he must take the medicine for a long period, whether it has at first a beneficial effect or not. I think the bromide of strontium well entitled to further trial."—*Brit. Med. Journ.*, Vol. I for 1895, page 1089.

GUAIACOL AND IODOFORM.

Guaiacol, obtained from beechwood and other creosotes, has varied so considerably in purity—all the way from 50 to 90 per cent.—that a strong incentive has been given to perfect the previously discovered process for making a synthetic product. It has at last been accomplished, and an article which is claimed to be absolutely pure is being made on a commercial scale. It is now such an important article to the medical practitioner that it becomes a serious question to obtain a reliable article.

The literature on this agent has been voluminous throughout the year. Its external application in acute pulmonary tuberculosis and as an antipyretic in typhoid fever, and in other fevers, has received very marked attention. Its application as a local anæsthetic has been largely pushed with much benefit. Some claim that it is as powerful as cocaine and much safer, as it can be given in ten times as large doses without ill effects. Dental surgeons are extolling it, for perfect analgesia is obtained when injected before extraction of a tooth. In conjunction with menthol, it is of pronounced service as a local

treatment of neuralgic pains. In conjunction with glycerine and tincture of iodine, it may be successfully applied over the whole posterior portion of the thorax in pleuritic effusions.

Dr. E. Darbouet, of Boucau, France, has met with success in treating non-diphtheritic sore throats by applying this agent in glycerine. He finds that the most intense sore throats run their course without fever or pain. The general condition of the patients remains good throughout the whole course.

It has found increasing use in this country as well as abroad.

Iodoform is still a most important agent in the surgeon's hands. Notwithstanding the numerous substitutes, with all their claims, he finds he can not do without it, in spite of its disagreeable odor. This latter objection continues to receive attention. It is now affirmed that the application of oil of turpentine to the part on which iodoform has been applied will completely mask the characteristic odor. In cleaning the hands, for instance, a little oil of turpentine is added to the wash water and the hands well wetted with this. Then, after washing with soap and water, the odor completely disappears.

Another suggestion, based on actual experience, comes from Surgeon-Captain J. S. Edye, A. M. S., of Aldershot, England, who reports on a case where equal quantities of freshly ground coffee and iodoform, mixed, did away with the odor of the latter, and apparently in no way affected its medicinal properties.—*Squibb's Ephemeris, January, 1896.*

TUBERCULOSIS OF THE TONSIL.

J. Purves Stewart (*British Medical Journal*, May 4, 1895, p. 970) reports a case in which an excised tonsil with the ordinary appearances of hypertrophy upon microscopic examination showed distributed throughout its substance a number of giant-cell systems characteristic of tuberculosis. No tubercle bacilli were demonstrated by Ziehl-Nielsen's stain, but the case seemed to be one of undoubted tuberculosis.

CARBOLIC ACID.

Phenol still continues to interest all observers, especially to determine the cause of the alteration in color. Dr. A. Bach, of Germany, has now apparently pushed investigations in regard to this subject directly in the line of those of Dr. Chas. A. Kohn, of Liverpool, England, and alluded to here last year,

only he has gone a step further. He recognizes that it has been claimed that the alteration was due to the formation of hydrogen peroxide, and he himself agrees with previous observers in usually finding it in the altered acid, but from his experiments he tries to show that the coloration is due to the presence of carbonic anhydride (CO) and not of hydrogen peroxide. He "found that when phenol is exposed to the action of light and moisture in an atmosphere of carbonic anhydride, it is quickly turned red and no trace of hydrogen peroxide can be detected. On the other hand, when phenol is exposed to light and damp air, and care is taken to exclude carbonic anhydride, after three days only a faint, brownish coloration is observed, and hydrogen peroxide can then be detected by its characteristic reactions."—*Journal of the Chemical Society (British) Vol. LXVIII, page 340.*

SURGERY.

ETHYL CHLORIDE AS A LOCAL ANÆSTHETIC.

By E. B. WARD, M. D., Selma, Ala.

Since the earliest days of surgery, remedies to lessen the pain incident upon an operation, it matters not how trivial, have been resorted to. It has been truly said that "from the earliest ages of antiquity, man has continually sought for the means of relief from pain. At the siege of Troy the Grecian surgeons were skilled in the art of assuaging the pain of injured men by the application of alcohol and carbonic acid to their wounds."

No longer we grope in that dark and misty age, when patients were strapped down and forcibly compelled to "grin, or yell, and bear it," was the motto. Civilization moves on and keeps pace with the wonderful march of time. In no department of science has the progress been greater than that of surgery. Each year brings us nearer the goal of perfection, and could our forefathers awake from their sleep they would look on with wonder and admiration. Now, the harp of science soothes with dulcet tones, the tingling nerve to sleep, and wafts pain away on the wings of anæsthesia.

My purpose in this short article is not to consider the wide subject of general anæsthesia, the discovery of which was thrown across the medical horizon like a flash light and heralded with joy and enthusiasm from one end of our land to the other as the greatest boon to humanity. A great many minor surgical operations present themselves to the surgeon where

the risk of a general anæsthetic is out of proportion to the gravity of the operation, and we anxiously look around for some agent with which we can render insensible the place on which we wish to operate.

Local anæsthesia plays an important part in the department of minor surgery, and for years some such remedy as will benumb the sensibilities of a part has been resorted to. "The anæsthetic effects of cold have always been known throughout those portions of the world in which atmospheric temperature sinks below the freezing point. The application of snow or ice as a means of numbing the sensibility of the skin has been practised from time immemorial. Of more recent date is the knowledge of the various freezing mixtures that have been introduced by chemists. So effectual is the local result of their action that, were they sufficiently easy of application, their use might be urged in a large number of the operations of surgery; but the difficulty that attends the effort to limit exactly the sphere of action of a refrigerant application, while at the same time endeavoring to produce a complete abolition of sensibility throughout the part, is so great that the utility of the method is very considerably restricted. Notwithstanding the disadvantages which limit its use, local anæsthesia by refrigeration is a valuable addition to the resources of the surgeon." The writer has truly expressed the difficulties attendant upon the use of such remedies, and such obstacles were in the way until these objections could be removed.

The preparation to which I wish to call attention in this article successfully removes these obstacles, and for that reason adapts itself nicely to just such cases where the employment of a local anæsthetic has been restricted heretofore. Of course, the adaptability of such remedies is well known; operations involving deep tissues, or requiring considerable time to bring them to completion, are more successfully done under general anæsthesia, and should never be attempted otherwise. But those cases minor and superficial in character respond like magic to the deadening effect of this remedy. The discovery of cocaine marked a great era in local anæsthesia, and its use was ushered in with delight by the surgeon. He certainly thought he had at last found the *sine qua non* of such remedies. Its remarkable power of paralyzing the peripheral sensory nerves has been amply demonstrated and many operations heretofore done only under ether or chloroform have been successfully performed with a perfect abolition of pain by its use. But it has been discovered that it is not entirely devoid of danger. Many cases exhibit idiosyncrasies toward this drug, and physiological and toxicological phenomena, un-

pleasant in character, confront the operator at a time least expected and much less desired. There have been reported many fatal results following cocaine anæsthesia, and we have become to a certain extent skeptical in regard to its use for fear that we may have some such phantom of ill luck rise up before our astounded vision. If we have to employ anæsthetics we want to eliminate as much as possible the danger of emergency and prevent any accident that might arise. To have the patient die on the table, under the knife, and as a result of the anæsthetic, is a calamity not relished even by the boldest and most fearless surgeon. Agnew says "such an event, however induced, must be looked upon as a great calamity. God grant it may never be a part of my personal experience;" and we may all truly add to that an emphatic "Amen."

The introduction to the profession of ethyl chloride has filled a long felt want. It is furnished in a form very convenient for use, and its success as a local anæsthetic has been well-established wherever used. This remedy is well known and a description of it would seem superfluous. As furnished to the trade it is a clear fluid put up in glass bulbs which have metal caps attached, rendering them air-tight. It is claimed by Dr. Bengué that it is an anæsthetic, rapid in action and perfectly harmless. Anæsthesia is produced in from one-half to one minute. I have found that by continuing the spray the local effects may be prolonged as desired; otherwise the effects will not last over two or three minutes, plenty of time for most incisions. I have used it very successfully in a number of cases, and in no instance has it failed to give me perfect satisfaction and charmed the patient with its result.

I will enumerate a few of the cases in which its use proved its merit:

CASE 1.—A young lady, very nervous and timid, wished relief from a very painful paronychia. The dread of the knife was intuitive. I assured her that by the use of a spray, from the bulb which I carried with me, I could incise the felon without giving pain. She reluctantly consented to the operation and I made a deep incision down to the bone. The patient looked on with interest, and expressed herself as absolutely feeling no pain at all from the knife.

CASE 2.—Young male, white, called at my office to consult me about a severe carbuncle situated on the back near the spinal column. I used the spray of ethyl chloride, and under a constant application of the spray, I made a crucial incision, and with the curette scraped out all the necrotic tissue. The result was perfect and the operation painless.

CASE 3.—Female, white, presented a fistula in ano. She had suffered a long time, but the nervous dread of a surgical operation and the fear of having to be “put to sleep,” had deterred her from having anything done. The spray of ethyl chloride was applied. I split up the fistula, curetted out the old tract, packed with gauze. The operation was perfectly painless and the recovery complete.

The fourth and only other case that I will enumerate was that of a young white man who came to my office suffering greatly from a severe palmar abscess. Under the spray of the ethyl chloride the incision was made without pain.

These are simple cases, but are just the kind met with in the daily rounds of a busy practitioner, and they serve to illustrate the efficacy of ethyl chloride as a local anæsthetic.—*Inter. Four. Surg.*

INJURIES OF PERIPHERAL NERVES.

CASE I.—*Traumatic Neuroma of Ulnar Nerve; Resection and Suture.*—William H., negro, aged 49 years, was admitted to the United States Marine Hospital, Memphis, Tenn., September 12, 1891. Two years previously he received an incised wound on the inner side of the elbow, was locked up by the police immediately afterward, and his wound received no attention. There was a scar between the inner condyle of the humerus and the olecranon, and just above the scar could be felt a small movable, subcutaneous tumor into which the ulnar nerve could be traced above and below. This tumor was very sensitive on pressure, and there were occasional attacks of severe pain extending downward from the elbow to the hand.

There was a manifest tendency to the formation of the *main en griffe* of ulnar paralysis, flexion and extension of fingers were imperfectly performed, and passive extension was painful. The ability to separate the fingers and bring them together again was partially lost. There was marked atrophy of the interossei and the adductor pollicis; the little finger was abducted. There was anæsthesia of the skin of the little finger and the ulnar side of the ring finger, and hyperæsthesia of the inner surface of the hand.

On September 20 the tumor was exposed by incision and found to consist of a neuroma involving the ulnar nerve. The distal portion of the nerve was connected with the growth by a few fibres only. The tumor was excised, leaving a gap of five centimetres between the cut ends of the nerve. The latter were approximated by traction and united by four catgut sutures, the wound closed, and the limb put up in extension.

The wound healed promptly, but extension was maintained for two weeks. At the expiration of this time there was slight improvement of sensation, but not of motion. Improvement of function was slow but progressive, and when the patient was discharged—December 12, 1891—there was no pain or tenderness along the course of the nerve, and sensation in the ulnar distribution was normal. Extension and flexion of fingers were much improved, and abduction and adduction of fingers were normal except in the little finger, which remained abducted. The function of the hand, as a whole, was excellent.

CASE II.—*Suture of Facial Nerves.*—William J., negro, aged 27 years; admitted to hospital March 11, 1891. Two days previously he received an incised wound which laid open the cheek from the anterior border of the parotid gland to within an inch of the angle of the mouth. It did not penetrate the mouth, but had divided the parotid duct and three branches of the *pès anserinus*. The wound, which was in a septic condition, was cleansed as thoroughly as possible, a seton was carried into the mouth from a point opposite the wound of the duct, the divided ends of the cut nerves were freshened, and each severed branch was sutured with a single stitch of fine catgut. The wound was partially closed, leaving ample openings for drainage. Healing by granulation in two weeks. The seton was then removed and the external opening of the salivary fistula closed by cauterization. At the time of discharge—one month after operation—there was no improvement in the facial paralysis and the patient has since been lost sight of. As improvement sometimes begins several months after operation, he may possibly have derived benefit from it since his discharge, but this is not likely, as the infection of the wound probably interfered with proper union of the nerves.

CASE III.—*Division of Musculo-spiral Nerve; Secondary Suture*—J. M., white, aged 28 years, admitted to hospital on October 20, 1892. On August 12, 1892, he received an incised wound of the outer side of the lower third of the right arm. The wound was dressed by a physician, and the arm put in angular splint for several weeks. Upon removing the splint, the patient found that he had wrist-drop and numbness on the back of the hand. Upon examination, there were found complete paralysis of the extensors of the wrist, reaction of degeneration in the paralyzed muscles, complete anæsthesia of the back of the thumb, and partial anæsthesia of the back of the hand. There was a linear cicatrix in the lower third of the arm, and about an inch to its outer side could be felt the enlarged upper end of the severed musculo-spiral nerve.

October 22—Etherized patient and cut down upon the divided nerve. The upper end was easily exposed, but the lower end could not be found. The incision was extended downward and the nerve exposed in its normal situation in the interspace between the brachialis anticus and supinator longus muscles. The lower end was then found by following the nerve up to the cicatrix. The ends were freshened and sutured with fine chromicized catgut, the wound closed, and the limb put in an angular splint.

November 5—Removed splint and dressing; primary healing in wound. Patient was discharged two days later, and was subsequently treated as an out-patient. There was gradual but progressive improvement. On January 1 there was considerable improvement of the anæsthesia and a slight but distinct return of motion. Patient was last seen on February 1, 1892. There was a more decided return of motion in the exterior muscles, and the anæsthesia had nearly disappeared. I have been unable to obtain the subsequent history of the case.

CASE IV.—*Injury of Brachial Plexus.*—W. W., mulatto, aged 21 years, admitted to the hospital on February 15, 1892. Three weeks previously he had been stabbed near the outer end of the collar bone. Immediately afterward he noticed numbness of the back of the hand and forearm, and a week later he lost power in the arm and hand. When examined he was unable to raise the arm, or flex, and extend the forearm; finger movements were very weak and pronation and supination nearly lost. Loss of forearm movements was partly due, however, to a chronic synovitis of the elbow joint. There was anæsthesia of the dorsum of the hand and forearm, with pain in the anæsthetic area. A small sinus was found, opening just above the outer end of the clavicle. A probe entered for half an inch and encountered exposed bone.

February 17th—Etherized patient and laid open sinus. Found that it led to a circular opening in the flat, outer end of the clavicle, about half an inch from its articular surface. Through this opening a small, depressed sequestrum was discovered and extracted. The knife had evidently perforated the clavicle and carried a piece of the bone before it. Four days after the operation the anæsthesia had disappeared, and a month later all symptoms of paralysis had passed away. The elbow joint was subsequently successfully excised for tuberculous disease.

CASE V.—*Traumatic Neuritis of Ulnar Nerve; Nerve Stretching.*—Miss G. M. M., aged nineteen years, music teacher, consulted me during November, 1891. Four years

previously, in a cable car accident, she sustained a severe contusion of the left arm, the limb having been extensively ecchymosed along its inner aspect. Dating from this accident there had been constant pain and tenderness at the inner side of the arm from the axilla to the elbow. After a time the pain extended to the supraclavicular space and the back of the neck. The pain gradually increased in severity and the hand became weak. Patient was finally unable to separate the fingers and had to abandon the piano. The following points were noted at the examination: Patient excitable and nervous, but in good health; carries the arm in a sling with the forearm flexed and the arm adducted from the side; any attempt to bring the elbow to side or to extend the forearm causes acute pain along inner side of arm; the fingers are semi-flexed, and attempts to straighten them passively cause great pain; abduction and adduction of fingers are abolished; there is exquisite tenderness along the ulner nerve, from elbow to axilla, and partial anæsthesia and paræsthesia in its cutaneous distribution; there is a less degree of tenderness above the clavicle and slight tenderness over the cervical vertebræ. She had submitted to prolonged courses of medical and electrical treatment in Kansas City and Pittsburg. Galvanism had given temporary relief only, and morphine was frequently required to allay pain.

Nerve stretching was advised, but the patient and her family were informed of the uncertainty of cure. Several months later, in February, 1892, she returned and submitted to the operation. The ulnar nerve was exposed at a point four inches above the elbow and thoroughly stretched. The wound was closed without drainage and united under one dressing. The limb was fixed on a splint in extension before recovery from the ether. For some days after the operation there was moderate pain referred to the wound and the back of the neck. Passive motion of the fingers caused no discomfort. She was sent home one month after the operation with instructions to continue the use of galvanism. At that time the attacks of pain were slight and infrequent, the fingers could be voluntarily extended, and the arm carried at the side in extension. Sensation was normal, but the small muscles of the hand were still paretic. A month later she wrote saying that the arm was well and that she had returned to her music. Her family physician, Dr. E. E. Ellis, of Dyersburg, Tenn., informed me shortly afterward that the arm had been free from pain for many weeks, the paretic finger muscles had recovered their function, and that recovery was apparently absolute.—*N. Y. Medical Journal.*

RETROGRADE CATHETERIZATION.

Pacheco Mendès (*Annales des Maladies des Organes Génito Urinaires*, September, 1895, p. 800) gives the details of two cases in which, for impermeable urethral stricture, he opened the bladder above the pubes and passed a sound from behind forward. The first case was that of a man, aged 49 years, with strictures along the urethra and a perineal fistula. It was found impossible to enter the bladder through the urethra, so the former was opened above the pubes and a sound passed into the urethra. It was brought out at the perineum, and the bladder was closed. After ten days an abscess formed in the abdominal wound and some of the scrotum sloughed. The patient recovered from this and then an internal urethrotomy was done, and a catheter introduced into the bladder and left for twenty days. Recovery was perfect. The second case was that of a man, 45 years of age, who also had an impermeable stricture with perineal fistulæ. Retrograde catheterism was resorted to and the bladder sutured immediately, the edges being first sewed with catgut and then inverted with Lembert sutures of fine silk. This patient had primary union of the abdominal wound, notwithstanding that he got out of bed six times on the day of the operation to go to the water-closet.

GYNECOLOGY AND OBSTETRICS.

CLEAN MIDWIFERY, WITH REPORT OF A CASE OF UNCLEAN MIDWIFERY.

By clean midwifery is meant midwifery not encumbered with anything useless—perfect, complete. Its principles are simple, its practice easy, requiring the virtues, perseverance, patience, thoroughness. Its results are too well known to dwell upon, depriving child-birth of much of its former horror, robbing death of many of its fairest victims, women in the prime of life performing their office of mother and helpmate, the time of all times at which they could at least be spared.

History.—This dates from the time when the true pathology of diseases of the puerperium was first properly appreciated, which was the keynote to their prevention and successful treatment. In the time of Hippocrates and Galen the results of unclean midwifery were thought to be due to the suppression of the lochia, this doctrine holding sway for about

twenty centuries. This was followed by the doctrine of milk-mestassis. These in turn were followed by the doctrines of inflammation of the womb, peritoneum, veins and lymphatics. Many considered it a specific infectious disease, such as typhoid fever. In 1850 Sir J. Y. Simpson published a paper entitled "The Analogy Between Puerperal and Surgical Fever," which was the beginning of the modern doctrine. Several years previous to this Semmelweis asserted that puerperal troubles were common in the practice of those who examined patients after performing post-mortems, or students attending patients while working in the dissecting room. He was considered a crank, and was rewarded by ridicule, but with the advance in other branches of medical science, this branch has also advanced, and to-day it is an established fact that puerperal diseases are due to germs, either putrefactive or infective. The putrefactive germs are termed bacilli, and depend for nourishment upon some foreign proteid substance, such as blood-clots, pieces of membrane, etc.

Their excreta are called ptomaines, which are capable of absorption by the uterus and are the offending agents. Puerperal troubles due to this cause readily respond to treatment, because as soon as the uterus is cleaned out the supply of ptomaines ceases, and the organism, with its wonderful eliminating glands, soon disposes of the dose it has. The infective germs are termed streptococci; these possess the power of invading living tissue, and are in themselves poisonous. This germ is the cause of the true infective puerperal fever, although the putrefactive germs are found with it. These germs must get into the system before they can cause trouble. Their avenues of introduction are seven in number:

1. The genital passages, as by an examination with a septic finger, filthy clothes coming in contact with the vulva, or by the patient scratching her vulva with a septic finger; it has been said that the water-closet has acted as a source of infection by the mucous membrane of the vulva coming in contact with the foul emanations from the sewer.

2. Wounds of the genital passages.

- (a) Lacerations of cervix.

- (b) Lacerations of vagina, the base of the clitoris is a favorite place for laceration.

- (c) The perineum.

- (d) The head lying in one position too long may cause sloughing of the underlying tissue.

3. The bladder, either introduced by a catheter, or may wander from the vagina; from the bladder they may wander through the ureter into the kidneys.

4. The rectum, as by a septic syringe nozzle.
5. The breast.
6. Respiratory organs.
7. Intestinal canal.

Having seen that there is a germ capable of introduction by the above-named avenues, and knowing the dire results which follow its introduction into the system, it became evident that if the germs were prevented from entering the system the puerperium would be robbed of its dangers. As we all know, this has been demonstrated by clinical facts. The prevention comprises clean midwifery, which involves three factors—the patient, physician or nurse, and the surroundings. The surroundings necessarily depend upon circumstances. It is those in the middle and lower walks of life whose surroundings we must modify. As to the room, it should not be too small; it should be exposed to sunlight, if possible, and be well ventilated. If the bed has been in use long, it should be scrubbed up and sunned. A mattress should be used and all unnecessary clothes, ornaments and furniture should be moved out. For a bed-protector there is nothing better than a piece of oil-cloth, or a piece of canvas which has previously been boiled. The bed linen is put on fresh, and then the bed is ready for the patient.

As to the patient, she should take a thorough bath with warm water and soap. She should have a copious enema of warm water and soap. The vagina should be douched with a 1 to 2000 bichloride solution. She should clean and cut her finger-nails, and when the physician has prepared his antiseptic solution she should soak her hands. She should put on fresh linen; after this an antiseptic pad should be placed over the vulva; one may easily be made by wrapping a piece of absorbent cotton or oakum in sterilized gauze, and the breasts and axillæ, after a thorough scrubbing with a boric acid solution, are to be covered with borated cotton, kept in place by a sterilized binder.

As to the physician, his hands and arms should be prepared as follows: Nails cut and cleaned, hands and arms scrubbed by means of a brush with hot water and soft-soap, then washed in plain water, next immersed in a hot bichloride solution, 1 to 2000, in which they should remain for three minutes; if they are simply rinsed it does not wet the several layers of dry, horny scales which form the stratum corneum of the epidermis, beneath which the germs may hide and remain unhurt. The hands should be allowed to dry—never use a towel; next they should be immersed in a 5 per cent. solution of creolin, remaining for one minute. This is antiseptic and lubricant; in the

lying-in hospital of the University of Maryland the rules relating to the time were very strictly observed. Some claim that it is unnecessary to use bichloride, soap and water being sufficient, but for the busy practitioner, who makes, possibly, a rectal and vaginal examination of one patient, lances a felon for another, is then summoned to a case of labor, for the benefit of his patient he should use bichloride. I mention bichloride because it is the neatest, least troublesome and among the best antiseptics. An apron should always be worn, pinned to which should be a sublimated towel, which is useful. In this connection it is well to remember that failure to carry out the minutest details in antiseptics may lead to disasters of the greatest magnitude. Remember the old expression, "*omnia ex ovo.*" Vaginal examinations should be as few as possible. The third stage of labor should be carefully managed or clean midwifery may fail. In those cases where it becomes necessary to separate the placenta from its attachment or in any way interfere with its delivery, it should be carefully examined to see if any part has been left. At the end of the third stage a hypodermic of strychnine-nitrate, one-fortieth of a grain, should be given and a dose of ergotole or fluid extract of ergot.

The strychnine tones up the muscles, acts as a general stimulant and lessens the shock which necessarily follows labor. Ergotole insures better contraction of the uterus, thereby forcing out all clots which otherwise might be retained and become infected. This is more important in multiparæ, as with each succeeding labor the uterus becomes more inert. During the interval between the second and third state of labor sterilized gauze, wet with an antiseptic solution, should be kept over the vulva. After a normal labor it is unnecessary to use an antiseptic douche, as the placenta wipes out the canal, and this is followed by a douche of blood from above.

Nature's Antiseptic Fluid.—In many cases in which the strictest antiseptic precautions have been observed we will have fever, temperature 100 deg., but it will be noted that the patient is cheerful and does not feel sick; this is Volkman's aseptic fever, due to the absorption of blood serum. The nurse should prepare her hands just as the physician, except the creolin solution; this should be done each morning before making the patient's toilet, and if she has occasion to touch the cord she should be careful not to hand the mother a cloth before cleansing her hands, or otherwise convey germs to her.

Van Horn and Ellison, Park Avenue, Forty-first street, New York, prepare an obstetric case which constitutes a valuable armamentarium; it consists of 2 sterilized bed sheets, 4 dozen sterilized vulva pads, 1 4-quart douche bag, with glass

nozzle, 1 zinc douche pan, 2 sterilized mull binders, heavy, 5 yards sterilized gauze, 1 yard 10 per cent. iodoform gauze, 2 3-inch heavy mull bandages, sterilized, 1 pound sterilized absorbent cotton, 1 sterilized nail brush, 2 12-inch papier mâché basins, rubber sheeting $1\frac{1}{4}$ yards by 2 yards, rubber sheeting $1\frac{1}{4}$ yards square, rubber on both sides, safety pins, 2 ounces carb. vaseline, 4 ounces powdered boric acid, 4 ounces 50 per cent. carbolic acid solution, 2 ounces green soap solution, 2-100 grms. chloroform, 1 ounce f. e. ergot, 1 small bottle bichloride tablets, 1 small bottle sterilized tape.

The physician should always see that the breasts are properly cared for during the last weeks of pregnancy, the nipples should be washed in a solution to harden them. Listerine and alcohol, equal parts, answers the purpose, gently drawing them each day also prepares them. Mammary inflammation is preceded by infection of the nipples, as a fissure or excoriation of the nipple; this can be prevented by keeping the nipples clean, using a weak solution of boric acid just before and after nursing. Attention to the cord also comes in the domain of clean midwifery. I always treat it as if it were the stump of an arm I had amputated. Wash it off with plain water, then dust with iodoform and put on iodoform gauze, 10 p. c., over this a piece of borated cotton, then the bandage. This need not be opened in four days. Equal parts of acetanilide and boracic acid and carbolic gauze would probably do as well, and be more pleasant to those around.

A Case of Unclean Midwifery.—The majority of troubles after child-birth at the present time, we might say, are caused *directly* by the ignorant granny of to-day, about which enough has been written, and *indirectly* by germs. For this reason the young physician is called upon to treat most of the unclean midwifery, as his practice is largely among those who are dependent for treatment upon midwives.

Case.—Mrs. C., American, married, aged 32 years, was delivered of her fifth child, a boy, weighing about seven pounds, December 3, 1894, after a short and normal labor—a midwife officiating. On December 6 says “she had a chill but no pain.” December 7 chill and general pain. I was called in December 8—respiration 28, pulse 140, temperature 105 deg., countenance very anxious, vomiting frequently, complete anorexia, tongue heavily coated, tympany marked, tenderness over abdomen, offensive diarrhœa.

Treatment.—No anæsthetic given. She was put on a table, the external genitalia and surrounding parts were scrubbed with pearline, the vagina washed out with a 1 to 2000 solution of bichloride. The instrument having

been sterilized, the patient being on her back, an Edebold's speculum was introduced (this is preferable for this class of work, as it is self-retaining); the uterus pulled gently down with a Skene's tenaculum, the entire inner surface carefully scraped with a curette; a small quantity of decomposing blood clots was scraped out; involution had not begun, and the organ was very tender. An intra-uterine douche of 1 to 3000 bichloride solution was given, continuing until the solution came away clear. Then the cavity was packed lightly with iodoform gauze, 10 per cent.

I think this a very important part of the treatment. It acts as (*a*) drainage tube; (*b*) hæmostatic; (*c*) stimulant—it stimulates the uterus, causing contraction, thereby promoting involution—(*d*) it is a good mode of applying a reliable antiseptic to the uterine cavity; (*e*) if there is a pus-producing surface at the late placental site, by its antiseptic and stimulating properties it sets up healthy action; (*f*) it aids in the production of a hasty convalescence; (*g*) it prevents endometritis, salpingitis, ovaritis, uterine displacements, lueorrhœa, etc., from following in after life.

The introduction of the gauze is greatly facilitated by the use of Polk's applicator speculum. By its use the irrigation is better done.

The vagina was then washed out with bichloride solution, 1 to 2000, and packed with iodoform gauze and antiseptic pad applied to the vulva. While the treatment was being carried out the bed clothes were changed, all unnecessary furniture and clothes were removed and one quart Platt's chlorides sprinkled around.

December 9, respiration 23, pulse 90, temperature 99 deg., elixir iron, quinine and strychnine ordered three times a day, with milk punches.

December 10, respiration 22, pulse 84, temperature 98; vaginal gauze removed and fresh introduced.

December 11, respiration 22, pulse 80, temperature 99; vaginal and uterine gauze removed and a carbolized douche given and antiseptic pad reapplied. Recovery continued uninterrupted.

Other cases illustrative of this plan of treatment might be reported, but I deem this sufficient.

WOMEN AND THE BICYCLE.

Hogg (*Providence Méd.*, No. 38, 1894) gives the opinions of a number of French, English, Belgian, Spanish, Holland and Switzerland gynecologists as to whether bicycling is bene-

ficial or not to the health of women. The greater number agree, as Auvard, Chaput, Dolérs, Treub and Vulliet, that, as a rule, where it is not carried to excess in women with healthy genitalia, it is a profitable exercise; while a few others, among them Tait, condemn bicycling for women. The harmful influences which this exercise has is dependent upon its being overdone, the general health suffering, or upon faulty position and imperfect construction of the saddle, local diseases being produced. Women who have chronic inflammatory disease of the genital organs should not be allowed to ride a bicycle, since it causes hyperæmia of these parts and thus accelerates the disease. A large number of French and other gynecologists believe that bicycling is a healing factor in disturbances of nutrition, as neurasthenia, hysteria, chlorosis, dyspepsia, etc.; also in chronic constipation, anemic amenorrhœa and nervous dysmenorrhœa.

THE DESTRUCTION OF THE ENDOMETRIUM AFTER CURETTEMENT.

Veit (*Centralblatt für Gynäkologie*, No. 36, 1895) writes a paper recording a case and his observations regarding this rare result of curettement. That the uterine cavity can be obliterated through curettement has been shown beyond doubt, first, by the case reported by Fritsch, and later by Kustner. The writer's patient was a married woman who had for a long time been sterile, and, becoming pregnant, aborted. The physician who attended the abortion had believed that all of the placental tissue had come away. The patient, however, began to have severe pain and profuse hæmorrhage, and a colleague was called in three days afterward and the uterine cavity was thoroughly curetted. Since then the woman had not menstruated, and it was for some time believed that she was again pregnant. A vaginal examination was finally made, showing that the uterus was not enlarged. The uterine body was somewhat lengthened, but not increased in its antero-posterior diameter. A sound could be introduced into the cervix to the internal os, where it met an insurmountable obstruction. It was concluded, therefore, that the obstruction was the result of destruction of the endometrium by means of the curette, and partial or complete obliteration resulted. The destruction of the endometrium from any cause in the non-puerperal uterus, the observer believes, is excessively rare. The first case which he saw was in Schroder's clinic. The woman had been sterile because of corporeal endometritis, and had been treated by introducing the porcelain burner of a galvano-cautery into the uterine

cavity. In this case the uterine cavity was completely obliterated. He has also seen obliteration occur in cases of corporeal endometritis with hæmorrhage and profuse, purulent discharge (those cases where the ordinary forms of treatment have failed and hysterectomy is indicated), as the result of making applications of the chloride of zinc to the uterine cavity. The object of the applications of chloride of zinc was to destroy the endometrium and then obliterate the cavity. Obliteration does not, however, occur in every instance, and he now has two cases under observation where the uterine sound can be introduced without difficulty, but the symptoms have disappeared, and a scanty menstruation continues. He believes that the endometrium can be destroyed by the use of the curette. The muscle tissue into which the fundi of the glands extend prevents their complete removal, and it is from these gland fundi that the new endometrium grows. In the puerperal uterus the endometrium is in an atonic condition, and it becomes possible that over greater or less areas the entire endometrium and the muscle tissue containing the gland fundi can be removed by the curette. If these areas are opposite each other, they coalesce, and thus partially or completely obliterate the cavity. In the case reported by Fritsch the glandular tissue must have been completely destroyed, while, in Kustner's case, only over a circumscribed area. He says it is strange that in those cases where only part of the uterine cavity is obliterated the menstrual flow is absent and hematometra does not occur. He is of the same opinion as Kustner, that when the uterine cavity is completely obliterated, it is useless to reopen it. In his case the obliteration was only partial, and after six weeks' daily progressive dilatation he was able to introduce a sound to the fundus uteri. The menstrual flow then returned and has appeared regularly ever since. Conception has not as yet occurred. He believes that the endometrium of the fundus which was not destroyed extended over the injured surfaces of the cavity. As a result of these observations, he concludes that the endometrium of the non-puerperal uterus is only destroyed with the severest possible treatment, as by using the galvano-cautery or chloride of zinc. In the puerperal uterus the danger is, however, very great, and the curette should, therefore, be employed very cautiously. Since Fritsch has pointed out that in puerperal infection curettement is not of necessity indicated, and the writer advises that when it is employed the greatest care should be taken. The changes which take place in the endometrium of a puerperal uterus are best treated by the involution process, and curettement should not be applied soon or severely after abortion or birth.—*University Medical Magazine.*

PLACENTAL CIRCULATION AND MORPHINOMANIA.

Bureau (*Report Universel d'Obstétrique et de Gynécologie*, August 25, 1895) attended a patient who, for seven years, had taken morphia, and at the time of his attendance was taking fifteen grains daily. She was in her fourth pregnancy, during which she spontaneously gave birth to a child with talipes of one foot. As the cord was divided, Bureau collected the blood of the placenta and umbilical vessels, in which, on chemical analysis, morphia was detected.—*University Medical Magazine*.

Book Reviews and Notices.

The Pathology and Treatment of Venereal Diseases. By Robt. W. Taylor, M. D., etc. With Two Hundred and Thirty Illustrations and Seven Colored Plates. Philadelphia: Lea Bros. & Co., 1895.

The name of Dr. R. W. Taylor on the title-page of a book stamps the work as valuable. While a successor of the several editions of Bumstead and Taylor on Venereal Diseases, which have ever been standard, this edition shows evidence of more than a mere revision. All that is new finds place here, while no pains have been spared to make the best in pathology and treatment prominent. The publishers have presented a handsome volume, with excellent type on good paper, and with modern illustrations. A volume of one thousand and two pages, it contains a full modern discussion of venereal diseases, including even the diseases of accidental venereal origin, such as herpes progenitalis and acuminate warts. The bacteriology of chancroids, so fully discussed in recent periodic literature lately, finds prominent place. The discussion of the varieties and of the treatment of chancres is exhaustive. Of particular interest is the chapter devoted to the consideration of syphilitic reinfection, with which the author has had a privileged experience. One hundred and sixty cases of reinfection are quoted, of which the author believes only thirty authenticated. While vouching for those cases in his own experience, six in all, Dr. Taylor acknowledges several instances in which he, himself no mean observer, was in error. "With very many exceptions," he says, "and much reservation, we must admit

therefore, that true second attacks of syphilis occur, but that they are very rare. All suspected and putative cases should be approached with caution and reserve, rather than with a sanguine and credulous spirit."

The author still clings to the division of syphilis into stages, and recognizes the secondary and tertiary forms of Ricord. His definition of the tertiary stage is, however, quite logical:

"When syphilis does not become extinct in the secondary condition, it passes into a chronic or tertiary condition."

An exhaustive chapter is devoted to the subject of the treatment of syphilis. We are glad to notice Dr. Taylor's emphatic stand disapproving of the cauterization of the suspected chancre, for which position he offers several strong reasons. Cleanliness and protection are the author's practice and advice.

The early treatment of syphilis before there are dermal evidences is discountenanced as dangerous. The author, however, gives a full discussion of the pro and con of this position, and quotes such men as Morrow, Bronson, *et al.*, who favor early treatment.

Altogether we put down this work with a recognition of the labor it has entailed, and feel that full credit is due to the masterly method with which the subject throughout has been handled. It is a modern work upon a subject with which the general practitioner needs a greater familiarity.

ISADORE DYER.

Dr. Taylor affirms the magnitude and importance of the subject of gonorrhœa and its complications by devoting fully one-half of his splendid book to its consideration.

His views on the etiology of the disease are very conservative; while he concedes that in a majority of cases of acute gonorrhœa the pathogenic agent is the gonococcus of Neisser, he believes that in a small proportion of those cases the infecting agents are other pyogenic microbes; he gives due importance to such cases as are only old ones lighted again in various ways without a new infection, but goes so far as to claim that many men *previously virgin to the disease* contract true gonorrhœa from women who never had gonorrhœa.

The author is certainly justified in claiming to give an "up to date view of the progress in the treatment of gonorrhœa." His summary of the numerous methods is the best which has come to my notice, and gives evidence of a vast amount of careful reading. Notwithstanding, he fails to mention in his long list one local agent which I believe deserves recognition for several reasons: that is Labarraque's solution, advocated chiefly by Doyen in his "*Traitement de la Blén-*

orrhagie," 1894. It strikes me he is rather too severe on Janet's method of irrigation when he terms it "one of the oft recurring fads." This treatment is to-day highly esteemed in Europe, and is as likely to produce good results as any with which I am familiar.

The chapter on stricture of the urethra is well written and comprehensive. I am glad to see that the doctor's vast experience justifies him in pronouncing in favor of gradual dilatation for the treatment of ordinary cases. On the other hand I consider that he does not devote sufficient space to internal urethrotomy. It is true this subject, it might be claimed, belongs more particularly to works on surgery, yet more attention is given in the volume to external urethrotomy, an operation which I believe to be less frequently indicated.

Dr. Taylor's account of chancroids and buboes is quite complete. The various forms of treatment he recommends are rational as well as practical, and he gives interesting details. I can particularly concur in his endorsement of Dr. J. R. Hayden's method of treating suppurating buboes by small incision, antiseptic irrigation and the injection of iodoform ointment.

To sum up: The entire genito-urinary part of the work is written clearly and concisely, yet is sufficiently explanatory to give the reader most of the latest and best views on the etiology, symptomatology and treatment of venereal diseases.

CHARLES CHASSAIGNAC.

An American Text-Book of Obstetrics for Practitioners and Students. With nearly 930 colored and half-tone illustrations. Richard C. Norris, M. D., editor. W. B. Saunders, Philadelphia, publisher. Armand Hawkins Co., New Orleans; \$7 and \$8.

Obstetrics can not be said to have made any great progress within the last few years; that is to say, the general principles taught a few years ago are the same to-day. It is true that the operative section of the art is more frequently had recourse to and more productive of good results than was the case some years back, but that is due to the present system of asepsis and antisepsis. The knowledge of true surgical cleanliness permits to-day the successful performing of obstetric operations which have long been known and suggested, but rarely attempted. To-day, owing to this "asepsis consciousness," the accoucheur does not approach the bedside of his patient with the torturing dread of a probable occurrence of a fatal infection.

The application of forceps, the repairing of a torn perineum or cervix, the introduction of the hand into the uterine cavity, the increasing of the pelvic diameters by symphysiotomy, and removal of a living child by abdominal section are operations from which the physician, to-day, can justly expect a successful termination. The more these operations are performed the more is their technique perfected. From those who with care and intelligence have frequently operated do we obtain our knowledge of this technique. And therein lies the importance of this admirable work.

The book is written by fifteen gentlemen known to every reader of obstetrics, some of them professors of the best colleges in the country. They are all men who by close and intelligent application to their work have acquired a profound knowledge of the science of obstetrics and great skill in the practice of the art. A book from such hands can not fail to be extremely instructive.

The chapters on Anatomy of the Pelvis and Female Generative Organs and Physiology of Pregnancy are by Dr. Geo. A. Piersal, professor of anatomy in the University of Pennsylvania. The subjects are exhaustively treated, yet written in a manner which is clear and interesting. The art editor, Dr. Dickinson, here and elsewhere in the book, displays his skill in the happiest style. Dystoria, due to accidents and diseases, are treated of by Prof. Theo. Parvin, himself the author of a work on obstetrics. To Dr. Howard Kelly, one of the best known gynecologists of the country, was given the task of writing on Extra-Uterine Pregnancy. The other contributors are almost, if not equally as well known as the gentlemen whose names have been quoted. The book is large, divided into six divisions and most elaborately illustrated.

The profession should be thankful to the contributors, artists and editor for this new contribution to the science and art of obstetrics.

P. MICHINARD, M. D.

PUBLICATIONS RECEIVED.

The Technics of Maunsell's Method of Intestinal Anastomosis, with a resumé of the cases of operation to date. By Frederick Holme Wiggin, M. D. *Reprint.*

Practical Dietetics, with Special Reference to Diet in Disease. By W. Gilman Thompson, M. D. New York: D. Appleton & Co., 1895.

An Atlas of Ophthalmoscopy. By Dr. O. Haab. Wood's Medical Hand Atlases, 1896.

An Atlas of the Normal and Pathological Nervous Systems. By Dr. Christfried Jakob. Wood's Medical Hand Atlases, 1896.

Color-vision and Color-blindness. A Practical Manual for Railroad Surgeons. By J. Ellis Jennings, M. D. Philadelphia: The F. A. Davis Company, 1896.

Miskel: A Novel. By L. M. Phillipps, M. D., of Penn Yan, N. Y. No. 2 of Doctor's Story Series. New York: Bailey & Fairchild Company.

Memorial Addresses and the Life and Character of Randall Lee Gibson (a Senator from Louisiana). Published by order of Congress, 1894.

Hand Book for Hospitals. By Abby Howland Woolsey, member of Committee on Hospitals, State Charities and Corrections. Third edition. New York: G. P. Putnam's Sons, 1895.

Chronic Seminal Vesiculitis. By S. P. Collins, M. D. *Reprint.*

Medical Items.

JAMES EDMUND REEVES.

The following is a brief biographical sketch of the late James E. Reeves, notice of whose death appeared in the *Journal* January 11. James Edmund Reeves, Chattanooga, Tenn., son of the Rev. Josiah Washington and Nancy Mosee (Kemper) Reeves, grandson of Thomas Washington Reeves, was born April 5, 1829, Amisaville, Rappahannock county, Va. Obligated to assist his father, who was a tailor, his early education was neglected, and he had to leave school at the age of 14; but he was determined to gain more knowledge, and by extra work made money with which to purchase books. At the age of 19 he commenced the study of medicine with Dr. Elam D. Talbott, at Philippi, Va., and after one year's instruction under this preceptor, he went to New Market, Va., and became the pupil of Dr. Jacob Neff. Here he was given every possible opportunity to study disease at the bedside, and frequently had charge of patients. In the spring of 1850 he opened an office at Sutton, the county seat of Braxton county, now West Virginia, and by the following October had earned enough money from his practice to enable him to attend a course of lectures at Hampden Sydney Medical College, Richmond, Va. His second course of medical lectures was at the University of Pennsylvania, and he was graduated from that institution in 1860. He remained one year at Braxton Court House, after that nine years at Philippi, seven years at Fairmount, twenty years at Wheeling, W. Va., and for the past five years and a half at Chattanooga, Tenn. Soon after settling at Wheeling he began to agitate the subject of municipal hygiene, and secured the passage of an ordinance establishing a city health department. In 1869 he was elected city health officer and county physician, which office he held four years. Subsequently he was elected a member of the City Council, and served four years.

He was one of the founders of the American Public Health Association, of which he was president in 1885. In 1867 he prepared and sent out the call for the establishment of the State Medical Society of West Virginia, and was elected its first secretary, and in 1881 chosen its president. He was one of the executive committee, for West Virginia, of the International Medical Congress in Philadelphia, 1876. In 1882 he was elected a member of the Judicial Council of the AMERICAN MEDICAL ASSOCIATION. In 1884 he was elected an honorary member of the Connecticut State Medical Society. For many years he has been a corresponding member of the Pathological Society of Philadelphia, was one of the vice presidents of the Section of Public and International Hygiene of the International Medical Congress, Washington, D. C., 1887; vice president of the American Microscopical Society, 1886; member of Advisory Council Pan-American Medical Congress, also Demonstrator of Pathological Histology, at the meeting in Washington, September, 1893. He was a member of the Association of American Physicians, was the author of the law creating State Board of Health of West Virginia, of which he was a member, and its secretary for five years. He was employed by the State Board of Health of Tennessee to make sanitary inspections of the State's defences against yellow fever during the Jacksonville epidemic of 1888. He was particularly interested in microscopic investigations, and has devised sundry microscopic appliances.—*Physicians and Surgeons of America.*

THE DISSECTION OF A FAMOUS MONARCH.

The *Lancet* gives the following interesting and suggestive account of the post-mortem examination performed upon William III of England:

Report of the Physicians and Surgeons, comanded to assist at the dissection of the Body of the late King.

Upon the first view of the Body, before dissection, the following appearances ware remarkable.

The Body in generall was much emaciated; Both the Legs up to the Knees and a little higher, as also the right hand and arm as far as the Elbow, were considerably sweld.

There appeared likewise on the left thigh near the Hipp, a bladder full of water, of the bignesse of a small Pullet's Egg, ressembling a Blane.

Upon opening the Belly, the Guts appeared of a Livid colour, and the bloud contained in the vessels there of blakish:

The gutt called Jlion had in some places, the markes of a slight Inflammation.

The Pancreas, Mesentery, Liver, Gall, Bladder, Spleen, Kidneys and Stomack, were all sound and without fault.

In the Thorax or Chest wee observed, that the right side of the Lobes of the Lungs adhered to the Pleura, and the Left, much more, from which upon seperation there Jssued forth a quantitie of Liquor judged to be purulent or frothy serum: The upper Lobe of the left side of the Lungs and the part of the Pleura annext to it, were inflamed to a degree of mortification: And this wee looke upon as the immediate cause of the King's death.

ffrom the ventricles of the Heart and the great bloud vessels issuing out of them were taken severall large tough flesh-like substances of the Kind called Polliposer.

The Heart was of the smaller size, but firm and strong.

Upon laying bare the right Collar bone, wee found that it had bin broken neare the shoulder and well sett, some Extravasated bloud was lodged above and below the fracture.

The Brain was perfectly sound and without any signe of distemper.

It is very rare to find a Body, with so little bloud, as was seen in this, there being more in the Lungs, than in all the parts besides putt together.

Signed

HUTTON BLOMBMORE
MILLINGTON BIDLOO

[and others.]

Delivered to ye Queen and Councill, March ijth, 170½. Endorsed—"Dissection of the Late King's Body." In writing of a later date and in different coloured ink, similar to the signatures—"To his Grace the Duck off Queensbury, &c., &c."—*Medical Record.*

THE THERAPEUSIS OF THE SAINTS.

The modern instances of the belief in simple faith or superstitious worship in the cure of disease, as exemplified in the almost daily reports of marvelous recoveries attributed to the efforts of "faith-curists," "mind healers," "layers-on-of-hands" and the like, furnish this century's analogue of the ancient custom of invoking the aid of the saints in the relief of the afflicted.

Superstition, Paul Lacroix has said, is the inevitable consequence of every religion or Deism, and to the simple, ignorant mind it naturally becomes more powerful than the religion itself, being more awe-inspiring and impressive. In the history of all nations and peoples the superstitious belief in the efficacy

of deified personages in alleviating pathological lesions has prevailed.

In the ancient Pagan times the divinities were the precursors and parents of pathology—the old gods are dead, but the heavens and the maladies still retain their intimate relations. The patrons, once placed in Olympia, were transferred to Paradise. In the heaven of the old Pagans there were supposed to be lodged long successions of gods and goddesses, whose province was to look over the diverse maladies of humanity. The material sheath of our soul, with its miseries external and internal, was supposed to be carefully guarded by this collection of deities.

The matrons contemporary with Augustus Cæsar well knew whom to address for the correct manipulations and treatments of childbirth. In the first instance they prayed to Pertunda to facilitate advantageous union or meeting of the sexes. Then follows appeals to Mena, on whom depended the regularity of menstruation. Materprema had a special mission in keeping the uterus in condition for the proper reception of the male seed.

Having carefully and successfully pursued their respective functions up to date, these deities were dismissed, and, conception happily ensuing, Fluonia was summoned to care for the growing germ in the womb, and keep out the evils of abortion and miscarriage.

Then grand Diana stepped in, and looked to the preservation of the life of the foetus. Juno Postversa labored to put it in good position, and stepped aside for Lucina, who was famous for her ability as an obstetrician, and with her little helpers, the Nixii, who pushed hard for the contractions, effected a safe delivery.

The members of the Celestial aristocracy having successfully brought the child to light, continued their monopoly in the person of Jupiter Diespiter, or possibly Cunina, to whose care the life of the child was entrusted. Throughout the period of lactation, with mystic passes over the breast, Rumilia produced a sufficient flow of milk.

Turning now to the more enlightened Christian woman of the latter period, we find her still happy in the protection of the plethoric heaven of sanctified personages, but to a less degree than her Pagan sisters. With the advent of Christianity, Saint Agatha replaced Rumilia in exercising an influence for good or bad, as the case might be, over the female mammæ. Invocations to her were deemed the best means of relief for mammitis. The older Christian woman addressed her prayers to Notre Dame de Montserrat, Saint Marguerite, and worshipped

at Lourdes and at the statue of Saint Guignolet. The latter will soon be a thing of the past, if its original does not acquire a better degree of proficiency, as it is fast disappearing under the scratches of sterile husbands.

Happily, if parturition is seemingly neglected by the saints, the pathological disturbances of the human body are plentifully supplied with patrons and patronesses from this overworked society, each of whom has a designation, either curative or causative, in some disease. Saint Guy had under his domination the neurosis, chorea, often called "danse de Saint Guy," or St. Vitus' dance. Formerly they danced before the chapel of this saint to be relieved; but since the discovery of the efficacy of arsenic Saint Guy is neglected, and the neurologist has usurped his domain. Saint Giles struggled with the hopeless task of carcinoma, besides lending adjunctory assistance to the others in the obstinate cases of epilepsy. Saint Gervasius gave many a sharp reminder to the unfortunate under his care, and has to-day a deadly rival in the lithiates and salicylates. His rheumatic clients are rapidly forsaking him, and, in fact, his memory is only perpetuated by an occasional charm or amulet among the lower classes. Saint Genou is fortunate in the possession of two helpers in the cure of gout, viz.: Saint Mor and Saint Gueslain. Coquillart bears witness to the efficacy of the former in his *Monologues des perrecques*, in which is seen "I come to Saint Mor des Forrez to be relieved of the gout." Homage is rendered to both these auxiliary saints in the old comedy, "Pasté et de la tarte," in which a character cries out:

"Que la goutte
De Saint Mor et de Saint Gueslain
Vous puyssiez tresbucher a plein."

In case of toothache, each jumping pain was considered the individual handiwork of Saint Appolonia, and to her the victims of this distressing minor ill looked for relief. Our *confreres*, the dentists, have played sad havoc with the saintly lady, and, like Othello, "her occupation's gone."

By his good offices Saint Main saved the itching commoner from scratching. If we can correctly judge from a passage in Ambrose Pare (des Venins), this same individual brought succor to individuals afflicted with dermal manifestations of syphilis. Pare says: "An ointment of quicksilver cures what is called commonly the malady of Saint Main," and after a glance through the *Commentaires sur Dioscoride* of Antoine du Pinet, we are led to believe that this saint looked after other cutaneous eruptions such as tetter, eczema, milk rash, etc.

Saint Reine was a valuable constituent of the sanctified

system of therapeusis, curing thrush and scald-head. Having recovered from a severe and terrible fever, this saint went to church to give thanks for his recovery. Jesus was duly thanked, but, turning to a picture portraying Saint Anthony with a white beard, he said: "Y no a vos, barba blanca, que tan mal su fuego me trato, y me quemo en mis calenturas." This warrior was not willing to thank Saint Anthony with his white beard for the fire that had almost consumed him during his fever.

Saint Avertin, Saint Romain, Saint Gildas, and Saint Mathelin divided among themselves the various forms of mental aberration. In the very early days Gheel seems to have been a kind of Lourdes, for, according to the *Cornhill Magazine*, a certain St. Dymrna, who lies buried there, was supposed to have *les faibles d'esprit* under her special protection. It was the custom, therefore, throughout the Netherlands for persons who had insane relatives to take them to her tomb and there offer special prayers to her for their recovery. If tradition is to be relied upon, the saint was by no means loath to give proof of her beneficent power, and wonderful stories are told of the way in which she used to restore reason to those who had lost it. Still, even in those times, miracles were not wrought every day. Some of the sufferers who went to Gheel had to wait for months—nay, years—before they were healed, while others were never healed at all. And while waiting they had to be taken care of. At first the innocents, as St. Dymrna's *proteges* were called, were all lodged in little huts or caves around the church, but as the fame of Gheel spread abroad they increased in number, and it became necessary to make other arrangements. They were then boarded out with peasants living in the village, and there were so many of them that at length every family had its innocent. If a child was constantly crying and fretful, says Panckoucke, in his *Dictionnaire des Proverbs*, he was committed to the care of St. Avertin. In his *Harangue de Midas*, Brus-cambile writes: "There is no receipt compounded by any doctor or apothecary, no matter how wise, which is potent in the malady of Saint Avertin."

Saint Eutrope was supposed to cure hydrops, as we can see in the nouvelle cxxix of Bonaventure des Periers; but the invocations to this patron were in vain in the celebrated case of Louis XI. If M. Chéreau is well informed, Saint Eutrope (eau trop) is but one of that series of saints whose province originated solely from a quibble or witticism on their name. Eugène Noël advanced this theory, and gives a few examples. Saint Genou, who was the solace of those afflicted with rheumatic or gouty joints, was probably one of the number; Saint

Mammard (mammelle) ripened the abscesses of the breast; Saint Marcou (mal au cou) was supposed to have the power of effacing scrofulous marks and curing the King's evil; and Saint Fiacre carried solace to those unfortunate enough to suffer from affections about the anus—particularly vegetations—from the resemblance of Fiacre to “fic.”

F. Brémond says the hypothesis of Noël becomes an absolute certainty in the case of the patron of the inhabitants of Courcine and Hospital du Midi, and quotes the interpretation of the name of this saint as given by his master Jacob. “The recoveries are divided between the saints, who take the monopoly of cure to themselves, and sometimes a saint has been invented expressly for the malady, as, for example, when the venereal malady first made its appearance there was soon found, where no one knows, a Saint Foutin to take the pox-stricken sufferers under his auspices.”

From the North to the South, the saint most respected in sacred therapeutics is Saint Hubert. The number of individuals that he is reported to have cured of the “rage” of hydrophobia is incalculable. He was given, it is true, the assistance of Saint Mathurin, but what help is he to the great patron of the chase, whose name is as familiar to the smooth chin as to the white beard, and we dispense with details, for this great patron had a glory which admits of no addition.

In the middle ages Saint Lazare was the busiest of all. In our times he is virtually in a lethargy of idleness. It is true that we continue to call some of the sanitary stations “Lazaret,” but these are nearly always empty, and when they contain a patient his malady is far different from those of olden times. Saint Lazare was the guardian of the leprous, more commonly called in France “ladres” or “mesels.” In the eighteenth century in France alone there were more than two thousand hospitals for lepers. To-day, thanks to science, the universal vanquisher of cant, hypocrisy, and superstition, a case of leprosy is cause for excitement and discussion in all the journals and among those versed in this pathological rarity.

Saint Sebastian was invoked for the *peste venenosque*, and had for his assistant Saint Roch. In *les Aventures du Baron de Foeneste*, d'Aubigné shows a Gascon who had fallen into the charnel-house of the plague-stricken, and employs his priest to say a mass to Saint Roch. Like this Gascon, the pious inhabitants of a certain village in Provence, even to the nineteenth century, cry once a year “*Miséricorde*” in the chapel of Saint Sebastian. In the south of France Saint Hermantaire is still supposed to look after children who are timorous, nervous, or who are subject to convulsions, and Saint

Victor calms their fever. If one consults him, devout inhabitants of Marseilles will tell you that, after the Virgin Mary, no one possesses the power of more miracles than Saint Victor.

Saint Gerbold was much occupied with dysentery, while Saint Regnauld was not indifferent to those suffering with affections of the bladder. In all cases of colicky pains, whether from excesses in eating or otherwise, supplications were addressed to Saint Erasmus. To the bibulous was given a patron in the person of good Saint Martin. Needless to say, few candles were burned for him, as curing the evil in this instance was worse misfortune than its continued existence.

If we consult Henry Estienne *Apologie pour Herodote*, in the preface of his edition of that great historian's work, we find that the curious duty of Saint Bernardin was to keep a guardian eye over the "suffocations of the matrix." If one should be asphyxiated, for relief he would invoke the aid of Saint Eloi.

The last alphabetically of this long list of pathological patrons was Saint Zachary, who cared for the dumb.

Félix Brémond, who was called to account by a friend for his campaign against superstition, and was accused of citing the customs of olden times with the present day in his arguments, denied the anachronism, and, among others, quoted from page 198 of *Pèlerinage de Saint Hubert*, by Abbé Bertrand, printed in Paris in 1869, the following: "In order to prevent the 'rage' they carry devoutly on them the objects blessed or which have touched the miraculous stole of Saint Hubert, such as crosses, rings, chaplets, etc." M. Brémond also produced modern books, in which were a prayer to Saint Christopher to keep off sudden death; an orison to Saint Vite for defence against the rage of ferocious animals; an invocation to Saint Blaise for the cure of sore throat, and a pious invocation to Saint Magnus for protection against venomous insects. M. Brémond, in addition, promised his friend a copy of Paul Parfait's *l'Arsenal de la dévotion*, in which he could revel in superstition to his heart's content. M. Brémond, on reading that the Queen of Spain was expecting her confinement, and had been provided with a bone of Saint John the Baptist, the comb of the Virgin Mary, containing three of her hairs; a chemiset of N. S. Jesus Christ, together with a reserve relic in case the foetus would exhibit signs of recalcitrant royalty, the body of blessed Diégo de Alcala, suggested in his piquant, skeptical French manner, as grand completion to this arsenal of saintly obstetrical aids, the following:

1. A wax taper from Notre-Dame-de-Montserat, which the reverend Pierre de Bourdeilles, Lord of Brantome, declares

in his fourth chapter of *Des dames galantes*, a strong aid to the Spanish ladies in childbirth.

2. The reliques of Saint Marguerite, which served Marie de Médicis so well, as told in the works of the celebrated midwife, Louise Bourgeois. But despite the assistance of the relics and the incessant prayers at Saint-Germain-des-Prés., she lay in agony 22 hours.

3. A piece of robe of Saint Ignace, which R. P. Terwecoren says is equally efficacious to the mother fearing pregnancy, and the female who trembles lest the soft name of mother will never greet her ear.

4. An agnus of white wax coming from the Chapelle Sixtine, which the Canon Barbier de Montault remarks protects both mother and child during pregnancy and deliverance, and shortens and ameliorates the throes of labor.

5. A cordon of blue wool from Saint Joseph to expedite matters; for, says R. P. Huguet, "what is impossible for the doctors is easy for Saint Joseph."

6. The orison of Sainte-Croix discovered in 1550, and reprinted in 1880, in Paris, in which are these words: "When a female finds herself in pregnancy, she is expected to read or repeat this prayer, or to carry it on her, and she will be expeditiously delivered; she will remain a tender mother, and when the infant is born, if the prayer is placed on its right side, it will be preserved from a great number of accidents." After generously offering these suggestions to the royal Christine, M. Brémond adds:

7. A pair of forceps. It happens sometimes that this instrument is not unuseful in accouchements even of royalty. In the case of another Spanish woman of the royal blood, Eugénie de Montijo, in spite of a strong armament of saints' bones collected by herself and her august spouse, the "fers de l'accoucher" sensibly flattened the ears of the youthful scion, who was called by Cassagnac "Napoleon IV," and who eventually offered up his life to the British government in the war with idolaters in Africa.

To complete the list of the virtues and powers ascribed to the saints would take this short sketch too far. At first glance, many of these facts seem exaggerated and almost incredible; but when we have before us in our own day the much-vaunted powers of the waters of Lourdes, with their enormous patronage, drawn from the high as well as the low classes, and from every section of the world; the almost daily pilgrimages to other famous wells and shrines; the custom, still extant, of the exposition of saintly relics for therapeutic purposes; the fre-

quent account of faith cures in this country as well as in the old, we can readily believe that the world is by no means lifted from its superstitious ignorance by the rapid advances of pathology, and, strange to say, the very countries that have done most to advance science are the most tenacious in their old medieval fears and faiths.—*Medical Record*.

CAN LEPROSY BE STAMPED OUT.

The London letter writer for the *American Practitioner and News* speaks hopefully of a proposed new treatment of leprosy, by the artificial induction of erysipelas upon the leprous members of the patient. He credits the suggestion to Dr. W. Impey, Medical Superintendent of the leper settlement at Robben Island, Table Bay, who is now in England on a six months' leave of absence. During his vacation he intends to visit the various leper establishments in Norway, Russia, Turkey and the south of France, in order to see the method of treatment, and if possible to experiment with a view of testing what he believes to be an effectual cure for the disease in its earlier stages. Dr. Impey has found that at Robben Island, where there are six hundred lepers, that when a patient is attacked with any inflammatory skin disease, such as measles, erysipelas or small-pox, the part affected is invariably cured of leprosy, and the patient either entirely recovers from leprosy or his life is indefinitely prolonged beyond the normal eight years. Dr. Impey contends that erysipelas should be induced within three or four years if a patient be attacked, and by this means he thinks leprosy may eventually be stamped out.—*Am. Med. and Surg. Journal*.

AUNTIE SEPTIC.

L. D. W. IN THE LIVING CHURCH.

Once upon a midnight cheery, at his work and never weary,
 Sang that happy little microbe who torments the editor.
 Suddenly there came a tapping, as of some one softly rapping,
 Seeking for admittance gently, softly tapping o'er and o'er.
 And the microbe smiled complacent, "'Tis my friend and fel-
 low bore
 Tapping at the chamber door."

But there stood within the portal such a form as any mortal
Would have gazed on with delight, and hugged unto his
bosom's core ;

Then the naughty microbe started, and his valor quick de-
parted.

“Who are you?” he cried in terror. “Tell me, tell me, I im-
plore!”

“Oh, I am your Auntie Septic, whom you never met before—
Merely this and nothing more.”

Then this little microbe faltered, and his joyous mien it altered,
As he felt determination in his Auntie's grasp full sore ;

And he said with agitation, “Can't I seek another station,
Where I may pursue my studies, and all mysteries explore?”

But his auntie as she clasped him, even closer than before,
Gently murmured, “Nevermore!”

MORTUARY REPORT OF NEW ORLEANS.

FOR JANUARY, 1896.

CAUSE.	White	Colored...	Male.....*	Female.....	Adults	Children.	Total
Fever, Yellow							
“ Malarial (unclassified)....	3	7	5	5	8	2	10
“ Intermittent							
“ Remittent	1	1	2		2		2
“ Congestive.....	2	1	1	2	3		3
“ Typho	1	1	2		2		2
“ Typhoid or Enteric.....	5	2	4	3	5	2	7
Puerperal	1	1		2	2		2
Influenza.....	15	2	5	12	16	1	17
Small-pox.....	3	8	9	2	11		11
Measles	2		2			2	2
Diphtheria	5		1	4		5	5
Whooping Cough	2		1	1		2	2
Meningitis	2	5		7	3	4	7
Pneumonia.....	62	84	102	44	115	31	146
Bronchitis	17	13	13	17	19	11	30
Consumption.....	44	28	45	27	70	2	7
Cancer	11	2	5	8	13		1
Congestion of Brain.....	7	2	5	4	7	2	
Bright's Disease (Nephritis)	21	12	22	11	32	1	3
Diarrhœa (Enteritis)	18	16	20	14	22	12	3
Cholera Infantum	4		2	2		4	4
Dysentery.....	5	7	9	3	12		12
Debility, General	1	3	2	2	4		4
“ Senile	20	10	12	18	30		30
“ Infantile.....	2	5	2	5		7	7
All other causes	193	131	182	142	220	104	324
TOTAL	447	341	454	334	596	192	788

Still-born Children—White, 25; colored, 19; total, 44.

Population of City—White, 195,000; colored, 80,000; total, 275,000.

Death Rate per 1000 per annum for month—White, 27.48; colored, 51.15; total, 34.38.

L. F. FINNEY, M. D.,
Chief Sanitary Inspector.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

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Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All paper must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. A complimentary edition of fifty 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.]

THYREOID MEDICATION IN MYXŒDEMA.

BY E. M. DUPAQUIER, M. D., NEW ORLEANS LA.

It is difficult to grasp in all its details the history of voluminous questions such as the one relative to the thyroid gland. In this question as in others of the same kind, though recent ones, a preliminary stage of research and experiment in the laboratory has accumulated names, dates and data long before the period of clinical application was reached. The consequence is that many details are confused with others belonging to a different phase of the question, confusing the well-intentioned reader or hearer. Quite recently, hearing statements somewhat at variance, that were made on the subject of thyroid medication in myxœdema, the writer was prompted to make research and to give in a short article a clear resumé of thyroid medication in myxœdema.

The references are the following:

Myxœdème, page 923, *Clin. Thérap.* G. Lyon, Paris.
Médication thyroïdienne, page 249, *Traité d'histothérapie Méthode de Brown-Sequard.* Dr. M. Bra. Paris.

A. GRAFTING OF THE GLAND.—This was performed with success in animals by Schiff, Fano and Zanda, Von Eis-selberg, but it was Prof. Lannelongue who first grafted the

gland IN MAN (*Société de Biologie*, 1890). The operation, since, has been performed several times, and in each case there has always been a notable amelioration; yet, the latter never was definite, because the grafted fragment would gradually become reabsorbed, and, naturally, its action was only transitory.

B. HYPODERMIC INJECTIONS.—The failure with grafting led to the use of hypodermic injections. This had also been successfully tried in animals by Vassale, Gley, etc. The first attempts in man gave negative results until Geo. Murray, M. D. (*British Medical Journal*, October 10, 1891), published the first case of myxœdema cured with hypodermic injections of thyreoid extract. Since, quite a number of cures have been reported, but in the majority the disease has recurred.

C. INGESTION OF THE GLAND.—After the grafting and the hypodermic injections, the ingestion of the thyreoid was tried. The most interesting observation (I do not say the first in date; *vide infra*) concerning this mode of thyreoid medication was that related by Dr. Marie, at the *Société Medicale des Hopitaux*, February 9, 1894.

Dr. Marie gave, daily, two glands (four lobes) to a woman affected with myxœdema of eight years' standing. The glands were from the sheep, and they were administered raw in bouillon. Immediate result followed. As early as the following morning the temperature rose to 38 deg. C. and diuresis began. Three days later, a very notable change in the patient's features was seen; the swelling below the eyes had considerably decreased. Six days later, perspiration began to be perceptible; speech was improving. Eleven days later treatment had to be suspended, because the patient showed complete insomnia, intense thirst, no appetite, a tired feeling all over, a general weakness, necessitating confinement to bed. One month later (the treatment had commenced on November 30), the thyreoid ingestion was resumed, but then at a much smaller dose, one lobe every other day. Still the treatment had to be suspended again, only seven days after its resumption, for the same symptoms were reproduced. Treatment was resumed, for the second time, January 11, 1894. The patient then took only two-thirds of one lobe every five

days, and she never experienced the symptoms that had occurred previously. Ever since, the patient has continued to improve, so much so that she became a different person physically and morally.

The mode of giving the thyreoid gland by the mouth is generally credited to our British friends. Now, this is a mistake. Priority belongs here to Dr. Howitz, Professor of clinical surgery, faculty of Copenhagen. In March, 1892, Howitz treated a woman suffering with myxœdema by giving her in patés some thyreoid glands from the calf. It was only one month after the commencement of this treatment that British physicians, Fox, Mackenzie, Baher and Lundie, began their experiments. Howitz' case was related by Ehlers (*Semaine Medicale*, February 8, 1895).

The alimentary mode of administering thyreoid differs according to countries. In Denmark and Germany the glands are usually decorticated, cleaned and slightly cooked and hashed. They are usually taken with the water in which they were slightly cooked or in bouillon. An adult during the first three weeks takes four lobes daily (a rather large dose, as seen by Marie's case). Then for three weeks the treatment is suspended. Then for two weeks three lobes are taken daily. Then again a suspension of twenty days should follow. Finally two lobes are given every other day. In short, it is a regime with intervals and decreasing doses. In Great Britain, one gland is cut up in round pieces and put in a few tablespoonfuls of water for half an hour. It is strained through a piece of muslin and administer the filtered part mixed with beef tea. This is given daily for one month, after which only half a gland is given daily. Others merely broil the gland very slightly and give it so. Fox himself believes that only a slight and rapid cooking is necessary, for cooking, says he, alters the virtue of the gland. This opinion is upheld in France, where the thyreoid is given raw, in bullets, like raw beef in chlorosis, tuberculosis, etc., with or without bouillon, and they usually give in this manner half a lobe daily.

D. DESICCATED THYREOID TABLETS.—Finally, pharmaceutical preparations of thyreoid made their appearance in the market and the thyreoid was administered in myxœdema also

under the form of dry extracts in capsules and ready-made tablets, of which the dose varies according to the preparations.

At first, it may seem questionable whether the virtue of the gland is here preserved, but the clinical results obtained by most reliable physicians from all parts using these preparations go to show that they produce the same effects as when the fresh gland is administered.

This is very gratifying, for there is no doubt but that the best mode of administering the thyreoid is surely by the mouth. Indeed, the grafting and the hypodermic injections are very objectionable modes, the latter introducing septic material notwithstanding all precautions.

Conclusion.—If you desire to administer thyreoid in myxœdema, or in other diseases in which it is indicated, you have the choice between the fresh gland given in the different ways mentioned above and the tablets. Though the mode of ingestion is recommended above all others, bear in mind that it is also attended with danger. Even when taken under the apparently innocuous form of tablets, the ingestion of thyreoid has caused accidents that proved not only grave but fatal. Remember these signs of reaction caused by thyreoid, *polyuria, rise of temperature, insomnia, pains in the limbs*, warning you that the remedy should be suspended.

CASE OF GUNSHOT WOUND OF THE BRAIN—REMOVAL OF BULLET—RECOVERY.*

W. E. PARKER, M. D., NEW ORLEANS, LA.

I consider the case that I report to you to-day as being of interest, not so much on account of the operation as on account of the symptoms present. There was no difficulty about the operation, and his recovery was uninterrupted. Patient is a negro musician, *æt.* 28, native of New Orleans, personal and family history good. He says that while playing at a negro dance the day before admission "a scrap was started and he caught one of the bullets." August 5, 1895, he walked into the Charity Hospital. An examination of his head showed

* Read by title at meeting of the Southern Surgical and Gynecological Association, November 10, 1895, in Washington, D. C.

that he had received a bullet wound just above the lobe of the left ear, the wound in the skull being about in line with the external meatus. So far as I could see, there were no cerebral symptoms, except rather a slow pulse. The scalp was shaved and the wound dressed antiseptically and the patient sent to the ward and instructions given to keep him as quiet as possible. August 6 his temperature went to 99 2-5 deg. in the evening, pulse 54. Otherwise his condition was unchanged. His temperature did not again rise above the normal until the evening of the 8th, when it was 101 deg. At this time it was found that there was *ptosis*, paralysis of the left side of the face; when his tongue was protruded it turned to the right; he was drowsy, and when awakened seemed startled. When shown objects he could tell their use, but could not call their names. For instance, he would say that a hat was to keep the sun off of the head, but could not call it by name. There was no impairment of sensation detected and no paralysis of the arm or leg. It was decided to enlarge the wound and look for the bullet the following day. The night before the operation the scalp was again shaved, well scrubbed with green soap, and towels wet with a 1-2000 solution of the bichloride of mercury were bandaged to his head. His pulse the night before the operation was 44.

Operation, August 9. About noon the patient was anæsthetized, chloroform being used as an anæsthetic. I operated with the assistance of the members of the resident staff. An incision, convex downward, was made, and the skull wound well exposed. A probe was then introduced, and at a depth of about one and a half inches a piece of bone was felt. The wound was then enlarged to about the size of a half dollar with the rongeur forceps. I then removed five pieces of bone, two quite large, and a thirty-eight calibre bullet, which was very much flattened. About an ounce of pus and broken-down brain matter was removed. The abscess cavity was, I think, larger than a walnut. The cavity was then washed with peroxide of hydrogen and a 1-4000 solution of bichloride. The cavity was then packed with narrow strips of iodoform gauze and a few sutures were put in the scalp wound. A tin shield, covered and well padded with antiseptic gauze, was then snug-

ly bandaged over the wound. He took the anæsthetic nicely, and was sent to the ward in excellent condition. Eve, August 9, temperature 99, pulse 52, patient quiet.

Morning, August 10.—Temperature 99 2-5, pulse 52, condition unchanged.

Evening, August 10.—No change since morning.

Morning, August 11.—Temperature normal, pulse 58, seems brighter. Wound dressed and looked well.

Evening.—Temperature 99 2-5, pulse 58, condition unchanged.

Morning, August 12.—Temperature normal, pulse 59, seems brighter. While he does not do so at once, he can, with an effort, call the names of some objects.

Evening, August 12.—Conditions unchanged.

Morning, August 13.—Temperature 99, pulse 62. Mental condition unchanged. Wound dressed and a little pus was found.

From this time he seemed to improve more rapidly, and his recovery was uninterrupted. The pulse increased about two beats daily until the 20th, when it was 80, after which it did not go above 76. His mental condition was much improved on the 15th, when he was dressed. He could call nearly all objects by name, and when dressed August 17, seemed to be much brighter. His facial paralysis gradually improved, but was slower than the amnesic aphasia.

August 27.—When dressed, the wound was found to be almost healed; facial paralysis considerably improved, as was the paralysis of the tongue.

September 2.—A few exuberant granulations along the line of incision were cauterized with nitrate of silver; tin shield left out of dressing. The wound was entirely healed, and patient was allowed to get out of bed on the 13th of September.

September 16.—He was discharged cured, the facial paralysis being much improved, and the paralysis of the tongue being well. He complained of a "roaring" in the left ear.

He came back to the hospital to see me in the early part of November. There was still slight facial paralysis, and he still complained of the roaring in his ear. Otherwise he was well.

I am indebted to the members of the resident staff for assistance during the operation, but am under special obligations to Mr. J. Barnett, R. S., for assistance in the after treatment, and for the notes from which this history is written.

As this is intended as a clinical report, I will not go into a discussion of gunshot wounds of the brain, but simply say that, if I get at another such case, I will probe the wound at once, and, if I find the bullet, remove it.

ADDENDUM.—The patient came to see me shortly before Christmas. His facial paralysis seemed to be slowly improving, but was still present to a slight degree.

PREGNANCY, BEGINNING OF NINTH MONTH; SARCOMA OF BREAST; CHRONIC INTERSTITIAL NEPHRITIS; OPERATION ON BREAST; DEATH IN TWO MONTHS AND A HALF, FROM NEPHRITIS.—A CLINICAL REPORT WITH COMMENTS.

BY F. W. PARHAM, M. D., NEW ORLEANS.

Mrs. X., married; age 36; in her fourth pregnancy.

She consulted me in July, 1895, giving the following history.

Family history good, no malignant disease, no consumption, no suspicion of syphilis.

History of present disease: This is her fourth gestation. In the first she miscarried at 2 months, due apparently to injury. In the second and third pregnancies she aborted at the sixth month or just before, with albumen in the urine. During this the fourth gestation, bearing this history in mind, I made frequent examinations of urine, finding urea diminished in quantity, albumen sometimes present, sometimes wanting. Ordered Basham's Diuretic Iron Solution, Carlsbad water and free drinking of mineral waters.

October 13—Remarked to me that she had had occasional pains in her left breast for the past two months, but thought nothing of it, because the nurse had assured her that the trouble would disappear.

Examination revealed left breast much enlarged, filled with large lumps, tending to coalescence, very hard, not very tender on pressure, with a high axillary lump, no involvement of skin,

no retraction of nipple, some pain, other breast normal. She noticed the lumps first not over four months ago; called Dr. Matas in consultation October 15, 1895. He agreed with me that the tumor should be removed, if the general condition permitted.

Examinations of urine (by Mr. R. N. Girling) passed October 15, Sp. G. 1017; R. acid; considerable trace of albumen; urea 1.3; granular casts, pus and pavement epithelium. Ordered iodide of potassium and water *ad libitum*.

October 18—Urine saved for 24 hours, 126 ounces. Sp. G. 1002; R. acid; faint trace of albumen.

October 19—Same quantity by actual measurement.

Her general condition being considered warranting it and the kidneys seeming to be doing their work well, we determined to do an operation for excision of the breast.

October 24, 1895, 12 noon—Operation in the operating room of Touro Infirmary, under chloroform, preceded by Morph. Sulph. gr. $\frac{1}{6}$, and Tinct. Digitalis, M. \bar{x} ; assisted by Dr. Matas and Dr. Kahlmann. Elliptical incision around mamma, with straight incision prolonged on to the arm; exposure of vessels and nerves, and clean dissection of axillary fat and glands, high up, with removal of pectoral fasciæ, but muscles not cut. Closure of wound except small wound in axilla packed with iodoform gauze. Morph. Sulph. gr. $\frac{1}{6}$, and Tinct. Dig. gtt. \bar{x} , before leaving operating table.

October 25—Removed dressing and drew out gauze packing. Redressed.

October 25, about 11 A. M.—Removed dressing, pulled out gauze drain. Renewed dressing of iodoform gauze, sterilized gauze and cotton. Had complained of pain in wound, and especially in elbow.

October 26—She complained occasionally of pain quite severe in elbow, wound and back. Bromidia was occasionally given at night, and Battley's sed. when pain was great (gtt. xv). Once or twice subc. morphine inj.

October 27—Only fair night passed; pain in back and occasional uterine pain. During the day pain in back more severe. At night had to give bromidia and Battley. At 2 A. M., October 28, was resting.

October 28—At 7 A. M. was called. Decided labor pains. Os dilating, head descending. At 10 A. M. discharge of water. At 11 A. M. delivery of fœtus in first head position; placenta delivered by hand in vagina; no unusual features. Cord not pulsating, blue and coagulated from middle to fœtus; fœtus dead, scrotum peeling, blisters on limbs, vernix caseosa much inspissated; occipital bones hard, but not fully developed. Nothing offensive. No chloroform; delivery spontaneous. Ordered strychnine $\frac{1}{30}$, and Tr. Dig. 10 M., every four hours, by mouth.

October 28, P. M.—Has rested well; much grieved by loss of baby. Ordered bromidia for quiet.

October 29, A. M.—Passed a good night. Changed dressing to-day and removed stitches. Union all along the line. Sloughing threatened at third stitch from sternum; absolutely no pus. Rubbed in dry iodoform and renewed dressing.

October 29, P. M.—Temp. 100 deg. Ordered vag. carb. inj. for the morning.

November 6.—The threatening slough seems drying up. A small raw place in axilla, where apposition was not accurate, but no cavity. A small phlebitis of med-basilic vein, cord-like, observed for three days past.

December 2, 1895—Remained in Touro three weeks and returned home. A small spot in axilla remained raw, where the apposition was imperfect, but has now completely healed. Use of arm very good; only extreme elevation can not be done. Complains of severe back and hip pains.

January, 1896—These hip and back pains continued, with little cessation. Pain along course of sciatic nerve (right), quite severe at times; some tenderness over ovarian regions, but no tumor. Digital examination per vaginam reveals nothing. The pains became very fleeting in character, but were especially marked over the bony prominences. She has been occasionally out of bed, and has even been into meals at table since coming from the Touro, but she never remained up long and was indisposed to make any exertions whatever, preferring to remain in bed. She gradually lost appetite and all spirit, became somnolent, passed very little urine, and died, after a period of unconsciousness of several days' duration, on

January 13, 1896, about two and a half months after the operation. No autopsy could be made.

Comment: The child had been dead for a longer period than that following the operation, judging from the signs of decomposition. The wound healed by primary adhesion, and there seemed nothing in the operation itself that might be assigned as the cause of the premature delivery, but to the anæsthetic (chloroform), not unreasonably, perhaps, might be attributed the death of the fœtus; if its death really occurred subsequent to the operation.

Some interesting questions are connected with such a case as the above.

1. Is the surgeon justified in making an attempt under such circumstances to remove, by severe operation, a malignant disease of breast or other organ; or, would it be better to consider his own reputation and wait until the delivery was accomplished, hoping that then he might still be able to operate?

2. Would such a tumor be apt to grow rapidly and to become inoperable during the ninth month of gestation, or after the establishment of lactation, when all the physiological processes are especially active, and when cellular growth is much stimulated?

3. Would the complication of nephritis, considering the unfavorable previous history, in any manner justify the breast operation, seeing that induction of labor might actually be indicated under such conditions?

Of course, an induction of labor would disregard the rights of the child, but would not the continuance of the gestation to full term jeopardize, by reason of the probable aggravation of the nephritis, the life of both mother and child? Could, therefore, any operation, which did not directly attack the child, be held as unjustifiable, provided it did not actually increase the hazard of the mother?

In considering these questions, in our patient's behalf we kept prominently before us the following facts and probabilities:

First—The patient had miscarried previously three times, twice about the sixth month, with grave renal complications, so that in this, the fourth pregnancy, it might not unreasonably be

considered proper to bring on a premature labor, in order to ward off the serious dangers that might attend the labor at full term, not only on account of the aggravation of the nephritis, but also from the more tedious labor the result of the increased size of the child. The woman having a most intense desire to become the mother of a living child, the induction of labor might also be considered as a means of bringing into the world a living child, which might be sacrificed by waiting until full term.

Second—It was not at all certain that the operation would bring on labor, and numerous cases on record attest that the death of the fœtus would not be the necessary consequence of the administration of the anæsthetic.

Third—If labor were precipitated and the child born alive, it would be little less capable of living than if born at full term, eight months having been already completed.

Fourth—We feared that convalescence after delivery at full term might be slow, and under the influence of lactation the tumor might, before her condition would justify interference, make such progress as to become inoperable.

Bearing in mind these considerations, we allowed the decision to be determined by the patient's ability to undergo the operation. This in our opinion justifying the surgical interference, we disregarded all personal considerations and did the operation.

A due regard for the surgeon's own reputation might very naturally cause him to hesitate under the circumstances described, and the family and friends would never find fault with procrastination on the part of the surgeon, but is it not the surgeon's duty to leave the personal considerations in the background in determining such a question? I believe so, and yet I am constrained to feel that in another similar case I should defer operation. Not the least of the influences impelling me to such a course is the result of the microscopical examination of the tumor, which was shown to be a small spindle-celled sarcoma, one of the slow-growing varieties of malignant tumor. In another case I should certainly adopt the suggestion of Bryant and take a piece of the tumor for examination, and at least not operate unless the evidences of malignancy were pronounced.

THE NECESSITY FOR THE EARLY RECOGNITION OF MORBID GROWTHS IN THE MOUTH.

BY ANDREW G. FRIEDRICH, M. D., PROFESSOR OF DENTAL AND ORAL SURGERY,
NEW ORLEANS POLYCLINIC.*

You are well aware that a proper presentation of this subject could hardly be treated in an article of a few pages; therefore, I can hardly give you more than a glance of a subject so varied in its multitudinous ramifications throughout the system in general, so it shall be my endeavor to simply impress its importance upon you.

We all know that the early recognition of cancerous growth is of vital importance to us, and how much more important must it be to the patient to know the true character of his disease—his life may depend upon it.

A patient may consult you for a small ulcer upon the tongue, such cases do present themselves to us—the rough edge of a decayed tooth may have caused it; the tooth is extracted and we take no heed to the ulceration. The patient leaves in the fond hope that now that his tooth has been removed the ulcer will heal. Alas! how often is this expectation found to be delusive, and after wasting weeks, possibly months, finding matters becoming worse instead of better, he consults a surgeon who dashes all hope to the winds and informs him that he is subject of cancer of the tongue, and that the greater part, or the whole, of this important organ must be removed; frequently the glands have become involved, and what might have been a simple and trivial operation had the disease been recognized early (in the first stages) becomes a grave and serious one, with the possibilities of its recurrence increased a hundred fold.

This plain statement of the truth will apply to all morbid conditions of the mouth or jaws. The burning question is, then, how are we to recognize these diseased conditions in their incipiency? True it is, their diagnosis is most difficult, and often at times impossible; still there are a few important factors in the case that might make us suspect malignancy, so I will first call attention to those forms of disease which we are most apt to see, and which attack the jaws. They may be

* Read before Louisiana State Dental Society, February 20, 1896.

classified thus: Cystus epulis, epithelioma, and sarcoma, both spindle and round celled.

Cystic tumors may be classified under two heads:

First—Cysts connected with the roots of fully developed teeth; and secondly, cysts connected with imperfectly developed teeth, to which the term of dentigerous cysts has been applied. Both kinds may occur in either jaw, and in the case of the upper jaw may be confounded with collections of fluid antrum or may secondarily involve that cavity. Cysts formed on the fangs of permanent teeth are usually of small size and generally extracted with the affected tooth and require no further surgical treatment.

Occasionally, however, they grow to a large size, in which case they produce an absorption of the alveoli and give rise to a prominent swelling:

They lie beneath the periosteum of the fang and have been named by Magstot, "Periosteal Cysts."

The general history of cysts is an expansion of the alveolus of either jaw, but more frequently of the upper, with crackling of the bone on pressure and ultimate absorption of the bony wall. The cyst then presents a bluish appearance through the distended mucous membrane, and if large, gives distinct evidence of fluctuation. They are not in themselves of a malignant character, but if allowed to grow other parts might become involved and life thereby jeopardized.

The timely extraction of a diseased tooth would often arrest the progress of the malady, and adds another illustration of the fallacy and folly of the time-honored dental proverb: "Preserve all the teeth you can, regardless of their condition."

With regard to the dentigerous cysts, they are almost invariably connected with the permanent teeth which have remained within the jaw and have undergone a certain amount of irritation. When they occur in the lower jaw, they are more isolated and prominent than in the case of the upper. However, the causes of these conditions are beyond our control; still an early recognition of them is advisable.

The next in order is epulis. Epiloid tumors may either be benign or malignant; the former, after removal, often recurring in a malignant form.

The histological character may be either fungoid, erectile, fibroid, sarcomatous, myeloid or myxomatous.

The Epilo-fungoid growth is merely a degeneration of a pulp of a carious tooth. It is most common and perfectly innocent. It may be met with in a variety of forms, either springing directly from an exposed pulp of a decayed tooth, sometimes occupying the whole of the cavity of the crown; at others springing from small carious spots at the side of the tooth just below the crown and pushing its way up through the gum. The growth bleeds easily and causes much pain, if bitten upon. But what always must be remembered is, that the extraction of the diseased tooth removes the disease permanently.

There is, however, a form of Epulis which often most closely resembles these fungating growths. They are found, however, if traced carefully, to commence in the odonto alveolar membrane, which adjoins the bone and instead of growing outward, pass up the pulp cavity of the fang and fungate on top, or at the side of the tooth. It is important to recognize these, as it is not sufficient to extract the tooth only, but a portion of the alveolar process must also be removed.

Epilo-erectile tumors are connected with the capillary system and are classed *nævi*. These growths vary in size, in some cases grow very large. They are dark and turgid in appearance, and bleed freely on the least provocation.

These growths, like *nævi* on other parts, may grow very rapidly, and in some cases undergo spontaneous cure by consolidation. They usually commence in a small, red pimple, springing from the gums, which sometimes grows rapidly like a polypus, and often attains the size of a cherry before much notice is taken of it. When the growth is pedunculated, it can be removed by strangulation. If not thus, then by actual cautery.

Fibromata.—These tumors are very commonly met with about the jaws. They usually arise from one or two situations either from the interior of the antrum, or from the periosteal tissues of the alveolus. They resemble closely simple epulis, but may be distinguished when arising from the alveolus by their dense, hard feel; while, if arising from the antrum, they

will usually attain a considerable size before they attract attention. These tumors may be distinguished from the erectile epuloides by their resistance to pressure, and also by their color, which is usually of a faint yellowish white, pure white, or a very pale red.

These growths may attain an enormous size in the superior maxilla without seriously interfering with health or endangering life. The constant irritation of carious teeth is the most frequent cause of fibroma, and the tumor usually commences in the periosteum connected with the alveolus.

Indeed, carious teeth have, in many cases, upon the removal of the tumor, been found imbedded in its substance. These tumors, if thoroughly removed, have little or no tendency to recur.

Sarcoma.—The favorite seat of these growths seem to be about the bones either intra or extra. They are more commonly met with in the superior maxilla than perhaps any other bone in the body. They usually occur singly, grow very rapidly, and when springing from the antrum produce most horrible deformity, such as protrusion of the eyeball, distention of the nose and face, etc. They are very vascular and bleed readily if interfered with. They also spring from the periosteum of the alveolar process and present a fungating mass, protruding through the socket of a tooth, and resembling ordinary epulis. Very frequently the first intimation the patient has of the disease is that he notices one of his teeth to be longer than the others, experiences pain on mastication, with possibly some slight bleeding around the tooth. He thinks the tooth at fault and consults the dentist, who removes the tooth, and often finds a fungoid growth at the end of one of the fangs. A microscopic examination of this growth would disclose a true nature of the disease. I would strongly advise in any case where a growth is found growing from the alveolus that is clearly not a simple epulis, that the disease should be freely removed with a considerable portion of bony structure around it. Little or no deformity follows, and the patient's life may be saved.

Again, if extracting a tooth because it is pushed down, whether decayed or not, a fungoid growth is discovered on any

of its fangs, by all means have such a growth examined with a microscope. By such a procedure the presence or absence of sarcoma may be recognized. By early operation much suffering will be saved and valuable life preserved.

Epithelioma of the jaws is not of an uncommon occurrence, and thousands of cases are upon record where the true condition was not recognized until the disease had extended to such an extent that little was to be done—in fact, the gland was infiltrated and the patient in a hopeless condition.

The most of these cases have been treated by all kinds of irritants, such as nitrate of silver, sulphate of copper and other irritating lotions and substances, which have only increased the disease, caused it to spread more rapidly than it would otherwise have done.

Its diagnosis is extremely difficult at times, and great care must be taken to inquire into the clinical history of the case, so as to distinguish it from syphilitic ulceration, or ulcerative sioniatitis.

However, if we examine closely and find out how it commenced, we will usually be able to clear up the difficulty and arrive at a correct diagnosis..

Generally to an experienced eye the nature of one of those ulcerations will be determined at once, whether malignant or not.

An epithelioma usually begins as a pimple or warty growth, either upon the palate, the internal or external portion of the gums; this is usually not painful.

After a while it ulcerates and presents an ulcer with a hardened base, with irregular, everted edges, bleeding readily and with an irregular nodular floor. From now on the progress of the disease is very rapid and painful.

I hope that I have said sufficient to justify me in urging upon you the necessity of the early recognition of morbid developments in the mouth and the responsibility placed upon us when consulted by our patients. I would urge the early removal of all roots of teeth which may be found irritating the gums, and if at any time a fungoid growth or ulceration is found existing around any decayed teeth or roots, and there is an hereditary tendency to malignant disease, do not waste a

moment, but remove them as soon as possible, and should others be found to exist extract them also, and further instruct your patient to present himself or herself from time to time for inspection, and should there be the slightest tendency in the part for the growth to increase, do not hesitate to advise its complete and thorough removal. Then you can feel and know that you have conferred a lasting benefit on a fellow-being, and at the same time, done all in your power to shield from pain and save from loss, and have added health and comfort to your patient.

This fulfilment of obligation must contribute to real happiness—a happiness that mere praise can not destroy, and that money can not buy.

N. O. Medical and Surgical Journal,

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

INTRODUCTORY.

Tempora Mutantur! We Salute You!

While knowledge grows, the capacity of interpretation follows with halting step, nor does it overtake its leader, always moving on.

The lamp of science burns, while men sleep. With printers' art and facile pen we strive to catch the strokes of genius, which keep the onward march.

To-day new recruits take the robes of honor and of labor from a worthy predecessor, and, with a timidity born of modesty, don them.

To what end?

The NEW ORLEANS MEDICAL AND SURGICAL JOURNAL has already passed its semi-centennial.

In succession, it has passed from hand to hand; now struggling with vicissitudes, now resting on a wave of success, now borne down by prejudice, now up by popular enthusiasm, but it has always lived.

We are too young in office to make promises, too wise to offer excuses.

The burden of office may be a coat of thistles, or a bed of roses, but we are here and are prepared to do our best in maintaining the high standard our community deserves, and to add what we may to advance the profession, which honors us.

To those who have always helped us we beg a continuance of favor.

To those who have wished to help us we introduce ourselves, and we trust that the acquaintance may prove a mutual acquisition.

While punctuality shall be our prime effort, purity and truth shall share our purpose.

The title page of this number of the JOURNAL will introduce some new friends, while it will recall some older ones.

We are pleased to call attention to the list of collaborators, whose names signify their intention.

No small impetus will be given our success by their contributions, which are to appear from time to time.

Beginning with this, the March number of the JOURNAL, the editorial department will be under the direction of Dr. Chas. Chassaingnac and Dr. Isadore Dyer. It is the plan of the management to encourage the report of clinical material, and to stimulate the co-operation of the literary effort of the profession of the State. The interests of the medical profession and of the institutions of the State will receive the attention and consideration of the JOURNAL at all times.

LAW REGULATING THE PRACTICE OF MEDICINE.

The Ohio Legislature has recently passed a bill to regulate the practice of medicine. Its essential features are on the same basis as those of the law of the State of New York. This adds another to the majority of States having such laws. Congress is considering the regulating of medical practice in the District of Columbia, and will, no doubt, finally pass a law creating examining boards.

Now that the advantages derived by the public and the profession, all over this country, from analogous laws, are becoming appreciated; that the law in Louisiana is getting to work smoothly and satisfactorily, its constitutionality is being questioned by a combination of two irregular practitioners who have been interfered with by our State Board of Medical Examiners.

Such laws have been in force for many years in some States and, as far as we know, have always been sustained. We hope the local court will judge proper to decide in favor of the law. The chances are that, in any event, an appeal will

be taken to the Supreme Court. We certainly advise the board to make the test complete if the decision is unfavorable to their position.

At any rate, this is an opportune time for obtaining a settlement of the matter by our highest tribunal, for should the worst happen, and should the Supreme Court point out a flaw in the law, steps could be taken to have the State Society act in such manner as to obtain a better and a technically correct law from our next Legislature.

PROMISCUOUS EXPECTORATION.

It is high time that the profession of Louisiana should call the attention of the public to the danger of promiscuous expectoration, particularly in public places.

Although we concede the possibility of differences of opinion as to whether a certain germ is the actual causative agent of this or that malady, it must be admitted that the secretions and excretions of a body suffering from an infectious disease are capable of transmitting said disease. This has been demonstrated over and over again. Typhoid fever and cholera can be selected as illustrations of propagation by fecal matter, diphtheria and tuberculosis as examples of transmission by sputum.

While precautions are already being taken or inaugurated in large centres to avoid contamination by feces, this is not done about sputum; yet the latter from being everywhere is more dangerous. True, it is more difficult to control expectoration, but the chief trouble is that the people are not educated as to the necessity for this control. If their medical advisers explained to them that expectoration dries without its poisonous properties being destroyed; how, once dried, it floats in the air we breathe, lodges on the things we are to eat, is carried from the tops of houses into the water we are to drink; that it is, in consequence, the ever-ready agent by which disease germs can be carried at the proper moment and in the proper soil to develop and multiply, they would gradually realize that to expectorate here, there, and everywhere is not only ill-bred and disgusting, but actually a prolific cause

of disease. They would not only be more careful individually, but would see to the framing of proper regulations for places of public assembly and public vehicles, to the enactment and enforcement of laws necessary to secure at least a mitigation of the evil and a consequent decrease of sickness.

Such an education would have to be made patiently and persistently in order to bear fruit. The interest and aid of the daily press should be invoked. Terse notices could be used to warn children at school and adults in places of recreation and of worship. In many ways, the details of which we have not space to consider, the people could be taught the advantage, nay, the necessity of stopping this practice.

Physicians are the ones who should inaugurate this campaign of education. We merely wish to suggest their duty in the matter. The health department of New York is moving in the right direction. If our medical men exert themselves New Orleans and Louisiana will follow the good example.

PILOCARPINE-PHENYL-HYDROXIDE.

Notices in the daily papers about a wonderful new remedy of Dr. Cyrus Edson, of New York, had put us on the alert. We eagerly scanned the medical journals to learn of it. The *Medical Record* of February 8th brought us the information in the shape of a paper by Dr. Edson on "A Rational Treatment for Phthisis Pulmonalis, together with some notes on a New Remedial Solution." The title is modest enough, but when the author states that his experience with his remedy in malaria leads him "to consider it a specific of even greater efficiency than quinine;" and when, at the end of his paper, he says he confidently believes it "will afford the best result yet obtained, not only in the cure of phthisis and other forms of tuberculosis, but of other diseases of germ origin," we agree with him that the "curative range of the fluid is obviously very wide." He will have to reinforce this, which we hope is only a preliminary article, with a more systematic and scientific one, if he wishes the intelligent members of the profession to take him *au sérieux*.

The basis of the treatment is a daily hypodermatic injection of about one hundred minims of a solution containing appropriately 2.75 parts of phenol and .0188 parts of the new

salt, which is a combination of pure phenol (54 per cent.) with pilocarpine (46 per cent.).

Unfortunately for the value of the tests made in the pulmonary cases, the treatment also includes inhalations daily of iodoform in ether by means of sprays containing 10 per cent. of the former; at times the administration of cod-liver oil, somatose, egg-phosphate, etc., is added. The malarial phase of the remedy has not been more happily tested, if we judge by a report furnished by a New York confrère and incorporated in the article by Dr. Edson as a sample case. We quote: After one week patient appeared well, but a relapse occurred one week after treatment was discontinued; patient was sent to a *non-malarious* country place; has *since resided there*, and, lo, and behold! has since remained well.

It was only "early in 1895" that Dr. Edson learned that healthy urine contained phenol and that the amount of the latter increased in some diseases. This made him conclude that nature cured many germ diseases with phenol. He then commenced a "long line of experimental work," consuming probably several months we can surmise from some of his statements, before he produced his "fluid." The earliest date mentioned for the *beginning* of treatment of a case is September 3, 1895, yet in February, 1896, five months later, are made the sweeping claims above quoted. All this, too, without apparently any experiments or control-tests having been made on animals. At least he does not refer to such, except to assert without explanations that "experiments with guinea pigs were such as to convince that no phenol solution of the strength of the pilocarpine-phenyl-hydroxide solution, except the latter, could be safely injected."

The number of patients that have been and are being treated up to date of paper is given at 216, but no attempt whatever is made to classify them even into pulmonary, malarial, and other cases. Twenty-three are reported cured. Descriptive histories of a number of these cases are promised in a subsequent report. Awaiting it, we shall withhold further comment after reminding our readers that analogous claims were made years ago for pure phenic acid in the treatment of yellow fever, malaria, etc., by Déclat, who pretended that good results could be obtained only by using *Déclat's own preparations*.

ROENTGEN'S RAYS.

Recent result obtained with Roentgen's rays suggest possibilities in the photography of the future that fairly make one's head swim. Baby-books will have to be remodeled; instead of reserving space for pictures of the prodigy only at one and more months, as at present, there will be places for his photo at one and three months before birth or any other period of utero-gestation deemed of sufficient interest. Bets as to whether it is a boy or a girl will be decided much earlier than now, and one will hear expressions like these: "He doesn't look like his pa now, but he was a perfect picture of him two months before birth." "This child is much larger than her brother was six months after conception," etc.

The crown in the medical line, however, is reserved for the one who will discover the special ray that can go through all substances except pathogenic micro-organisms. All present methods of diagnosis will become antiquated. The only thing necessary will be to photograph your patient by means of that variety of the X ray; the resulting silhouette of the germs then being magnified, you reach your diagnosis by recognizing the kind of bacillus present; your prognosis is established by the number and the location of the bugs; the treatment then becomes less than a secondary matter; in fact, it is already suggested that the rays themselves may be used for the destruction of germs within the body.

How simple, yet how beautiful! Away with your stethoscope, plessimeter, sphymograph, ophthalmoscope, laryngoscope and cystoscope! Away with your powder and pills, your knives and batteries! Bring forth your camera and your X ray—there you have diagnosis, prognosis and treatment!

Department of Surgery.

In charge of Dr. F. W. PARHAM; assisted by Drs. E. D. MARTIN, and
F. LARUE.

SOME OF THE LATEST SUGGESTIONS IN HIP-JOINT AMPUTATIONS.

I. WYETH'S PIN AND TUBE METHOD, WITH ADDITIONS.

Use two pins as described by Wyeth,* but place the outer pin as high as possible (Lanphear) in order to adopt the suggestion of Murdoch to disarticulate without sawing the femur, using the extremity as a lever. It may assist, in properly adjusting the pins, if the suggestion of Thomas is adopted of first placing the tube as high as possible and afterward putting in the two pins to touch the tube with anteriorly and posteriorly, then tighten the tube and secure. Strong clamp forceps afford a convenient method of securing the tube.

In most cases the Esmarch band need not be used, Lister's method of elevation and milking of the leg being sufficient. Before applying the tube Dawbarn's suggestion† of cutting the hamstring tendons might be practised, in order to equalize the subsequent retraction of the muscles, when the circular cut is made. This seems to us to be a valuable addition to the technique of all thigh amputations and even of the arm (cutting of the biceps tendon).

In cases where the height of the tumor made hemostasis difficult or its size meant considerable loss of blood by its mere removal, the suggestion of Dawbarn should be adopted of having the canula of the saline infusion apparatus introduced into an elbow vein ready for use during or after the completion of the operation.‡

II.—TILDEN BROWN'S FEMORAL-CLAMP METHOD.§

The Hueter-Parker-Barker incision is made between the sartorius and rectus on the inner side and the tensor vaginæ

*Paper read before the American Medical Association in 1890, also a paper read before the New York State Medical Association, 1893.

†New York Medical Record, January 25, 1896.

‡Journal of American Medical Association, August 3, 1895, p. 180; also Annals of Surgery, Vol. XX, p. 183.

§Annals of Surgery, February, 1896.

and gluteal muscle on the outside. Through this incision a special clamp is introduced so as to clamp femoral vessels, the sartorius being embraced in a fenestrum made by curving the handles of the instrument. The crural nerve seems also to be in the fenestrum out of the way of compression. He has performed one operation successfully with it. It is especially applicable to cases where an exploratory operation must first be made before amputation will be seen to be required, but he thinks it might be also found superior to digital compression in the treatment of aneurism.

Wyeth,* in discussing the paper, while admitting it to be ingenious for the class of cases without clear-cut indications for amputation, without exploratory incision, though the method is a step backward instead of forward, and could hardly be considered superior to femoral ligation, which could be easily done under cocaine anæsthesia. In amputation where the pins could be applied, he thought the clamp method much inferior, since only the anterior circulation was controlled. It seems to us that for the particular class of cases mentioned where an exploratory incision has first to be made the method is a valuable one, since the amputation can be finished through only the one vertical incision.

THE NEW METHODS OF TREATMENT FOR HYPERTROPHIED PROSTATE (CASTRATION, LIGATION, ALIMENTATION.*)

The palliative treatment of prostatic hypertrophy can afford but temporary relief to the patient.

This explains why a radical cure of this trouble has been for a long time sought for.

However, surgical measures directly involving the hypertrophied prostate, says Mr. Englisch, are at the same time most serious and no less uncertain as to the results; they are, for these reasons, seldom resorted to.

Thus it is that attempts have been made to act on this gland in an indirect way.

Ligation of the internal iliac artery was first tried; then,

* Medical Record, Dec. 21, 1895, p. 887.

† Abstract of a few remarks made by Mr. Englisch before the Imperio-Royal Society of Physicians of Vienna, translated from *Bulletin Medical*, of December 25, 1895.

knowing that the testicle exerts a certain influence on the development of the prostate, operations on the testes were undertaken.

There really does exist an intimate sympathy between the prostate and the testicles.

The prostate gland is fully developed about the twentieth year. It is thus unfair, in studying this question, to accept any facts observed previous to that age.

Later on, the prostate develops proportionately more than do the testicles, and after the fiftieth year there is quite a disproportion between these organs.

The relations existing between those two parts of the genital system are confirmed by the cases reported, in which they both showed signs of simultaneous arrested development. We have but few precise observations as to the condition of the prostate in cases of absent testicles; it, however, appears that the former was always found atrophied when the testes were wanting.

It has also been noticed that in cases of monorchidism the prostate was remarkably small.

The prostate of eunuchs and of the Russian scopyi have been found notably small.

Experiments on animals (the dog is particularly suited to these researches) have shown that castration, in young subjects, invariably checks the growth of the prostate, and that in the adults this same operation causes its atrophy. These facts served as a basis to the modern treatment of prostatic hypertrophy.

To appreciate fully the results attained by this means of procedure, it is proper to examine its effects on the prostate itself and likewise its secondary action on the urinary system.

In 102 operated cases, sixty-eight times a salutary modification was noted both in the prostate and on the urinary functions.

Thirty-two times an improvement in the functional disorders of the urinary organs was derived, although no change whatever took place in the prostate.

Twice the prostate was found decreased in size without the least improvement as to the urinary troubles.

These observations referred to give a total of 37 permanent cures and 59 improvement.

Such results have been obtained with no other kind of treatment.

Spontaneous evacuation of the bladder was witnessed in several cases shortly after the operation, and occurring in others after a more or less protracted time.

The prostate likewise gradually diminished in volume.

At a meeting of the same society on January 17, 1896, Mr. Englisch again spoke as follows: "The inconveniences naturally arising from bilateral orchidectomy for the relief of prostatic hypertrophy have led on to successively testing unilateral castration, which four times resulted in cure, the ligation or resection of the vas deferens.

Experiments on animals have shown that the mere ligation of the vas deferens excites no influence whatever on the shape and structure of the testicle; that the genital functions are not impaired although in man absolute sterility is its fatal consequence.

This fact was noticed long ago by Bardenhauer, who had resected the epididymis and part of the vas for testicular tuberculosis.

Other researches, particularly those of White, have again demonstrated that the bilateral ligation of the vas deferens brings on atrophy of the prostate without any modification in the testicles.

Mr. Englisch says he recently had the opportunity of performing this operation on a patient 67 years old, for an enlarged prostate and accompanying retention of urine. The section was accomplished by means of the thermo-cautery, and on the ninth day following, the patient was able to pass his urine spontaneously and to completely empty his bladder. The prostate showed no signs of shrinkage before the fifteenth day. Resection of the vas deferens for hypertrophied prostate has been practised in 102 cases up to date; 43 times the prostate decreased in size and the urinary troubles disappeared entirely. In 57 cases the prostate retained its previous size.

As to the method of treating prostatic hypertrophy by in-

gestion of prostatic parenchyma, instituted by Reinert, Mr. Englisch says he gave it a trial in 4 cases of hypertrophy.

In these 4 cases micturition became less frequent at night and the urine itself much clearer; furthermore, in two of the above cases diminution of the prostate was witnessed.

Medical News Items.

JOSEPH JONES, M. D.

It is our sad duty to chronicle the death of Joseph Jones, M. D., of New Orleans, which occurred late on the night of February 17, 1896.

The medical profession has lost one of its most earnest workers. He labored constantly; he took advantage of the many positions of honor he attained in order to collect information, and by communicating this information to his confrères, he became a prolific writer. This is attested by the very numerous articles and reports which he published in the medical press, many of which were contributed to this JOURNAL. His most important work is his "*Medical and Surgical Memoirs.*"

Born in Liberty county, Georgia, September 6, 1833, he graduated as doctor of medicine from the University of Pennsylvania in 1855. He entered practice in Savannah, and it was not long before he was elected professor of chemistry of the medical college of that city. About four years later he was elected to the same chair in the Medical College of Georgia.

When his native State seceded he joined the Confederate army, and served as full surgeon during most of the war. Shortly after the declaration of peace, Dr. Jones decided to settle in Louisiana, and in 1868 he was honored with the position of professor of chemistry and clinical medicine in the University of Louisiana. Owing to impairment of health he was relieved about three years ago by the faculty of his clinical teaching at the Charity Hospital, and his chair was termed that of chemistry and medical jurisprudence. He was filling the chair at the time of his death. His kindly and soft tones will be missed by the students in the green room this spring, for



JOS. JONES, M. D., LL.D.,
Prof. of Chemistry and Medical Jurisprudence,
Tulane Medical Department.

none more than he seemed to take a personal interest in the prospects of the candidates for graduation.

Prof. Jones served a full term of four years, from 1880, as president of the Louisiana State Board of Health; devoted much time and energy to the study and enforcement of quarantine, and the State was spared from any epidemic during his incumbency.

He was also president of the Louisiana State Medical Society in 1885, and was surgeon-in-chief of the Confederate Veterans at the time of demise.

His health had been failing gradually for many years, yet he labored on, and it is only since a comparatively short time that he had been unable to attend his practice. He was out driving probably not more than a week before his death, and we understand that the end came rather suddenly. We extend our heartfelt sympathy to his mourning family.

MEDICAL DEPARTMENT,
TULANE UNIVERSITY OF LOUISIANA, }
NEW ORLEANS, February 19, 1896. }

At a meeting of the faculty, held this day, the following resolutions were adopted:

WHEREAS, Prof. Jos. Jones, M. D., was called to occupy the chair of chemistry in the Medical Department of Tulane University of Louisiana, July 30, 1868, and has continued his connection therewith until the same was severed by death, February 17, 1896, and

WHEREAS, in addition to his untiring labors in the laboratory, in the lecture room and in the clinic, during the twenty-seven years that he held his professorship, Professor Jones strengthened the reputation of the Medical Department as a centre of learning by his profoundly erudite, original and vast contributions to the literature of medicine and the collateral sciences; therefore be it

Resolved, That by the death of Prof. Jos. Jones, the faculty of the Medical Department is called to mourn the loss of one of its most learned and venerated co-laborers; that the students and alumni have been deprived of the counsel of a most loyal and loving friend; the medical profession of one of its strongest pillars, and the State of a patriotic citizen, whose

public spirit and self-sacrificing devotion to its interests has been conspicuously displayed in the most memorable and trying circumstances.

Resolved, That a copy of these resolutions be sent to the family of our deceased colleague as a token of the profound esteem and respect in which he has been held by us, and of the sorrow and sincere sympathy that we feel for them in their overwhelming bereavement.

In behalf of the medical faculty,

STANFORD E. CHAILLÉ, M. D., *Dean*.

THE FACULTY OF THE MEDICAL DEPARTMENT of Tulane University has temporarily appointed, as Professor of Chemistry, Dr. A. L. Metz, the well-known chemist of the State Board of Health, to fill the vacancy caused by the death of Prof. Joseph Jones. Dr. Metz has for several years been in charge of the chemical laboratory of the department.

THE LOUISIANA STATE DENTAL SOCIETY recently held a successful annual meeting in this city. Dr. J. H. Landry, of Plaquemines, was elected president; Dr. R. L. Zelenka, of Houma, 1st vice president; Dr. M. W. Rainold, of New Orleans, 2d vice president; Dr. C. V. Vignes, of New Orleans, recording secretary; Dr. S. J. Bourgeois, of Morgan City, corresponding secretary; Dr. L. D. Archinard, treasurer; Dr. A. J. Friedrichs, president of the Board of Dental Examiners.

DR. PAUL S. CARRINGTON, one of New Orleans' oldest physicians, died February 6, in this city, aged 68 years. He came to New Orleans while yet in the prime of life. He occupied the position of quarantine officer in 1878, and was in charge of the quarantine at Morgan City, La., from 1890 until 1895. Dr. Carrington was yet an inspector for the State Board of Health at the time of his death. A sad circumstance associated with Dr. Carrington's death was that his daughter lay critically ill with tetanus, and the announcement of the calamity probably precipitated her end. He left a wife and three remaining children, with whom we condole.

THE CHARITY HOSPITAL at Monroe has been completed and turned over to the Board of Administrators.

THE Texas State Medical Association meets in Fort Worth April 28, 29, and 30 next.

THE Louisiana State Medical Association will meet in the assembly hall of the medical department of Tulane University on Tuesday, Wednesday, Thursday and Friday, May 5, 6, 7 and 8, 1896. Dr. R. M. Littell, president; Dr. A. G. Friedrichs, corresponding secretary.

THE International Congress of Dermatology will take place in London, England, the first week in August, 1896. Dr. George T. Jackson, 14 East Thirty-first street, New York City, is the secretary for the United States.

THE *Medical News*, so long domiciled in Philadelphia, has moved its publishing and editorial departments to New York City. Dr. J. Riddle Goffe has fallen into the editorship left vacant by Dr. George M. Gould. Whether the new surroundings will affect the popularity of this enterprising journal remains to be seen.

THE JOURNAL voices the general expression of gratification at the resurrection of the *Index Medicus*. It is to be hoped that it has taken a new lease on life which will be of indefinite duration.

DR. PAUL REISS has returned to New Orleans, after five years of European life and study, to practise in diseases of the eye exclusively.

DR. H. BRONSON GEE has resigned the editorship of the *New York State Medical Reporter*, and the services of Charles Wilson Ingraham, M. D., of Binghamton, N. Y., have been secured for the editorial department. We wish our *confrère* and the *Reporter* success.

THE MEDICAL DEPARTMENT OF TULANE UNIVERSITY has already about 380 matriculants for this term. The three-year

course is now obligatory, and all matriculants are enrolled on that basis. It is encouraging to note that there is a higher average of education apparent among the students than for some time. They will profit by additional laboratory courses in chemistry, histology, bacteriology and operative surgery.

THE NEXT INTERNATIONAL MEDICAL CONGRESS is to take place at Moscow in August, 1897. The official language of the congress will be French, but papers can be read in either French, German or Russian. While we do not agree with many of our American and English contemporaries in criticising the action of the committee in their selection of an official language, we believe with them that the omission of English from the list of languages for papers will militate seriously against the success of the congress and go far toward preventing it from being in truth international. It is to be hoped that the committee will yet correct the omission.

THE NEW ORLEANS POLYCLINIC begins its session for 1896 on March 2. The first term closes April 13. The second term begins April 15 and ends June 1, 1896. The faculty of the Polyclinic announce the completion of the new Polyclinic building, in which lectures are now held. In addition the course will be conducted as heretofore, at Charity Hospital.

THE MEDICAL PRESS OF NEW YORK is now very much concerned over the question of the repeal of the law which prevents a physician from being president of the Board of Health, an illogical and iniquitous law. The laws governing the coronership in the city of New York are also being severely condemned, inasmuch as they permit ignorant and non-professional men to fill that important office. It is evident that on these two points Louisiana and New Orleans are far in advance of the Empire State.

THE following points of interest regarding the ORLEANS PARISH MEDICAL SOCIETY are culled from a report read recently by Dr. F. W. Parham, as retiring president. The membership is about 145. The average attendance during the latter half of 1895, notwithstanding the fact that the meetings were

increased to two a month, was about 23 per cent. of the membership. The library now contains 1786 volumes, including 130 unbound and 110 duplicates; the large majority of these were added during 1895. The cataloguing of the library by cards is nearly complete. The society receives over one hundred journals, which are always accessible to members. This assuredly makes a good showing of the present condition of the society, which is in its own quarters, and shows a healthy progress as well as a bright outlook for the future.

The Charity Hospital of Louisiana Alumni Association will hold their next annual session on April 14 and 15, 1896. We hope it will be largely attended and result in something practical. In this connection, we append the following letter, which was received by the *Board of Administrators* of the Hospital at their February meeting:

“GENTLEMEN—The Charity Hospital of Louisiana Alumni Association, composed of ex-internes, have the welfare of the hospital and of its resident students at heart. As an evidence of their interest they, at their first regular meeting, appointed the undersigned a committee to attend to the presentation on their behalf of a gold medal to the most worthy out-going resident student next April. They desire not only to obtain your co-operation in the matter, but to present the medal through your honorable body, and at such time and place as you may select.

“They respectfully suggest that, in reaching a determination as to the comparative merits of the outgoing students, you may be guided not only by such examination as you deem necessary, but as well by the manner in which said students have kept their records and have performed their ward work and other hospital duties.

“They respectfully solicit an early action on this communication in order that the medal may be struck off and any details may be attended to in due time.

(Signed) “A. W. DE ROALDES, M. D., *Chairman*.
“W. S. BICKHAM, M. D.,
“CHAS. CHASSAIGNAC, M. D., *Secretary*.”

The communication was referred by the board to the Medical Committee with power to act.

The medal committee of the Charity Hospital of Louisiana Alumni Association, previously referred to, received the following letter:

NEW ORLEANS, February 25, 1896.

To Dr. A. W. de Roaldes, Chairman:

DEAR DOCTOR—The proposal submitted by your committee to present a medal from the Charity Hospital Alumni Association to the most competent and deserving outgoing student, was referred by the Board of Administrators to the Medical Committee, composed of Dr. Shepard and myself. We cheerfully accede to your request and would suggest that you appoint one of your number to confer with the House Surgeons to determine the manner in which the examination should be conducted.

Cordially and fraternally yours,

E. S. LEWIS, M. D.,
Vice President.

The committee was convened by the chairman upon receipt of the above communication and the same was found eminently satisfactory. Its suggestion was adopted, and the secretary, Dr. Chassignac, was appointed to confer with the House Surgeons of the Charity Hospital.

This meeting between Drs. Bloom, Fortier, Parker and Chassignac, took place a few days ago, and the following decision was reached: a competitive examination of an eminently practical character will be held on March 14, 1896, at 3 P. M. In addition to the information to be derived from the results of the examination, the amphitheatre work, such as making dressings and assisting at operations in the past, will be given weight as well as the ward histories written up by the resident students. Any other data as to hospitals which can be obtained will be taken into consideration by the examiners.

There are only four outgoing internes this year, so the race promises to be very interesting.

Book Reviews and Notices.

Handbook of the Diagnosis and Treatment of the Skin. By A. Van Harlingen, Ph. B. (Yale), M. D., etc. Third edition. P. Blakiston, Son & Co., Philadelphia, 1895. A. Hawkins Co., New Orleans. Price, \$2.75.

The third edition of Dr. Van Harlingen's work shows careful revision and the addition of much that is new. The excellent colored plates, illustrating the primary lesions of the skin, occupy the same position as in former editions, in the frontispiece.

Containing altogether five hundred and seventy-seven pages, the subject matter is arranged alphabetically without particular reference to any system of classification. In the present uncertainty of nomenclature this is a wise disposition. The illustrations are not numerous, but have been judiciously selected and distributed through the text.

The easy style of the author, with a conciseness in description, creates a favorable impression on the reader. The work is of particular value to the physician and the student alike on account of the stress laid upon differential diagnosis.

Tables of differentiation have been drawn in many instances, showing even the finer distinctions between diseases.

The treatment outlined is modern, set forth in a practical manner, and is evidently the result of extensive reference.

The chapters on massage and electricity are especially noteworthy.

The publishers deserve mention for the excellent type and for the style of the work, which, with the size of the book, makes it all it claims to be, an ideal handbook.

DYER AND MÉNAGE.

A Manual of Medical Jurisprudence and Toxicology. By Henry C. Chapman, M. D. Second edition. W. B. Saunders, Philadelphia, 1896. Price, \$1.50.

Mr. Saunders is to be congratulated upon the neat series of manuals he is publishing, of which the present work is a fair

example. So little opportunity is afforded the ordinary medical student of attending specific lectures upon medico-legal topics that a condensed but clear presentation of contingent information is welcome. The work is well rounded, and is logical in the handling of the material. Each subject discussed is presented without undue expansion. The illustrations are only too few.

DYER.

A Manual of Syphilis and the Venereal Diseases. By James Nevins Hyde, A. M., M. D., and Frank H. Montgomery, M. D. W. B. Saunders, Publisher, Philadelphia, 1895.

The authors frankly and modestly announce in their preface that their work is for the student and general practitioner; they also freely acknowledge their indebtedness to many classical works on the subject. They have done their work well and have given in a clear and concise form a resumé of information that should be very valuable to those for whom the book is intended.

We can not agree with the authors when they say that bubo from chancre consists actually of several glands, and exists on one or both sides of the body. Several glands on *both* sides is the rule.

They dismiss the treatment of gonorrhœa by irrigation in what is, to our mind, too summary a manner. Indications for and against circumcision during the existence of chancroids are clearly stated, but they omit a mention of the ideal circumcision cases, those in which, with the presence of phimosis, the chancroids are all located on the tip of the prepuce, and the operation can remove the disease and correct the phimosis at once.

The chapter on Hypochondriasis, referring to nervous conditions produced by real or fancied venereal disease, is especially well written. In reading it any one would be repaid for the time consumed and the money paid for the book.

The colored plates are inferior; the others are good.

C. C.

PUBLICATIONS RECEIVED.

Year-Book of the United States Department of Agriculture.

Formulaire des Médications Nouvelles, par le Dr. H. Gillet. J. B. Baillière et fils, Paris, 1896.

A Manual of the Practice of Medicine, by George R. Lockwood, M. D. W. B. Saunders, Philadelphia, 1896; A. Hawkins & Co., New Orleans; \$2.50.

Principles of Bacteriology, by A. C. Abbott, M. D. Lea Bros. & Co., Philadelphia, 1895.

The Medical Muse, collected and arranged by John F. B. Lillard. I. E. Booth, New York, 1896.

The Functional Examination of the Eye, by John Herbert Claiborne, Jr., M. D. The Edwards & Docker Company, Philadelphia, 1895.

Medical Jurisprudence, Forensic Medicine and Toxicology, by Witthaus and Becker. Vol. III. William Wood & Co., Philadelphia, 1896.

Manual of Syphilis and Venereal Diseases, by J. N. Hyde, M. D., and F. H. Montgomery, M. D. W. B. Saunders, Philadelphia, 1895.

A Manual of Medical Jurisprudence and Toxicology, by Henry C. Chapman, M. D. W. B. Saunders, Philadelphia, 1896. Price, \$1.50.

Syphilis in the Middle Ages and in Modern Times, by F. Buret, Paris, France. Translated from the French by A. H. Ohmann-Dumesnil, M. D. The F. A. Davis Company, Philadelphia. Vols. II and III, 1895.

Washington, or the Revolution, a drama, by Ethan Allen. F. Tennyson Neely, New York and Chicago, 1896.

The Prevalence of Germ Dermatoses, by James C. White, M. D. Reprint from the Boston *Medical and Surgical Journal*, January, 1896.

Transactions of the College of Physicians, of Philadelphia, 1895.

Abstracts, Extracts and Miscellany.

DR. CALMETTE, OF LILLE, France, has constantly preparing anti-venomous serums of both the horse and ass, which he claims, and has demonstrated, are effectual against the bites of all snakes, if injected in sufficient quantity not more than an hour and a half after the bite, the dose being from 10 to 20 to 40 cubic centimeters, according to the age of the patient and the deadliness of the snake. The wound is first washed with the hypochloride of lime in water that has been boiled, of the strength of 1 in 60, and the anti-venine injected into the subcutaneous cellular tissue at the side of the abdomen. Subsequently 8 or 10 cubic centimeters of the solution of hypochloride of lime are injected into the parts surrounding the wound. The administration of alcohol and ammonia are to be avoided. The anti-venine should be kept in a dark and cool place, as it becomes inactive if exposed to a temperature of 122 degrees Fahrenheit.

IN THE *Southern Medical Record* for February, Dr. Wm. S. Gottheil reports an interesting case of unusual syphilitic infection. A child of seventeen months presented a lesion on the index finger of the left hand just at the nail. This was duly followed by constitutional symptoms and a characteristic papular eruption. In place of the initial sore there was "a fungating mass of tissue which covered the entire dorsal surface of the distal phalanx, apparently composed of granulated tissue; the edges around it were reddened and indurated." The source of the disease was not ascertained, but the case is certainly interesting as one of acquired syphilis in one so young.

PRIMARY MALIGNANT TUMORS OF THE CLITORIS.—In a clinical lecture, delivered at the Tremont Dispensary, Dr. C. G. Cumston considers the etiologic factors possibly responsible for the condition named. Even childhood is not exempt. Syphilis, pruritus vulvæ, eczemas, psoriasis, vaginal discharges are among the causes named. Carcinomas and true epitheliomas may occur in this region. Cancer of the clitoris begins insidiously and develops slowly, and may for some time remain unnoticed by the patient. A sensation of heat or burning may attract the patient's attention, especially after walking or sitting for some time.

A disagreeable pruritus of the vulva may be the first

symptom. Examination shows either the tumor or an ulceration.

Neoplasms of the clitoris give place to a number of functional disturbances which are common to all types—burning pain, pruritus, irritation from the secretion, interference with the act of coitus. Removal of the growth is the indication for treatment, but recurrence is frequent, and takes place with astonishing rapidity, especially in cases of melanotic sarcoma.

Among the very frequent complications, the disease may involve the rectum or spread to the skin of the pubis or the perineum.

As the case advances, the concomitant cachexiæ develop, œdema, diarrhœa and intense suffering.

The diagnosis of neoplasms of the clitoris is important. Simple hypertrophy of the clitoris is distinguished by its more regular shape and firmer consistency; also from the lack of bleeding granulations and the fetid discharges. The lymphatic glands are normal.

From hard chancre the diagnosis is made by the slower progress of the epithelioma, the precedent pruritus, the irregular ulceration, the dirty secretion and the inguinal glands enlarging.

The diagnosis between a tubercular and carcinomatous ulceration may be difficult; however, the former presents an ulcer with a granular bottom of a rosy gray color, secreting a yellowish pus.

Carcinoma is distinguished from epithelioma by its more rapid progress and its more destructive action on the surrounding tissues, as well as more severe hæmorrhages.

In discussing the treatment, Dr. Cumston remarks upon the interstitial injections of an alcoholic solution of salicylic acid, the intra-parenchymatous injections of alcohol and the use of the toxins of erysipe'as, as practised by Dr. W. B. Coley, of New York. (Abstract of clinical lecture, in February, 1896, number of *Annals of Gynecology and Pædiatry*.)

AMONG several cases of drug eruption which Dr. Fordyce reports in the December number of the *Journal of Cutaneous and Genito-Urinary Diseases*, one is recorded of particular interest, a case of erythematous eruption from the internal use of boric acid.

A female patient was given thirty grains of boric acid daily for a month for cystitis. At the end of this time she developed a multiform erythema of the trunk, more noticeable over the back and shoulders, and at the same time a marked

swelling of the upper lids. The lids were painful and the œdema so extensive as to cause them to be closed.

The eruption disappeared in a week from the time the boric acid was discontinued. The unusual, in fact unique, occurrence in this case was the œdema of the lids, which for a time was a solid œdema.

STATE MEDICINE VS. FADS.—Professional fads have been developed from time to time, and it has always been in the province of rational medicine (which is only another name for State medicine) to assist in showing up what is fallacious and promoting the growth of what is good. State, or preventive medicine, is doing the same to-day, and to meet these questions successfully must adhere strictly to the truth, or to what can be satisfactorily demonstrated, without recourse to what may be justly denominated imagination and theory.

In our professional work preventive medicine may not seem so brilliant as surgery, nor so seductive to the general practitioner as the administration of drugs, yet the fact that a life may be saved without the intervention of either the knife or a drug is a most gratifying result to the average human being.

Many drugs and surgical supplies are advertised in our medical journals in which we have no confidence, and, while there may be members in the medical profession who use them, yet it is generally expected that the public will purchase rather than the profession.

Barnum once made the remark that the public loved to be humbugged, and the suggestion has been acted upon by the maker and vendor of patent medicines for many years.

The profession should direct public opinion on all matters of professional interest instead of having it brought around in the grip of a commercial traveler. The surgeon should never confidently allow the use of some compound when he is not thoroughly informed of its chemic constituents.

I anticipate that ere long some bold disciple of the Commercial Travelers' Union will come around to our office with a grip sack full of samples for the relief and cure of such a variety of surgical diseases, "that," using his own language, "no reputable surgeon would ever be without a large stock ready for immediate use."

The following from the pen of one of our profession will serve to invite serious thought and investigation into a class of remedies that is being heralded to the world with all the brazen effrontery of empiricism.

"An extract of muscle for rheumatic pains,
A gray matter extract to nourish our brains,

An extract of teeth for the man that can't chew,
 A maxillary extract to cure lock-jaw,
 An extract of ocean to cure mal-de-mer,
 A hirsute extract for those without hair,
 A duodenal extract to serve a good turn,
 In healing the ulcers that follow a burn,
 An extract made out of a whole population,
 To rescue the housewife from sterilization."

True scientific investigation and its deductions should be the admiration of every member of the profession, but not be in such hot haste to accept conclusions as to overthrow and trample upon such common sense opinions as have been set forth by State Medicine, as well as the axioms and aphorisms of the science and art of medicine and surgery that have been in the past, and must be in the future, beacon lights to guide professional opinion, thereby avoiding the dangerous shoals of dogmatic assertion and empirical insinuation.

Always investigate for yourself. Do not allow "isms" nor fads to become a part of your daily prescriptions. Hold fast to what is good, and promptly discard all that will not bear a searching scientific investigation under a light as strong as the noonday sun.

And, lastly, with a thorough knowledge of hygiene, therefore fully realizing the powerful influence of *State Medicine* in counteracting the deleterious effects of fads and theories that are but a figment of the imagination (fostered by minds already dazed by an all-absorbing desire for pecuniary gain), we should not forget that in surgery we have in absolute cleanliness the true foundation of practical success.—Extract from article by Granville P. Conn, A. M., M. D., *Columbus Medical Journal*.

DR. GEORGE DOCK has declined the election to the chair of Pathology in the Jefferson Medical College. The University of Michigan is to be congratulated upon his decision to remain with the institution with which he has identified himself.

LANGSDALE'S LANCET is the suggestive title of a new monthly which has just appeared, edited and published in Kansas City, Mo. If the coming numbers fulfil the promise made by the initiatory, we feel that the profession are the better for its beginning. We stretch the fraternal hand.

IN the *Indian Lancet* of January 16, 1896, Dr. Carleton writes a masterly article on leprosy, based on his observation

of the disease at Subathu, India. He concludes with an enumeration of the more important diagnostic signs of the disease, which we feel are important enough to reproduce: 1. Pain on pressure in the intra-scapular space, more rarely similar sensitiveness lower down the spinal column. 2. In general a feeling of excessive warmth. 3. Lethargy of mind and body. 4. Amblyopia and asthenopia. 5. Excessive debility. 6. Tendency to copious perspiration. 7. Presence of frequent dry, tickling cough. 8. Dyspnoea and palpitation of the heart, the sounds meanwhile being normal or nearly so. 9. Intolerance to the direct rays of the sun. 10. Wrinkled, shiny, horny skin, etc. 11. Nails ill-nourished, stumpy and short, etc. 12. Spongy gums, easily excited to bleeding. The author acknowledges the hopelessness of treatment, but suggests nothing in the way of amelioration.

BICYCLE RIDING AS A CAUSE OF STRICTURE OF URETHRA.—The "wheel" has become such a fad that any consideration of its possibilities for evil is timely. Dr. William Warren Townsend, in the *New York Medical Journal* of February 22, 1896, claims that bicycle riding with the saddle which is sold with most wheels causes disease of the prostate and the urethra severe in proportion to the amount ridden and the relation of the buttocks and perineum of the rider to the saddle.

He justly calls attention to the fact that the prostate is covered in the perineum only by the fascia, fat, skin and rectum; that the latter, when loaded with hardened fecal masses, can only add to the trouble. Hence, the prostate is fully exposed to the concussions inflicted by saddles which fit the perineum, and upon which rests only a small portion of the buttocks.

Dr. Townsend cites a case as an illustration. A patient was referred to him by a physician who had been treating him for an irritability of the urethra, principally the membranous. Endoscopic examination of the bladder was negative. The prostatic urethra presented the caput gallinaginis swollen, the mucous membrane livid, velvety and sensitive to pressure. The membranous portion was swollen, and exhibited a few small erosions, the bulbous contained numerous granulations. By rectal palpation and other physical and rational symptoms he made a diagnosis of chronic parenchymatous prostatitis, and granular urethritis, and looked for a cause. Venereal history was denied absolutely. Upon close questioning it was determined that patient rode a bicycle to excess. After a long ride he experienced inconveniently frequent micturition and dysuria. The doctor examined the saddle used by the patient, placing the latter in the position he usually assumed when

riding; it was seen that the entire weight of the body rested on the perineum, as the buttocks merely rested upon the back part of the saddle.

This was considered the cause of the prostatic trouble. The use of the wheel was interdicted, and the affection yielded readily under treatment.

A FRENCH (?) REMEDY.—A physician in Paris, it is said, once prescribed a nightly dose of an infusion of fig leaves for a patient who complained of dreams peopled by visions of naked women.—*Exchange*.

CONSENT TO OPERATE.—Legal questions interesting to operators are brought up by the *Pacific Medical Journal*, in discussing the question of consent to an operation. To legally justify a surgical operation upon a married woman, her consent and not that of her husband is necessary. A married woman can not be compelled to submit to an operation. If she voluntarily submit to its performance her consent will be presumed unless she was the victim of fraudulent misrepresentation. Even if death seems to have been caused by the operation, the surgeon is not liable if patient had consented to have the operation performed, and the latter was carefully and skilfully done, under the belief, after proper consideration, that it was proper. Any person who allows a surgical operation to be performed is presumed to have employed the surgeon for that particular purpose; it is to be presumed that the operation was carefully and skilfully performed in the absence of proof to the contrary.

CARCINOMA OF LARYNX.—At the meeting of January 17, 1896, of the Laryngological Society of Berlin, Dr. Gluck presented a patient upon whom he had performed, two weeks before, a total extirpation of the larynx for carcinoma. This was a man of 56 years, and he now wears an artificial larynx. In this case a preliminary section of the trachea was made, and the latter was sutured to the skin in order to avoid that the blood and the exudation from the wound should drain downward. In this manner primary union was obtained.

Dr. Fränkel claimed that while suture of the transversely divided trachea was a great advantage, it was not practicable in some cases; it was impossible of performance, for instance, in one of his cases in which, owing to kyphoscoliosis of the vertebral column, the cricoid cartilage was located immediately behind the sternum. It is better to avoid a communication between the trachea and the pharynx, for patients

operated in such a manner get to talk well and swallow without difficulty.

[Translated from *Revue Hebdomadaire de Laryngologie, d'Otologie et de Rhinologie*, of Bordeaux].

THREE NEW IODINE COMPOUNDS.—For many years odorless and non-toxic substitutes for iodoform have been sought. Notwithstanding the annoyances and dangers which may result from the use of the latter, it is yet considered the best of antiseptics by most surgeons.

By making iodine react on solutions of phenol-phtaleine, Messrs. A. Classen and W. Löb have succeeded in obtaining new combinations. These possess energetic cicatrizing and germicidal properties; can be used in the soluble or insoluble state, according to need; can be combined easily with bismuth, mercury and zinc; are without odor or other disagreeable features.

These combinations include nosophene, or tetra-iodo-phenol-phtaleine, anti-nosine and udoxine. NOSOPHENE is a light yellow powder, containing 61 per cent. of iodine, is odorless, tasteless, insoluble in water and acids, slightly soluble in alcohol, more soluble in ether and chloroform. It is slightly acid, and forms inoffensive salts with the heavy metals, mercury, bismuth, zinc, and with soda.

Like its salts, it is distinguished principally by its fixed combination with a large amount of iodine.

Numerous observations show that nosophene has no toxic properties.

Daily doses of forty centigrams produce no irritation of the digestive tract. It is not decomposed in the alimentary canal, and is all found in the fæces without the slightest trace of free iodine.

Its cicatrizing properties in the healing of wounds accord it a marked superiority over all the other healing agents, such as iodoform, dermatol, europen and aristol.

Possessing no irritating properties, it is suitable for antiseptic dressings; after three days wounds so treated have a healthy and physiological aspect. It acts with equal efficiency in the treatment of infected wounds, which heal rapidly in a few days. The slight exudation and swelling, or infiltration, which follows its use, shows conclusively, again, the superiority of nosophene over iodoform and dermatol. Its action on pathogenic micro-organisms has been clearly shown by Dr. Lieven; it is not due to the setting free of the iodine, but by its gradual solution of the alkaline salts of the culture media the microbes rapidly lose their vitality.

From a therapeutic standpoint nosophene finds its principal indications in the following cases: (*a*) In minor surgery as a dressing after cauterization, notably after those made with chromic acid or trichlor-acetic acid; as insufflations in acute rhinitis with hypersecretions, in which they cause a rapid stoppage of the swelling, the inflammation and the secretions; as a rule, in affections of the nose, the ear and the throat, on account of the absence of odor and any irritating effect; in ulcers and abscesses, on account of its rapid and powerful anti-suppurative action; finally in burns, where a film of it prevents secretion, and hastens the development of granulations.

(*b*) In major surgical operations, excellent results are obtained in resections of the rectum, operations on the breast, the extirpation of ganglia, and other surgical proceedings, about the mouth and the jaw.

It can be used instead of iodoform, whether it be in the form of powder, as a dressing for surgical or infectious wounds, or in the form of 3 per cent. gauze, or internally in doses of from five to forty centigrammes in gastro-intestinal catarrh; it possesses the precious advantage of being less toxic, less irritating. For internal use, eudoxine is preferred.

Medical authorities claim that nosophene is superior to iodoform in the treatment of extensive and deep wounds because it does not liberate iodine, and that its absorption is harmless. Besides it has a specific action, which has been perfectly demonstrated in infectious diseases like balano-posthitis, soft chancre, tuberculous ulcers, herpes progeneralis, and syphilitic manifestations.

Nosophene gauze has been employed with success in cases of caries, the removal of lipomata, in castration, as well as in a serious vesical operation performed by Dr. Franck.

Nosophene is about four times more bulky than iodoform, which renders it less costly. With sodium it forms a soluble salt, anti-nosine, and with bismuth, eudoxine.

ANTI-NOSINE is a blue powder, easily soluble in water. It is neither irritating nor toxic. In small quantities, it is eliminated by the urine without the latter showing traces of iodine.

When injected into the viens in large quantities, it produces a central paralysis, without, however, affecting either the heart, the lungs or the tissues.

Like iodoform, anti-nosine stops and prevents the diapedesis of leucocytes, on the line of the contused or inflamed tissues, without, however interfering in any manner with circulation: hence, anti-nosine diminishes secretion. It consti-

tutes the most powerful antiseptic known to-day, the only one, which arrests the development of the pyogenic micrococci, and of the bacilli of anthrax, and of diphtheria.

It is suitable on account of its liquid form for deep cavities, in which form of wounds it gives the same results as nosophene; it acts equally well, on account of its absence of odor and of toxic or irritating properties, in the affections of the nose, the ear, the mouth and the throat.

Irrigations of one-tenth of one per cent. to two-tenths of one per cent of anti-nosine have been employed with success in cystitis and vesical catarrh. Dr. Lieven has obtained equally good results with this powder, in syphilitic chancre and chancroids.

EUDOXINE is a reddish-brown powder, odorless and tasteless, insoluble in water. It is noted for its well marked healing properties, and for its absolute innocuity, like nosophene, when administered internally. Its use is particularly indicated in gastro-intestinal disorders. It does not disturb digestion, and does not provoke any secondary effect. In doses of one gram three times a day, it diminishes or suppresses chronic inflammations, accompanied by colics, flatulence, dyspepsia and diarrhœa.—Translated from the *Gazette Medicale de Liege*, February 20, 1896.

WE find in the *Brooklyn Medical Journal*, No. 3, Vol. X, an admirable charge which was delivered to the jury by Justice Augustus Van Wyck in a case for damages instituted against Dr. Emery, the head of the health department, and Dr. Boyden, one of the vaccinators of the department. The question was as to the responsibility of those gentlemen for the death of a child from vaccination in a public school.

The charge is so clear and covers the ground so thoroughly that we need not further comment upon the case after recording our commendation:

“*Gentlemen of the Jury*—Under our system of jurisprudence, it becomes my duty to instruct you in the rules of law that should govern and regulate you absolutely in the consideration of this case. That which I instruct you to be the law must be followed imperatively by you. On the other hand, every controverted question of fact in this case, which I deem proper to submit to the jury, is within your sole province, uninfluenced by me, to pass upon. Let me say right here that the function of a jury is the highest that can be assigned to the citizen. It is the basis of the order and obedience to law that prevails in civilized countries; and let me say that every case

should receive serious and intelligent consideration on the part of each and every one of the twelve jurors drawn from the panel to try that case.

“ This case has been ably and earnestly presented by the plaintiff’s counsel and by the defendant’s counsel in behalf of their respective clients; though at times it has seemed to me that they have shown a spirit of too much acrimony toward each other, notwithstanding that I know these counsel are personally friendly with each other.

“ In approaching the consideration of this case, let me say that you should banish from your mind any prejudice, sympathy, hostility or friendliness to one side or to the other. Courts are not organized for the purpose of indulging in sympathy or in charity, but for the purpose of doing even-handed and cold-blooded justice between parties, according to certain well-known rules of law and according to the facts, as you shall conscientiously determine them to exist from the evidence that has been offered before you.

“ Before the plaintiff can recover in this case against Dr. Boyden, he must establish, by a fair preponderance of evidence, that the death of this child was caused by the negligence of Dr. Boyden in the method of vaccinating her upon the occasion in question. Let me say to you that a fair preponderance of evidence does not mean the largest number of witnesses; it means evidence of such weight and character as carries conviction to your minds of the existence of the facts sought to be proved.

“ The law of negligence is a common-sense rule, is a failure to exercise that degree of care which persons of ordinary experience and prudence should, would, and ought to exercise under similar circumstances in a like case or in the same case. Therefore, it becomes your duty to determine what were the circumstances in this case, and say whether Dr. Boyden was guilty of negligence in the method adopted in vaccinating the child, and whether, by virtue of that negligence or omission of duty on his part, the death of this child was caused.

“ There has been a great deal of evidence offered in this case for the purpose of establishing certain branches of the case which have been taken from your consideration, and which it is proper for me to say to you that you should eliminate in considering the case.

“ In the first place there has been evidence offered, or intimations made from time to time, that vaccination itself was not efficacious as a preventive of small-pox; that the disease or diseases produced by vaccination were of greater injury and

harm to the human race than the dangers that ensue from small-pox. Let me say to you that that question is taken absolutely from your consideration. The efficiency of vaccination as a preventive of small-pox is not a question for you twelve gentlemen to pass upon or to decide, and whether it be efficacious or not is no evidence of negligence on the part of Dr. Boyden. The question whether bovine or humanized lymph should be used has also been spoken of by the doctors and referred to in the books. Let me tell you that that question also can not be taken into consideration in determining the alleged negligence of Dr. Boyden.

“Gentlemen, the history of this case has been interesting, I think to all, sad as it may be. Doubtless every human being that hears me sympathizes with those parents for the loss of their dear little one.

“In this age, the tendency of our population is to gather in our cities. By degrees the percentage of population residing in cities is increasing. The result is that health departments are required to preserve the masses collected in the cities from various kinds of contagion. The law of this State has recognized that the public schools may be the means of disseminating disease by means of children, going to school from their various homes, coming in contact with diseased scholars, especially in the case of small-pox. Hence there are certain provisions of the statutes of this State intended to prevent the dissemination of small-pox, through the scholars of the schools, throughout the large cities and thickly settled communities. In this city we have a health department also. Dr. Emery, one of the defendants in this case, was the head of that department at the time of this occurrence, when a considerable number of small-pox cases existed here, scattered throughout the city. Steps were taken for preventing the spread of the disease. The Board of Education, in conjunction with Dr. Emery, instituted a plan for the purpose of preventing its spread, by a universal vaccination in the city, as far as within their power lay. Dr. Boyden was appointed one of the vaccinators. Inspectors were sent to the various schools, in part execution of this design on the part of the Health Department and on the part of the Board of Education, for the purpose of inspecting the scholars and ascertaining those who were not free from the liabilities of small-pox, so far as vaccination was a preventive. Notice was given in this school that the scholars would be vaccinated unless they had been previously vaccinated at home before a certain time; and this little girl who died, then in her joy and good health, doubtless told her parents that she would either have to quit school, or be vac-

inated. Notwithstanding that they sent her to school, and she was vaccinated. Let me say in this connection that we are told by the parents that this child had been vaccinated about eight months before, so that they were not totally unaware of what vaccination was; they had cared for the child in that respect, and the child had been vaccinated. Let me say to you, as counsel on both sides have said to you, under the intimation of the ruling that I made before they began summing up, that there is no question in this case of forcible trespass upon this child, and that it was not wrongful for Dr. Boyden, under all circumstances in this case, to vaccinate that child.

“That brings us to really the only question that you are to pass upon, namely, whether Dr. Boyden exercised the care that a doctor should have exercised in the operation of vaccination to prevent any harm arising therefrom. A doctor holds himself out to the public as possessed of the ordinary skill of his profession. He is not held to the highest skill in his profession any more than lawyers are held to the highest skill and learning of the great leaders of the bar; but they are held to and hold themselves out as possessed of the ordinary skill incident to their profession, and the question for you to determine is, whether Dr. Boyden exercised in performing vaccination upon this child such a degree of skill, and if he did not, whether the wound of vaccination caused the death of this child. The only question for you to determine with regard to that is this: The plaintiff in this case contends that the arm should have been washed and that an antiseptic should have been applied at the time of vaccination. Is that so? Did ordinary care on the part of the physician dictate or demand that? That is a question of fact for you to determine. You are to determine it upon the evidence. You heard the evidence of Dr. Meyer, who said that that was a proper practice. You heard the testimony of the other doctors, who said that it was not the usual practice; that the ordinary practice and skill of the profession did not demand that precaution, and that it was the usual way to vaccinate without the washing of the arm or the application of antiseptics, just as Dr. Boyden did vaccinate this child. That is a question of fact for you to determine, and you are to determine the further question whether Dr. Boyden’s failure to do that caused the death of this child.

“Now, let me say to you that Dr. Boyden used proper care in the selection of the vaccine matter. There is no proof here that is worthy of submitting to you that there was any negligence in procuring the special vaccine matter in question. It

was received by the Health Department from one of the chief manufacturers of the country. There is no proof that its reputation is not good; but the proof is that it was put up in the usual way, upon ivory points, and furthermore, that the Health Department made inquiries on that subject. There is no proof to submit to you that the vaccine matter was not carefully selected that was bought from the establishment that sold it; and if a tetanus bacillus happened to be on that point, and was injected by vaccination, and killed the child by producing tetanus, then this defendant would not be liable therefor. But if the tetanus bacillus found its way there by virtue of not washing the arm and not applying the antiseptic, and so killed the child, then it is for you to say whether the doctor exercised ordinary care; that is, whether any lack of ordinary care in the vaccination caused the death.

“Gentlemen of the jury, I think it is proper for me to caution you not to allow sympathy for the bereaved father and mother to influence you or to blind you as to any fact in this case. Nor should you allow yourselves to be influenced by any prejudice against the medical profession. Doctors are not insurers; they simply hold themselves out as possessed of the ordinary skill that their profession has attained, and to do what they can to help the ailing and sick mankind.

“Take this case and say, after careful, conscientious and intelligent consideration, did the negligence of Dr. Boyden, in the respects to which I have referred, cause the death of this child? If you determine that it did not, that ends the case, for the defendant is entitled to a verdict. On the other hand, if you find that the negligence of the defendant, Boyden, did cause the death and without any negligence on the part of the parent or custodian of this child, then the plaintiff will be entitled to a verdict, otherwise the defendant. If the plaintiff is entitled to recover, the law says that he is entitled to recover such a sum as you may deem a fair and just compensation for the pecuniary injuries inflicted upon the father by the death of his child. There is no mathematical formula by which you can determine what that sum is; it is left to your sound discretion, taking into consideration the age of the child and its prospective pecuniary benefit to the father, excluding anything like compensation for the anguish of the father or mother for the death of his loved one or of her loved one. Your verdict must be confined, if you reach the question of damages, to a sum which will be a just and fair compensation for the pecuniary injury inflicted upon the father by virtue of the death of his child.

“Take this case and do justice—calm, deliberate, conscien-

tious and intelligent justice, according to the law as I have given it to you, and according to the facts as you shall find them to be from the evidence."

A NATIONAL DEGREE IN MEDICINE.—A government medical board, upon whose examination alone can licenses to practise be granted, is perhaps the only means by which in the United States the increasing plethora of medical colleges and graduates can be relieved. It is only through national legislation that the medical colleges in the United States, or in fact in any other country, can be forced to adopt a uniformly high standard of medical education. Such a standard will certainly not be attained by the ununited and non-coöperative methods now pursued by the several medical schools of this country.

It can not be expected that Congress will ever take from the several States of the Union the right or power to regulate the licensing of physicians and surgeons; but national legislation can provide for a government medical and surgical examining board that could examine all applicants and to those who pass the examination confer a special degree with some proper title, such as "Fellow in Medicine and Surgery, United States of America." In order to maintain a high standard of requirements for passing this examination and keep this examining body free from political influences, a controlling majority of the members of this board should be selected from the medical staff of the United States Army and Navy. A degree from this board should be accepted as sufficient evidence of qualification or fitness for admission to medical positions in the Army or Navy. For the convenience of applicants in the several States, this examining board could periodically hold meetings in each State or district of the Union.

This government board having been formed for the purpose of examining applicants as to their qualifications to practise medicine and surgery and for the purpose of conferring a degree or giving a governmental recognition of that qualification, the several States of the Union would then have a uniform standard upon which they could license physicians to practise, and each State could through its Legislature provide that any person not already licensed to practise medicine and surgery in that State must first present a degree from the national board of examiners before he can obtain a license, the applicant's license then to be granted regardless of what medical college he has ever attended or whether he has or has not ever attended a medical college. By this plan the granting and the revocation of licenses to practise would still be reserved to each State, the governmental standard of qualification being the only one upon

which licenses would be granted. With such a national examining board in existence, but a short period of time would elapse before all States and territories would license only upon certificates of qualification issued by this board or else permit to practise only those who could register a degree from this board.—*C. E. Farnum, M. D., in The Journal of the American Medical Association, Vol. XXVI, No. 5, p. 209.*

BODY SNATCHING.—Something else for those who believe we are worse off than every one else, and who will not look on the good side of things (we can scarcely call it the *bright side*). The janitor of the Medical Department of Worcester University, in Ohio, was arrested not long ago, after a stolen body had been recognized in the anatomical rooms of that college. He was charged with body-snatching, and, on February 22, a suit for damages was entered against three of the faculty of the same school, in this case. The latter are Drs. C. B. Parker, Mr. Rosenwasser and C. E. Cotton.

As the *Cleveland Journal of Medicine* states, “this case illustrates well the result of the faulty laws in regard to the obtaining of bodies by the medical colleges, which are in force in this State.”

EFFECTS OF GRIPPE ON FEMALE GENITAL ORGANS.—Statistics published by Dr. R. Miller, of Munich, include 157 cases of influenza. Of this number 21 were pregnant, of which 17 were confined prematurely. Of the remaining 136, all but 3 suffered from either metrorrhagia, menorrhagia, or other disorders due to an aggravation of pre-existing affections of the genital organs.

The author states that in all the parturient women lochia of a bloody character announced the outset of labor. His opinion is that these lochia give evidence of a hæmorrhagic metritis, and that the latter is what leads to miscarriage.—*Centralblatt für Gynæc., No. 49.*

A CONSERVATIVE TUBAL OPERATION.—Gersung reports the case of a woman who, though five years married, had never borne any children and who consulted him for a tumor of the size of a child's head. The tumor was determined to be a tubo-ovary cyst of the left side, which he extirpated. In exploring the right annexa he found that while the ovary was perfectly normal, the Fallopian tube was enlarged at its extremity, the swelling being of the size of a walnut. There were no traces of any previous peritonitis, and the uterus was, in addition, found to be healthy. Owing to this, the operation

simply opened the sac, out of which only blood came, and finding the mucous membrane in good condition, he conceived the idea of including the ovary in this open sac; he held it in place by means of a few sutures.

The patient left the hospital on April 30, 1895, three weeks after the operation. A little over a month after, in the beginning of June, she menstruated again for the first time and she had her monthlies in July and in August. After this menstruation ceased, and, by November 25, Gersung was able to diagnose a pregnancy in the fourth month; enlargement of the breasts, a spherical uterus as large as an orange, softness and shortening of the cervix. His patient was otherwise enjoying the best of health.—*Centralblatt für Chirurg.*, No. 2, 1896.

BATHS IN CEREBRO-SPINAL MENINGITIS.—Dr. Woroschilsky experimented in two cases in order to determine the influence of baths at 32 deg. centigrade (about 90 deg. Fahrenheit) after the method of Anfrecht, in cerebro-spinal meningitis.

In both cases the baths were commenced six or eight days after the beginning of the attack and were kept up ten minutes each time. They strengthened the heart's action, lowered the pulse, diminished the cerebral pains as well as those of the spine, caused the disappearance of albumen from the urine, and in a few days brought down the temperature from 40 (104) deg. to 37 (98 3-5 F.) deg.—*Wiener Klin. Wochen.*

SEMINAL EMISSIONS.—In the course of an interesting paper on "The Treatment of Seminal Emissions," in the February number of the *American Journal of Surgery and Gynecology*. Dr. E. Lanphear states that nocturnal emissions occurring oftener than ten days are indicative of some pathological condition requiring treatment; seminal discharges taking place in daytime, the patient being awake, are always of serious import. He considers true spermatorrhœa as very rare.

After discussing the symptoms and usual history of such cases, the doctor makes the following important statement: "The cause of impotency, of abnormal seminal emissions and of premature ejaculations is in most cases an intense hyperæsthesia of the deep urethra." This naturally suggests that the line of treatment must be directed to the latter condition and leads the author to claim that the local treatment is of greater importance than the internal. He recommends the use of sounds, instillations of nitrate of silver to the irritable spot with an Ultzmann, or better, a Guyon syringe; also suggests that it is absolutely necessary that the solution should reach the mouths of the ejaculatory ducts. Galvanism and tonics are also recommended.

THE INFECTED SCRATCH AND ITS RELATION TO IMPETIGO AND ECTHYMA.—The infected scratch is most frequently met with among the patients seeking relief in public institutions, particularly in the dispensaries.

It is characterized by the presence of a number of disseminated lesions of different size, leaving either a pustule—that is a more or less tense elevation of the corneous layer of the epidermis filled with pus—or a dark yellow, brown or blackish thin crust, or exhibiting a moist surface covered with pus. The pustules are not of a regular shape, sometimes round or oval, often with irregular peripheral indentations; they are usually considerably raised above the skin, tent or globe-shaped without a central depression. They do not show any regularity in their distribution, are not symmetrically arranged or formed into groups, but usually discrete, sometimes arranged in chains. Under the crusts, in some instances, a slight loss of substance can be observed, extending partly in the superficial layers of the cutis itself, and characterized by a certain infiltration of the basis.

In adults the lesions are usually seen on the lower extremities, mostly below the knees, around the ankles, less regularly on the arms, around the wrists, and in the face. Most of the adult patients are males, almost always of unclean habits. In elder children the lesions are mostly found on the face, on the hands, and lower parts of the arms. In small children, while the face is somewhat affected in almost all instances, the pustules are distributed all over the body—hands, buttocks and lower extremities being favorite seats. The lesions themselves do not itch, but may cause pain by rubbing against the clothes, etc.

Adult patients invariably state that they scratched, without assigning or presenting any particular cause for the itching; that the affected spots bled, then formed dry crusts, and soon after yellow blisters and crusts.

In children, a history of scratching will always be given. Examination of the patients, which on the first line has to determine whether pediculosis corporis, scabies and other parasitic, urticaria and other itching skin diseases can be excluded, easily confirms the history; scratch marks of various intensity are detected without difficulty, and often the lesions can be observed in their various stages of development—longitudinal dry red marks, then shallow furrows, then single eroded spots of the size of a pin's head or a hempseed, bearing a thin crust; then a small area of raised epidermis with yellow contents, and, gradually extending in height and width, the mature pustule; then the dried up, flat crust, which may have

been removed by mechanical irritation, but nowhere and at no time can vesicles or bullæ with serous or sero-purulent contents be found.

After the investigations of several French authors, and particularly after the clinical and experimental researches of M. Bockhart, there can be no doubt that suppuration in such cases is due to the infection with pus-producing cocci, in the majority with the *staphylococcus pyogenes aureus* or *albus*, or both. The almost universal distribution of these microbes easily accounts for the frequency of such infections. It is not necessary now to enter into the question of how the infection takes place and what are its immediate effects on the tissues.

A name which naturally would suggest itself [for this condition] is that of *impetigo*. If it ever had a definite meaning, it signifies a pustule—a circumscribed elevation of the corneous layer of the epidermis by an accumulation of fluid contents which are fluid from the beginning.

If the infected scratch is not a real impetigo Duhring, nor an eczema, nor pediculosis, nor pruritis, I can not see that it has any legitimate standing among the diseases contained in the official list.

It could easily be recognized if a wider latitude were given to Duhring's impetigo by the admission, besides the spontaneous idiopathic, of the accidental or traumatic impetigo of Bockhart, under the name of *impetigo simplex traumatica*. I am, however, by no means partial to the term impetigo, but should be only too glad to have it entirely abolished, together with others of the old Greek meaningless or misleading names. I do not wish to go into the construction of new names myself, but several times I have come across a term in the periodic literature which I should be glad to see generally accepted for the conditions primarily caused by the infection with pyogenic cocci, namely, pyoderma. It would be an easy matter to differentiate between impetigo Duhring and the infected scratch as *pyoderma circumscripta superficialis idiopathica* and *traumatica*.—Dr. H. G. Klotz, *Journal Cutaneous and Genito-Urinary Diseases*, for February, 1896.

ACUTE SUPPURATION OF THE MIDDLE EAR.—In the treatment of acute inflammation of the middle ear a prominent place is usually assigned to iodoform and boracic acid. But, while in many cases their use proved satisfactory, there are some persons who are highly susceptible to these remedies and are unfavorably affected by them. Thus Prof. S. S. Bishop, of Chicago, (*Medical Standard*, December, 1895) reports a case

of operation for acute mastoiditis in which a dressing of boracic acid was the source of intense suffering, preventing sleep, while on substituting aristol this trouble at once ceased. That the boracic acid was directly responsible for the mischief was demonstrated by alternating between the two remedies, the application of aristol being always followed by instant relief. This experience led the author to the use of this drug in acute suppurative inflammation of the middle ear, and after an extensive trial and study of its effects in both private and hospital practice, he has come to depend upon it exclusively. He states that it is undoubtedly the best cicatrisant at our command, and appears to possess an anæsthetic property to some degree. It does not block up passages and dam back discharges, is not easily dislodged or washed off the ulcerating surfaces. Its odor is faint and not offensive, and in the hundreds of cases in which Dr. Bishop has employed aristol he has never known it to irritate or produce pain. The best way in which to apply it is with the small pocket powder blower. This carries a current of the fine powder along passageways into minute cavities, and leaves a complete coating of the surfaces without packing the parts. In cases where the discharge does not show a decided tendency to dry up rapidly, it is a good plan to first cover the surface with aristol and then blow in a light covering over this with the boracic acid, or it is sometimes preferable to resort to the latter alone, or to alternate between the two—first the aristol treatment, then the acid. But when the part once stays dry, it is best to leave it alone entirely for about a week or even longer.

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[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 tenth day of the month preceding that in which they are expected to appear. A complimentary edition of fifty 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.]

EXTRACTION OF A CHIP OF STEEL FROM THE VITREOUS WITH THE ELECTRO-MAGNET.*

BY B. A. POPE, B. S., M. D., OCULIST TO THE CHARITY HOSPITAL, ASSISTANT SURGEON
EYE, EAR, NOSE AND THROAT HOSPITAL.

The subject of wounds of the eye is one of considerable difficulty on account of our lack of definite knowledge as to the true pathological anatomy of sympathetic ophthalmia.

No one has yet been able to formulate a working hypothesis that can always be relied on.

No one of the three principal hypotheses is definite enough to enable us to say whether a given wound will produce sympathetic trouble in the other eye or not.

Only a few points are definite. One is that wounds not in the ciliary region are not likely to cause disease of the other eye. This is not, however, an absolute rule. The second point is that wounds in the ciliary region are always dangerous, even when not infected.

Here again, however, we are confronted by the fact that many eyes with such wounds go a whole lifetime with useful vision, and without injury to the other eye.

The third point is that foreign bodies in the eye add immensely to the danger, even when small and apparently aseptic.

* Read before the *Orleans Parish Medical Society*, March 14, 1896.

The oculist has no safe rule to follow, unless he advocates enucleation in every dangerous case.

Such a procedure is repugnant to me, because in this way many good eyes are needlessly sacrificed.

Of course if the patient lives at a distance from any oculist, and especially if he be stupid and unable to appreciate his danger, I would say enucleate at once. But with an intelligent patient, living in a city, with an eye only slightly injured, I would advise conservative treatment.

There being no universal rule to follow, the physician is thrown on his own resources, and must use his own judgment in each particular case. Mr. R. M., a young mechanic in "Murphy's Foundry," was struck in the eye by a small piece of steel chipped from a cold chisel in the hands of another workman. After consulting several oculists in this city, each of whom advised enucleation, he was finally referred to me by Dr. Ernest Lewis and Dr. Ferguson.

I found a clean incised wound in the ciliary region, just in front of the insertion of the external rectus muscle of the left eye.

With the ophthalmoscope the body could be plainly seen as a shining metallic object about two lines behind, and to the lower and outer side of the lens.

As seen in the eye, the object looked at least four times as large as it was subsequently found to be.

There was moderate vitreous opacity around the steel, and the body moved freely in a small orbit.

The scleral wound was about three lines in length and about healed. Vision was reduced to $\frac{20}{L}$, but still fairly good.

No pain and no evidences of irritation were present.

Taking into account the youth of the patient, the comparatively good vision, the freedom from infection and the smallness of the wound, I determined to remove the steel, if possible.

I also got the consent of the patient to remove the eye in case I failed to get out the foreign body.

I explained to the patient that the eye was not out of danger, even if the steel was removed, and that all that the other

doctors had told him of the dangers of such an eye was true, and that he would always have to be on the lookout for such dangers.

He was firm in his desire to save the eye, however, and promised to be on the lookout for any symptoms—on the appearance of which he was willing to have the eye removed.

Not having sufficiently powerful electrical apparatus to be sure of successful removal, Prof. Brown Ayres kindly placed at my disposal the necessary electrical instruments. A solenoid with a specially designed soft iron core was used as an electro-magnet, the current being obtained from the large Siemens & Halske dynamo of Tulane University.

The soft iron core of the magnet was so shaped at the end as to give the greatest magnetic attraction possible in a small blade.

This was necessary, because these foreign bodies often have to be drawn through obstructions.

The solenoid and core were wrapped in a damp aseptic towel, and the end to be introduced was first made red-hot in a Bunsen flame.

The patient was laid on a table, the conjunctiva anæsthetized with cocaine and made aseptic.

No speculum was used, in order to avoid loss of vitreous from the pressure of this instrument.

Professor Ayres held open the lids. An incision was made with a cataract knife between the external and inferior recti muscles, beginning just behind the ciliary body and extending back about four lines.

No vitreous presented.

The magnet was carefully introduced about one-eighth of an inch, the current turned, and the steel could be seen by Professor Anderson (looking through the pupil) to at once spring to the end of the magnet and adhere there.

On withdrawing the magnet the steel came with it.

A little vitreous also came out, but not nearly so much as we had expected.

One suture was placed in the conjunctiva to hold the lips of the scleral wound together, the eye bandaged and the patient told to keep quiet at home. The current used—that is,

the part that passed through the solenoid, was 20 ampères at 20 volts, banks of lamps having been used to reduce it and avoid heating effects. When the eye was examined the following day there was some local œdema over the new wound, but the patient did not complain of pain. The eye was kept well atropinized and the patient put on increasing doses of potassium iodide internally. In two days the conjunctival suture was removed.

On examination with the ophthalmoscope there was marked congestion of the retina (the veins being tortuous), and some increase of the vitreous opacity. The iodide was pushed until the patient was taking sixty grains three times a day. Gradually all symptoms subsided, even vitreous opacity becoming much less marked.

The atropine was then stopped.

At present, more than two months after the operation, the patient has $\frac{20}{XL}$ vision, can read with the eye, and there are no signs of inflammation. There is a little vitreous opacity, of course, but not enough to seriously impair the usefulness of the organ.

I see no reason to fear that the eye will not remain useful, or that it will injure the other eye, but I will certainly watch it closely for any unfavorable change in the future.

In conclusion I will only add that such a piece of steel could not have been grasped by forceps.

TRACHEOTOMY AS A RESOURCE IN COLLAPSE DURING GENERAL ANÆSTHESIA. *

By S. P. DELAUP, B. S., M. D., VISITING SURGEON TO CHARITY HOSPITAL.

In a recent issue of the *Gazette Hébdomadaire de Médecine et de Chirurgie*, there appeared a most interesting article on the action of tracheotomy in collapse during anæsthesia, by Dr. Vanverts, of Paris. The author so thoroughly demonstrated the practicability and efficiency of the operation that I thought it worth while to present his investigations to this society.

Medical literature contains but seven reported cases where

* Read before the Orleans Parish Medical Society, February 22, 1896.

tracheotomy was employed to overcome the toxæmia from anæsthesia. Before discussing this subject, it is proper, I think, to begin with a synopsis of these reported cases.

CASE I. Howse* performed tracheotomy on a patient anæsthetized with chloroform, for cessation of respiration, due to spasm of the glottis. Artificial respiration had been practised without result, as air could not be made to enter the lungs. Quite a quantity of blood which had penetrated into the trachea, before the canula had been securely fixed, was removed by aspiration. Four days later the patient was again anæsthetized, this time with ether, and the same accident, spasm of the glottis, followed; but the tracheal wound being still open offered a free passage for air. Howse mentioned another case where he had saved his patient's life by a speedy tracheotomy, but he gave no particulars of that case.

CASE II. Thiéry† was called to perform the same operation in a case of chloroform narcosis during an ovariectomy. Forty-seven minutes after the operation was begun, respiration suddenly became labored, and the patient showed signs of asphyxia. These symptoms being caused by the tongue falling backward into the pharynx, the tongue was drawn out of the mouth. Still asphyxia became complete and the pulse disappeared. Artificial respiration by elevation of the arms and thoracic compression, kept up for fifteen minutes, produced no effect. From time to time air was insufflated from mouth to mouth, but it passed into the digestive tract and incompletely filled the lungs. At forty-seven minutes past nine o'clock, tracheotomy was performed, along with direct insufflation and expiratory compression of the thorax. At forty-five minutes past ten artificial respiration with a special apparatus was resorted to. Finally, at twenty-eight minutes past eleven the first contraction of the diaphragm was felt.

CASE III. Ten minutes after the cessation of a normal etherization a patient of Dr. Poncet‡ had a syncope due to the sitting position wherein she had been placed by oversight. In spite of the long continued use of artificial respiration and vari-

* HOWSE, *British Medical Journal*, 1878, VOL. II, p. 642.

† THIÉRY, *Gazette Médicale de Paris*, 1887, p. 423.

‡ PONCET, *Lyon Medical*, January 13, 1895.

ous stimulants, cyanosis became more and more pronounced. Dr. Poncet, suspecting that asphyxia was kept up by mucus obstructing the larynx and trachea, performed tracheotomy and introduced the canula into the trachea. Artificial respiration was resumed, and at regular intervals air was insufflated into the mouth. An hour and a quarter after the inception of the narcosis a few respiratory movements were observed, and then normal respiration set in.

CASE IV. * Following symptoms of asphyxia which had appeared in the course of etherization in a child, the usual measures for resuscitation having proven ineffectual, Dr. Poncet hurriedly performed tracheotomy, while artificial respiration was systematically continued. A few moments later, three minutes at the most, some weak respiratory movements were produced, and the child was saved.

CASE V. † During an anæsthesia for the ablation of a carcinoma of the superior maxillary bone, respiration became affected, the diaphragm contracted violently, gasping supervened, and the inspiratory efforts prevented air from penetrating into the lungs. Neither the chloroform nor the retraction of the tongue could be incriminated. The cause of the asphyxia was due to obstruction of the larynx and trachea by the blood which had flowed abundantly from the wound. Confronted with the futility of the various methods employed, tracheotomy was resorted to. By suction with the mouth on a level with the canula many clots were drawn out, and the bronchi became pervious. Insufflation was continued, and in less than five minutes spontaneous respiration was re-established.

CASE VI. ‡ In order to overcome the symptoms of suffocation of four days' duration, and due to an œdema of the glottis (laryngeal tuberculosis), Dr. Thiéry decided to introduce a tracheal canula, and had the patient chloroformed for that purpose. From the first whiffs of chloroform a threatening cyanosis supervened, and respiration ceased completely. The tracheal incision was made with difficulty, and insufflation was continued for about ten minutes, after which all was over.

*PONCET, *Lyon Medical*, January 13, 1895, p. 38.

†THIÉRY, *Gazette des Hôpitaux*, 1895, p. 174.

‡THIÉRY, *Gazette des Hôpitaux*, 1895, p. 1118.

CASE VII. * A child, five years old, was suffering from a suppurating adenitis, following acute pharyngitis. The tumor was incised, evacuated, and drained. Just as the operation was being completed the child suddenly ceased to breathe. Artificial respiration, together with rythmical traction of the tongue, was immediately practised. In spite of these measures, long continued, and others, such as flagellation, injection of ether, etc., respiration could not be induced. The patient was pulseless, with dilated pupils. Considering the inefficiency of these various measures, the surgeon decided to perform tracheotomy. This was done about fifteen or twenty minutes after the beginning of narcosis. After a few movements at artificial respiration the child breathed normally and was revived.

CASE VIII. I am indebted to Dr. H. B. Gessner for the history of this case. A white man, about 70 years of age, was operated on December 22, 1895, by Dr. W. S. Bickham for a neoplasm of the penis. The anæsthetic used was ether mainly, though a small quantity of chloroform was also used.

The fatal symptoms were failure of respiration and an imperceptible pulse. Artificial respiration was practised without benefit. Palpation showed the epiglottis lying relaxed over the larynx. Tracheotomized with immediate improvement under artificial respiration. The operation was completed under cocaine analgia.

CASE IX. The history of this case was furnished me by Dr. Wm. Parker. A man 60 years of age, a syphilitic and drunkard, was admitted into the Charity Hospital in 1892. He had a urethral stricture, with urinary infiltration. The perineum, penis and scrotum were gangrenous. Chloroform was the anæsthetic employed. Tracheotomy was performed without effect. The patient died. It is proper to state that in this case tracheotomy was resorted to long after the patient had given evidence of life.

Such is a short abstract of the seven only cases recorded to date of successful tracheotomy in collapse during anæsthesia.

Dr. Bickham's case brings the total number of cases to eight. These, for practical purposes, can be divided into two very distinct classes. In the first class can be placed those

cases in which there exists an obstruction in the air passages, such as spasm or œdema of the glottis, blood in the respiratory passages, etc., preventing completely, or nearly completely, and in a permanent manner, the entrance of air.

Cases 1, 5, 6 and 8 belong to this class. In the second can be placed those cases in which no obstruction exists (syncope, reflex or toxic apnœa). It must be noticed, however, that in several cases of the second class, the primary cause of narcosis was perhaps, at times, due to the falling of the tongue into the pharynx, that is, an obstruction of the air passages, but this can be easily relieved; it is surely not to overcome this obstruction to the ingress of air that tracheotomy could prove beneficial. According to Poncet and Thiéry, tracheotomy acts in a mechanical way. Especially in cases where there is more or less complete obstruction of the upper air passages, which prevents the ingress of air (constriction of the jaws, falling of the base of the tongue on the epiglottis, spasm or œdema of the glottis, etc). Tracheotomy acts, then, by allowing a free access of air to the lungs. This is indeed the ordinary indication for tracheotomy, an indication which can be met with during anæsthesia.

Aside from these observations of toxæmia which seem to be necessarily fatal, and which arise from the anæsthesia itself, we must also consider those cases where, in a complete surgical anæsthetization, the patient has been brought back to life. In such cases the anæsthesia is the exciting cause of the accidents, but the field was prepared for it (lesions of the larynx, compression, deformity of the trachea, etc.). Let it be said here that in the cases where the trachea is obstructed by blood flowing from the upper air passages (in operations on the mouth, pharynx, larynx), or by an accumulation of mucus, tracheotomy, which, perhaps, could be replaced by intubation of the larynx, is performed for the purpose of freeing the trachea of the fluid it contains, by the aid of aspiration, practised on a level with the canula, and thoracic compression. Except in those cases of obstructive narcosis, tracheotomy can not be said to act mechanically. When the air passages are free, artificial respiration, by raising and lowering the arms, is sufficient to fill the lungs with quite a quantity of air, and usually proves effective.

Air surely enters more easily through a tracheal canula than through the upper air passages, which are long and irregular; but this is of so little consequence that it can be overlooked in practice. The efficiency of tracheotomy in the cases included within the second class can not be attributed to a mechanical action. Reflex action is the only explanation. It is quite plausible to suppose that this operation, bearing on a region abundantly supplied with nerves, can, by reflex action, excite the cardiac and respiratory centres. The tracheal incision, the pressure of the canula, which acts as a foreign body, surely exercise the same effect as the rythmical tractions of the tongue. The trachea is sensitive to the gush of air, which, cold, or at least untempered by its passage through the nasal cavities or the pharynx, can surely act in the same manner, that is, induce respiration by reflex action.

In CASE II, spontaneous respiration being re-established only one hour after the tracheotomy, it may be questioned whether, the air passages being permeable, artificial respiration continued simply without tracheotomy, or insufflation would not have had the same result. The same may be said of CASE III. In CASE IV, however, it is indeed by reflex action that tracheotomy seemed to have acted. Still there is room for doubt in this case as in the preceding one, as the trachea was filled with mucus.

In CASE VII, two points are forcibly brought out. First, the absolute inefficacy of long continued (20 minutes) artificial respiration in normal conditions (unobstructed air passages); second, the efficacy, somewhat sudden, of artificial respiration as soon as the trachea was incised, and the inability to explain this by mechanical effect, since air penetrated as easily after as before tracheotomy. It is, therefore, to reflex action that it must be attributed.

This fact is of considerable importance. It clearly demonstrates what can be expected from tracheotomy, followed, it is unnecessary to add, by artificial respiration, in cases where all other measures of resuscitation have failed. This operation should be resorted to not only in cases of obstruction of the air passages, but in those cases where the air passages are pervious, in order to induce respiration by reflex action.

In conclusion, I quote the words of M. Poncet: "In a general anæsthesia with threatening death, tracheotomy may be resorted to before cessation of respiration and circulation. It is a measure of the greatest importance, on which the surgeon can rely, and to which he must have recourse after all other measures have failed."

A CASE OF DOUBLE CASTRATION FOR HYPERTROPHIED PROSTATE.

BY EDMOND SOUCHON, M. D., PROFESSOR OF ANATOMY AND CLINICAL SURGERY
TULANE UNIVERSITY, NEW ORLEANS, LA.

HENRY V—, male, white, aged 63 years. Enjoyed good health until four years ago, when he found one morning upon waking that he could not pass his urine. A physician was called, who attempted to catheterize him, but failed, and the bladder was aspirated. He was treated by the physician for some time, but he finally came to the Charity Hospital on October 27, 1891, in a desperate condition.

Suprapubic cystotomy was at once performed by the writer. The middle lobe of the prostate was found to be much hypertrophied, producing the obstruction to urination. This was excised and the bladder was drained through the suprapubic opening. He remained in the hospital for some time (until December 7, 1891), and the opening closed, but the patient had to use the catheter to thoroughly empty his bladder and to cleanse it.

The patient re-entered the hospital on February 23, 1895, not being able to pass the catheter any more, and passing his urine through a small urinary fistula, which had remained in the scar of the suprapubic opening.

Examination of the prostate by the rectum showed it to be very large, about the size of half a small orange, not very hard to the touch.

Double castration was proposed to the patient as a possible means of relief and cure, and he readily assented to the operation, saying that the testicles were of "no further use" to him.

The operation was performed on March 4, 1895. The vaginal tunic was dissected out without being opened. The vas

deferens was separated from the cord and cut. Then the cord was tied with double silk ligature so as not to have too great thickness of tissue in one single ligature. The cord was severed. A small drainage tube was inserted in each side and the edges were stitched with catgut.

Primary union took place.

On the fourth day after the operation the patient passed a very small amount of urine through the urethra upon closing the the suprapubic fistula with the finger. This he continued to do slowly, but could not empty his bladder thoroughly. At the end of a week and a half appreciable reduction in size of the prostate could be detected. It was also softer.

The patient left the hospital March 19, in a condition not as satisfactory as could have been wished. On April 3, he called at my office and I made him pass his water before me. He passed it in a stream as large as a crow quill, and in a continuous stream.

On April 13, he passed a stream as large as an ordinary goose quill, but he still used the catheter to thoroughly empty the bladder of residual urine and to cleanse it, by injecting a solution of boracic acid.

On April 15, the patient died almost suddenly of superacute pulmonary trouble.

I am indebted to my faithful ward student, Mr. W. A. Carnes, for many of these data.

TRUE SYCOSIS, PARASITIC SYCOSIS AND THE RINGWORMS. A CLINICAL LECTURE.

BY ISADORE DYER, PH. B. (YALE), M. D., PROFESSOR OF DERMATOLOGY, NEW ORLEANS POLYCLINIC; LECTURER AND CLINICAL INSTRUCTOR ON DERMATOLOGY, MEDICAL DEPARTMENT, TULANE UNIVERSITY; DERMATOLOGIST TO CHARITY HOSPITAL, ETC.

GENTLEMEN—This is a case of sycosis. It is an inflammatory disease, the cause of which is not yet known, but it is supposed to be due to some artificial irritation and a subsequent pus infection.

The disease consists, essentially, in an inflammation of the hair follicles, which become pustular subsequently. This

man has been in this condition for nine months; has recovered two or three times, but has persistently relapsed.

The eruption begins with an inflammatory area resembling a beginning boil, and on that the tiny pustules start which are found here. This case is a classical one on account of the distribution and arrangement of the eruption and the individual lesions themselves.

The disease is called sycosis on account of the resemblance to a fig. The Greek word from which the term sycosis is derived is *sukos*, meaning a fig.

The disease is a chronic one, continuing for weeks, months and even years; gets well under treatment and relapses after a shorter or longer period.

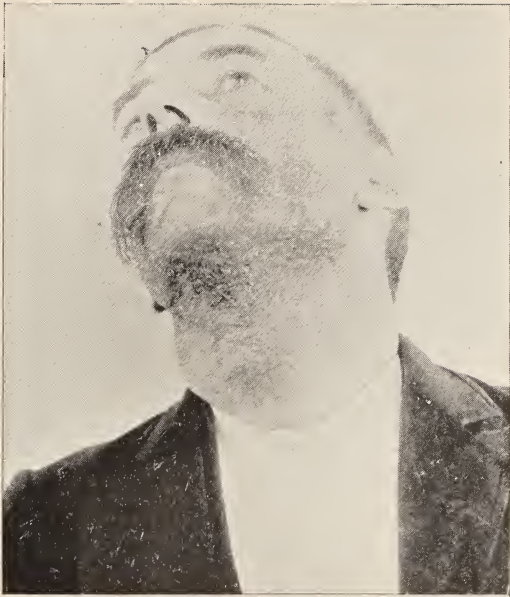
You see that, in the case before you, the eruption is distributed over the hairy portion of the face, involving only that part upon which the beard grows, the cheeks, chin and neck.

The term sycosis is applied, usually, only to the eruption as it affects the beard, although I have told you it is only really a folliculitis or an inflammation of the hair follicle, and, in that way, it may as well attack the scalp or any other hairy portion of the body.

The cause is not known, but the tendency of the disease is to spread from one part of the beard to the other, until it covers all of the hairy portion of the face. I have seen a case in which the backs of the hands were additionally affected, and in which the scalp was also attacked, the disease starting from the nape of the neck and extending up on the scalp itself, involving the hair follicles, causing an extensive infiltration and appearing as large pustules. Pus is found in every one of these lesions in the case before you. These are distinct results, whether the base of infection comes from behind or from outside sources. It is called sycosis non-parasitica, or true sycosis, to distinguish it from barber's itch. This, then, in other words, is a false barber's itch. Barber's itch is a variety of ringworm and belongs to the tinea family.

Sycosis, or true sycosis, is distinguished in its clinical features from the parasitic sycosis in the character of the eruption from the beginning to its finish.

Non-parasitic sycosis has many peculiarities which admit



CASE I.—True Sycosis.



CASE II.—Parasitic Sycosis, or Barber's Itch.

of no explanation just yet. When the patient seems almost well, an acute exacerbation occurs, and the whole region of the previous attack is covered with a fresh eruption. The symmetry of the eruption often suggests its dependence upon a general internal or reflex factor, which the frequent and almost periodic relapses would additionally argue. The pus, however, as a constant factor, and the usual cellulitis around and in the area of the eruption, fully account for the local element in the disease.

We are fortunate in having this second case on hand this morning to demonstrate the clinical distinctions between true sycosis and false sycosis or barber's itch, or, better still, *tinea barbæ*.

You see that this second patient presents on his face, several lesions, pustular in character, with a ring-like arrangement, each patch being annular, and all tending to spread at their edges, and to heal in the centers, while the margins of adjoining patches distinctly merge into each other, forming larger and serpiginous, or scalloped patches. The edges of the patches are inflamed, and made up of pustules, which examination shows to be in or around the hair follicle.

BARBER'S ITCH begins in scaling patches like these; begins, in other words, as ringworm does on any other part of the body. It begins in a small scaling patch, which, involving the horny layer of the epidermis, eventually touches the hair shaft and edges of the hair follicle.

These are both modifications of the horny layer, and as the parasite of this disease, the trichophyton, feeds upon this layer, it soon penetrates the hair follicle. The irritation resulting produces a necessitous inflammation, and the pustule results. Until the follicle is destroyed by this process the hair shaft can be well seen penetrating the centre of the pustule. The slightest traction will pull this hair, ready almost to fall out of itself.

Non-parasitic sycosis, on the other hand, begins as an inflamed spot, a papule suddenly develops, rapidly becoming pustular, and is exceedingly painful. Upon microscopic examination you will find the parasite in parasitic sycosis; you find the presence of pus only in true sycosis.

In eczema you find the presence of infiltration as well, indicating deep inflammation of the epidermis. The microscope determines the parasitic or non-parasitic nature of the disease, and that is essential to its treatment. In treating ringworm by parasiticides the indication is to use irritant applications. On the other hand, treatment of non-parasitic sycosis must be based on a different system. The indications are for a soothing antiseptic application. The treatment should be begun with the application of fomentation, hot cloths and warm poultices, to relieve the irritation, and that should be followed, until the pustules are removed, with the application of antiseptic ointments or oils. Perhaps the best of these is the oleate of mercury, in ointment of 10 to 20 per cent. strength.

RINGWORM is one of the vegetable parasitic diseases of the skin, and is referred with all of the vegetable parasitic diseases of the skin, to the family of the tinea. The botanical variety of tinea to which the ringworm belongs is known as the trichophyton, and the species is determined by the location affected, and by the size and method of development of its pores. Ringworm is known generically as trichophytosis or trichomycosis. *TINEA CIRCINATA*, or trichophytosis circinata, is the term applied to ringworm affecting the body, its species, corporis, cruris, etc., according to locality invaded. *TINEA TONSURANS* is the term applied to the variety which affects the scalp, and tinea barbæ to the variety attacking the beard. Sabaraud has separated some twenty odd species of the trichophyton, each having its distinct spores, with determined periods and methods of growth and development, some larger than others, and some with more vitality than others. Occurring on the body, ringworm begins in a small scaling patch, spreading at the edges in a circular or annular way, indefinitely. It spreads, involving new regions of the epidermis, until it may become general or universal even. The rubbing of the clothes may carry the seeds or spores from point to point, and so determine the general distribution. As the patch develops peripherally, it heals in the centre, forming the annular or ring-like patch, from which the vulgar name is derived. The spreading of the ringworm patch may be compared to the dropping of rain from the edges of an umbrella. The tricho-

phyton parasites are mushrooms, microscopic in character, but with the same shape and characteristics as the grosser species. If you can imagine a combination of hundreds, or thousands of these micro-organisms, like umbrellas, and dropping spores, you can appreciate the manner in which ringworm spreads.

The patch heals in the centre, because the parasite depends, for its food and development upon the horny layer of the epidermis. This is soon destroyed, and the parasite dies through lack of nourishment. At the death of the parasite, however, the horny layer is reformed, and this central portion may again be attacked by a fresh supply of spores from the well-fed peripheral colonies.

The treatment of ringworm of the body is comparatively simple. The parasite requires air for its growth. If this is excluded, the parasite will die. If the area affected is small, collodion, or adhesive plaster, well applied, will exclude the air sufficiently to let the parasite die. This method is not practicable when the disease is general, or involves large areas. Here, some parasiticide must be applied. Pyrogallic acid will answer the purpose, on the covered parts of the body. It should not be used where the light can strike, as the effect produced is disagreeable, for the light turns the skin black where the application has been made. The strength should be from 3 to 5 per cent., best applied in ointment.

Ringworm of the scalp is a disease almost confined to children, occurring quite early in life, and liable to occur up to the fifteenth or sixteenth year, or as long as there is exposure to contagion. The disease may occur in adults, but this is rare. Affecting the scalp, ringworm begins in the customary scaling patch, which, spreading, involves the hair shaft and destroys it in part or entirely. The patches vary in size from a silver dime to the size of the palm, or, finally, covering the whole of the scalp. The patches are covered with fine branny scales, and here and there is a tiny pustule, the site of an inflamed follicle. The hair is broken to within an eighth or a quarter of an inch of the skin, the result of the honeycombing by the parasite, and all the hairs lie in the same direction. The inflammation is not marked usually, assuming a dull, grayish

color, rather than one of acute inflammation. There is slight itching and little other subjective sensation. The clinical diagnosis is based upon the points which I have suggested—the broken hair, the scaling patch, the arrangement of the patch in rings, the appearance of a stubble-field and the occurrence of several rings, or patches. The microscope shows the spores and the parasite in the scales, the hair and the sheath.

The treatment of tinea capitis is a more difficult undertaking than that of the body. Stronger applications must be made and closer attention to the parasitic element paid. Perseverance is the chief element here and patience the next. Improvement is slow and often hard to determine. The disease may be nearly overcome when the evident symptoms would seem to contradict this. The microscope is of service here, periodical examinations of the hair showing the decrease in the number of the spores, etc. The treatment should be entered upon systematically. The scalp should be shaved and the patches epilated. Then the field is ready for routine and antiparasitic treatment. The tincture of iodine can now be applied to the individual patch. When the inflammation following this application is sufficiently abated, the regular treatment can be started. The oleate of mercury, in 10 to 50 per cent. ointment; the red and yellow oxides of mercury in ointment, 5 to 20 per cent. strength; sulphur in ointment; chrysarobin; losophan, and a variety of other medicaments may be used. The essential point to be remembered in the treatment of ring-worm of the scalp is that the time required is from six weeks to as many months, and the method should be logically persistent. Precaution should always be taken to prevent the spread of the disease. A child affected should be kept from school; the scalp so protected that the danger of contagion is reduced to a minimum. Muslin caps, daily changed for new ones, or tissue paper placed inside the hat and daily changed will serve here.

AMPUTATION AT THE HIP JOINT, WITH DIGITAL COMPRESSION
OF THE EXTERNAL ILIAC.

BY S. M. FORTIER, M. D., NEW ORLEANS, LA.

The anastomoses, in carrying on the collateral circulation, after the application of a ligature to the external iliac, are quite numerous; so much so that the weight of authority declares against the possibility of controlling hæmorrhage, in amputations at the upper third of the thigh, and of the hip-joint, either by compression or ligation of the external iliac or femoral. Treves speaks of the ligation of the femoral artery, either before or during the fashioning out of the flaps, and compression of the femoral or external iliac, but warns against the posterior hæmorrhage, which, in the adult, always follows, and very frequently occurs in the child.

Dr. Ed. Souchon, Professor of Anatomy and Clinical Surgery in the Tulane Medical College, while admitting the correctness of these views, insists that such cases deserve serious consideration, and demand a thorough investigation. In support of his statement, Dr. Souchon cites a case in which he had ligated the external iliac, for femoral aneurism, but upon opening the sac after having ligated the femoral artery in Hunter's canal, he still had to contend with hæmorrhage, necessitating the ligation of the superficial femoral. We should bear in mind that when we have to deal with aneurisms and neoplasms, the anastomatic branches carrying on the collateral circulation are very much increased in size, and therefore should expect hæmorrhage.

Among other methods which have been suggested for controlling bleeding, Treves mentions the Davy's lever for compression, through the rectum, of the common iliac.

I have notes of three cases, one in which the external iliac was ligated. This was for a railroad injury of the thigh of several days' standing. The patient's condition was extremely bad, gangrene of the skin and muscles of the thigh having set in.

Dr. W. S. Bickham, fearing secondary hæmorrhage if a ligature were applied to the femoral, decided upon ligation of the external iliac. Amputation at the hip joint was then performed without the loss of blood.

The other two cases came under my own observation.

The first one required an amputation at the middle third of thigh for railroad injuries to leg and thigh. After completing a circular incision to the bone, the constrictor slipped, but pressure upon the external iliac, with the immediate readjustment of the constrictor, was followed by no alarming results. This was in a male subject 35 years of age.

Before entering upon the discussion of the third case, which is the subject of my title, I will enumerate briefly some of the measures that have been recommended for controlling hæmorrhage in amputation of the hip-joint.

Foremost of these is that of WYETH, which consists in the application of an Esmarch tube high up, kept in position by transfixing the thigh on either side of the articulation with steel mattress needles or skewers.

THE ELASTIC BANDAGE; the figure of eight elastic bandages applied around the thigh and over the iliac crests, with transfixion of thigh by single needle, over the ends of which a rubber cord is passed.

AORTIC COMPRESSURE, by Lister's tourniquet, which was formerly practised to a considerable extent, but has been replaced by more modern methods.

FURNEAUX JOURDAN made an incision on the outer side of the thigh, as in operations for excision of the head of the femur, disarticulated, and then dissected the shaft. While an assistant grasped the inner flap to compress the artery, a circular incision at the requisite point was made and the bone sawed.

ASHURST mentions a modification and improvement of this method by Senn, as follows:

“Senn, in perforating the tissues on the inner side of the thigh, after enucleating the upper portion of the femur, introduces a double elastic tube, tying one part over the anterior tissues, crossing the other posteriorly, and finally bringing it around the whole limb and securing it in front, thus doubly constricting the great vessels, and removing the limb by a long anterior and a short posterior flap.”

ESMARCH BAND, as applied by F. T. Paul, after the methods of Moore, Volkman and Esmarch.

DR. WALTER BRASHEAR, of Kentucky, who was among

the first, if not the first, to perform this operation, controlled hæmorrhage by the tourniquet; made a circular amputation of the thigh, and after ligating the vessels, completed the operation by an external incision extending over the trochanter major.

Many more methods have been offered, for which it is my pleasure to refer to an excellent article upon this subject, by Dr. F. W. Parham, which he read before the *Southern Surgical and Gynecological Association* at New Orleans, November 14, 1893.

I shall now discuss CASE No. 3, ALBERTO BERTRAM, 15 years of age, a native of Honduras.

Father living and healthy at age of 65; mother died of yellow fever, six years ago, at the age of 45.

Has three brothers and four sisters; all in fair health.

While riding a small horse, nine months ago, the animal became frightened at an object in the road, reared and fell backward upon Albert's right foot, which had become entangled in the stirrup.

He was carried to his home, and, on examination by the physicians, disclosed a compound fracture of the tibia above the joint. The end of the bone that protruded through the skin was reduced with great difficulty.

For two months the wound was dressed twice daily; then daily. For nine months he rested on his right side, as any slight change in position was accompanied by excruciating pain, persisting for hours.

In the course of the confinement the joint became involved, as evidenced by pain, high temperature, restlessness and loss of appetite. As his condition daily grew more alarming and his death was momentarily expected, it was determined, as a last hope, to have him removed to the Charity Hospital for treatment.

Upon the arrival of the steamer at this city from Honduras he was immediately transferred to the hospital.

His condition was beyond description. The general appearance, the sight of which would have appalled the stoutest heart, indicated the suffering he had endured for nine months.

Pulse, 135, weak and compressible; respiration hurried and shallow; temperature 100 deg. F.

The foot and leg were comfortably (?) ensconced in a fracture box improvised for his transportation.

The wound was in the lower third of left leg, revealing a fracture of the tibia and its malleolus.

The wound was suppurating profusely, and further examination disclosed an involvement of the joint, which had become infected by an extension of this suppuration process.

After some persuasion the parents finally consented to amputation at the lower third of the leg. During the administration of ether, the leg was carefully and thoroughly prepared by Mr. T. F. Richardson, interne.

Complete anæsthesia was induced in less than five minutes. The leg was elevated, after Lister's method, and the constrictor applied at the middle third of thigh. After the shaping of the flaps—lateral—and division of the tissues, the bone was found so extensively diseased as to require amputation at a higher point. It was decided to amputate at the upper third, but after division of the soft tissues and sawing the bone evidences of osteo-myelitis were so manifest as to suggest a still higher operation.

A circular incision at the lower third of the thigh showed the condition of the bone unchanged.

The constrictor, after compression of external iliac, was applied around the thigh, high up. A circular incision was made, bone sawed, diseased condition still persisting. A hip-joint amputation was a *dernier ressort*.

The boy's condition was now alarming; pulse 150. Stimulants were freely and boldly administered; nitrite of amyl inhalations practised, and the anæsthesia that had been so judiciously administered, by Mr. A. J. Babin, interne, continued.

Mr. Richardson, who up to this time had been my only assistant, was relieved of some of the responsibilities by the advent of Messrs. C. T. Pollard and J. Barnett, internes.

Without any regard for surgical technique, as the patient was progressively growing worse, we proceeded to amputation at the hip joint.

While Mr. Richardson compressed the external iliac with his fingers the constrictor was removed.

After making a longitudinal incision over the trochanter

major the shaft was dissected, the capsule opened and the ligamentum teres divided, and finally disarticulation effected. The vessels were then ligated. This was practically a bloodless operation. Only two drachms of blood were lost, owing to the slight release of compression before the vessel had been completely seized with forceps.

The case was reported to me for operation at 11:20 A. M. Notwithstanding the difficulties we had encountered in the lack of assistants and in obtaining the consent of the parents to the operation, the patient was removed from the operating room at 12:15 P. M.

At 1:30 P. M., pulse 160. Ordered an enema, consisting of the following mixture: Eleven ounces of normal saline solution and one ounce of brandy, morphine sulphate, gr. $\frac{1}{12}$, and atropine sulphate, gr. $\frac{1}{50}$, were given hypodermatically; cans filled with hot water were applied to the body and the foot of the bed was elevated.

3:30 P. M., pulse 140. Strychnine sulphate, gr. $\frac{1}{30}$, tincture of digitalis ℥viii were injected hypodermatically, normal saline solution, six ounces, brandy, one ounce and one egg, by enema.

7:10 P. M. temperature, 99.6; pulse, 114; respirations, 30.

Besides the digitalis and strychnine, which were administered every three hours, milk punches and Elixir Ducros were also ordered.

November 29, temperature 102 deg. F.; pulse, 158. As the bandage was soiled the dressing was changed. The packing was removed, wound washed with bichloride solution (1-2000), carbolic acid solution (3 per cent) and sprayed with peroxide of hydrogen, then thoroughly cleansed with sterilized water. Wound was repacked and dressed.

The enema of the normal salt solution, etc., was repeated; also the hypodermatic use of the atropine and morphine.

As there had not been an alvine discharge in several days, and pain complained of in lower abdomen, a soap-sud enema was ordered, followed by a satisfactory result.

The course of the pulse, temperature and respirations varied but little until December 1.

December 1.—Temp. 99.6 F., pulse 130, respiration 25. The diet, which had consisted principally of milk, was in

creased by the addition of soft-boiled eggs, chicken broth, and the juice of steak.

December 4.—Temp. normal, pulse 114, respiration 28. Stump dressed. Slight suppuration was noticed. Solid food allowed.

December 7.—The temperature, which had been normal up to this time, rose to 100 deg. F.; this was accounted for by the presence of suppuration in the wound. Several stitches were removed, and wound cleansed. The dressing was removed on alternate days until December 8, then daily, in order to overcome the slight exacerbations of temperature, which were dependent upon slight suppuration.

December 11.—Temperature, 104.2 F.; pulse, 140; respiration, 32; short, hacking cough. Upon physical examination of the chest, the following conditions were observed: Apex of right lung: increased vocal fremitus, dullness on percussion, bronchial breathing, subcrepitant and sonorous râles. Microscopical examination of the sputum for the bacillus tuberculosis gave a negative result. Phenacetin in three-grain doses reduced the temperature about two degrees.

Tinct. *strophanthus Mii* was substituted for the *digitalis*, which irritated the stomach.

At the suggestion of Dr. A. J. Bloch, the patient was injected with antiphthisin. This was followed in five hours by a rise in temperature to 105 deg. F.

This reaction pointed conclusively to the presence in the system of the bacillus tuberculosis. The antiphthisin treatment was inaugurated at once, the dose being increased at each injection. The temperature rose after each injection, so the treatment was discontinued at my request on January 24.

The wound, which had nearly healed, required but a colodion dressing.

The benefit which resulted in the use of crutches manifested itself in an increased appetite, gain in weight and an exaltation of spirits.

The points of interest in this case are :

A. Complete hæmostasis, by digital compression of external iliac.

B. Rapidity of operation; time consumed being less

than forty-five minutes. This included the moment when the first incision was made at lower third of leg, to the time that the patient was removed from the operating room.

C. The small amount of suppuration, considering that all rules bearing upon asepsis and antisepsis were utterly disregarded.

WELCH says that the complete disinfection of an infected wound, even if that were possible, would not furnish a guarantee that pyogenic cocci, usually ubiquitous, were not present upon the patient's body in other situations. He mentions that "in certain persons and in certain conditions of the body a wound is much more likely to suppurate than in others, although the same precautions are taken to guard against the micro-organisms. We are at present unable to explain the conditions which predispose an individual to infection. Such conditions may be determined by a question of susceptibility."

Although the surface of the thigh was hurriedly washed, yet not sufficiently to destroy the staphylococcus epidermidis albus, which is difficult to destroy, and other micro-organisms, we were surprised that the wound should have healed with so little suppuration. This may be accounted for, according to Welch, "by a question of susceptibility." The shaft of the femur, with the head which was necrosed, was submitted to the pathologist, who in the examination failed to find the presence of the bacillus tuberculosis; but reported the presence of the pyogenic cocci.

In the face of such contradictory evidence, but in the interpretation of some of the symptoms already referred to, I am inclined to look upon the case as one of tubercular osteomyelitis, awakened to activity by the irritation sustained in the compound fracture.

In conclusion, I beg to acknowledge the devotion of the Sisters carefully nursing the patient through the critical period to convalescence. Too much praise can not be bestowed upon the efficient nurse, Clyde DePass, and last but not least, to Mr. C. T. Pollard, whose vigilance and assiduous attention assured the success of this case, I desire to extend the deserved acknowledgment.

N. O. Medical and Surgical Journal,

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

TO THE SILENT COUNTRY SUBSCRIBER.

With the elevation of medical science, methods of research are constantly created. Every day new laboratory experiments evolve the practical determination of hitherto misunderstood conditions.

Micro-organisms are allowed to multiply for the enlightenment of the medical profession, and their habits and antagonists are investigated with the ever constant purpose of the cure of disease.

The student of medicine to-day finds his medical pabulum already predigested or undergoing this process, and he has but to swallow and assimilate.

The fledgling medico nowadays begins practice with a vast fund of scientific data at hand, which he has to store away for occasions.

The specialist solves problems of pathology, and cures his patient by a process of dependent argument.

Those of us, however, who are of a middle generation, recall that older time clinical judgment, born of experience, often innate, with which our predecessors of twenty years would cure their cases.

No chart guided the antipyretics, no sphygmograph calculated the pulse wave, nor the tone of the faltering heart.

Eyes then saw the reflex in the patient's face. The pulse told the story to the finger tip, and the sympathy of the physician and the patient made the prognosis and outlined the treatment.

It is all very well for us who are of the city-born to dally

with *isms* and *ilogies*; but the patient needs the clinical judgment as much now as then.

The medical journal is, at best, but a reflex of the medical thought of the section of country in which it exists, and there should be no attempt made to satisfy the few.

While our columns are always open to medical progress, and its space ready for scientific medical news, we are anxious to have much space occupied with material of practical importance and usefulness to the every day doctor.

To our country friends, we extend our invitation, and urge its acceptance, to send us reports of cases.

It is from the virgin soil that the best fruit comes, and the history of medical development owes much that is best to the country contingent. There is no reason for us to believe that to-day is retrogressive in this respect.

Don't file your interesting cases away in a page of your ledger where your only notes are memoranda of the dates and fees, but transfer them to paper and let us put them on record for you. It is the relation of facts that makes history. It is the recording of cases that makes the study of disease thorough.

THE STATISTICIAN.

Statistics are one thing, logic another. For the former to possess any value they must be accompanied by the latter. The statistician must not only do his work completely, he not only should be strictly impartial, but he should also be logical if his figures are to be accepted as having any significance.

Unfortunately the average statistician does not, as a rule, seem to possess the above necessary combination of qualifications. As the result, statistics have fallen into disrepute and figures, which are said not to lie, have been twisted into meaning anything that the unscrupulous juggler has an interest to show, or have had the ridiculous conclusions drawn from them by the illogical computer.

The latest illustration of the latter is the scientific observer who has made in Europe a comparative study of the longevity of residents in cellars and basements, on the first and second

floor, and on all the floors above. Strange (?) to say, he found that the largest mortality was among the residents of the basements and cellars, that the next on the list were those on the upper floors, and that those who lived the longest were those who resided on the middle floors.

Forthwith he concludes that the latter are the healthiest quarters, and that the cellars are unhealthiest. All of this may be very true, yet, we submit, his statistics do not prove it. It can be admitted that the cellars are unhealthy, and that without statistics. But when he makes the statement that the reason the most heavenward inhabitants die more than their neighbors just below, is that the former get affections of the heart from climbing stairs, the statistician should be prepared with another set of figures showing the relative frequency of cardiac disease in residents of the two regions—and the figures might, or might not, bear him out. He lacks logic also by not taking into account the fact that people who live on the middle floors in Europe are those who can have the most agreeable home-life, the best protection against the weather, can change climate, have better food and clothing, in short, can best take care of themselves.

Of the juggling statistician the name is legion. We find him frequently in the medical as well as in the lay press. He starts off, not to find the truth, but to *prove something*. He adroitly gathers the inoffensive figures that are apparently correct and puts them in such shape that they end by ruining their reputation for veracity. What cares he as long as his end is attained?

We can close with a rather recent illustration of the juggler, which can serve to show how "figures can prove anything." A certain scientific observer noting that phenol is found in small quantities in normal urine, studied a large number of statistics which showed that the amount of phenol was usually increased in pathological conditions. To him the just conclusion was that nature produced a greater quantity of phenol in order to cure the disease. To another it might prove that the abnormal amount of phenol was what produced the disease. You see it depends upon whose ox is gored.

MEETING OF THE STATE SOCIETY.

Our State society will meet in this city in a little over a month. Hence it is time for the officers to bestir themselves in order to arouse the interest of the members and for the latter to go to work perfecting their papers and arranging their routine business that they can be sure to get off in due time.

Each man should make up his mind now that he is going to the meeting and let nothing change is decision except matters of the most weighty character.

Those who expect to have papers must get them in shape and come down to read them. Those who have none must try to come and report at least one interesting case. Those who have not the opportunity to do even that must come, any way, in order to take part in the discussion of scientific questions and those of material interest to the profession. All can make good listeners at the proper time.

In our opinion, papers should not, as a rule, be long. Of those that would require more than fifteen minutes to be read an abstract should be made for the meeting, while they could be published in full in the transactions.

Positive arrangements, however, should be made to have the transactions published promptly. If they are delayed they are scarcely worth publishing. Some of the subjects presented and discussed have become old, if not entirely out of date, and much valuable information has been unfairly kept from the members.

For instance, the transactions of the 1895 meeting have not yet been issued. We are informed that it is owing to the inefficiency of the official stenographer, who finally threw up the job altogether. That was unfortunate, to be sure, yet we will venture to suggest that the papers read were on hand, the committee reports as well, and that some data besides the stenographic reports should have been available. Even if it had been necessary to omit all discussions, a presentable volume might have been published which could have been of assistance in keeping up a proper degree of interest in the society.

We publish in our *MEDICAL NEWS ITEMS* a list of the committees which we have obtained from the secretary, Dr.

McCutchon, and which have not as yet been generally made known to the members.

We hope the meeting will be largely attended; a large attendance will mean a successful session, for we have an abundance of literary talent, power of observation, and professional acumen among our members.

THE MISSISSIPPI STATE MEDICAL ASSOCIATION.

Our neighbors meet earlier than we do. Their next annual session will be held on the 15th of this month, at Vicksburg.

We understand that the prospects for a good meeting are excellent, and we sincerely hope that all the expectations of our confrères will be realized.

We shall be glad to publish as many of the papers as our space will permit, and shall endeavor to obtain and promptly publish an account of the proceedings.

MORE ABOUT THE CONSUMPTION CURE.

The *Southwestern Medical and Surgical Reporter* (of Fort Worth, Texas), makes editorial comment upon the newspaper advertisement, in a Fort Worth daily, of the lately purported discovery for the "cure of consumption, etc." The editorial justly takes the position that the medical profession is always best reached through reputable medical journals, and it is scarcely without an imputation of obliquitous sense of professional obligation and ethics that such advertisement can appear in the secular press. The Amick cure began its bid for popular favor in a similar manner, and met with a summary judgment at the hands of the medical profession. We shall still watch with much interest the outcome of this panacea for multiform coccogenous diseases.

NEW YORK AND THE LEPROSY PROBLEM.

“IS NEW YORK TO HAVE ITS MOLOKAI?” is the startling title of an editorial in the *Medical News* of March 14.

A rather pertinent and opportune comment is passed upon the popular and professional indifference generally throughout the United States with regard to legislation in the matter of the eradication, or control of leprosy. “From recent reports,” says the editorial, “the disease would appear to be increasing at the expense of the native born population in and about New Orleans, and it would seem to be as much a matter of National as of State interest to check its spread.”

The Congress of American Physicians and Surgeons in 1894 memorialized the United States Congress with a view to securing legislation for the appointment of a commission to investigate the extent of leprosy in this country. The result is well known. The petition was simply pigeon-holed. Meantime, the State of Louisiana has attempted legislation in the matter, and the efforts at segregation are being watched with much interest. We have much to do at home in the matter, before the wheels of a national government can be even got ready to move. It is a sad commentary that so small a percentage of the lepers of Louisiana has been located in the Home in Iberville parish. It seems a sadder thought that the law must compel, where the influence and persuasion of those best qualified, the family physicians, might direct these unfortunates to a place of refuge. The medical profession of the State should make the effort, before enforced Federal legislation shows us how to do it.

SHALL SMALL-POX BE ENDEMIC IN NEW ORLEANS ?

New Orleans has been in the throes of a small-pox scare. There is still some ground for apprehension.

Since April, 1894, small-pox has been more or less prevalent in this city. Two or three times the efforts of the Board of Health have been taxed in the attempt to control the spread of the disease. Twice an epidemic has been forefended.

Meanwhile, the number of cases has been augmented, almost invariably by blacks, from the country parishes.

Latterly the Board of Administrators of Charity Hospital have tried to do the only rational thing in the premises, *viz.*, establish a detention hospital in the neighborhood for the investigation and observation of all suspicious cases.

The New Orleans City Council has gone on record in the matter with a strong opposition to so radical and rational a means of stopping small-pox. Even before this, it had been a difficult matter to obtain funds sufficient from this Council to carry on the absolutely necessitous vaccination.

At last the Board of Health itself has prevailed upon the Council to appropriate a special fund for a detention hospital, which has been completed, adjacent to the pest-house. The Board of Health deserves considerable credit for their good work for the public protection in the face of so many difficulties. When there is so frequent a failure on the part of the municipal authority to recognize the necessities of a situation as threatening as this small-pox situation has been, some volunteer effort should be ready for the breach. What are the members of the medical profession doing? The Board of Health is the champion of State Medicine; it is to the public what the physician is to the family and to the individual. Is the medical profession to stand idly by and watch an official body, with hands half-tied, try to solve a recurring problem of public interest and concern? Let the medical profession of the State give every moral support to the State Board of Health. Remind all patients that they should be vaccinated. Make them realize the importance of this step. Stimulate popular sentiment to such a pitch that logical measures in the prophylaxis of small-pox shall obtain, and if this fails, organize a crusade and let the entire medical profession make wholesale vaccination compulsory by moral force.

The whole United States has its eye upon us, and we may make a laughing stock of ourselves for all well-governed cities where endemic small-pox would be an utter impossibility. Let us raise the cloud; let us wipe the slur away.

AN APOLOGY.

It is easy to apologize for other people's mistakes, though not always as simple a matter to explain them. We will do the former for our friend and predecessor, without attempting to do the latter.

In the February number of the JOURNAL an article was copied from the *Medical News*, without the author's name being mentioned, and credit for the same was given to the *Medical Record*.

The article was an interesting and well written one, entitled "The Therapeusis of the Saints," by Dr. Walter L. Pyle, of Washington. From the very fact that the paper is a good one, the *News* must feel aggrieved at getting no credit for it, and doubly so, because that credit is given to an esteemed contemporary—the more esteemed the contemporary, the more keenly is the injustice felt.

We regret the occurrence and tender our apology to an esteemed confrère and a valued contemporary for an error with which we had nothing to do.

Department of Surgery.

In Charge of Dr. F. W. PARHAM; Assisted by Drs. E. D. MARTIN, and
F. LARUE.

NEW OPERATION FOR THE CURE OF NON-MALIGNANT STRICTURES OF THE RECTUM.

In the *American Gynecological and Obstetrical Journal* of March, '96, Dr. Jos. B. Bacon, of Chicago, proposes a novel method of operating for non-malignant strictures of the rectum. The first method described is applicable to all strictures situated above the levator ani muscles, and even lower in the female, where the vaginal wall can be easily separated from the rectum.

The operation consists in making an incision in the median line from the pubes to the umbilicus, with the patient in the Trendelenburg position. The small intestines are crowded back with a large, flat sponge; the sigmoid flexure is bent down over the limit of the stricture, and the length required noted. The sigmoid is then drawn up to the abdominal opening and the half of the smallest sized Murphy button inserted. The other half of the button is passed through the anus by means of a button holder and carried to the lowest limit of the stricture anteriorly. The gut is then nicked over the presenting staff of the button, which is made to protrude, the peritoneum scarified, and the two halves united. After the passage of the button and healing of the wound, one blade of a clamp is introduced through the fistulous opening, the other remaining in the rectum; this is tightened and left *in situ* until released by sloughing, thereby making a larger and permanent fistula. Mikalicz drain or gauze should be firmly packed around the opposing surface of the gut until all danger of infection is averted. The abdominal wound is closed to the drain.

The second method, for low stricture, consists in making a mucous fistula around the stricture. A large silk ligature is passed, by means of a blunt needle, from a point below its border, posteriorly, in the median line between the stricture and the coccyx, terminating in the rectum above the stricture. This is left in place three months; a grooved director is now introduced through the fistulous opening thus formed and the stricture severed down to the director with a cautery.

The method here recommended for relief of high stricture is undoubtedly superior to those now in vogue, and is possible when other operations must fail. The latter, for relief of low strictures, does not seem to promise such good results, but is easily performed and fraught with little danger.

DISADVANTAGES OF NON-ABSORBABLE SUTURES IN THE RADICAL CURE FOR HERNIA.

Dr. Wm. B. Coley, of New York, in a paper read before the N. Y. ACADEMY OF MEDICINE,* cites a number of cases to

**New York Medical Journal*, February 29, 1896.

show the disadvantages of non-absorbable sutures in operations for radical cure of hernia. Although every case cited was operated upon by the best surgeons and the most careful antiseptic precautions observed, those which healed primarily where non-absorbable sutures were employed, suppurred later, thereby weakening the cicatrix and causing a return of the hernia.

In two hundred and fifty cases in which kangaroo tendons were used for the buried sutures, 96 per cent. healed primarily, and not a single instance of sinus formation occurred. This is certainly a powerful argument against the use of non-absorbable sutures.

Medical News Items.

THE REPORT FOR THE MONTH OF FEBRUARY OF THE SHREVEPORT CHARITY HOSPITAL, made by Dr. T. E. Schumpert, shows that the number of patients treated last month amounts to 205 from the State at large and 30 from this city. Remaining under treatment from previous month, 23; received during the month, 150; total to be accounted for, 235. Recovered, 70; improved 42; not improved, 6; died, 9; remaining under treatment, 104. White, 111; black, 124; males, 148; females, 67.

Dr. Schumpert stated that the next Legislature should appropriate \$20,000 annually for the maintenance and improvement of the hospital. The present appropriation of \$11,000 annually is inadequate to meet the demands of the hospital. This sum was sufficient several years ago, when only 50 or 60 patients were treated during a month, but as this number has now increased from 250 to 350 patients per month, the sum is not sufficient.

The building should be heated by steam and a new outfit, consisting of furniture, beds, bedding and other necessities, are required, also a modern amphitheatre.

Last year the patients who received treatment at the hospital numbered nearly 3000. Of this large number at least two-thirds were from the State at large. It is understood that the Senator and Representatives from Caddo parish have signified their intentions to present the claims of the Shreveport hospital for an increased appropriation, and no doubt this charitable institution, which is ministering to the ills of so large a number of the people throughout North Louisiana, will secure the necessary appropriation.

THE AMERICAN MEDICAL ASSOCIATION will meet in Atlanta, May 5, 6, 7 and 8. The Atlanta Society of Medicine has appointed a good committee of arrangements, with Dr. W. F. Westmoreland as chairman.

DR. J. R. TACKETT, formerly of Pickens, Miss., has been appointed Assistant Physician to the East Mississippi Insane Asylum, at Jackson, Miss.

THE TWENTY-FIRST ANNUAL SESSION OF THE ARKANSAS MEDICAL SOCIETY will take place at Fort Smith, April 29 and 30, and May 1, 1896.

DR. C. H. TEBAULT has been selected to fill the position of Surgeon General of the United Confederate Veterans, *vice* Dr. Joseph Jones, deceased. Dr. Tebault has the warm congratulations of the JOURNAL in the honor conferred upon him.

THE LOUISIANA STATE MEDICAL SOCIETY is to meet in New Orleans next month. The date fixed at the last meeting was May 5, 6 and 7. By a coincidence, those are also the days selected by the American Medical Association. Owing to this we understand that the officers are considering the expediency of postponing the meeting for a few days, particularly as some distinguished guests are looked for who also desire to attend the Atlanta meeting.

The Chairman of the Committee of Arrangements, Dr. Fortier, has obtained from the railroad passenger agents a rate of full fare one way and one-third fare on return trip, on the certificate plan.

As the transactions of the Society for 1895 have not yet been issued, we publish for the benefit of the members the following list of committees:

On Arrangements—Dr. S. M. Fortier, New Orleans, Chairman; Dr. E. D. Martin, New Orleans; Dr. E. M. Dupaquier, New Orleans.

On Necrology (The Vice Presidents)—Dr. P. E. Archinard, New Orleans; Dr. F. M. Thornhill, Arcadia; Dr. F. W. Parham, New Orleans; Dr. A. A. Forsythe, Monroe; Dr. J. T. Abshire, Abbeville; Dr. C. J. Ducote, Cottonport.

On Organization (*ex officio*)—Dr. R. M. Littell, Opelousas; Dr. F. M. Thornhill, Arcadia; Dr. P. E. Archinard, New Orleans; Dr. A. A. Forsythe, Monroe; Dr. F. W. Parham, New Orleans; Dr. C. J. Ducote, Cottonport; Dr. J. T. Abshire, Abbeville; Dr. A. G. Friedrichs, New Orleans.

On Publication (*ex officio*)—Dr. P. B. McCutchon, Dr. J. B. Elliott, Jr., Dr. A. G. Friedrichs.

On Library—Dr. J. B. Elliott, Jr., New Orleans; Dr. S. L. Theard, New Orleans; Dr. A. F. Barrow, Baton Rouge; Dr. F. E. Schumpert, Shreveport; Dr. H. S. Cocram, New Orleans; Dr. R. L. Randolph, Alexandria.

On Judiciary—T. Y. Aby, Monroe; Dr. J. H. Bemiss, New Orleans; Dr. F. Formento, New Orleans; Dr. J. S. Jones, Quarantine Station; Dr. B. Guilbeau, Grand Coteau; Dr. C. Chassaignac, New Orleans; Dr. J. P. Saizan, Opelousas; Dr. C. L. Horton, New Orleans; Dr. G. McD. Brumby, New Orleans; Dr. W. D. White, Abbeville.

On State Medicine and Legislation—Dr. S. F. Meeker, General Chairman, Campte; Dr. H. D. Bruns, New Orleans, Chairman of Medical Jurisprudence; Dr. T. J. Mayer, Opelousas, Chairman of Public Hygiene; Dr. T. S. Kennedy, New Orleans, Chairman of Medical Education; Dr. W. E. Scheppegregell, New Orleans, Chairman of Public Institutions; Dr. A. J. Bloch, New Orleans; Dr. W. E. Barker, Iberville; Dr. J. C. Munday, Lake Charles; Dr. W. H. Sutherlin, De Soto; Dr. W. L. Dickson, Bossier; Dr. E. L. Irwin, East Feliciana; Dr. W. D. Haas, Avoyelles; Dr. R. W. Seay, Lutcher.

On Collective Investigation of the Continued Fever of Louisiana—Dr. P. E. Archinard, New Orleans; Dr. R. Matas, New Orleans; Dr. F. W. Parham, New Orleans; Dr. O. L. Pothier, New Orleans; Dr. J. B. Elliott, New Orleans; Dr. J. J. Archinard, New Orleans, Secretary; Dr. W. E. Parker, New Orleans.

Each committee has as chairman the one first mentioned.

SECTIONS.

General Medicine—Dr. J. H. Bemiss, New Orleans; Dr. G. R. Fox, Jesuits' Bend.

Surgery—Dr. W. E. Parker, New Orleans; Dr. F. E. Schumpert, Shreveport.

Obstetrics and Gynecology—Dr. A. J. Bloch, New Orleans; Dr. W. G. Owens.

Materia Medica and Therapeutics—Dr. L. F. Reynaud, New Orleans; Dr. J. D. Trahan, Lafayette.

Otology, Laryngology, and Rhinology—Dr. W. E. Scheppegrell, New Orleans; Dr. A. Joachim, New Orleans.

Ophthalmology—Dr. B. A. Pope, New Orleans; Dr. W. H. Woods, New Orleans.

Dermatology—Dr. Isadore Dyer, New Orleans; Dr. E. M. Dupaquier, New Orleans.

Diseases of Children—Dr. R. F. Jones, Houma; Dr. E. D. Fenner, New Orleans.

Quarantine—Dr. F. J. Mayer, Opelousas; Dr. T. Y. Aby, Monroe.

Anatomy and Physiology—Dr. H. Bayon, New Orleans; Dr. S. P. Delaup, New Orleans.

Medical Jurisprudence—Dr. F. Formento, New Orleans; Dr. Jos. Holt, New Orleans.

Bacteriology—Dr. A. McShane, New Orleans; Dr. O. L. Pothier, New Orleans.

Oral and Dental Surgery—Dr. G. J. Friedrichs, New Orleans; Dr. A. G. Friedrichs, New Orleans.

In each instance the name mentioned first is that of the chairman. The second is that of the one appointed to open the discussion.

MEDICAL EXPERT TESTIMONY.—The following is an abstract of the report of a special committee of the Medical Society of the State of New York, regarding improving the present method of introducing expert medical testimony.

WHEREAS; the present method of obtaining medical expert testimony tends to lessen the value of such testimony and to bring the medical profession into disrepute; therefore, be it

Resolved, That the Medical Society of the State of New York would recommend the enactment of a law by the Legislature providing for the appointment of experts by the courts, and that only physicians of repute in the particular branch of medical science to which the question calling for expert opinion relates shall be appointed; that the function of the experts so appointed shall be advisory, and the number thus appointed shall be such as to adequately represent the court, and both sides of the question at issue, as in the judgment of the court shall seem necessary; that the experts so appointed shall have full and free access to all the evidence in the case, as well as access to the plaintiff or defendant in person, as the case may be, if the issue involves his mental or physical state. That the expert shall submit to the court for transmission to the jury a report in writing, setting forth their conclusion and the facts in evidence on which such conclusion is based; that the cross-examination of such experts shall be limited to the facts and opinions embraced in their testimony as embodied in their report, and that their compensation shall be fixed by the court at a rate that is reasonable for professional service of such a nature."—*Buffalo Medical Journal*, March, 1896.

THE TEXAS STATE MEDICAL ASSOCIATION will meet at Fort Worth, Texas, on the 28th, 29th and 30th of this month.

The programme of the meeting promises a profitable and an entertaining list of attractions. We wish our Texas confrères all success on this occasion.

THE JENNER CELEBRATION, that of the hundredth anniversary of the discovery of the protective power of vaccine, is to take place at Atlanta on May 7, 1896, the third day of the American Medical Association meeting. Dr. N. S. Davis, of Chicago, will read an address on "The Character of Dr. Edward Jenner, and the History of his Discovery of the Value of Vaccination." Dr. Geo. M. Sternberg, Surgeon General,

United States Navy, will present a paper on "The Scientific Researches Relating to the Specific Agent of Small-pox, and the Production of Artificial Immunity in this Disease." Dr. Francis C. Martin, of Boston, will read on "The Propagation, Preservation and Use of Vaccine Virus." Dr. Eug. Foster, of Augusta, will treat of "The Statistic Evidences of the Value of Vaccination to the Human Race." Each paper will be followed by discussions thereon.

THE DIRECTORS OF THE POST GRADUATE MEDICAL SCHOOL AND HOSPITAL, of New York, have named one of their wards in memory of the late Dr. Chas. Carroll Lee, who was for many years a professor in the institution. They have placed a tablet in the ward, giving the names of those who contributed. The faculty participated largely in the memorial gift.

THE FIRST NUMBER OF THE *Alumni Register*, published by the General Alumni Society of the University of Pennsylvania, has been sent to us. Dr. Wm. L. Pepper is the president of the society, Dr. Wm. L. Winner the secretary and treasurer, and Dr. Ewing Jordan is the associate secretary. The various departments of the university are represented on the executive committee and in the columns of the publication.

MARINE HOSPITAL SERVICE CHANGES have been announced for this section as follows: Dr. G. M. Guiteras has been transferred from the Gulf Quarantiné Station to Key West, to relieve Dr. G. B. Young, who proceeds to Memphis. Dr. A. C. Smith goes to the Gulf Quarantine, and Dr. H. W. Wickes, who had been at Memphis, is to rejoin the Station at New Orleans.

THE ENTERTAINMENT FOR THE EYE, EAR, NOSE AND THROAT HOSPITAL, at which the celebrated and genial Joe Jefferson gave an appreciated lecture, in this city, netted about \$2500.

ACCORDING TO THE ANNOUNCEMENT made in last month's JOURNAL, the outgoing resident students of the Charity Hospital took part in a competitive examination on Saturday,

March 14, for the medal offered by the Alumni Association. The entire class of 1896 entered the competition, and consisted of Messrs. Babin, Carnes, Renaud, and Walet. The examining committee consisted of Drs. Bloom, Fortier, and Parker, on behalf of the Hospital, and of Dr. Chassaingnac as representative of the Alumni Association. The examination was strictly practical. The competitors were given cases to examine, in turn, and were then allowed sufficient time to write up an account of the cases, including their diagnosis, prognosis, and treatment, also the reasons upon which the latter points were based. The examination appears to have been satisfactory. The result will be announced later, probably at the next meeting of the Board of Administrators of the Charity Hospital.

THE TWELFTH INTERNATIONAL MEDICAL CONGRESS rules have been somewhat modified, as we had hoped. While only three languages, French, German and Russian, will be recognized, in the meetings of the sections, papers can be read in any European language at the general meetings. There will be three of the latter. The sections will be twelve in number: 1st, Anatomy; 2d, Physiology; 3d, Pathology and Pathological Anatomy; 4th, Therapeutics; 5th, Internal Diseases; 6th, Diseases of Children; 7th, Nervous and Mental Diseases; 8th, Diseases of the Skin; 9th, Surgery and Diseases of the Eye; 10th, Midwifery and Diseases of Women; 11th, Hygiene; 12th, Legal Medicine.

EIGHTEEN BIRTHDAYS IN SEVENTY-SIX YEARS is the record of Prof. Louis A. Sayre, of New York. The well-known orthopedic surgeon was born on the 29th of February, hence he can celebrate only once in four years. This "long time between birthdays" seems to have agreed with him, and now that he can not have any birthday for eight years he will get older at an unappreciable rate. We desire to add to the numerous congratulations Dr. Sayre has been receiving from both sides of the water.

WE HAVE RECEIVED THE FIRST NUMBER OF *The Medical Council*, edited and published by Dr. J. J. Taylor, at Phila-

delphia. It is to devote special attention to obstetrics, diseases of women, diseases of children, and to racial development. These four departments make an important and rational combination. The initial number of the *Council* creates a good impression, and we wish it success.

THIRD INTERNATIONAL CONGRESS OF DERMATOLOGY—
To be held in London, August 4th to 8th, 1896.

PROGRAMME—TUESDAY, August 4th, Preliminary Business; 12 M.: Presidential Address; 3 P. M.: Subject, "Prurigo."

WEDNESDAY, August 5th, 9 A. M.: Clinical Demonstration of Cases.

Dermatology—10:30 A. M.: Subject, "The Etiology and Varieties of Keratosis."

Syphilis—10:30 A. M.: Subject, "Syphilitic Reinfection."
3 P. M.: Papers.

THURSDAY, August 6th, 9 A. M.: Clinical Demonstration of Cases.

10:30 A. M.: Subject, "The Connection of Tuberculosis with Diseases of the Skin Other than Lupus Vulgaris."

10:30 A. M.: "The Duration of the Period of Contagion of Syphilis."

2 P. M.: Subject, "Ringworm and the Trichophytions."

FRIDAY, August 7th, 9 A. M.: Clinical Demonstration of Cases.

10:30 A. M.: Subject, "The Nature and Relation of the Erythema Multiforme Group."

3:30 P. M.: Subject, "Malignant Syphilis."

2 P. M.: Clinical Demonstration of Cases.

3 P. M.: Papers.

SATURDAY, August 8th, 9 A. M.: Clinical Demonstration of Cases.

3 P. M.: Papers.

It is of the greatest importance that those intending to join the Congress should notify the Secretary, Dr. J. J. Pringle, 23 Lower Seymour street, London, W., of their intention as soon as possible. The membership fee is \$5, which should be

sent in the form of one pound sterling draft on London, or P. O. order for the same amount.

GEO. THOS. JACKSON,
*14 East Thirty-first Street, New York, Secretary for the
United States.*

IN THE DEATH OF PROF. WILHELM MEYER, which recently occurred, the profession of medicine has lost a brilliant and appreciated member, and the world one of the most practical philanthropists of the time. Meyer's recognition of the condition known as Adenoid Hypertrophy at the vault of the Pharynx, the urgent warning which he gave as to its dangers, and the efficient means which he devised for its prompt cure, have been the means of bringing relief to hundreds of thousands throughout the world. In recognition of his great service to humanity, it has been determined to erect a monument to his memory in his native city, Copenhagen, Denmark. To this end committees have been formed in all the principal countries of Europe for the purpose of raising the necessary funds. A large and influential National Committee, representative of all the leading sections of this country, has been appointed, and power given to each member to make such local arrangements as shall secure the success of his work. It is hoped that all who have profited by the results of Dr. Meyer's teachings, not only of the medical profession, especially in the departments of Laryngology, Otology and Pædiatrics, but also among the laity, will be willing to aid in the accomplishment of the object for which the committee was formed. Contributions should be handed to Dr. A. W. de Roaldes, the representative of the National Committee in this city.

THE COUNTRY PARISHES are on the alert and seem to be taking the necessary steps to prevent the introduction or spread of small-pox. The city council of Hammond has acted in the matter. The police jury of Rapides parish, meeting in Alexandria, has appropriated money to buy vaccine virus to be distributed and request all persons to be vaccinated. The police jury of West Baton Rouge has resolved itself into a Board of Health, and has arranged to have vaccinations made and to

have any possible or suspected cases isolated. All this is proper and is much more rational than inaugurating unnecessary quarantines. We are glad to announce, however, that the disease in this city is decidedly on the decrease.

Abstracts, Extracts and Miscellany.

LOCAL AND GENERAL TREATMENT OF VARIOLA.

LOCAL TREATMENT.—The object of local treatment is to prevent suppuration, or at least to attenuate its consequences, by means of a rigorous antiseptis of the skin and mucous membranes.

Of the numberless means recommended for checking the progress of the pustules, only two are worthy of consideration; they are, the application of mercurial ointments and the application of corrosive sublimate by means of the spray.

Mercurial Ointments.—Revilliod, of Geneva, uses as an abortive treatment of the pustules on the face the following:

Ung. hydrarg	20 parts.
Saponis.....	10 “
Glycerini	4 “

Mix and apply before the vesicles are transformed into pustules.

Dujardin-Beaumetz, like Serres, applied over the face the mercurial plaster of the French codex, *emplastrum de Vigo cum mercurio* (see U. S. Disp., p. 495). He used the paste alone and covered the face with it; he then laid over this first coating some powdered starch, making thus a mask. He carefully obliterated with new coats of paste and starch any fissure, crack or chink that might have occurred. When this mask was applied before the end of the third day of the eruption, suppuration and pitting were prevented, except around the lips and mouth, because their constant motion prevented perfect adherence of the mask. Never use any mercurial collodion. Comby has reported a case of death following the application of one of the many collodions recommended.

Sublimate Spray.—The solution of sublimate used with the spray is the following (Talamon, 1890):

Hydrarg. chlor. corros.....	} aa 20 grammes.
Acidi citrici.....	
Alcohol ethyl. 90°.....	100 grammes.
Æther. sulph	q. s. ad. 1000 grammes

Modus Operandi.—The spray must contain at least 250 cubic centimeters. The patient sits up in his bed, keeping the eyes closed, the latter being covered with two pieces of absorbent cotton soaked in a saturated solution of boric acid. Start the spray, beginning at the forehead. Spray gradually over the face until the chin is reached. It is difficult to determine what should be the duration of each application, but it must be kept up until you perceive a white deposit of sublimate over the surface of the pustules and of the skin. Usually from fifteen to twenty seconds are sufficient. In order to keep the skin constantly under an antiseptic coating and secure from exterior germs, it is advisable to apply over the face by means of a brush, the following:

Hydrarg. chlor. corros.....	1 gramme.
Glycerini.....	15 grammes.

The sublimate spray, followed by the sublimate application mentioned above, must be used three times daily.

Results.—Positive results as regards suppuration. The eruption in the discrete form does not progress beyond the first stage, that of the small, red circular points or papulæ; the swelling of the face is absent or hardly noticeable. In coherent confluent eruptions, most of the vesico-pustules are checked in their growth. As regards pitting, the sublimate spray does not prevent completely the formation of cicatrices, but they are markedly diminished, both in number and in depth, the more so when the sublimate spray is used soon after the appearance of the eruption.

Negative Results.—The sublimate spray has no effect at all on the eruptions primarily confluent and on the hæmorrhagic confluent eruptions.

In such cases a sublimate bath is resorted to (10 gm. of sublimate per bath). When suppuration has begun a tepid sublimate bath or warm sublimate lotions are the safest means of applying antiseptics to the skin. A variety of other antiseptic applications are recommended for the skin. Ointments of resorcin, 2 per cent.; of ichthyol, 5 per cent.; of iodoform, 3 per cent., etc. Schwimmer applies over the face a mask covered with the following paste:

Acidi carbolici pur.....	4 to 5 grammes.
Olei olivæ	40 grammes.
Pulv. cretæ.....	60 grammes.

Du Castel uses simply a 10 per cent. carbolized oil. Hebra applied, after a bath, the following powder:

Acidi salicylici.....	10 grammes.
Talci.....	} aa 50 grammes.
Amyli.....	

Carrieu, the following:

Salol	100 grammes.
Amyli	} aa 20 grammes.
Talci	

Antisepsis of the mucous membranes must be vigorously attended to in a conjoint manner with that of the skin. Washing of the mouth and of the eyes with boric acid solutions; applying to the pharynx by means of a brush equal parts of salol and glycerine every two hours are among the useful measures. At the stage of desiccation the fall of the crusts is facilitated by baths of soap and water, followed by inunctions of vaseline. To diminish the cicatrices it is advisable to apply, with a piece of flannel soaked in warm water, a coat of either resorcin, salicylic acid or sulphur soap.

General Treatment.—When the eruption appears and is recognized, if it is discrete and the patient has been vaccinated, no active intervention is indicated. It suffices to order tepid baths, 30 deg. to 35 deg. C. (86 deg. to 95 deg. F.). If, on the contrary, the eruption is confluent, whether the patient has been vaccinated or not, prompt use must be made of two forms of treatments which can prove most serviceable. I mean cold baths and the ether and opium medication.

Cold Baths.—They are the only efficacious measure in the serious forms of variola. Their indication is absolute in case of hypothermia and of grave nervous accidents (dyspnœa. somnolence, coma). The temperature of the water must be from 18 deg. to 20 deg. C. (64 to 67.5 F.) for adults, 21 deg. to 23 deg. C. (71 to 74.5 F.) for children. They facilitate the eruption by causing active dilatation of the capillaries of the skin; they also promote diuresis. If, notwithstanding the cold baths, dyspnœa is yet intense, and if signs of congestion of the lungs and of the brain are still present, blood letting is sometimes indicated, from 3 to 400 grammes of blood being removed when the patient is of a robust constitution.

Ether and Opium Medication.—It consists in using simultaneously ether and opium in high doses. A hypodermatic injection of ether (1 gm.) is given morning and evening. Through the day extractum opii is given in broken doses. The whole dose for each day is usually 20 centigrammes for the male adult and 15 centigrammes for the female. It can be administered with strong toddies. With the administration of ether and opium, which constitutes the basis of the treatment, is usually associated the use of perchloride of iron, tr. ferri chloridi, in doses of xx drops daily.

Dreyfus Brisac says: "The results are conclusive in the cases where the treatment was followed to the letter from the

appearance of the eruption to the beginning of the desiccation. I do not consider it as an antidotal medication to the variolous poison, but it does actually influence the course of the eruption."

The ether and opium treatment has the power of checking the formation of quite a number of papulæ; some become vesicular, but they remain very small. After three or four days of treatment, in the space of 24 to 48 hours, the vesicles of the face, trunk and limbs begin to sink, and they become dry without suppurating, leaving small blackish crusts. Under that treatment the temperature, which is very high at the appearance of the eruption, goes down gradually to normal two or three days previous to desiccation. There is no fever of suppuration. Dysphagia, salivation, delirium, are usually absent, or they are slightly marked. Summing up: the characteristic influence of that treatment is to prevent suppuration, to arrest the eruption, to diminish the size of the papulæ and vesicles.

The Red Chamber—Finsen, of Copenhagen, has proposed a treatment for variola, designated by the name of "red chamber process." It consists in placing the variolous patients in a room where only the red rays of the solar spectrum penetrate, because the red rays are those which possess the least chemical activity.

The researches of Widsmark and Hammer have shown that, among the rays of the spectrum, the violet and ultra-violet rays are those which have the most power on the skin. So Finsen thought of protecting the variolous skin by preventing the sunlight from acting upon it. Juhel-Renoy and Cettinger have tested, in France, the method of Finsen. According to Cettinger it hastens the evolution of the eruption, prevents the formation of cicatrices and lessens the frequency of the accidents due to suppuration, for, in a few days, the vesico-pustules become dry.

The various antipyretics have been used in variola, chiefly sulphate of quinine, without appreciable results.

Alcohol, in moderate doses, is useful in all cases. Of course it must be given *larga manu* in alcoholics, and on the occurrence of adynamic symptoms.

Caffeine, hypodermatically, is indicated when there are signs of myocarditis and of anuria.

The internal use of various remedies, supposed theoretically to have the power of preventing suppuration, have been tried; for instance, Chauffard has praised carbolic acid (from 5 centigrammes to 1 gramme); others have recommended perchloride of iron (10 to 30 drops), hydrochlorate of cocaine (Luton and Ory), etc.

However, the only internal medication which is as yet acknowledged to possess some efficacy is that of ether and opium combined, described above, according to the practice of DuCastel since 1881.—DR. GASTON LYON—*Translated from Clin. Ther.*, 1895.

CREOSOTE IN PULMONARY TUBERCULOSIS.—In the discussion which recently took place at the *Société médicale des hôpitaux*, Paris, on the therapeutical value of creosote in the treatment of pulmonary tuberculosis, it seems to me that the mode of action of creosote on the bacillary lesions has not been sufficiently determined. It follows that the speakers have not clearly stated the indications and the contra-indications for a remedy which is at times dangerous, though remaining as yet the best agent we can oppose in many cases to the progress of tuberculous infiltration. I set aside the mode of administering the remedy, merely stating that creosote has, without question, an irritating action on the gastric mucous membrane, which seldom permits a prolonged administration by the mouth. Its anti-fermentative action may be turned to profitable account temporarily, but the stimulation of gastric secretions and the increase of appetite which result from its use, are soon followed by a dyspeptic condition; this danger to the integrity of the digestive tract evidently is due to the administration by the mouth. It is therefore preferable to administer creosote hypodermically and per rectum, by means of enemata and suppositories when the intestine is yielding and tolerant. The point I desire to bring out is that to make a rational and analytical use of the creosote medication we must consider the mode of action of creosote on the tuberculous lung. Now, it seems to me the improvement of the general nutrition upon which Burlureaux, first, and Fernet next, have insisted, is not the only therapeutical effect of the remedy.

In the *Gazette Hébdom.*, December, 1891, I think I have plainly established the fact that, aside from a general action as a dynamic and stimulant, creosote has a local action on the tuberculous lung as an irritant. It is this local action on the diseased lung that renders the medication dangerous in some cases; but that permits us at the same time to determine its therapeutical value. While creosote can be taken in health in high doses without causing any pulmonary disorder, it readily manifests its action in tuberculous subjects in proportion to the degree of inflammation due to the bacillus and to the extent of tissue involved.

In cases with extensive lesions and febrile attacks, creosote

often has a formidable action. It gives rise to violent reactions quite similar to those caused by *tuberculin*, viz.: intense congestion, hæmoptysis, pain, dyspnœa, high temperature. Of course, in such cases, creosote aggravates the tuberculous lesions and must be rejected. But these reactions clearly explain the mode of action of the remedy. For instance, again, take a tuberculous patient inclined to congestion, hæmoptysis, etc. Creosote will give rise to reactions, to congestion, plainly shown by hard breathing, moist râles. Notwithstanding all precautions, it is difficult to gauge the dose that will not cause too violent reactions; in other words, the actually therapeutical dose.

In the majority of cases of tuberculosis, either those that are not far advanced or those that have lesions running a slow course with rare local exacerbations, we need not fear exaggerated reactions; there occurs a reaction, easily kept within a moderate degree, which represents the actually therapeutical power of creosote. Indeed, creosote acts as an irritant to the affected lung, causing a reaction about the bacillary area, a therapeutical congestion, leading to *phagocytosis*; in short, it acts like the physiological antibacillary force. To this special irritating action on the diseased lung, therefore, we must attribute the improvement and sometimes the actual cure brought on by the creosote medication. Consequently, Burlureaux was right to say that those who bear creosote well are liable to be cured, and that the creosote medication is a valuable prognostic test. The creosote medication will profit only those whose bacillary process is moderate and who are strong enough to stand the local reactions brought around the bacillary area by the medication itself as a curative process.

To obtain the benefit of the creosote medication it is never necessary either to use very high doses or even to go so far as to reach a state of saturation. Ferrand spoke of it as acute creosotism, a condition telling on the general nutrition and the renal parenchyma. In conclusion, creosote should not be used with a view of obtaining an antiseptic action. We should remember that it acts in two ways: generally, upon nutrition; locally, upon the bacillary lung, causing a reaction, which, according to its intensity, determines at the same time the curative value of creosote in each case and the indications and contra-indications for the creosote treatment.

After reading the report of the discussion at the *Soc. med. des hôp.*, I thought a very long practice in a clientele of tuberculous patients authorized me to recall the conclusions I had already advocated in this same journal a few years ago. DR. E. GUITER, *Translated from Gazette Hebdom.*, Feb., 1896.

ANTIDOTE FOR POISON IVY.—The *New York Sun* first mentioned the remedial agent through an anonymous correspondent, who gives it the name of “ceroline” or “silver plant.” It is found growing by the side of brooks, to the height of two feet. Its stalks are green and bear a yellow blossom, with a red tinge, shaped like the “lady’s slipper.” The juice from the crushed stalks, or tea made from the whole plant, is rubbed on the poisoned surface of the skin.

The plant is known botanically as the *impatiens fulva*, and is further known as “touch-me-not,” “jewel weed,” or “balsam.” The name of the genus is derived from the sudden bursting of the seed pods, when these are touched or slightly pressed with the hand. As the pods ripen, they burst spontaneously, scattering the seeds to a considerable distance.—*Bullet Pharm.*, 1895, ix, 564.

[*Grindelia robusta* in the tincture, used in the form of lotion and given internally, in the fluid extract, acts well and rapidly in rhus poisoning; 2 to 5 per cent. ichthyol in water, kept applied, will relieve an acute case in half an hour, and will cure quickly.—D.]

INSANITY ON TIME.—The *Medical Press* tells a story of a gentleman who went to visit a friend who was an inmate of a lunatic asylum. When he had been there about half an hour he looked at the clock and asked if it was right. The lunatic gazed at him with a look of compassion for a minute or so, and then said: “Do you think it would be here if it was right, you lunatic?”

STERILIZATION OF CATGUT.—The following is a recent method suggested for the preparation of catgut: Boil the catgut in a mixture of *ethylic alcohol*, 85 parts; *carbolic acid*, 5 parts, and *water*, 10 parts, for five minute at a temperature of 172 deg. F.—*Bulletin Med.*, January 1, 1896.

A CASE OF SYMPHYSIOTOMY was reported at the last meeting of the Tri-State Medical Association of Mississippi, Arkansas and Tennessee by Dr. E. E. Ellis, of Dyersburg, Tenn., and is published in the *Memphis Medical Monthly* for March. He was called in consultation for a case in which forceps had failed to effect the delivery, as it had done at the previous confinement fifteen months before, when embryotomy had been necessary. The woman was twenty-five years old, small, strumous, with a generally contracted pelvis. She had been in labor 36 hours; had a pulse of 140, a temperature of 103 degrees. Child was in second position, not wedged. Forceps were ap-

plied again to make sure of their inability to aid in the delivery. Fœtal heart being clear, and patient consenting to anything in order not to give birth to another dead child, chloroform was administered and the parts were made aseptic. The soft parts were divided with a large bistoury, the large bleeding veins were clamped and the articulation was divided with the same knife. The subpubic ligament once severed, the separation was sudden. The child was then easily delivered with forceps. The separation of the joint caused an audible snap and was two inches wide. The whole time consumed, including dressing, was twenty minutes. The patient recovered, though her convalescence was retarded several weeks by phlebitis. The child also did well. The doctor states that should he have occasion to resort to this operation again, he would select the subcutaneous method, as the latter had many advantages over the open one.

SAALFELD suggests for the intertrigo of children :

℞	Euophen.....	50
	Lanolin anhydr.....	5.0
	Talci venet.....	100 0

SABARAUD recommends the following for onychomycosis and splitting of the nails. He advises that it be kept applied and held in place with rubber finger stalls.

℞	Iodine.....	1 gramme
	Iodide of potassium.....	2 grammes
	Distilled water.....	1 litre

—*Annales de dermat*, Jan., 1896.

NEXT—In the Near Future: First Doctor—"Good photograph, isn't it?" Second Doctor—"Fairly good. Flatters the left lung a little, I think."—*Puck*.

ENURESIS :

℞	Rhus aromatica.....	ʒ
	Glycerine.....	ʒi
	Aquæ.....	aa

Sig: Teaspoonful at the dose.

—*Medical News*, March 7, 1896.

THE INSIGNIA OF THE MEDICAL CORPS OF THE U. S. ARMY has been finally decided upon. It is a modified cross of the Knights Hospitallier—a Greek cross. This is to be seven-eighths of an inch high, and the same in width, and to be of dead gold bullion or metal.—*Medical News*.

OBTRUSIVELY BRILLIANT.—Twins were born in an American home, and a bright boy set about to name them. He said: "Will they be called Peter and Repeater?" No, his mother would not listen to such names. Then he said: "Let them be called Max and Climax." "No," said she, "they are both girls, so we can not call one of them Max." Then he said, after much thought: "Let them be called Kate and Duplicate." After that he was sent out to play.—*Exch.*

DIAGNOSTIC POINTS IN DISEASES OF CHILDREN.—Lividity of the skin, induced by exertion or excitement while the respiration is normal, indicates malformation or disease of the heart or vessels.

Lividity, whether temporary or permanent, is a sign of imperfect decarbonization of the blood.

Transient circumscribed congestion of the face, ears or forehead is a most reliable sign of brain disease.

Absence of tears in infants over four months of age, during the act of crying, indicates a severe and probably fatal form of disease.

A permanent downward direction of the axis of the eyes, with smallness of the face and great expansion of the cranium, is a sign of congenital hydrocephalus.

Young children do not shake when they have chills, but have a pallor or lividity of the skin, lips or nails.

Bulbous enlargements of the fingers and incurvation of the nails are signs of cyanosis, and therefore of malformation at the centre of the circulatory apparatus, or of tuberculosis or chronic pulmonary disease, attended by malnutrition.

Enlargement of the spongy portions of bones, causing prominence, softness and bending of the bones; an open condition of the fontanelles, a large square-shaped head and delayed dentition indicate rachitis.

A thick Meibonian secretion of a puriform appearance collecting between the eyelids, is an unfavorable prognostic sign. It indicates a state of great depression. It is observed more frequently in cerebral and intestinal diseases shortly before death. There is often a hyperæsthetic condition of the skin, with certain acute febrile and inflammatory affections. This hyperæsthesia is more often found on the anterior surface of the trunk. This condition is often misleading to the physician, leading him to think that the hyperæsthetic pain is of an inflammatory nature. The pain of hyperæsthesia can be readily diagnosed from that of inflammation by the fact that it is so extensive, is less severe on firm pressure than on light,

and is especially observed on the inner surface of the thighs.—J. LEWIS SMITH, M. D., in *The Medical Council*, March, 1896.

GREAT PHYSICIAN (pompously)—“I work with my head, sir, instead of my hands.” Jay Green—“Huh! That ain't nuthin'! So does a woodpecker.”—*Puck*.

TOXIC SYMPTOMS FROM PIPERAZINE.—Female, aged 32, uric acid diathesis. At time seen had vesical irritability and tenesmus. Prescribed piperazine ʒi, ft. chart. No. iii. Instruction was given to dissolve one powder in a pint of water and the whole quantity to be taken in the course of twenty-four hours. The drug clerk told the husband of the patient to dissolve one powder *in a teaspoonful of water* and to give at once. The wife remembered the instruction regarding one pint of water, so drank a whole pint of water containing the twenty grains of piperazine. Some seven hours later the woman was seen. She was greatly cyanosed and semi-comatose, it being necessary to arouse her to obtain replies to inquiries. Her pupils were minutely contracted; the pulse fifty beats per minute and slow; temperature 97.4 deg. F. Respirations were very much depressed and low, muttering delirium prevailed. The tips of the fingers and the lips were cyanotic, and, on attempting to walk, there was complete loss of motion of the lower limbs, while sensation was well preserved. Symptoms most alarming. Cardiac and respiratory stimulants, external heat, and elevation of the lower limbs were used. Stimulating high rectal injection was given. Patient was catheterized. Reaction occurred only after several hours. Complete recovery.—SLAUGHTER, *Medical News*, March 14, 1896.

THERE ARE SOME MEN who act according to their lights, but there are more who act according to their livers.—*Boston Transcript*.

TATTOO MARKS REMOVED.—After asepsis of region, the tattoo is remade with a solution of chloride of zinc, 30 parts in 40 parts of sterilized water. With due precaution no great inflammatory reaction takes place. After a few days a crust forms, which falls from the fifth to the tenth day.—*Medical Record*.

A DIAGNOSTIC POINT IN LICHEN PLANUS.—Wickham notes that the striæ and grayish points on the tops of papules of lichen planus are pathognomonic—on older papules particularly. When the papules merge (?) these signs are more marked.—*Annales de Dermatologie*.

FOR PRURITUS ANI—

℞ Chloroform.
 Tinc. aconite rad.
 Tr. opii..... aa ℥i
 Olei olivar..... ℥vi
 Sig: Shake well and apply.—ADLER.

℞ Ext. hamamelis fld..... ℥i
 Ext. ergot. fld..... ℥ii
 Ext. hydrastis fld..... ℥ii
 Tinct. benzoin comp..... ℥ii
 Olei carbolat. (5%)..... ℥i
 Sig: Shake well before applying. Introduce ℥i to ℥ii in rectum.
 —ADLER.

℞ Menthol..... ℥i
 Cocaine hydrochlorat..... gr. xx
 Alcohol..... ℥i
 Aquae distillat..... ℥i
 M. et Sig: Apply on cloths frequently.—MATTHEWS.

—*Therapeutic Gazette.*

CALCIUM CHLORIDE IN URTICARIA.—Dr. Wright reports gratifying results with calcium chloride in urticaria in two cases. The drug was administered in large doses at first (30 grains) and gradually reduced to the minimum required to control the attacks.—*Brit. Journ. of Dermat.*

MODERN HOSPITAL SERVICE.—Cleverton—Did the surgeons treat you well at the hospital? Dashaway—Finely. Every time they re-set my leg they set up the ether.—*Judge.*

TAPE WORM.—Papain is recommended as a remedy for the removal of tape worm. It is administered in doses of ten grains three times a day after meals.—*New Rem.*, 1896, viii, 29.

AN UNUSUAL DERMOID CYST.—Mundé reports a case of dermoid cyst in which, in addition to a great quantity of sebaceous matter, a switch of hair seven feet long was found. A photograph accompanies the report. [In this the switch is shown braided and tied with ribbon. We conclude, however, that this effect was accomplished by the operator, for, if it were found so, it would, indeed, be a remarkable case.—D.]—*Medicine*, March, 1896.

CREOSOTE LOCALLY FOR LUPUS.—Creosote is used pure, or with glycerine (1 part to 3, or 1 part to 10). Scarify and apply on thin gauze.—ZERININE, *Med. Moderne.*

CANTRELL suggests the following list of skin diseases in which resorcin has been found useful: Tinea trichophyton, acne, seborrœa, dysidrosis, hyperidrosis, scabies, dermatitis venenata (rhus toxicodendron), clavus, pityriasis capitis, psoriasis and eczema.—*Phila. Polyclinic.*

CAUSES OF DEATH INHERENT IN THE OPERATOR, in surgical cases, are put down by Dr. Milo B. Ward, in a paper read before the Western Surgical and Gynecological Association, and published in *The Denver Medical Times* for February, 1896, as being due chiefly to the lack of careful consideration of the four following propositions: 1. Knowing, as far as may be, what he is going after; 2. Where he expects to find it; 3. What he expects to do with it when he does find it; 4. How much live patient will be left.

He further adds that the important thing is to determine whether or not the forces of life, despite the disease plus the operation, are stronger than those of death.

ONE OF THE CAUSES OF ANEROTICISM in women is claimed by Dr. Eug. P. Bernardy, in the *March Medical Council*, to be clitoridian adhesions. He quotes Dr. Robt. P. Morris to show that of Aryan-American women 80 per cent have adhesions between the glans of the clitoris and its prepuce. While the white race suffers so frequently, he states that the negroes are totally free from the complication and suggests that this might account for the excessive amativeness of those women. He recommends a separation of the adherent surfaces as the proper treatment. This is done under cocaine, as the operation is painful. The latter is preceded and followed by an antiseptic washing, and is performed by pressing the broad end of a seton needle between the glans and the prepuce, dividing the adhesions.

AN ECONOMICAL RING-TEST FOR ALBUMEN in the urine is suggested by Dr. Alex. C. Ewing, of Salt Lake City, in the *Medical Record*. This is a description of the simple and ingenious method: Draw up into a small glass tube about an inch of the urine; let the finger remain tightly over the top of tube while you insert it into nitric acid, drawing up about the same quantity of it as of urine; the latter remains on top and if even a trace of albumen be present, there will appear a beautiful line of demarcation between the acid and the urine.

THE RECTAL SPECIALIST was defined by Dr. Chas. B. Kelsey, at the close of one of his clinical lectures, which is re-

ported in the *New York Medical Journal*, "as one who is prepared to cure the patients who come to him with trouble in the rectum."

GOOD NEWS FOR PUERPERAL WOMEN is imparted in the abstract of a paper by A. Blau, contained in the *Monatssch. für Geburtsch. and Gynäkol.* and quoted in the March number of the *American Medico-Surgical Bulletin*. The author carried out a series of experiments by putting same patients of different diets and noting the results on the involution of the uterus, the quantity and character of the urine, the abundance of the mother's milk, the weight of the child, and the weight of the mother.

The different diets tried were the exclusive milk, or egg, or meat diet, the low mixed diet, and the full mixed diet. The comforting conclusion is that a full mixed diet is preferable in all cases of normal puerperium. Hence that, after the third day, the patient may take the same amount and the same kind of food that any other healthy woman may take. Thus does science confirm what ordinary observation and common sense have already taught to the intelligent of general practitioner.

THE INTERESTING AFTER-HISTORY OF A CASE OF MYXŒDEMA, cured by thyroid extract, is published by Geo. R. Murray, M. A., M. B., M. R. C. P., in the *British Medical Journal*, St. John, to show that a patient remains free from myxœdema as long as the thyroid extract is taken, and without any increase in the dose. This case was that of a woman, 46 years of age, who had suffered from myxœdema, with the characteristic symptoms for four or five years previous to treatment. She gradually lost all the symptoms of myxœdema, which, however, partly returned on two occasions when the use of the remedy was discontinued for a time. She continues to take one drachm of thyroid extract during each week and she now remains well, over four years after the treatment was inaugurated. It is evident that as long as she continues to take the extract she will not have myxœdema. This continuance of good health in an adult leads to expect that cretins, if treated early and continuously, will also grow up and develop into normal adults.

OCULAR SYPHILITIC HEREDITY was considered by Dr. Galezowski, in a communication made to the *Societe de Syphilo-graphie* and reported in the January number of the *Recueil d'Ophthalmologie*. He has been struck by the occurrence of a number or cases of ocular affections, keratitis or especially

choroiditis, which resembled to a remarkable degree acquired syphilitic affections, though no venereal infection or any apparent specific history could be traced in any of the subjects.

Finding other forms of treatment unsuccessful, he finally decided to treat them by means of mercurial inunctions in a manner similar to that with which he treats acquired syphilitic affections. The result was surprising; he obtained either an arrest of the disease or an unquestionable and lasting improvement. Not willing to ascribe these results simply to the antiphlogistic action of the mercury he sought for a syphilitic taint in all these cases. He reports four cases which justified his suspicions. In all of these not the slightest trace of acquired syphilis could be discovered, but the parents had had hereditary syphilitic manifestations and the grandparents had been treated for syphilis.

On these four cases he bases the following conclusions:

FIRST—In all these cases there have been ocular inflammatory accidents in children of heredo-syphilitic parents who had not acquired syphilis. Hence ocular syphilis can be transmitted to the second generation.

SECOND—In these affections, called by Fournier *para-syphilitic*, mercury has an undeniable curative action if it is used during two consecutive years.

THIRD—A number of analogous affections occur in persons without syphilitic history, but one is warranted in supposing that syphilis may have been transmitted for two generations, this is controlled only by mercurial inunctions. Mercury used alone, in this manner, is efficacious in arresting the choroidal affection, and, if continued for two consecutive years, will usually improve the sight.

HAD I BEEN A GRADUATED PHYSICIAN, I would, first of all, have written a good monograph on obesity; then I would have established my jurisdiction in that nook of science. I should in that manner have had the double advantage of having as patients the most healthy people and of being besieged daily by the prettier half of humanity; for, to have just enough flesh, neither too much nor too little *embonpoint*, is with women a life study.—BRILLAT-SAVARIN.

SPECULUM SPECULATORS.—Gynecologists are the speculators of the speculum.—BLANDIN.

FORMOL HAS BEEN USED by Lamarque for washing out the bladder and urethra in 1 per cent solutions. Results have not been good in acute gonorrhœal cystitis. While they have

been better in chronic gonorrhœa, the best results have been obtained in tuberculous cystitis. The pain is intense at first, but quickly ceases. Daily washings have stopped hæmaturia, relieved pain and lessened frequency of micturition where other treatment had failed.—*British Medical Journal*.

OTHELLO'S OCCUPATION GONE.—A good-looking and fashionable member of the demi-monde had a serious attack of variola and there was every probability that she would be totally disfigured. Her physician, the distinguished Professor M. . . . , was asked as to her prospects of recovery. "Oh, the poor little one," answered the doctor, "I do not believe that her *days* are numbered, but I seriously fear that her *nights* are to be despaired of."—WITKOWSKI, *Les Drolleries Médicales*.

WHERE SIGNS FAIL—Rubbing one's hands together is not always a sign of content; think of the fellow with the itch, for instance.—*Ibid*.

Book Reviews and Notices.

The Toxic Amblyopias: Their Symptoms, Pathology and Treatment. By GEORGE E. DE SCHWEINTZ M. D., Clinical Professor of Ophthalmology, Jefferson Medical College of Philadelphia; 8vo. 240 pages, 41 engravings and 9 full-page colored plates. Limited edition. Deluxe binding, \$4.00, *net*. Lea Brothers & C., Publishers, Philadelphia and New York. 1896.

This is indeed a new departure in medical publication and the type, paper, binding and reproduction of micro-photographs are all that the most fastidious could demand.

The contents of the work are worthy of the dress the publishers have conferred upon it. At no point, and upon no more interesting common ground can the special and the general practitioner come together than this of the poisonous effects of drugs upon the visual faculty, especially as these effects are often the earliest and most striking symptom of an insidious constitutional poisoning. Dr. De Schweinitz has

done his subject full justice and brought his information up to the latest date.

The chapters upon quinine amblyopia should especially interest the practitioners of our region, while the oculist will rejoice in the full and accurate treatment of the alcohol and tobacco amblyopias, with full and modern treatment of their pathology and the original experiments upon lower animals.

H. D. B.

Leprosy, in Its Clinical and Pathological Aspects. By DR. G. ARMAUR HANSEN AND DR. CARL LOOFT. Translated by NORMAN WALKER, M. D., F. R. C. S. (Edin.). Bristol: John Wright & Co.

A brief commentary can be made on this valuable work. It is modern, brief, well published and well illustrated.

The subject matter is well arranged and no undue discussion is given place. The unqualified contagion of leprosy is acknowledged by Dr. Hansen, who first found the cause, the *bacillus lepræ*. He does not accept heredity, telluric nor dietary conditions as causative elements in the disease. Because authenticated cases of contagion do not appear is no argument, to his mind, that contagion is not the factor.

Segregation is insisted upon as the only means of eradication of the disease. A full review of all modern treatment is comprehensively given.

DYER.

A Text-Book Upon the Pathogenic Bacteria, for Students of Medicine and Physicians. By JOSEPH MCFARLAND, M. D. 113 illustrations. Philadelphia: W. B. Saunders. Price, \$2.50.

This work treats of bacteriology from a pathogenic, perhaps more properly a clinical standpoint. After a few introductory chapters on the nature, mode of living and cultivation of bacteria, the author goes on with the methods of examination of the air, water and soil for bacteria; then he treats of experimentation upon animals, but justly devotes the greater part of his time to the study of diseases known to be of microbic origin in animals and men. In this way we believe the study of bacteriology is made more interesting and attractive.

P. E. A.

Syphilis in the Middle Ages and in Modern Times. By F. BURET, Paris, France. Translated from the French, with notes, by A. H. OHMANN-DUMESNIL, M. D., etc., of St. Louis. Being Volumes II and III of "Syphilis To-Day and Among the Ancients." 12mo, 300 pages. Extra cloth \$1.50 net. Philadelphia: The F. A. Davis Co.

This volume furnishes a very interesting work in syphilography. Its value is, perhaps, most dependent upon the vast material used in the compilation rather than upon the original work contained. References galore are made in the course of the work which will be of service to the future worker in this line.

In the present volume much space is devoted to the prefaces, which both the author and the translator have seen fit to introduce, to the tedium of the reader, and without much profit.

A lengthy argument is made against the current opinion that leprosy was epidemic in Europe in the 8th to the 12th century, which the author urges was only syphilis, and that the observers of that time, through error, mistook for leprosy. The burden of proof rests with him in this instance, and his case is far from proven in his text. We are sorry to see so iconoclastic an attack made at accepted history, for the sake, it appears, of argument chiefly. The evidence quoted is all partisan, and from men who have urged the theory while they deny the facts. With the light of the evidence of leprologists like Hansen and Leloir, the testimony of Zambaco, who is chiefly quoted, carries far from a potent weight.

The whole work is entertainingly written, with a characteristic method of arrangement. It is new enough to attract the attention of syphilophiles and those interested in the history and morbid anatomy of the disease.

DYER.

The Principles of Bacteriology—A Practical Manual for Students and Physicians. By A. C. ABBOTT, M. D. Third edition; enlarged and thoroughly revised, with 98 illustrations, 17 colored. Philadelphia: Lea Brothers & Co.

This work, already in its third edition, is as convenient and complete a text-book for students and a ready reference book

for the bacteriologist as can be desired. This edition is greatly enlarged, and it contains a number of practical suggestions not found elsewhere. As a technician Professor Abbott's reputation is well established and greatly appreciated, and we commend his "Principles of Bacteriology" for use in our medical colleges and think that any library without it would be incomplete.

P. E. A.

Pictorial Atlas of Skin Diseases—Parts I and II. Philadelphia: W. B. Saunders & Co.

If Baretta's wax reproductions of skin lesions in the museum of the St. Louis Hospital in Paris have been acknowledged superb for their artistic resemblance to nature, the plates of the "Pictorial Atlas of Skin Diseases," etc., made from these wax models, are indeed marvels of art. Two volumes are already out, published in English and in French. The first volume contains photo-lithochromes of Lupus Vulgaris, Dermatitis Herpetiformis, Syphilitic Chancre of the Vulva, Purpura Hæmorrhagica and numerous wood cuts, all well executed. The second volume contains photo-lithochromes of Lupus Erythematosus, Hypertrophic Rosacea, Circinate Papular Squamous Syphilide, Xanthoma Planum et Tuberosum. The descriptive text is well arranged and equally well written.

DYER.

International Atlas of Rare Skin Diseases. H. K. Lewis, London. The XIIth volume of this Atlas is recently out, presenting several interesting cases: Neuroma Cutis Dolorosum, by L. A. Duhring, of Philadelphia; Streaked Skin Affections of the Lower Extremities (2 plates). The descriptive text is presented with the usual editorial skill.

DYER.

Formulaire des Médications Nouvelles, par le Dr. H. Gillet. I Vol. in 18 de 288 pp, avec figures, prix 3 francs. Librairie de S. B. Baillièrre et fils, 19 rue Hautefeuille, Paris.

This little book is full of interest and replete with valuable information for the general practitioner. It not only tells of

all the new medicines, and medications but in a practical way shows us the manner of administering same, the conditions for which they are recommended, their doses, their good and bad immediate and after effects, The serum antitoxins as far as known are fully discussed and their values given. We know of no work on the subject equally desirable. P. E. A.

PUBLICATIONS RECEIVED.

Fractures and Luxations, by Prof. H. Helferich, M. D., Wm. Wood & Co., publishers, New York, 1896.

Nephritis of the New Born, address before the Medical Society of the District of Columbia, by A. Jacobi, M. D., New York.

Speech on Monroe Doctrine, by Hon. Newton C. Blanchard in U. S. Senate, February 11, 1896.

The Necessity of Complete Extirpation of Tumors, paper read before New York State Medical Association, by Fred. H. Wiggin, M. D.

Some of the Newer Problems in Abdominal Surgery—Consideration of Doubtful Points in Abortion—Movable Kidney, etc., by Chas. P. Noble, M. D.

A Text-Book Upon the Pathogenic Bacteria, by Joseph McFarland, M. D., W. B. Saunders, publisher, Philadelphia, 1896.

A Treatise on the Medical and Surgical Diseases of Infancy and Childhood, by J. Lewis Smith, M. D., 8th Ed., Lea Bros. & Co., publishers, Philadelphia, 1896.

The Toxic Amblyopias, by Geo. E. de Schweinitz, M. D., Lea. Bros. & Co., Philadelphia, 1896.

Climate and Health, No. 6, edited by W. F. R. Phillips, M. D., U. S. Department of Agriculture, 1896.

The University. A plea for higher education, by Wm. Benj. Smith, A. M., Ph. D., Prof. of Mathematics in Tulane University of Louisiana.

Transactions of the American Ophthalmological Society, 31st annual meeting, New London, Conn., 1895.

Biennial Report of the Natchez Hospital, 1894 and 1895.

Electricity in Electro-therapeutics, by Edwin J. Houston, Ph. D., and A. E. Kennelly, Sc. D., the W. J. Johnston Co., publishers, New York, 1896.

Biennial Report of the Board of Trustees and Superintendent of the East Mississippi Insane Asylum, etc., 1894 and 1895.

Special Report of the Board of Health Upon the Cholera Epidemic in Honolulu, Hawaiian Islands, etc., 1896.

MORTUARY REPORT OF NEW ORLEANS.

FOR FEBRUARY, 1896.

CAUSE.	White	Colored...	Total
Fever, Malarial (unclassified).....	4	4	8
“ Intermittent	1	1	2
“ Remittent	1	3	4
“ Congestive.....	2	.....	2
“ Typho	1	1	2
“ Typhoid or Enteric.....	2	.....	2
“ Puerperal	15	3	18
Influenza.....	.....	11	11
Small-pox.....	.....	.....	.....
Measles	3	1	4
Diphtheria .....	.....	.....	.....
Whooping Cough	6	3	9
Meningitis	51	81	132
Pneumonia.....	9	12	21
Bronchitis	38	45	83
Consumption.....	6	1	7
Cancer	7	2	9
Congestion of Brain.....	22	11	33
Bright's Disease (Nephritis)	5	3	8
Diarrhœa (Enteritis) .....	.....	.....	.....
Cholera Infantum	2	2	4
Dysentery.....	.....	.....	.....
Debility, General	19	12	31
“ Senile	3	6	9
“ Infantile.....	6	.....	6
Suicide	33	19	52
Heart Disease.....	12	7	19
Apoplexy .....	.....	1	1
Tetanus-Idiopathic	2	3	5
“ Traumatic	11	6	17
Trismus Nascentium.....	7	1	8
Hepatitis	4	1	5
Hepatic Cirrhosis	5	1	6
Uræmia	14	4	18
Injuries	89	49	138
All Other Causes .....	.....	.....	.....
TOTAL	370	292	662

Still-born Children—White, 26; colored, 13; total, 39.

Population of City—White, 195,000; colored, 80,000; total, 275,000.

Death Rate per 1000 per annum for month—White, 22.77; colored, 36.80; total, 24.07.

L. F. FINNEY, M. D.,
Chief Sanitary Inspector.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

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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 tenth day of the month preceding that in which they are expected to appear. A complimentary edition of fifty 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 SYPHILIS IN INFANTS AND YOUNG CHILDREN.

BY GEORGE T. ELLIOT, M. D., Professor of Dermatology in the New York Post Graduate Medical School, etc., etc.

The treatment of syphilis in infants and children differs somewhat in the acquired and hereditary form of the disease owing to the differences in character and course of the lesions occurring in each and the influence which the process exerts upon the somatic health. A child born healthy and at full term and later acquiring syphilis is in a much better condition to resist the disease than is the one who has been subjected to the poison from its very inception and during the whole period of gestation. On the one hand, there is a child robust, strong and well nourished; on the other, one badly handicapped from the start, weak and puny, possibly marasmic, and having a tendency to degenerative changes in its organs and tissues. These bodily conditions are not the only factors complicating the question of treatment; but there are divergences in the course of the disease which are perhaps of as great importance. In the acquired form, the course is typical and regular, and the physician can foresee and estimate the manifestations and emergencies which may arise, while if the disease is of hereditary origin, all order and regularity seem to be abolished, early and late symptoms, secondary

and tertiary lesions may appear and exist together, may be present at birth or develop later, or have even begun *in utero*, and the complications varying constantly cause their treatment to be most difficult and fraught with uncertainty. The therapeutic and other measures made use of do not, however, differ so much in themselves as in the manner in which they are applied. In the acquired form of syphilis in infants and children the treatment is practically the same as is required for adults. It should be carried out in the same regular and careful manner and for the same length of time, from two to three years, or perhaps longer, being at variance only in the dosage of the mercury and other remedies employed, and in the greater care required as regards the hygienic and material conditions of the patient. On the other hand, when the syphilis is of hereditary origin, the treatment should, if possible, begin as early as possible, and even when the child is *in utero*. It being known that there is parental syphilis, either from confession of the fact on their part or from objective evidences on their persons, or from their having given birth previously to syphilitic children, or the knowledge has been obtained in some other manner, then it is advisable to treat them even when conception is not present in order to protect the next and future pregnancies and to enable a healthy child to be born. Should the woman become pregnant while she is under such care, her treatment should continue during the entire period of gestation. If parental syphilis becomes known only at the time of or after conception has taken place, then the treatment should be carried out as rigorously as possible during the remainder of the pregnancy. Consensus of authority has entirely disposed of the fear that treatment of a syphilitic woman during her pregnancy adds to the dangers of her condition or exposes her to the occurrence of abortions or of serious complications. It has been established, on the contrary, that such treatment not only does no harm to the woman, but it constitutes a most powerful agent in preventing the occurrence of abortions, which are so frequent in syphilitic women, and in enabling the child to be brought to full term and to be born in a healthy condition, or at least influenced by the disease in a degree which does not render it unsuitable for life.

The medicinal agents required for the syphilitic pregnant woman are mercury and iodide of potash, the preponderance of one or the other depending upon the stage of the disease. Together with these all other general symptoms and indications should receive appropriate care, the hygiene should be looked after and everything should be done to place the woman in the best possible condition of health. From my own experience I fully agree with those who attach the most value to the use of inunctions systematically carried out. From 45 grains to one drachm of mercurial ointment should be used for each inunction and the course should be carried out with the watchfulness, periods of intermission, etc., which are well known and have been so often and so thoroughly described that it is unnecessary for me to enter here into the details.

The hypodermic injection of some one of the salts of mercury has received in later years very high praise, but the method is not easy to institute, is painful and objectionable to the large majority of patients. When neither one of these procedures can be made use of, then the bichloride, proto-iodide, tannate or other salt of mercury can be given by the mouth, or recourse may be had to the mixed treatment—mercury and iodide of potash.

The parental syphilis being unknown, and no treatment having been followed during the pregnancy, a child may be born alive, but with indubitable evidences of an hereditary syphilis, or these develop a few days or weeks later. The question of its treatment now becomes much more complicated. Besides the purely medicinal side of the subject there is the important one of its nursing and general hygienic care. If the mother has milk enough she should nurse her child, or, if not, then artificial feeding with cow's milk should be resorted to. The mother runs no risk whatever in doing this, as the results of observation embodied in Colles' law have shown that a woman who has given birth to a syphilitic child can not be infected by it. Under no circumstances should a syphilitic infant be given to a healthy woman to nurse, and this refers equally to a child who has acquired its syphilis after birth. In this latter case the mother likewise should not nurse it, as under these circumstances she is not protected by Colles' law,

but is just as liable to become infected with syphilis as any healthy person would be.

In addition to this, the infant should be given every possible healthy surrounding and aid to counteract its tendencies to malnutrition and debility. Cleanliness should be insisted upon, and the mouth, the nose and the anal region and the various folds and creases of the body should be carefully looked after. The mouth and nose should be washed out with a boric acid solution or of one of thymol (1-500), and the folds, etc., be dusted with some absorbent powder, such as one composed of magnesia carbonate, zinc oxide and starch, to which boric acid may be added.

The medicinal treatment will be more or less difficult and vary according to the nature of the existing symptoms. These latter may at birth, or soon after, be of secondary and tertiary type or of grave nature, and the limitation of the therapeutic cure to any one routine method will be productive of little or no benefit. No definite rules can be laid down in regard to the choice of mercury or of iodide of potash, which will not be subject to so many variations as to nullify them. The use of either one or of both must be decided by the conditions in existence rather than by any specified rule or law. Whichever is, however, made use of, the manner in which the drug is conveyed to the child is subject to several modifications. The infant being nursed by the mother, the treatment may be an indirect one through her milk, she receiving a course of inunctions or the mercury or mixed treatment being given by the mouth. The results of experience have shown that benefit is derived by the infant from such a course, and analyses of the milk of the nursing woman have shown, under these circumstances, the presence of mercury. The same may be said in regard to the iodide of potash, which has been detected both in the mother's milk and in the baby's urine. The indirect method is much lauded, but in my experience I have seen it fail so many times that I prefer to treat the child directly and independently of the mother.

The direct treatment may be carried out either by inunctions or by the administration of one or the other mercurial salts. When the former is made use of, the ungt. hydrar-

gri—15 to 20 grains—may be rubbed in as is done for adults, but it does just as well to smear it on the infant's bandage. The movements of the child cause it to be rubbed into the skin and its absorption is probably favored by the heat and moisture of the surface. The inunctions should be kept up, if acting favorably upon the child and the disease, for a long period of time—from two to three years, with proper intermissions and periods of rest. I have frequently seen very good results obtained by giving the baby iodide of potash at the same time that it was receiving the inunctions, or by alternating their use—two weeks of ungt. hydrargri, two weeks of iodide of potash and so on. This latter may be given in two to five or more grain doses three times daily in a little milk. Besides the iodide of potash, the iodide of iron or any other of the iodine compounds may be used. Any one of the mercurial salts may also be given by the mouth, if the inunctions are objected to, or if a preference for such treatment is entertained. The hydrargyrum cum creta, or gray powder, is very much to be recommended, calomel in one-quarter to one-half grain doses alone or in combination with a tonic. The bichloride, the protoiodide, the tannate of mercury may also be used if preferred, in powders or in solution or in pill form.

Hypodermic use of mercury has also been recommended, but it can scarcely be used on infants and children owing to its painfulness. At any rate, it is scarcely called for when the same result can be obtained by other means. Mercurial baths are often of the greatest value. They are especially indicated when there are such cutaneous lesions as the bullous syphilide, condylomata, etc., and they consist of bichloride of mercury, and chloride of ammonium. The amount of each will vary according to the severity of the lesions and the reaction of the child to their use. Generally, eight to ten grains of each in seven or eight gallons of water are sufficient, though this quantity may be increased or diminished according as the infant withstands them, does not or does show evidences of depression, weakness or of irritability, and as the lesions are or are not benefited. The bath should be of about 15 minutes' duration, and, according to the necessities of the case, they may be given every day or every second, third or fourth day.

I have derived much benefit from them, when alternated with general inunctions of iodide of potash ℥ii to lard ℥i. After the bath, an erythema or eczema may develop. If severe, discontinuance of the treatment may be necessary, but if not, it may be relieved by the use of an absorbent and mildly antiseptic powder.

Should the child survive the early attack of the disease its treatment should be continued for two to three days with the mercurial which agrees best with it. At the same time, every attention should be given to its hygiene, alimentation, functional and somatic health. Good food, tonics, proper rest, and every possible care should be expended upon it and every means made use of in order to eradicate the disease as much as possible from the system.

Should the case be one of late hereditary syphilis, bearing the insignia of that condition, the treatment is in no wise different, but, in conjunction with the most careful hygienic care, it should consist of mercury and the iodide of potash.

The treatment which has been sketched refers to the systemic therapeutic care of the syphilitic, and could be enlarged by describing the local measures which can be made use of for the one or other lesion which may be in existence. I would, however, only say in that regard that those affected with syphilis are peculiarly liable to pyogenic germs, and the utmost cleanliness should therefore be insisted upon, and a mild general antiseptis of the body should be ensured. If ulcerations are present, aristol, iodoform, hydrargyrum ammoniatum, iodol or dermatol can be used either in powder or in ointment form as a dressing. Mercurial plaster will be found useful when applied over bone or joint affections. If "snuffles," are present, irrigation with boric acid or thymol solutions, or bichloride of mercury (1-1000), or with a 1 or 2 per cent. aqueous solution of ichthyol will be suitable. For mucous patches, mild solutions of nitrate of silver, or of mercuric chloride are of benefit, while for the condylomata, cleanliness, dryness, the use of nitrate of silver, or of calomel in powder form, 5 to 20 per cent., are indicated. Fissures at the angles of the mouth, I have seen much benefited by balsam Peru, painted on in full strength, ichthyol ointment 10 per cent., or by touch-

ing with the nitrate of silver stick. Should eye, ear lesions or other important organs exist, they should receive appropriate local care, in addition to the general syphilitic treatment.

In conclusion, it should be stated that notwithstanding that such definite and powerful remedies as mercury and iodide of potassium are in our hands as agents against syphilis, yet the results obtained from them are not to be regarded as invariably successful. The mortality of the children with hereditary syphilis is enormous—one-third to one-half dying—even though these remedies may be used. But notwithstanding that this is the case, every one a subject of the disease should receive the benefit to be derived from their intelligent use and should be given that opportunity for their life, which otherwise or from other means is unobtainable.

14 West 33d Street.

THE ANNUAL REPORT OF 1896, TO THE PRESIDENT OF THE UNIVERSITY, AT THE ANNUAL COMMENCEMENT OF THE MEDICAL DEPARTMENT OF THE TULANE UNIVERSITY OF LOUISIANA, HELD AT NEW ORLEANS, APRIL 15TH, 1896.

BY PROF. STANFORD E. CHAILLÉ, M. D., DEAN OF THE MEDICAL FACULTY.

Mr. President: During the last four years the Medical Faculty has endured losses in its membership greater in number and in magnitude, than during any similar period in the history of our college. At the annual commencement of 1893, it became my duty to commemorate the death not only of Professor Richardson, the most honored and influential member of the faculty, and, conjointly with his wife, the greatest benefactor the Medical Department has ever had—but also of Professor Logan, who was, at the time of his death, the most experienced, skilful and famous surgeon in Louisiana. At our commencement of 1895 it became my duty again to deplore a third irreparable loss, due to the death of Professor Miles, who had already acquired, though the youngest man in the faculty, professional reputation, influence and honors unsurpassed by any man of his age in the South.

On this day it once more becomes my duty to commemorate the death on February 17th, 1896, after more than twenty-seven years of active service to our college, of Prof. Joseph Jones, who, by his encyclopædic learning and his unusually numerous and valuable contributions to medical literature, had extended his reputation far beyond the limits of his home, having been better known abroad than any member of the medical profession in this State.

He was a man of exceptionally forcible characteristics. Intellectually a very strong man, he possessed a brain so active and so fertile that it stimulated him to an industry and an energy that seemed inexhaustible. Always a most earnest student, he established a merited reputation as one of the most erudite scholars and prolific authors in the medical profession of this country. Able and learned he held strong convictions, brave and independent, he possessed the courage of these convictions, and therefore his influence was a potent factor in every cause he advocated. He was a patriot, as was conspicuously proved by the services he rendered and the enviable reputation he gained as a Confederate surgeon.

It is not strange that a man so notably endowed with exceptional courage, industry, ability and learning should have become a professor in a medical college when only twenty-three years old; that he should have filled a professional chair in five different colleges before he had attained the thirty-fifth year of his age; that he should have been the recipient of numerous honorable and influential positions, and that he should have held, at the close of his career, a professorship in Tulane University and the Surgeon Generalship of the United Confederate Veterans.

During the sixty-two years that have elapsed since the origin of our medical department in 1834, there have been registered on its record of students 11,624 names, and 3306 have been graduated, viz.: 3037 in medicine and 269 in pharmacy. It has fallen to my lot during my thirty-eight years of official service, the longest yet given by any one, to have aided in the education of nearly four-fifths (2342) of all our graduates in medicine.

At our last commencement attention was called to the following facts: In 1893 there had attended 420 students, the greatest number ever registered. This number was reduced (for reasons amply stated last year) to 377 students in 1894, and to 340 in 1895, having thus lost in two years 20 per cent. of the maximum number registered in 1893. Good reasons were given for the fear that still fewer students would attend the present session; and it was stated that no increase should be expected until the session of 1896-7, by which date it was confidently believed that an annual increase would begin.

It is a source of great satisfaction that the fear expressed has not been realized. Instead of having had fewer students than the 340 of 1895, there were registered this session 379 students; thus 39 were gained, that is nearly one-half the number lost from the maximum attendance in 1893. This unexpected gain was chiefly due to the greater profits derived by the South from its agricultural products, and to the annually increasing educational advantages and reputation of our college.

There are now more than 16,000 medical students attending about 100 regular medical colleges in the United States; the geographical position and the hospital and other advantages of New Orleans entitle it probably to as many as one thousand of these students; our college can provide accommodation for 500, and it is now so organized that not fewer than 400 students annually are required to ensure a full measure of prosperity. It is believed that this number will attend the next session, provided that general prosperity prevail throughout the South.

Many Northern colleges have adopted regulations requiring, after 1898, that no medical student shall be graduated until he has completed the fourth year of his collegiate courses. Of our sixty-eight medical graduates of this day, twelve have attended four or more annual courses; and the indications at the present session justify the expectation that there will be next year a still greater proportion of medical graduates who will have attended four or more annual sessions. Hence it seems probable that in a few years a collegiate course of four years will be approximated without compulsory regulations.

Further evidence of the higher qualifications required for graduation, and of the consequent greater value of our diploma, is found in the fact that there has never before been a class having proportionately as few graduates. In 1894, only two years ago, the class numbered 377 and had 111 graduates, while this year the class numbers 379 and has only 77 graduates.

Women were first admitted to our Laboratory of Practical Pharmacy in 1888; to our full course in pharmacy, with right to secure the degree, in 1894; and the first degree ever conferred on a woman by the medical department was the degree of Master of Pharmacy given to Mrs. Rudolf in 1895. This degree will this day be conferred on Miss Augusta Lowenstein and on Miss Estelle Scott; and would also be conferred on Miss Corinne Wright, who has passed all of the final examinations satisfactorily, but for the reason that, and solely because, she has not yet attained the required twenty-one years of age. Six female students have been registered this year, the greatest number ever attending any session. Although the study of pharmacy in our college has been open to women since 1888, yet during all of these eight years the total number who have attended has been only twelve. However, during none of these years has anything whatever occurred to justify any objections to the study of pharmacy conjointly by both sexes; and all reports of all students, especially of those who belong to the fairer and better portion of humanity, have been most favorable to the courtesy, consideration and good feeling manifested by those students who belong to the sex claimed by no one to be either specially fair or particularly good. In truth, all conditions prevailing in our college encourage women to undertake the study of pharmacy, a profession believed to be specially adapted to women.

During the past ten years there has been greater improvement in medical education than during all of the previous 100 years' existence of medical colleges in the United States. Much more can be and ought to be done. Much more will be done as speedily as the future may develop a fuller appreciation of the dependence of the public welfare on medical education; and, as a result thereof, may provide the much ampler pecuniary resources, indispensable to the progress of every kind

of education, but pre-eminently of medical education, because no other special education requires as many costly expedients for its perfection.

While indulging in sanguine hopes for the future of medical education, experience proves that great progress is seldom attained except by slow and gradual steps, and that we should be content if, holding fast by all that has been gained, something more is year by year added. In such case, all interested in the medical department should now be well content, for nothing ever gained has been lost; something has been added annually to its educational resources; very notable progress has been made; the greater success of the present session has freed the responsible authorities from the anxieties, fears and trials of the last three years, and on every hand the signs are now propitious for still greater progress, prosperity, usefulness and renown.

Graduates of 1896. The Medical Faculty extends to every one of you cordial congratulations on the attainment of your degrees, and grateful thanks for the attention, courtesy and generous consideration given to the dean, and to every member of the faculty. Your decorous and meritorious conduct as students justifies the hope that your careers will be prosperous and honorable; thus furnishing the best evidence of the good work of your college, and thus serve to enlarge its usefulness and to extend its fame.

Mr. President—You are respectfully requested to confer degrees upon seventy-seven graduates. The sixty-eight whose names will first be called are entitled to the degree of Doctor of Medicine, and the nine who will be last named are entitled to the degree of Master of Pharmacy.

(Prof. Wm. Preston Johnston, president of the University, then conferred degrees upon the graduates whose names are recorded in the annual catalogue of 1896.)

PULP OSSIFICATION. *

BY J. PAUL BAYON, D. D. S., SECRETARY LOUISIANA STATE BOARD OF DENTAL EXAMINERS.

It has been my good fortune to listen to many valuable papers in the old Odontological Society, and in this its successor, the present Stomatological Society, on subjects pertaining to dentistry which have been so fully treated and discussed that I was at a loss to know upon what subject to write which would mostly interest you. After considerable deliberation I concluded to relate a case of pulp ossification which came under my observation and which was productive of no little misery to my patient, and which was very perplexing to myself. In order to understand more intelligently the cause of this singular affliction it will be necessary to study to some extent the anatomy of the dental pulp, which is a highly vascular substance of a reddish gray color occupying the central cavity of the pulp chamber, the greater portion of which is made up of fusiform and filiform cells, having no regularity, but crossing and anastomosing in all directions. On the surface of the pulp are the odontoblast cells secreting the dentine, from which originate the dentinal fibres which penetrate the dentinal tubuli. The pulp is also well supplied with nerve elements consisting of medullated and non-medullated nerve-fibres which terminate in the odontoblastic layers. It receives its blood supply from a few vessels of considerable size and numerous capillaries which ramify throughout the entire organ.

The most common affections that we are called upon to treat are pulpitis and periostitis, and as it is not within our sphere to treat inflammation outside of the mouth, we are consequently but little acquainted with inflammation in its general aspect, although it is more painful in such places as the eye, ear and organs of generation, excluding the central nervous system.

But as this is somewhat drifting from my subject, and in order not to impose upon you too long, I will proceed to relate the above stated case.

* Read before the New Orleans Academy of Stomatology, March 25, 1896.

Mr. L. H., after having exhausted the pharmaceutical list prescribed by his physician, finally applied to me as a second resort for relief. He had been a sufferer for some considerable time, spending sleepless nights, and was actually wasting away for the want of rest. It appears that when the trouble first manifested itself the patient did not notice it much, attributing it to cold (as most people do when they are so affected), until the pain became so severe as to interfere with his commercial duties. The symptoms were shooting pains about the face, extending to the ear, and on examination I discovered a second left lower molar with a large contour amalgam filling responding to percussion; the result of examination revealing a typical case of facial neuralgia. The rubber-dam was applied and a portion of the filling removed as far as the pulp-chamber, which I explored in vain at different sittings with repeated applications of pure carbolic acid with the hope that the welcomed openings might show themselves. But, alas! all my efforts were to no avail, the cursed canals could not be found, and my patient was growing weary and disheartened, when I suggested the extraction of the tooth, to which he gladly acquiesced. Nitrous oxide gas was administered and the tooth extracted; upon breaking it the trouble was made manifest without further investigation. The pulp had entirely ossified, and to such an extent that the canals were entirely obliterated.

This last treatment had the desired effect of accomplishing a permanent cure of the trouble, as I have since worked for the patient, who is again a happy man. I have met with another case which would have had a similar course had I not extracted the tooth.

I have preserved both specimens to show you, with the hope that it might be of some interest to the association. In the second case you will notice that the pulp was undergoing the process of ossification, and would have resulted similarly to the first one had not extraction been resorted to.

The causes are attributed most frequently to thermal changes of heat and cold through the medium of a metallic filling on a thin layer of dentine, but oftener from a continual slight irritation upon the nerve, which results in secreting a

plasma which in time is converted into osteo or secondary dentine, or ossification of the nerve.

The symptoms in the first stage are a numb vibratory pain of but a short duration, increasing in severity as ossification goes on, until it reaches the stages of the case herein described.

If dental irritation should be caused by some remote branch of the trigeminus the diagnosis may be obscure to both medical and dental practitioner; such disturbances as neuralgia arising from the supra-orbital nerve, or ear-ache from the auriculo temporal nerve, the patient would necessarily seek relief from a physician, as in his ignorance of anatomy, physiology and pathology of the trifacial nerve, he could not know where the trouble originated, and would not suspect that it required the interference of his dentist. If, otherwise, the physician should in any way be so negligent or incompetent as to fail to discover the seat of the trouble the cause would forever remain in the dark.

It, therefore, behooves the physician to discover and consult with the dentist in regard to such cases, when he has failed to ascertain a correct diagnosis, as both are brethren in the noble art of healing.

In conclusion, I desire to state that physicians, particularly specialists on diseases of the eye, ear and other organs which receive distributions from the fifth pair of nerves, can not be too particular in eradicating dental irritation, and should his knowledge of oral surgery be so limited as to leave him in doubt as to any oral lesion or disease, let him seek counsel from some reputable and conscientious dental surgeon.

A CASE OF THE MIGRATION OF A FOREIGN BODY WITH THE EXACT PERIOD OF MIGRATION.*

BY H. B. GESSNER, A. M. (TULANE), M. D., CHIEF OF CLINIC, CHAIR OF SURGERY,
TULANE UNIVERSITY OF LOUISIANA.

EVA N., aged 20 years, of German parentage, is a seamstress by occupation.

On the morning of July 4, 1895, the tip of a coarse sewing

* Related before the *Orleans Parish Medical Society*, September 28, 1895.

needle was broken off in her right thumb. The point entered the proximal phalanx of the thumb, passing transversely from the outer toward the inner border. The patient stated that she had felt the "snap" of the breaking needle.

The day after the occurrence of this accident an incision was made over the minute wound of entrance, under cocaine analgesia. A close search for the fragment met with no success.

July 24, the wound having healed primarily, and the girl still complaining of pain in the thumb, the inner border was incised to the extent of $1\frac{1}{4}$ inches. Cocaine hydrochlorate was again used in a 2 per cent. aqueous solution. The skin was dissected up freely on either side, with no better result than that of the first attempt. Suture of the wound, primary union.

Pain, associated with some stiffness of the thumb, was present continuously. Finally, on September 8, the patient became conscious of pain in the sole of the right foot, near the heel, especially when walking. Her brother examined the tender spot and removed with a pair of tweezers the pointed end of a needle, half an inch in length, corresponding exactly to that which had disappeared in the thumb sixty-three days before. The fragment was removed point foremost.

While the fragment may have escaped notice at the time of the first incision, having penetrated further than was at first supposed, the writer is convinced that the free exploration made nineteen days later could not have failed to discover the foreign body had it still been there. It is, therefore, probable that within this period the needle tip had already left the thumb; the persistent pain must then have been due to some cause other than the local irritation of a foreign body.

The case is reported not because it seems to be of any direct, practical importance, but because of the brief period of migration, which, furthermore, was more accurately ascertained than in any other case known to the writer.

LARGE CYST OF THE KIDNEY, CAUSING INTERNAL OBSTRUCTION BY PRESSURE.

BY DR. H. S. LEWIS, M. D., HOUSE SURGEON TO HOTEL DIEU, NEW ORLEANS.

In December, 1895, Mr. A., a foreigner, came to the Hotel Dieu for treatment.

He gave a history of repeated attacks of intestinal obstruction. He had been subject to these attacks for over eight years, but recently the interval between the attacks had become much shorter, and their severity had increased. His symptoms on admission were as follows: Constant vomiting, intense pain over the abdomen, and great distension. The temperature was 100 degrees, and the pulse rate 120.

The tongue was thickly coated. This state of affairs had existed for several days, and the bowels had not moved for a week.

On account of the excessive irritability of the stomach I decided to resort to repeated enemas of castor oil and turpentine to break up, if possible, the impacted feces, and relieve the obstruction. On the following day found my patient much improved, the bowels had moved freely during the night, and he was practically over the attack.

As Mr. A. had so frequently suffered from attacks of this kind, I made a careful examination of the abdomen, but could find nothing to account for the obstruction.

As the attacks were accompanied by great shock and were so frequent, I urged an exploratory operation; but my patient would not consent, but promised to let me operate on him if the trouble recurred.

The opportunity soon presented itself, for scarcely a month had elapsed before my poor patient was again in the same condition. This time he consented to an operation, and the usual precautions having been taken to insure asepsis, I made an incision over the swelling on the left side, and found on entering the abdomen, a large fluctuating tumor firmly adherent to the intestines and causing obstruction by pressure. Consulting with Dr. E. S. Lewis and Dr. W. E. Parker, who were assisting me, we decided that the tumor was a cyst of the kidney.

I broke up the adhesions with the intestines, but in attempting to break up the adhesions posteriorly I ruptured the sac, allowing some pus to escape into the abdomen. The rent in the sac was quickly clamped and the pus sponged out of the cavity.

As the posterior adhesions of the tumor were very firm, I was unable to enucleate the sac without again rupturing it, so I decided to make a free opening into the tumor, evacuate the pus and suture the sac to the abdominal walls. This was done and the pouch was packed with iodoform gauze.

The gauze was removed daily and the sac thoroughly irrigated with sterilized water and hydrogen peroxide.

My patient made a very uneventful recovery, union in the wound was perfect, and I removed the stitches on the tenth day.

On the twelfth day an accident occurred that worried me for several days. The abdominal wound ruptured during a paroxysm of sneezing, and the intestines escaped from the abdominal cavity. I replaced them, however, without any difficulty, resutured the wound, and my patient had no further trouble.

After I had explained to Mr. A. the cause of the intestinal obstruction, he remarked that after each attack he had passed large quantities of a milky liquid in his urine.

Several months have elapsed since the operation, my patient has gained weight, feels perfectly well, and has had no further trouble with his bowels.

CLINICAL REPORT OF TWO CASES OF LIGATION OF THE FEMORAL ARTERY.

BY W. E. PARKER, M. D., NEW ORLEANS.

The first of these cases was shown at a meeting of the Orleans Parish Medical Society in September, 1894, and the second was operated upon by me in October 1895.

CASE I.—Felix W., negro, male, age 21, admitted to Charity Hospital, August 20, 1894. Health had always been good until about two and a half months before admission, when he

contracted syphilis. Three weeks before admission he was shot, the bullet entering the apex of Scarpa's triangle and coming out in the outer and posterior part of the thigh; says that he bled very freely at the time but the hemorrhage stopped without surgical assistance. A swelling soon appeared at the apex of Scarpa's triangle, and has steadily increased in size. When admitted a swelling about the size of a foetal head was found which presented all the features of an aneurism. The leg was flexed on the thigh. Pulsation was present in the dorsalis pedis but was feeble. He had a full secondary syphilitic eruption. Patient was put to bed, he was given large doses of mercury and a shot bag weighing about five pounds was applied over the aneurism.

This plan of treatment was continued until August 27, when it was decided to cut down on the wounded artery, turn out the clots and tie above and below the wounds, as the aneurism seemed to increase in size. After the usual antiseptic precautions had been taken the patient was chloroformed and a tourniquet applied above the aneurism. An incision four or five inches long was then made, the clots were turned out and the wounded artery ligated on both sides of the wound.

The artery was wounded just at the apex of Scarpa's triangle. A small abscess around the point of exit of the bullet was then opened. Both wounds were then washed with a 1 to 2000 solution of corrosive sublimate and with peroxide of hydrogen and then packed with iodoform gauze, the wound over the artery being partially closed with silk sutures. He made an uneventful recovery and returned to his home on the 1st of October, 1894, to resume his work. I am indebted to Mr. (now Dr.) E. H. Walet, who was at that time the resident student in charge of the service, for these notes and assistance in the after treatment.

The question may be asked: "Why was he not operated upon as soon as he was admitted?" My answer would be that he was under close observation, and any change in his condition could be noticed at once; it was three weeks after the wound was received, nothing was lost by waiting, a chance was given to commence his constitutional treatment and improve his general condition. Of course, the time should have

been as soon as he received the wound. When he left the hospital the syphilitic eruption had disappeared, but he was told of the necessity of a prolonged course of treatment.

CASE 2 was of interest on account of the operation having been done with cocaine anæsthesia, and as showing the small amount necessary to do the operation without pain. John M., a railroad laborer, white, age 62, came to the hospital October 3, 1895. Is rather emaciated and walks with a decided limp. Has had a cough for several years. About six weeks before admission he was lifting a cross-tie, and felt something give way round his knee. A few days later he felt a swelling there, which has steadily grown until time of admission. Never had rheumatism or syphilis. An examination showed that he had a pulsating tumor in his popliteal space, about the size of a lemon, and a bruit was present. The diagnosis of aneurism was made and for three days an effort was made to cure it by digital compression, but without a satisfactory result. Physical examination had shown that he had a mitral regurgitant murmur and chronic bronchitis. After consultation with Dr. F. W. Parham, of our visiting staff, and my colleague, Dr. S. M. Fortier, I decided to ligate the femoral at the apex of Scarpa's triangle under cocaine anæsthesia. After the field of operation had been prepared I operated, October 8, with the assistance of the resident staff. Fifteen minims of a 4 per cent. solution of cocaine were injected along the line of incision, and the artery was exposed and ligated, the Ballance and Edmonds' knot being used. The incision was about three inches long. The patient suffered no pain except when the needle was introduced. Notwithstanding his bad condition the wound healed by first intention and under one dressing. At the end of ten days he was ready to be transferred to a medical service to be treated for his bronchitis and heart trouble. He is still in the hospital, and the swelling is only about one-third of its former size and seems perfectly solid. I am indebted to Mr. B. N. Ward (R. S.) for the notes from which this history is written.

GONORRHOEAL OPTIC NEURITIS.

BY PAUL L. REISS, M. D., VISITING OCULIST TO TOURO INFIRMARY, NEW ORLEANS, LA.

I would like to report a very interesting case which has come under my observation and which I trust will prove of interest not only to the specialist, but also to the general practitioner.

M. H., thirty years of age, laborer by occupation, presented himself to me on March 6. His sight was perfect until one year ago. The right eye is amblyopic. There exists a papillitis, hyperæmia, edges indistinct and blurred. There is no swelling.

It is quite evident, then, that there can be no stasis, descending neuritis, or perineuritis. The rest of the eye is in a normal condition. There is a slight venous hyperæmia of the left eye, the sight of which, however, is perfect. The patient can count fingers at a distance of four feet with the right eye. The field of vision is greatly narrowed at the nasal and inferior side; but much less so in other directions. The tension is normal. There was never any subjective sensation in regard to light. The chromatic sense is preserved. There was never any other symptom. The pupil answers well to light and accommodation. There was never any diplopia, or strabismus. The sensibility is normal.

I at first suspected a toxic amblyopia, but there was on central scotoma, no color blindness.

I could eliminate, therefore, the probability of a toxic neuritis (retro-bulbar). Moreover, although unilateral retro-bulbar neuritis is sometimes met with, it is more generally bilateral.

In this case, up to the present, it is unilateral. The patient had not suffered from any general disease, nor did he give any history of rheumatism or syphilis. He confessed, however, to having had gonorrhœa several times, and of having even yet some vesical trouble. For a year past he has been subject to violent pains in the lumbo-sacral regions, which have compelled him to cease working on several occasions, for even a month at a time.

The pains are not muscular. He suffered during these attacks with crural and sciatic pains, symptoms of neuritis. He lost consciousness on one occasion. His senses of smell, taste and hearing are normal.

There has been no vertigo, headache or vomiting. The condition is limited to the cauda equina. The right patellar reflex is a little exaggerated. There are no evident symptoms of hyperæsthesia.

Can there be any relation between the spinal troubles and those of the optic nerve?

It has been shown that besides lesions of the medulla, affections of the spinal column also could react upon the optic nerve.

The question arises here if there could not be an ascending neuritis, but I question this. The same factor which here acts upon the spinal column also acts upon the optic nerve. The nature of this factor, then, we must look for in some septic intoxication. We find this in gonorrhœa. We have, in this case, spinal and optic nerve symptoms caused by gonorrhœa.

This is a rare condition in the history of disease. We know that there exists a blenorrhagic myelitis. Cases of blenorrhagic neuritis and several cases of gonorrhœal rheumatism, accompanied by severe forms of meningo-myelitis have been instanced. These conditions have been specially elucidated in the works of Charcot* and Bonnet.†

This patient seems to have an attenuated type of the spinal affection, lightning pains, diminished generative functions, etc. Panas‡ cites an example analogous to mine.

It is to be apprehended that the other eye will also become involved. As regards treatment, I put my patient upon increasing doses of the iodide of potassium. If I do not get the desired effect I shall resort to intra-muscular injections of the biniodide of mercury, then to arsenic and to general tonics.

* CHARCOT, *Leçons Cliniques*, 1887.

† BONNET, *Thèse de Paris*, 1877.

‡ PANAS, *Semaine Médicale*, December 30, 1890.

N. O. Medical and Surgical Journal.

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

A TEST OF ANTIPHTHISIN.

Antiphthisin is the remedy proposed by Prof. Edwin Klebs, of Zurich, for the treatment of tuberculosis. Briefly, antiphthisin is a derivative of Koch's tuberculin. It is prepared by precipitating the toxalbumens from tuberculin or from the culture-fluid. As these toxalbumens have been found to be the cause of the reaction and accompanying symptoms produced by the administration of tuberculin, and as the filtrate does not produce these effects yet preserves therapeutic properties, antiphthisin may be finally defined as tuberculin which has been rid of its toxic properties.

Further information on the subject can be obtained from the JOURNAL for July, 1895, and from current medical literature. It is sufficient for the scope of this article to add that Dr. Karl Von Ruck, of Asheville, after having used tuberculin extensively, then modifications of tuberculin, finally adopted antiphthisin, obtaining gratifying results, especially in the early stages of pulmonary tuberculosis. He claims that it causes the bacilli to disappear from *living* tubercular tissue; it does not act upon dead tissue, but upon the outlying zone of infiltrated tissue, inhibiting the development of the bacilli at that point.

Some of the members of the Orleans Parish Medical Society having used antiphthisin in their private practice, apparently with good results, the subject was discussed at the regular meeting, held October 12, 1895. It was decided that a committee should be appointed which would suggest a plan by which the remedy could be given a careful test. The president appointed Drs. A. J. Bloch and H. Bezou on the committee.

These gentlemen reported at the next regular meeting of the society, held October 26, 1895. They stated that upon corresponding with Dr. Karl Von Ruck, the associate of Dr. Klebs, they had learned that an amount of antiphthisin sufficient for the experiment would be furnished to the society free of charge. They consequently recommended the appointment of a commission to conduct the necessary experiment, the members of said commission to be five physicians, five surgeons, two laryngologists and two bacteriologists.

The president, Dr. F. W. Parham, appointed Drs. J. H. Bemiss, John B. Elliott, Sr., Joseph Holt, A. J. Bloch, H. S. Lewis; E. Souchon, J. D. Bloom, R. Matas, F. Loeber, C. Chassaingnac; C. J. Landfried, A. McShane; P. E. Archinard and O. L. Pothier, the Society having adopted the committee's report. The president was added to the commission by a motion. Later, Drs. J. B. Elliott, Jr., M. Souchon and J. F. Oechsner were appointed to attend to the giving of the antiphthisin.

The commission was organized, subdivided into medical, surgical and statistical committees. It was at first determined to select the cases, choosing the greater number from patients in the early stages of tuberculosis, as the best results were to be expected from such; but, owing to the difficulty of finding a sufficient number, and also in order to make the test as complete as possible, it was finally decided to take all cases that could be secured.

The experiment was commenced in November, 1895. All cases, medical and surgical, were examined by their respective committees, in conjunction with Dr. Von Ruck. Careful memoranda were taken and charts of their physical condition were made. Ten surgical cases were kept under observation and fourteen medical cases. The average duration of the observations were from two to three months.

The commission presented its report to the society at a regular meeting held March 28, 1896, about four months after the inauguration of the trial. This report really consisted of a report from the medical, the surgical and the statistical committees respectively.

Surgical Cases.—The report of the surgical committee went to show that of its ten cases, two should be omitted from the summary, as the treatment was not continued long enough to have any influence either way. All the cases were treated by means of appropriate surgical measures, except the glandular case, which will be particularly noted further.

Of the eight cases in which treatment was kept up, there were four of hip-joint disease, two of old Pott's disease, one of tuberculous cervical glands, and one of tuberculous knee. The result in these was recorded as follows: Three improved, two unimproved, two doubtful, one died. We quote the general conclusion of the chairman of the surgical committee, Dr. Parham: "A consideration of the three improved cases would certainly lead us to believe that antiphthisin has decided value and we should commend its careful tentative employment in conjunction with general measures and the usual appropriate surgical operative treatment. The glandular case we consider especially encouraging. This case would have required a most serious operation for the removal of the glands, with great uncertainty of ultimate benefit; the improvement under antiphthisin treatment, therefore, would alone justify us in asserting that we have in this remedy a most valuable aid in the management of such cases."

This glandular case, in our opinion, is the only one showing conclusive results. The glands situated on right side of neck had appeared five years before patient came for treatment. They remained of the size of a pea until two years ago, when they began manifestly to enlarge, growing rapidly during the three months immediately preceding the treatment. The antiphthisin was at first given by the rectum, afterward hypodermically. The temperature occasionally rose to 104 deg., but after the remedy had been injected directly into the glandular substance for ten days "the glands had become smaller, better defined and harder."

The other cases were not only treated by appropriate surgical methods, but of the two, besides the glandular one, recorded as improved, one at least had improved progressively before the administration of antiphthisin.

Medical Cases.—At the time of the framing of the report, the medical cases were summarized as follows: Cured, one; much improved, five; improved, three; stationary, two; died, two. When the report was presented, the chairman of the medical committee, Dr. Bemiss, stated that two of the improved cases had continued gaining at such a rate that he felt justified in adding them to the list of the cured, thus making the number of the latter run up to three. We quote the conclusions read by the chairman: “(1) In nearly every case the area of lung involved decreased, if it did not clear up entirely. (2) Auscultation bore out the results of percussion, vesicular respiration replacing in a greater or less degree morbid breath sounds. In those cases which were recorded as cured, the departure from health is only such as is due to the results of every continued pneumonic process. (3) Secretion was diminished even in the cases marked only improved, and entirely absent in others. (4) Bacteriological reports, in most cases, bore out the results obtained by physical and other examination. (5) The general condition of the patients improved in the large majority of cases, even in those whose physical examination did not show any great improvement. (6) The use of the remedy was not attended with any danger to the patient. (7) Finally, antiphthisin does seem to have curative and not simply palliative qualities.”

To further elucidate point No. 5 we can add a few sentences taken from the report of the committee on statistics: “We wish to mention that the bacteriological examinations were made without any knowledge of the cases clinically by the bacteriologist. Also, that the only case recorded as positively cured is the only one in which it was found, independently, that the bacilli were absent at the final examination, though having been found at the first. Again, that of the five cases recorded much improved, four were of those in which bacilli were found before treatment and only degenerate forms at the close of the experiment, the fifth having been examined only at the beginning and with negative results.”

It can be seen at a glance that the medical cases gave more decided results than the surgical. The society received the:

report, which was read before a large attendance and in the presence of Professor Klebs and Dr. Von Ruck, who had come specially from Asheville to hear it.

There was very little discussion and no formal adoption of the report.

We think the society acted wisely. The subject is one of too great importance for the report to have been considered otherwise than as a preliminary one. The consequences, direct and indirect, of any final expression of opinion are too far-reaching to allow anything but very deliberate action after more prolonged observations.

It is true that the showing so far, especially in the medical cases, is very encouraging. It certainly should warrant and induce further study of the remedy. There have been so many previous disappointments, however, that the profession can not be blamed if it is more than conservative in the matter. We learn that the cases reported as improved in March have held their own up to date, but a much longer period of continued improvement will have to follow before we can conscientiously give antiphthisin our unqualified endorsement.

THE LOUISIANA STATE BOARD OF MEDICAL EXAMINERS AND THE TULANE GRADUATES.

The public exploiting of the discontent among the recent graduates from the medical department of Tulane was unfortunate and is to be regretted. The dignity of the board has in nowise suffered, however, and the JOURNAL is glad to express its approval of the final position taken by the graduates themselves. While the demand for a presumed right may deserve some consideration, yet at this time, when the Board of Examiners is young and just beginning its crusade against the evils of our profession, all assistance should be given it.

If Tulane has conferred the honor of a diploma on any man, this should in no way hamper his meeting the examination of a State Board, whose purpose is not to keep physicians out of the State, but to bring in those best qualified to hold up the

standard we all want. Each additional name on the list of registered physicians now means an addition to the force of our intellectual future. It means that the stamp of excellence is the possession of every man who has passed the ordeal. It means that hereafter our State medical institutions and our medical purposes shall be guided and governed by the highest intelligence that fair-minded tests can procure. So we have learned that the best interest of each of us is the best interest of all, and it is highly creditable to the last class at Tulane that they have fallen in line and faced the State Examining Board.

THE RIGHT OF WAY FOR PHYSICIANS.

Chicago has passed an ordinance allowing the right of way to physicians before all processions, vehicles, public conveyances, etc.

The *Journal of the American Medical Association*, of March 28th, quotes the ordinance in full.

This is a step in the right direction. We can understand that a fire engine, or an ambulance should, at all times, precede in right of way the physician, but that a delay of even five or ten minutes, caused by a passing procession, of holiday origin, or even a funeral, might be of serious importance to the expectant patient.

The impracticability of this movement alone stands in the way of its usefulness. Unless something more than the badge, or municipal token, is in evidence, delay is only more apt to occur in the solicitation of the right in the matter. Expediency is always suggesting the solution to its own embarrassment, however, so we will watch the effectiveness of the Chicago movement before we urge its adoption here.

MISCELLANEOUS MEDICAL ADVERTISING IN THE LAY PRESS.

The *Ladies' Home Journal* has decided to refuse all advertising of a medical or purported medical or sure-cure nature.

Editorial acknowledgment of this position of the *Ladies' Home Journal* has been made all over the country.

We are as appreciative as others and we congratulate the management of this periodical upon the step taken.

Never as to-day has scientific medicine appealed to the public, and it is a disgrace and an insult to the intelligence of the American people that the periodical and the daily press should be so disfigured with miscellaneous quack advertising. Unscrupulous for the most part, it aims at a class who are unable to appreciate the harm they do themselves by patronizing such advertisers.

Legitimate medicine suffers at the hands of these charlatans and ill-doers; who, just without the pale of the law, have only a monetary consideration and whose humanity is regulated by the net profits on a year's business.

If other reputable journals of a lay nature would follow the high standard raised by the *Ladies' Home Journal* the repute of themselves and of the subscribers to whom they cater would be much enhanced, while the respect due a deserving medical profession would only be increased to the detriment of none.

Department of Surgery.

In Charge of Dr. F. W. PARHAM; Assisted by Drs. E. D. MARTIN and
F. LARUE.

(EXTRACT OF THE PROCEEDINGS OF THE PARIS ACADEMY OF MEDICINE OF MARCH 3, 1896.)

RHINOPLASTY BY THE ITALIAN METHOD.

Mr. Berger presented a case of specific origin, in which he performed rhinoplasty, according to the Italian method.

When he undertook to repair the nose, on December 4, 1895, the ulceration had been completely cured for several months.

The first operation consisted in the paring of the nasal stump, and in the fixation to the latter of a pediculated flap, taken from the arm.

The arm was held to the head by an apparatus specially devised by Mr. Berger.

This position, maintained for ten days, was well borne by the patient.

Then it was that the flap pedicle was cut, being found both adherent and well nourished.

On January 7, 1896, Mr. Berger was able to complete the restoration, with most satisfactory results.

Berger insists on the minute and rigorous technique of the procedure.

His apparatus for maintaining the required position is acceptable to the patient, as cleanliness, feeding and walking are not interfered with.

DOUBLE TUBAL PREGNANCY, HEMORRHAGE, OPERATION, RECOVERY.

Mr. Le Dentu reports the case of a woman who entered his ward with positive signs of a serious intra-abdominal hemorrhage.

A fortnight previous, she presented undoubted symptoms of a ruptured hematocele.

Mr. Brodier, the chief of clinic, performed laparotomy and found a diffuse hemorrhage in the abdominal cavity.

In searching for the source of the bleeding, he found two small embryos.

The interesting feature of this case is that it was one of double tubal pregnancy with a single sac.

Such cases are extremely rare; Brodier in his researches gathering but three or four similar ones.

Mr. Le Dentu presented the two embryos of seven to eight weeks and the placental debris before the members of the Academy.

The patient made a very good recovery.

Medical News Items.

THE SIXTY-THIRD ANNUAL COMMENCEMENT EXERCISES OF THE MEDICAL DEPARTMENT OF TULANE UNIVERSITY OF LOUISIANA were held on April 15, 1896, at 11:30 A. M., in the Grand Opera House, New Orleans.

The house was filled, as usual, there being a large preponderance, also as usual, of ladies. The presence of the latter, in new spring costumes, and of a good orchestra made up the bright side of the picture; the background was composed of the faculty, a few eminent men as guests, and the dignified aspirants for a degree.

Degrees were conferred upon eighty-six; seventy-nine were made doctors of medicine and nine masters of pharmacy; of the latter, two were young ladies.

The opening prayer was feelingly delivered by Rev. J. D. Whitney, S. J. Dr. S. E. Chaillé, dean of the faculty, read his annual report, published in this issue of the JOURNAL. Then Prof. William Preston Johnston conferred the degrees, as president of the University. The distribution of diplomas followed. Bishop Sessums delivered the annual address in an eloquent manner, and Dr. Eugene Walet was the valedictorian. The exercises were closed with a benediction by Bishop Sessums.

The report of the dean shows a gratifying increase in the number of matriculants over last year, and leads us to hope for a steady gain on the part of the Medical Department of Tulane, as the boys affectionately call it.

THE SECOND ANNUAL MEETING OF THE CHARITY HOSPITAL OF LOUISIANA ALUMNI ASSOCIATION was held on April 14 and 15, 1896. The first evening session was the so-called "business session." Routine business was transacted and papers were read. Dr. J. W. Scott, of Texas, was charged with the report on "Progress of Medicine During the Year" and gave a most carefully compiled resumé of everything new in the way of therapeutics. The task of doing the same for "Progress of

Surgery During the Past Year" had been allotted to Dr. W. S. Bickham of Louisiana. He entertained the association with an account of new surgical procedures, the status of the X ray up to date, and the surgical work of a novel character done during the past year at the Charity Hospital. The first two sections of the paper were illustrated by means of stereopticon views.

A motion was carried, acting upon a suggestion of Dr. Bickham and which had been made already last year, to transmit to the Board of Administrators of the Charity Hospital, as the sense of the association, a recommendation for the appointment of a competent medical registrar, in order that all the valuable data concerning medical and surgical work done in the institution might not only be preserved but be collected systematically.

Officers for the ensuing year were elected as follows: President, Dr. G. A. B. Hays, of Plaquemine parish, La.; vice president, Dr. J. W. Scott, of Texas; secretary, Dr. Jno. Laurans, of New Orleans; treasurer, Dr. J. F. Schmittle, of New Orleans; executive committee, besides the president and secretary, who are *ex-officio*, Drs. F. W. Parham, Jno. Callan and Jno. Leake, all of New Orleans.

The second night was occupied in listening to an interesting address from the retiring president, Dr. E. L. McGehee, in which he called attention to the need of a training school for male nurses, and recommended that special attention be given by the Hospital Board to the question of an absolutely pure water supply for the entire hospital.

Mr. Edwin Marks, secretary of the Hospital Board, was the annual orator. His address was able and well prepared. He paid a tribute to the medical fraternity and its works and relation to society, particularly to referring to those who have labored and now labor at the Charity Hospital.

This oration was preceded by the awarding of the "Alumni medal" by Dr. E. S. Lewis, vice president of the Board of Administrators. The history of the medal up to this point is recorded in the March and April numbers of the JOURNAL. The name of the successful outgoing student had been kept secret by the medal committee and the majority of

those present, including the competitors, were ignorant of the result of the examination. The committee had simply had the name inscribed on the medal, and Dr. Lewis read that Dr. Eugene H. Walet had been accorded the honor, at the same time making some remarks in his usual happy way. Dr. Walet, in accepting the medal, said a few appropriate words to express his gratitude.

The finale of the meeting of 1896 was a banquet at the Cosmopolitan, which was much enjoyed by the alumni and a few guests.

THE DATE OF MEETING OF THE LOUISIANA STATE MEDICAL SOCIETY has been changed. The following extracts from a letter sent to all members by the acting president, Dr. P. E. Archinard, through the corresponding secretary, Dr. A. G. Friedrichs, gives a clear statement as to the present status of the society and the prospects for the meeting:

“ On March 18, Dr. R. M. Littell, president of the Louisiana State Medical Society, sent his resignation as president of the society. Believing that I had no authority to accept and act upon same, I called a meeting of the officers of the society and of the chairmen of the sections for April 4, in New Orleans, for the purpose of advising as to what action to take in order to make our meeting a success.

“ Eighteen of the invited ones responded, ten in person and eight by letter. At this meeting it was decided that the article of our by-laws relating to the resignation of the president should be applied and the vice president of the First Congressional District should act as president. As the transactions of 1895 were considerably delayed and still in the printer's hands, it was thought proper to appoint a committee to act with the publication committee in order to hurry up the completion of this work.

“ Another committee, consisting of Drs. W. E. Parker, F. W. Parham, F. Formento and A. J. Bloch, was appointed to confer with the chairmen of the various sections and urge them to secure papers for the meeting.

“ It was also determined to send a circular letter to all members, explaining the situation, and assuring their co-operation in making the meeting the equal of any of its predecessors.

“It was reported that, in some sections, interesting and valuable contributions were already promised and more were expected. Finally, it was decided that, in view of the conflict of dates with the meeting of the American Medical Association at Atlanta, our next meeting would take place in New Orleans on May 12, 13, 14 and 15, instead of May 5, 6, 7 and 8, as originally announced.

“In view of the fact that the new medical bill making this society partly a State institution, and also as names have to be considered for two vacancies on the medical examining board, you are urged to be present at the meeting and to bring with you notes of interesting cases in your practice, and, if possible, the application of one or more regular practitioners in your neighborhood.”

THE AMERICAN MEDICAL ASSOCIATION will meet, as previously announced, in Atlanta, Ga., on May 5 to 9, 1896. A large number of papers are promised in each section, and the meeting will, in all likelihood be an interesting, as well as a successful, one.

THE TWENTY-FIRST ANNUAL SESSION OF THE AMERICAN ACADEMY OF MEDICINE will be held in the “Dancing Hall” of the Hotel Aragon, Atlanta, Ga., on Saturday, May 2, and Monday May 4, 1896. The academy will meet in executive session on Saturday, May 2, at 10 A. M. The open session for the reading of papers will begin at about 11 A. M. There will be a recess for luncheon from 1 to 2:30 P. M. The “Reunion Session” and annual dinner will be held on Saturday evening. An executive session will be held on Monday morning, after which the special discussion on “Methods of Medical Education” will be the order of the day. The Association of American Medical Colleges and the Confederation of the State Boards of Medical Examiners and Licensers have accepted the invitation of the council and will participate in this discussion. The time table for the day and the time for adjournment will be determined by the circumstances

A MONTHLY MAGAZINE of from 12 to 128 pages, to be known as *Weir's Index to the Medical Press*, will soon be issued. Each issue will treat the entire medical literature of

the month preceding as one volume, to which it will aim to be the index or contents table. For this purpose, an editorial staff, the *personnel* of which has been carefully chosen, will review monthly the medical press of the United States and Canada, including, in addition to the published transactions of the various national and State medical societies, the current number of every important medical periodical published in the two countries.

THE NINTH ANNUAL COMMENCEMENT EXERCISES OF THE CHATTANOOGA MEDICAL COLLEGE were held on March 17, 1896. There were twenty-two graduates. Addresses were made by Dr. J. W. Bachman, of the First Presbyterian Church; by Dr. George H. Cope, class valedictorian; by Dr. H. Berlin, who made the faculty address, and Rev. R. J. Cooke, D. D., vice-chancellor of Grant University, presented the diplomas.

THE NATIONAL CONFEDERATION OF STATE MEDICAL EXAMINING AND LICENSING BOARDS will hold their sixth annual meeting in Atlanta May 4, 1896, at 10 A. M. After introductory remarks by the vice president, reports of officers and committees will be heard and discussed. The president's address will follow. In the order named will come: First, address by Jas. R. Parsons, Jr., on "Preliminary Education and Practice in New York;" second, "The Limitations of the Standard of Modern Educational Requirements, as Determined by State Medical Examining Boards," by Jos. M. Mathews, M. D.; third, a paper by Wm. S. Foster, M. D.; fourth, "Some Obstacles to an Interstate Recognition of a State License to Practice Medicine, with Suggestions for their Removal," by Chas. McIntire, M. D. "Miscellaneous Business" will be considered next, and finally the election of officers. The purpose of this confederation is the discussion of all questions pertaining to licensing of intending practitioners, and of comparative methods of handling examinations, etc.

THE CAVALRY CONFEDERATE VETERANS, as represented by the Cavalry Association, have elected our friend, Dr. Wm.

H. Watkins, surgeon of the camp, to fill the vacancy caused by the death of Prof. Joseph Jones. The election was unanimous, a fitting and deserved compliment.

THE WEDDING BELL.—DR. W. WUNDERLICH was united in marriage to Miss Eva Rainey on Wednesday evening, April 8, 1896. The ceremony was performed at the residence of the bride's mother by Rev. B. M. Palmer. The doctor and his bride have our sincere congratulations.

The same evening witnessed the wedding of Dr. L. D. Archinard and Miss Corinne de Verges, with impressive ceremony, at the St. Louis Cathedral. The young couple are tendered our cordial congratulations.

A week later Dr. W. W. Butterworth was married to Miss Maud Campbell, at Trinity Church. To this couple as well are our congratulations extended.

THE TENTH ANNUAL MEETING OF THE AMERICAN ORTHOPEDIC ASSOCIATION will be held at Buffalo on May 19, 20 and 21, 1896. Over forty papers are announced in the preliminary programme, many on subjects of great practical importance.

THE LOUISIANA STATE LEPERS' HOME.—On Friday, April 17, the four Sisters of Charity designated for that work began their service at the Lepers' Home in Iberville parish. The State Board of Control of the Lepers' Home have in this added one more comfort to the unfortunate inmates of the Home. With the means at their disposal, and with the inaccessibility of the Home considered, much has been accomplished in the eighteen months of existence of the institution. The number of patients at present is twenty-four.

THE MISSISSIPPI STATE MEDICAL ASSOCIATION held its regular annual meeting at Vicksburg, on the 15th of April. A number of interesting papers were read, and some social features introduced made a pleasant meeting. The next meeting will be held in Jackson, the usual place selected.

Abstracts, Extracts and Miscellany.

A CASE OF PULSATING PLEURISY.—This case, in regard to certain points, differs from the classical description. A woman, aged 28 years, came to the clinic, January 29, 1896, presenting the symptoms of pleurisy, involving the whole of the left pleura.

The left side of the chest was enlarged and dull all over, even in the supra-clavicular fossa. Clearness was detected only over a few square centimetres about the root of the left bronchus. In front, all the left side, including Traube's space, was dull; the dullness extended beyond the sternum, nearly reaching the right mammary line.

There was consequently an enormous exudation displacing the costal parietes, the diaphragm, and the mediastinum. No vocal fremitus.

Above the *right* mamma, palpation alone revealed the vibrations of the semilunar valves over a surface of several square centimetres. Palpation, combined with auscultation, revealed below the *right* nipple the apex-beat.

No vesicular breathing over the dull surface, but there was bronchial breathing over that clear spot near the root of the bronchi.

Both heart-sounds above and below the *right* mamma were very distinctly heard on auscultation, while they gradually weakened when the auscultating ear drew toward the *left* mamma, at which spot they were hardly perceptible. There was no question but that the heart was located in the *right* half of the chest, and that it was there *in toto*, apex and base.

Upon exploring by palpation, the diaphragm, whose movements appeared to be abolished on the left side, the fingers clearly detected, far from the median line, behind the left false ribs, strong pulsations corresponding with the heart-beats.

The heart having been distinctly located on the right side of the chest, the pulsations noted on the left side behind the false ribs were due to the pulsating exudation transmitted to the exploring fingers by the diaphragm.

Dyspnœa being intense, 1250 grammes of serous fluid, somewhat turbid, were aspirated. Microscopical examination revealed a large number of pus cells. Albumin in the fluid reached the enormous proportion of 150 grammes per litre. A few days later, though re-accumulation did not seem to take place, 600 grammes were again aspirated. The heart came

back to its normal place and the pulsations noted behind the ribs disappeared.

A number of conditions yet uncertain are necessary to the formation of pulsating pleurisy. However, as Mr. Cornby has well established the fact, we know that the lung must be completely shrunk, for any expanded part of the lung communicating with the open air would arrest the transmission of the heart sounds. The mediastinum also must be in a condition of complete rigidity, for if it can be driven back, the other lung will absorb the heart sounds. Finally, the diaphragm must be stretched to a certain degree only; it must not be completely rigid, otherwise it could not transmit to the hand the pulsation wave.

The conditions appear to be rarely met with. Yet the case reported here invites us to seek for the pulsations with the fingers when they are not recognizable by the eye, in pleurisy, and perhaps it may demonstrate that pulsating pleurisy is not so rare as the past records show. Indeed, Mr. Comby, in 1889, (*Archives de Médecine*, 1889, I. page 451) collected only 45 cases.

Bouveret, in his excellent work on pulsating pleurisy (*Traité de l'empyème*) does not report any new cases.

Only later, Rumno, Wilson, and more recently Beclère (*Soc. med. des hôpitaux de Paris*, 1894, page 339) have added a few new observations, but counting all, hardly 60 cases were ever reported. In concluding, it is well to note that the fluid was not purulent in this case, that on the second aspiration it looked less turbid than the first time. The patient is doing well.—R. LEPINE, in *Lyon Médical*.

PROFESSIONAL SYPHILIS—A WARNING.—In the April number of the *Journal of Genito-Urinary and Cutaneous Diseases*, Dr. Morrow writes quite practically on the occurrence of professional syphilis, and of the dangers of its occurrence and of its presence.

While medical men can not claim an exclusive monopoly of digital chancres, yet they are the most frequent sufferers. Fournier's statistics of forty-nine cases showed thirty among physicians.

It is noteworthy that specialists in venereal diseases who are most exposed to constant contact with syphilis are rarely contaminated. This is because they recognize the danger, and take greater precautions to guard against infection.

Enough has been said to show that a chancre on the hand of any one engaged in obstetrical work may be a prolific source of syphilitic infection. Almost all professional

men with digital chancres maintain that it must be a simple sore, and display an almost invincible repugnance to acknowledge the true nature of the lesion.

Any unusual sore on the hand should excite the attention, if not suspicion of the physician, and his precaution should begin at once.

In surgical operations, obstetrical examinations, in the presence of open wounds, all care should be used in prophylaxis. It is well to see that there are no cuts, pricks, abrasions, fissures, hang nails, or any break of the epidermis of the hands. If these are present they should be protected before the examination is made.

An instant's exposure may produce an uncomfortable, not to say, serious result, by introducing the syphilitic intoxication with all this entails.

THE TREATMENT OF PULMONARY APOPLEXY is based upon etiological indications. When the heart is affected use digitalis, caffeine. In urgent cases, blood-letting is the best means for relieving the heart.

When depression occurs in infectious diseases, use tonics—alcohol, champagne, cinchona. Against the hypostatic congestion, so common, use dry cups. Compel patients to lie on the side, or, better, flat on the stomach. Against the stitching pain in the side, use dry or wet cups. Against the dyspnoea use cups, inhalation of oxygen, hypodermatics of ether, of caffeine, and chiefly of camphorated oil, from one to four syringefuls of the following solution :

Sterilized olive oil.....	30 grammes
Camphor.....	5 grammes

Against abundant hemoptysis use the ligature, rather tightly applied about the four limbs, ice internally, dry cups and hypodermatics of ergotin.

Against less abundant hemoptysis of a more lasting character, use in preference ergotin or ratanhia by the mouth. Keep the patient quiet, of course. No movements, no talking should be allowed.—*La Presse Médicale de Paris.*

TREATMENT OF HICCOUGH BY TRACTION ON THE TONGUE.—A non-hysterical young lady was having hiccough for three days, thirty spasmodic inspirations per minute. It was attributable to some disorder of the stomach, and while the tongue was thrust out for examination, it was noticed that the spasms ceased. The patient was asked to repeat the move-

ment of thrusting her tongue out in a rythmical way for a certain time, and she was completely and rapidly rid of the hiccough.

The mechanical excitation of the base of the tongue told on the respiratory centre of the bulb, the seat of the functional trouble, in a reflex manner.—R. LEPINE, in *Bull. Med. de Paris*.

TREATMENT OF HICCOUGH.—In patients subject to frequent attacks of hiccough, I always cure them immediately by the following method: A few seconds after a contraction, the patient, standing motionless, having released, if necessary, all constriction about the waist, takes a half inspiration and immediately closes his nostrils, and begins to drink half a glass of water by small mouthfuls, repeatedly and regularly sipping it without breathing. This must be prolonged as much as possible, but without too much effort. It can be repeated when necessary. I have always had this method succeed.

Here is the physiological explanation: On the one hand, repose of the diaphragm which the deglutition of a little quantity of water and air allow to be prolonged without effort. On the other hand, the deglutition creates peristaltic movements of the œsophagus and of the stomach which interrupt the spasm of the diaphragm usually accompanying the anti-peristaltic movements in vomiting. The œsophagus contracting regularly, brings back by synergy the regularity of the contractions of the diaphragm.—VARANGOT, *Journ. de Medicine et Chirurgie*.

“ANTI-FAT” DISCOUNTED:

STOUT GENTLEMEN TO PHYSICIAN.—“I have tried most everything, and I cannot lose weight, what would you advise.”

PHYSICIAN—“Why, ride a bicycle.”

STOUT GENTLEMEN—“But I can't stay on one.”

PHYSICIAN—“Well, you want to fall off, don't you?”

—(*Exeunt*).

ALCOHOL FOR PAPILOMA OF THE LARYNX—Lady of fifty-five years, suffered for two years with progressive aphonia, which had become complete. She stated that she had frequent colds, and at times expectorated small, pink-colored, fleshy masses. The laryngoscope revealed a collection of large papillomatous masses situated in the anterior half of the larynx, and especially involving the left vocal band. The right was partly covered also. The character of the growth was questioned so operative interference was deferred. A spray of al-

cohol was applied by the patient herself six times daily, and in a very short time improvement was noticed. The voice began to be better. The growths shrank in size, and several pedunculated masses came away. The treatment was continued for about five months, when no trace of the papilloma could be found. The voice and larynx were absolutely normal. Aside from the clinical result with alcohol as the therapeutic agent, it is possible that this may give us a method of differentiating between a small papilloma and a malignant growth of the larynx—*DELAVAN, Journ. of Laryng., Rhinol., and Otolog.*, March, 1896.

AMONG THE ABNORMALITIES OF THE SEXUAL ORGANS which render labor abnormal, Mr. Maygrier, in his lectures, (FACULTY OF PARIS) narrates the following: A woman had an impervious vulva. Her vagina communicated with the rectum. She became pregnant.

At the time of labor a physician was called in, who, with great surprise, discovered this singular anomaly. He was dexterous enough to deliver the woman without lacerating the anal sphincter.

Curious to say, neither the husband, it appears, nor his wife, had suspected the existence of such an anomaly.—*La Médecine Moderne.*

THE SCIENCE OF ANTHROPOLOGY is rightly not looked upon as a frisky and sportful thing. Yet, once in a while, it presents some amusing subjects; as, for example, the researches of Mr. O. Hovorka v. Zederas on the mutilations of the penis among some ancient and modern nations.

The author first makes the statement that of the two functions of the penis, viz., micturition and coitus, it is only in view of the latter the mutilations are performed. Of these, the best known is the splitting of the urethra lengthwise (hypospadias) in order to freely allow the tricks and pranks of Cupid whilst preventing their usual consequences falling due nine months later. So far, this is only prudence, though beyond bounds, but what follows is lewdness. The Dayaks of Borneo have quite an original way of increasing the voluptuous sensations of their paramours. Paramour is purposely written in the plural, because it cannot be thought that for only one sweet-heart they would submit to so painful a fantasy. They perforate the glans (brrr!) transversely; and, when the hole is healed, they insert in it a small pencil of ivory or of metal the extremities of which bear metallic heads or hair brushes.

The Alfoures of the Celebes, add to this ornament a brush made with the eyelashes of a he-goat, which they place in the perpetual furrow at the base of the glans.

The Javanese reach the same aim in a more simple manner, by merely covering the penis with a goat skin, hairs outside. It is not stated whether or not they use the same apparatus to cleanse the lamp chimneys of their home.

The Batta of Sumatra make incisions in the skin of the penis and insert therein small multi-cornered stones which, through cicatrization, become adherent. If the women resist such a charm and allurements, they must be hard to please.

Aside from circumcision and castration, so well known, there are yet on the same subject more gems to present.

The infibulation of the prepuce is no more in use at present, but among the Romans, in former days, it enjoyed a certain vogue. It consisted in inserting through the perforated prepuce a ring or needle to close it in part. Evidently, that operation was to prevent coitus. The story even says that the Roman histrions were compelled to wear this singular "*ceinture de chasteté*," because repeated coitus would spoil and ruin their voice.

The Greeks and the Etrusci had a better notion of the physiological needs. They contented themselves by closing the prepuce in front by means of a ligature, or raising the penis vertically and keeping it in situ by means of an abdominal belt. They merely had to remove the ligature or the belt to give the human beast a chance.—*La Médecine Moderne*.

PATHOLOGY OF NERVOUS EXHAUSTION.—According to Dr. Bouchard, such exhaustion is due to auto-intoxication; according to Dr. Hyem, to irregularities of nutrition of dyspeptic origin; according to Dr. Dumas, to vaso-motor disturbances. Dr. Féré attributes this exhaustion to paroxysmal vibrations overtaxing the cerebral cells. According to Dr. Béard, exhaustion is due to a loss of equilibrium between the waste and repair of the cerebral cells. Dr. Erb holds that the exhaustion is due to an intimate disturbance of the nutrition of the nerve elements. Dr. De Fleury admits the mechanical theory, which he arranges in four stages: First stage, immoderate expenditure of motor activity or overwork by excess of sensation; second stage, stagnation of the nerve cells; third stage, muscular and glandular hypo-tonicity; fourth stage, modifications of the mental state consequent upon this condition of minor activity.—DE FLEURY, *Revue de Médecine*, February, 1896.

FOREIGN BODIES IN THE AUDITORY MEATUS.—In every case it is most essential that a properly-conducted examination,

under good illumination, be made, otherwise mistakes and deplorable consequences may ensue. Statements made by the patient must never be taken as accurate, unless confirmed by a careful examination with mirror and speculum. In the vast majority of cases the foreign body, if present, will be found in the cartilaginous portion of the meatus; when it remains in this situation its removal is usually accomplished with comparative ease; when, however, the foreign body has passed into the long portion of the meatus, either during its first introduction or during attempts at its removal, the difficulties of successful extraction will be greatly increased.

In all cases attempts should first be made to remove the foreign body by means of a syringe. For this purpose a syringe holding from three to four ounces, with a fine tapering nozzle, will usually be sufficient. If previous examination has demonstrated that a small chink exists between the foreign body and any one of the meatal walls, the stream of fluid should be made to pass along that particular wall and so past the foreign body. During the process of syringing the auricle should be held well upward and backward (in children downward and backward). Should syringing fail to dislodge the former body, recourse may be had to instruments, but it must always be borne in mind that unless inflammatory symptoms and symptoms of cerebral irritation be present, there is no special haste required in removing the foreign body. Foreign bodies may remain in the ear for months, and even years, without producing any symptoms at all.

It has been suggested that if the foreign body be of such a nature as to absorb water, syringing should be conducted with glycerine or oil. A plan which is at times useful and successful is the "glue method," devised by Löwenberg, of Paris. A small camel's hair brush is dipped in a strong solution of glue and then applied, under illumination, to the presenting surface of the foreign body. When the glue has set gentle traction is made and, in some cases at least, the foreign body is drawn out. Hooks, scoops, forceps, curved probes, wire snares, etc., may be used if syringing is ineffectual. Any such instrument must be gently passed behind the foreign body, great care being taken that the latter is not pushed further into the meatus, and then gentle traction exercised. During all manipulations, whatever instrument be employed, the greatest care must be taken to work under proper illumination and with gentleness. Foreign bodies have frequently been pushed through the membrana tympani during attempts at removal.

In many cases the ingenuity of the surgeon will be taxed as to which is the best instrument to employ for extraction. In a case where the top of a mother-of-pearl collar stud had

found its way into the external meatus, all instruments failed to catch or to grasp it, and it was removed only after a small basket of wire had been constructed around it.

Where inflammatory symptoms are present, but no danger is anticipated by temporary delay, the surgeon should wait until their subsidence. This may be effected by the use of ice-bags around the meatus, the local applications of leeches, or the instillations of warm astringent solutions. Should urgent symptoms of extension of inflammation or of cerebral irritation be present, the surgeon should at once detach the auricle by means of a curved incision and then extract the foreign body by means of instruments.

In the case of animate foreign bodies, such as flies, bugs, earwigs, etc., syringing with plain warm water is usually all that is required. If, however, the insect should have attached itself to the meatal walls, the vapor of chloroform or the smoke from a tobacco pipe will, as a rule, cause its detachment, when syringing will at once effect its dislodgement. If not, it may be removed with a pair of fine forceps.—MILLIGAN, in the *Medical Chronicle*.

IODIDE OF POTASSIUM OR IODIDE OF SODIUM.—After reviewing the opinions of a multitude of authorities relative to the advantages of the sodium and potassium iodides over each other, Dr. Briquet concludes that the iodide of potassium should be preferred in affections of the respiratory tracts and in certain rheumatic conditions.

It would be well to begin always with the iodide of sodium, which is generally the better borne, and as soon as iodide tolerance is established, to change to the potassium salt.

Where the iodide of potassium depresses, it is well to alternate this salt with the sodium salt, particularly in cases of long treatment.—*Journal de Médecine et Chirurgie Pratiques*, Vol. 62, No. 4, 1896.

ANOTHER LANDMARK GONE.— Soon there will be no "front row." A German physician, says an exchange, makes the statement that three or four applications of methyl chloride to the hairless portions of the head will be followed by the appearance of a fine growth of hair.

The remedy is sprayed on the parts once a week. He does not state when the applications must cease, nor the ultimate effect in hirsutic development. We venture the opinion that the remedy will not be popular with bachelors of a certain age, nor with conjugal males who have a predilection for abbreviated skirts and Terpsichorean fancies, but let the methyl spray.

THE TREATMENT OF CERTAIN FORMS OF CEPHALALGIA was considered by Mr. Galliard at a recent meeting of the Academy of Medicine of Paris. It is met with in people who are perpetually complaining of headache, but must not be mistaken for hemicrania. It is continuous, and when there are paroxysms they come without vertigo, nausea or vomiting. It is generally located in the forehead, rarely at the temples, the vertex, or the occiput; there is no tenderness at the point of exit of the cranial nerves.

Sleep is not disturbed at night by this headache, one of the characters which distinguishes it from syphilitic cephalgia.

When the cause is searched for, no special lesion can be discovered. It is noticed, however, that it is usually associated with neurasthenia, and is of more frequent occurrence in women than in men. Besides this persistent cephalgia of the neurasthenic, there is a variety which is independent of neurasthenia, whose pathogenic relations remain unknown, and which is characterized by two things: (1) It is continuous. (2) It resists the so-called analgesic remedies and the usual medication.

Until such time as we are able to combat each form of these headaches which are yet unnamed, we are compelled to resort to empiricism. M. Galliard has frequently succeeded in curing them by the administration of calomel.

He prescribes for an adult, six doses of calomel of one-half grain each. One dose is taken daily, in the morning, while the stomach is still empty. He watches the mouth, bearing in mind the possibility of the occurrence of stomatitis. He gives warning that on the third or fourth day colics and diarrhœa will occur, and if he mistrusts the docility of the patient he insists upon rest in bed. Care as to diet and exposure to catching cold must be exercised. Should the first course of treatment not give sufficient results, another six days' course is advised after a few weeks' interval. If the second fails, it is useless to persist.—*Gazette des Hôpitaux*.

RESORCIN IS CONSIDERED BENEFICIAL IN INFANTILE DIARRHŒA by Tenwick. He deems it the most efficient antiseptic in those cases. He is accustomed to giving three-grain doses every four hours to infants only a few weeks old; there is not the least toxic effect, and he claims to get very decided results after the fourth dose.—*British Medical Journal*.

A NON-IRRITATING EXCIPIENT FOR OPHTHALMIC OINTMENTS.—It is essential to employ perfectly bland bases in prescribing for disorders of the eyelids. Vaseline has been

found irritant, producing a slight pink congestion of the conjunctiva, if the conjunctiva was not previously involved, or intensifying existing inflammation.

Unna has suggested lanoline combinations, of which the following is a modification:

Rx. Lanolini (Liebreich)	ʒiii
Olei amygdalæ	
Aquæ destillatæ	aa
Misce.	ʒs

If smeared thinly on the eyelids this occasions no unpleasantness, and may be of service in preventing the gluing of the lids by secretions.

A few grains (about two grains) of boric acid will prevent rancidity. In eczema of the lids this ointment carries well the yellow oxide of mercury.

Patients contrast this ointment with others used by commenting upon the grateful sensation of coolness produced, without a trace of smarting or irritation. Its curative effect should be as much as of any base ordinarily employed, and the mere fact of comfort should commend its use.—*British Journal of Dermatology, April, 1896*—JAMIESON.

ALCOHOL IS NOT A STIMULANT but is a paralyzant, concludes Dr. J. M. French in *The Medical and Surgical Reporter*. He quotes some interesting ideas of Dr. N. S. Davis, of Chicago: "It has long been one of the noted paradoxes of human action that the same individual should resort to the use of the same alcoholic drink to warm him in winter, to protect him from the heat of summer, to strengthen him when weak or weary, and to soothe or cheer him when afflicted in body or mind. All this is easily explained. The alcoholic drink does not relieve the individual from cold by increasing his temperature, nor from heat by cooling him, nor from weakness and exhaustion by nourishing his tissues, nor yet from affliction by increasing his nerve-force; but simply by diminishing the sensibility of the brain and nerves, and thereby lessening his consciousness of impressions of all kinds, whether of heat or cold, weariness or pain. The same anæsthetic properties that render the laboring man less conscious of the cold, or heat, or weariness, also renders the sick man less conscious of suffering, either mental or physical, and thereby deceives both him and his physician by the appearance temporarily of more comfort. It is true that a physician can make the anæsthetic properties of alcohol available for the temporary relief of pain and the production of sleep, but it is equally true that he has many other remedies more efficient for the purpose and less objectionable than alcohol."

SYPHILITIC RE-INFECTION.—Dr. Schirven reports two authentic cases of syphilitic re-infection. The first was treated in November, 1892, for gummata of both legs, undergoing disintegration (chancre in 1882). The anti-syphilitic treatment effected a cure of the condition in four weeks. In February, 1894, the patient returned to the author. On December 21st past, one month after coition, he noticed on his foreskin a little vesicle, which cicatrized in eight days under bichloride dressing and dermatol. Soon after induration showed and a general malaise. Examination discovered an indurated chancre with ganglionic engorgement, an erythematous-squamous syphilitic manifestation, with a slight squamous eruption of the palms. The anti-syphilitic treatment produced a ready disappearance of the symptoms.

In another patient, September, 1892, the author found a chancre at the meatus urinarius. There were secondary manifestations, recurring twice. Under vigorous anti-syphilitic medication he recovered. In March, 1894, one month after suspicious coitus, there appeared upon the prepuce a nodosity, which was excised, and upon microscopic examination was found to be an indurated chancre. A short while after the usual eruptions appeared. According to the author, these two observations tend to prove the curability of syphilis, still *sub-judice*.—SCHIRVEN, *Dermatol. Zeitschrift.*, Vol. II, 1895.

THE ABSORPTION OF TOXIC SUBSTANCES FROM THE URINARY BLADDER has lately been studied by Lewin and Goldschmidt. This is a matter of considerable clinical importance. It has generally been held that the absorptive powers of the urinary bladder are slight, and the observation of Sir Henry Thompson, where four drachms of laudanum injected into the bladder did not produce any toxic effect, is in favor of that position. Lewin and Goldschmidt experimented on rabbits. They found that large quantities of strychnia could be injected into the bladder without any symptoms of poisoning ensuing; provided the ureters were ligated close to their entrance into the bladder and the catheter be tied in securely at the neck of the bladder, for the prostatic urethra absorbs readily; also, if some of the contents of the bladder were allowed to pass into the ureters, symptoms of strychnia poisoning ensued in a few minutes.

As fluid has a tendency to pass from the bladder into the ureters when the bladder is distended, either by injection or by retention, it must be remembered that it is possible for absorption to occur in diseased conditions without its occurring in the bladder proper.—*Archiv. für exp. Pathol. und Pharm.*

[It has long been known, also, that while perfectly healthy bladder mucous membrane is non-absorptive, ulcerated or otherwise impaired bladder-lining may absorb certain drugs or toxins.—ED.]

HYPERIDROSIS.—

Rx. Balsam Peruvian	1 grm.
Formic acid	5 grms.
Chloral hydrate.....	5 grms.
Alcohol	100 grms.
Misce.	

—HEUSNER, *Amer. Med. Surg. Bulletin*.

INFANTILE ECZEMA.—

Rx. carbolic acid.....	10 grs.
Acetanilid.....	30 grs.
Petrolatum	1 oz.
Misce.	

—WELLS, *Phila. Polyclinic*.

THE STAINING AND MOUNTING OF TUBE CASTS and other urinary deposits is described by Dr. Bromwell in the *British Medical Journal*. He claims that the recognition of tube-casts is much facilitated by the use of staining reagents. He uses picro-carminie chiefly, by the following method: (1) An ordinary conical urine glass is filled with equal parts of urine and an aqueous solution of boracic acid and set aside until the deposit forms; (2) this deposit is drawn off with a pipette and transferred to an ordinary test tube in which about half a drachm of picro-carminie solution has been previously placed; (3) the urine and staining fluids are next thoroughly mixed by inverting the test tube several times, the end being closed with the thumb; (4) the test tube is now set aside and allowed to stand for twenty-four hours; (5) the deposit has by that time settled in the tube can be drawn off by a fine-mouthed pipette to be placed on a slide, covered and examined under a low power. If tube casts are present they are easily detected. When a cast is detected it should be brought to the centre of the field and examined with a higher power in order to study its minute characters. If amyloid degeneration is suspected, methyl-violet may be used, as in some cases the tube casts give the characteristic rose-pink reaction with it.

ANTIPYRIN IN PRURITUS.—*Arnstein and †Antoniak report two cases of obstinate pruritus cured with antipyrin.

The first observation was made on a woman of twenty-eight, in whom symptoms had first manifested themselves around the genital organs, progressively extending to the thighs

*ARNSTEIN, *Gaz. Lek.*, No. 48, 1894.

†ANTONIAK, *Przegląd Chirurgiczny*, t. II, zeszyt, iv.

and legs, and then to the abdomen, the back, the neck, the chest and the upper limbs. There were no pathologic lesions of the skin, only a number of excoriations being noticed. In the fourth month of the disease the patient was put on antipyrin twice a day. At the end of ten days all the symptoms had disappeared. The second case was in a woman, sixty-six years old, complaining of senile pruritus. The use of ten grain doses of antipyrin continued for fifteen days, four times a day, effected complete recovery.

THE NURSE NOT A NEW WOMAN.—Dr. John H. Claiborne disclaims the idea, in a lecture before a Training School for Nurses, which is published in the *Virginia Medical Monthly*. "The professional female nurse," he says, "though comparatively a new idea, is not an outcome or an evolution from the new woman. Only one who has 'renounced the world, the flesh and the devil' (and the new woman has not) can, with grace and cheerfulness, give her days to patient waiting at the bedside of the sick, and her nights to weary watchings in the dim chamber, where death is ever knocking at the door. Such, I take it, is not the new woman."

THE OBJECTIONS TO WHITEHEAD'S OPERATION for hemorrhoids are summed up by Dr. Jos. M. Mathews, who is quite an advocate of the ligature in such cases, in a paper read before the Marion County Medical Society and published in the *Indiana Medical Journal*.

(1) It can not be advised except in selected cases; (2) an anæsthetic is necessary in order to the operation; (3) full and complete paralysis of the sphincters is necessary in order to do the operation; (4) the operation is difficult, tedious and bloody; (5) if union does not take place by first intention, pus accumulates and the result must be an ugly one, if not dangerous, and invites sepsis; (6) it is recommended in doing the operation to remove the whole of the hemorrhoidal plexus, which is not necessary to the curing of piles; (7) it can be maintained that secondary hemorrhage is more likely to occur than after the ligature; (8) the function of the parts is greatly impaired.

FACTS IN REGARD TO INFANTICIDE from a medico-legal standpoint: (1) It is possible for a woman to be unconsciously delivered, but not likely that she should go through the full term without being conscious of her pregnancy. (2) If the child was suddenly and unexpectedly born and dropped accidentally on the floor, or into a water-closet vault, the cord

would be found torn, broken off and untied, and not cut and tied in the ordinary manner; (3) in order that a child shall be live-born within the meaning of the law, it must show some sign of life after being completely separated from the mother; (4) if a woman prepare no clothing for her child and the child be found dead shortly after birth, this could be considered strong evidence that the woman intended to destroy it; (5) it is possible that a child may be born living, yet so badly deformed as to render the prolongation of life impossible after the separation of the cord; (6) if the child has food partly digested in the stomach and intestines and the meconium has all passed away, the child has lived at least twenty-four hours, and, of course, has been fed; (7) if the septum ovale of the heart is found closed, making a four-cavity heart, the child has lived as much as four days; (8) if the cord has withered and come away and the navel is healed completely, the child has lived as long as a week; (9) it is a fact worthy of remembrance that a child will stand a great amount of exposure and that one can be found living for days after the most terrible neglect.—*The Physician and Surgeon.*

THE MORTALITY IN TOKIO, JAPAN, we find from the *Sei-I-Kwai*, of February 29, 1896, is about 18 per thousand per annum at this season of the year, the population being 1,275,615. The most common causes of death were phthisis pulmonalis and meningitis, which accounted for 302 and 253 deaths respectively in one month. During that space of time the disease known by the euphonious name of kak'ke was responsible for twenty-three deaths.

TO RENDER COD LIVER OIL PALATABLE put a pint of it in a flask, adding one ounce of freshly-roasted and ground coffee and a half ounce of animal charcoal; stop up the flask and put it in a water bath at about 140 degrees F., for about fifteen minutes; after it is allowed to stand for two or three days, with an occasional shaking up, it is to be filtered through paper. The oil, as a result, becomes limpid, light in color, and has a strong odor and taste of coffee.

PALATABLE CASTOR OIL.—A pleasant combination is obtained as follows:

℞ Pure saccharine	ʒss.
Alcohol.....	ʒss.
Castor oil q. s. ad.....	℥j.
Oil of peppermint.....	gtt. 5.

Add saccharine to alcohol and heat until the former is dissolved, then add to oil and shake well; finally add oil of peppermint.—EDEL, *Spatula.*

MANY OPERATIONS DESIGNED FOR THE TREATMENT OF RETRO-DEVIATIONS OF THE UTERUS, are, according to Dr. Augustin H. Goelet, of New York (in a paper presented at the New York State Medical Society), unnecessary and irrational. The objection to Alexander's operation is the time it consumes and the prolonged convalescence it entails. Both ventro-fixation and vaginal fixation substitute an abnormal position and leave the organ fixed. When the uterus is movable, opening the peritoneal cavity to overcome a displacement is not justifiable if a cure can be effected without it. This should be reserved for cases in which the organ is fixed in an abnormal position by adhesions which can not be otherwise overcome; in these cases the uterus should be *suspended* from the anterior abdominal wall, instead of *fixed*, securing the organ in a nearly normal position of anteflexion and fair mobility.

Vaginal fixation has been given undeserved attention in this country. Its originator, Mackinrodt, has abandoned it. When it is more generally known that the fixed abnormal position which results offers a serious impediment in pregnancy and complicates labor, it will be abandoned.

Where the uterus is movable, Goelet dilates, cures, and inserts a straight glass drainage tube, which acts as a splint and keeps the uterus straight. The vagina is then tamponned with iodoform gauze in such manner as to throw the organ temporarily into a position of anteversion. Subsequently, a vaginal pessary is made to take the place of the tamponade. For a week, during which the patient is confined to bed, the tube is temporarily removed every day and the cavity is irrigated to remove mucus and clots. When the patient is permitted to get up, the tube is permanently removed and a vaginal pessary is employed for awhile to maintain the uterus in a correct position until the normal tone of its walls and supports is restored.

When the adhesions are not very firm or extensive they are broken up by manipulations under anæsthesia without opening the peritoneal cavity; the case is then treated as one of movable displacement.

This seems rational since a cure of the metritis and endometritis, the maintaining cause of movable displacements, is aimed at; the uterus is left in a normal position and movable. It is free from risk if thorough asepsis is observed, and requires only a week's confinement in bed.

The uniform success which this treatment has afforded in his hands leads him to believe that the more complicated operations designed for retro-deviations are generally unnecessary.

THE VALUE OF OPERATIVE INTERFERENCE IN EPILEPSY is treated upon by Dr. Edwin G. Mason, of New York, in the *Medical News*. The paper, which was read at the *Medico-Surgical Society of New York*, is based on an analysis of seventy cases taken from contemporaneous literature. The percentage of cures and improvement obtained is not great, but is not small enough, the author thinks, to make us think of abandoning the operation.

The following principles should be borne in mind: 1. Always consider an epileptic fit as a symptom of some underlying condition. 2. Inquire particularly and very carefully about the first convulsion: What was its apparent exciting cause; what was its character, general or affecting only portions of the body, and what portion was affected at the beginning of the fit? 3. If there was an aura, investigating it will not infrequently give a clew as to the seat of the lesion. 4. If there has been a trauma or a suspicion of trauma, shave the head and look for a scar or a depression. If there is evidence of a trauma in a position corresponding to the initial symptoms of the fit an operation is usually justifiable. 5. If you can not get a clear history of the case give a placebo and place the patient under competent surveillance until you can satisfy yourself as to the character of the fit. 6. Do not operate on a porencephalic child and expect to cure the epilepsy. Do not, as a rule, operate on a case of post-hemiplegic epilepsy in a child and expect to cure. 7. Do not operate on an old, idiotic epileptic, a victim of idiopathic epilepsy, with general convulsions of years' standing.

The value of operative interference in the treatment of epilepsy can, in the light of present experience, fairly be put thus:

- (a) A certain small percentage of the cases will be cured.
- (b) A certain larger percentage will be improved.
- (c) An even larger percentage will not be improved at all.
- (d) An operation upon almost any case will produce a temporary cessation of fits.

THE GRATITUDE OF THE PATIENT for the physician is well known to me. It is part of the disease. It comes on with the fever, it improves during convalescence, and is cured by a return to health.

A. Vaquerie.

AN ASCITIC'S LAMENT.

Audi, doctor, me clamantem,
 Trista voce lamentantem!
 Aqua horrida interna
 Ventris plena est caverna!
 Diaphragma, in thoracem
 Aquæ vi impressum, pacem
 Rapit jam pulmoni, omnes
 Fere noctes sunt insomnes.
 Nunquam autem tulit venter
 Meus aquam-phy! libenter!
 Ergo, doctor fac me salvum,
 Aqua liberando alvum,
 Ne sis Fabius Cunctator,
 Veni Medicus Punctator.

—*Deutsche Med. Zeitung.*

(Our Translation.)

Hear, O, doctor, my exclaiming,
 In a sad voice now lamenting
 At the inundating water,
 Running my poor belly over.
 Now is my diaphragmal area
 Narrowed, jabbed into my thorax,
 Sleep has left, and nights insomnic
 Bring me visions, oh, how awful!
 In my faintest foolish fancy,
 Could I think that my poor belly
 Could such horrid fluid encircle.
 Therefore, doctor, come and save me.
 Punch a trochar in my innards
 And let loose this ventral fluid.
 Be no Fabius Cunctator,
 But my medical punctator.

—[ED.]

Book Reviews and Notices.

Diagnosis and Treatment of the Rectum, Anus, and Contiguous Textures. By S. G. Gant, M. D. With two chapters on "Cancer" and "Colotomy," by Herbert William Allingham, F. R. C. S. Eng. One volume, royal octavo, 400 pages. Illustrated with sixteen full-page chromo-lithographic plates and 115 wood engravings in the text. Extra cloth, \$3.50 net; half-Russia, gilt top, \$4.50 net. The F. A. Davis Company, publishers, New York, Chicago.

This is an excellent work. The chapters are well and systematically divided. The subject is comprehensively treated, while some new things are considered. The author calls attention to two points that are new for a work of this kind—"Railroading as an Etiological Factor in Rectal Diseases" and "Auto-infection from the Intestinal Canal." The former can be summed up as showing that the method of living of train employees is such as to predispose them to diseases of the rectum. The demonstration is correct as far as it goes, but I am inclined to doubt that the "irregular, jarring motion of the train" has as much to do with the case as the author seems to think. The chapter on "Auto-infection" is interesting and up to date; more pointed attention might have been directed to the production of hepatic abscess from intestinal infection in dysentery; probably Dr. Gant sees less of it than we do in this almost tropical region. I am glad to see that the author gives his preference to the clamp and cautery operation. He naturally extols his particular clamp, which is a good one; its chief difference from those more generally used is that its blades are at a right angle to the handle; this is convenient, and insures the obtaining of equal pressure along the entire length of the blades; the latter advantage, however, is shared by other clamps, which the author does not mention in making his comparison between different models.

Of the two chapters contributed by Dr. Herbert Allingham, the one on "Colotomy," is the better; it is more

complete, and explains clearly the conditions necessitating colotomy and those which are to guide us in the choice of operation.

The book is clearly printed on good paper, nicely bound, and moderate in price. The chromo-lithographic plates are handsome; the other illustrations, which are distributed in the text, are, most of them, only ordinary. On the whole, I can sincerely recommend the volume. C. C.

Atlas und Grundeiss der Traumatishen Fracturen und Luxationen von PROF. DR. H. HELFERICH, in Greifswald, mit 166 Abbildungen nach Originalzeichnungen von Dr. JOS. TRUMPP. München, 1895: J. F. Lehmann.

Atlas of Traumatic Fractures and Luxations, with a brief Treatise by H. Helderich, Professor at the University of Greifswald, with One Hundred and Sixty-six Illustrations, after Original Drawings, by DR. JOS. TRUMPP. New York, 1896: Wm. Wood & Company.

These two books are before us. The preface of the second, which is a translation of the first, has also the same date and the same signature, except that in the German it is written "Dr. Helderich" and in the translation "H. Helderich, M. D." We have compared the two sufficiently to justify the statement that the one is an almost exact translation of the other, with absolutely no addition of any new matter. Yet the title page would indicate a year's interval between them.

On the back of the title page of the German are the words: "The right of translation is reserved." These are the only words not found in the translation. We have looked carefully for the name of the translator, but fail to find any evidence that it is a translation. The only evidence that the present translation has been authorized by Helderich is that the plates are exactly the same and bears in the translation the imprimatur of the Munich house which made them for the original.

Be this as it may, we feel constrained to say that we can see no good reason why the work should be published as an

original work in English when the work had already been for more than a year before the medical world in Germany.

Much, however, as we must condemn the method, we feel that we can justly commend the book as a very excellent presentation of the subject of fractures and dislocations for the use of students. The plates are the chief feature. There is, properly speaking, no text, or rather very little, but the explanations of the plates and the comments on them are to the point and make the matter clear. The work, of course, is by no means exhaustive, being intended only as a manual. We believe the work will be appreciated by practitioners as well as by students of medicine, as a useful aid to the understanding of the pathology and treatment of fractures and dislocations.

F. W. P.

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Diagnosis and Treatment of Diseases of the Rectum, Anus, and Contiguous Textures, by S. G. Gant, M. D., with two chapters on "Cancer" and "Colotomy," by Herbert W. Allingham, F. R. C. S. Eng. The F. A. Davis Co., publishers, Philadelphia, 1896.

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Difficulties Encountered in the Reduction of Dislocations of the Hip, by Oscar H. Allis, M. D. The Samuel D. Gross Prize Essay, Philadelphia, 1896.

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MORTUARY REPORT OF NEW ORLEANS.

FOR MARCH, 1896.

CAUSE.	White	Colored....	Total
Fever, Malarial (unclassified).....	4	6	10
“ Intermittent			
“ Remittent	2		2
“ Congestive.....	1		1
“ Typho	3		3
“ Typhoid or Enteric.....	6	1	7
“ Puerperal	1		1
Influenza.....	8	2	10
Small-pox.....	5	78	83
Measles	2		2
Diphtheria	4		4
Whooping Cough			
Meningitis	5	5	10
Pneumonia.....	57	56	113
Bronchitis	13	8	21
Consumption.....	38	47	85
Cancer	7	1	8
Congestion of Brain.....	6	3	9
Bright's Disease (Nephritis)	19	13	32
Diarrhœa (Enteritis)	11	8	19
Cholera Infantum	3	1	4
Dysentery.....	2	2	4
Debility, General	3	1	4
“ Senile	14	4	18
“ Infantile.....	2	3	5
Suicide	2		2
Heart Disease.....	20	13	33
Apoplexy	14	2	16
Tetanus-Idiopathic			
“ Traumatic	4	2	6
Trismus Nascentium.....	5	10	15
Hepatitis	4		4
Hepatic Cirrhosis	3	3	6
Uræmia	1		1
Injuries	13	5	18
All Other Causes	109	67	104
TOTAL	400	339	739

Still-born Children—White, 23; colored, 24; total, 47.

Population of City—White, 195,000; colored, 80,000; total, 275,000.

Death Rate per 1000 per annum for month—White, 24.61; colored, 50.85; total, 32.25.

L. F. FINNEY, M. D.,
Chief Sanitary Inspector.

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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 tenth day of the month preceding that in which they are expected to appear. A complimentary edition of fifty 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.]

REMINISCENCES OF DR. T. G. RICHARDSON*.

By EDMOND SOUCHON, M. D.

It was in November, 1866, on the Day of the Feast of the Dead, that I landed in New Orleans, after an absence of over ten years in Paris. I had gone a boy and I returned a man. Had I landed in China I would not have felt more a stranger. Those I once knew barely remembered me and surely did not recognize me. I was returning before the time fixed because of family exigencies.

However, I had in my pocket a letter from Dr. Marion Sims to Dr. Richardson, and the day following my arrival, I called upon the doctor to present it.

When I first cast my eyes on him I felt much discouraged, because of his dignified appearance, apparently so cold and so distant, especially to one used to French vivacity and demonstration. What was I to expect from one so indifferent? Dr. Sims had made the letter a very strong one, realizing the difficulties that were awaiting me. Dr. Richardson read it with seeming listlessness; then he extended his hand, uttering a few words of greeting. As soon as his hand touched mine, and I felt the soft and firm pressure, there came from it and passed through me a magnetic fluid that went direct to my heart and

*Read before the Louisiana Historical Society, May 20, 1896.

gladdened it. That must be a good man, thought I at once, that can make one change impression so quickly by a mere gentle and sweet pressure of his hand. We could exchange but a few words, as it was his busy hour, and he bade me return soon, "to-morrow," said he. Indeed, I returned, and we had a long talk about surgical matters in Paris; about Dr. Sims and his achievements and glory; about my plans for the future. When I rose, after a longer stay, perhaps, than I should have made, but which I could not have helped making, he stepped to his desk and, handing me a key, he said: "I would be glad if you would use this office and these books and instruments—in fact, all that is in here, until you have a place of your own." I felt another magnetic current pass from his eyes, and his low, soft voice and another wave of human love rise from my soul. To have met so soon such another good man after leaving that great, good one, Marion Sims, made me exclaim to myself the words of the poet: "*Oui, l'homme est bon et Dieu l'aime toujours.*"

I would then come early to the office and use his books and journals. Of course, I had no use for the instruments, having no patients. Usually the doctor preceded me, but one day that he was detained I came in first. Soon after he entered and, seeing that I had not lighted the fire, reprov'd me gently for waiting for his arrival to do so. "I have told you that this place was also yours."

It was not long before I found out the cause of the great sadness that so grieved those who knew him. But a few months previously, while his wife and three children were coming to join him in New Orleans, the steamboat was lost in the middle of the night, on a Friday, the 2nd of February, 1866. The first news to him and to all was this appalling telegram in the *Picayune*: "Another sad accident has occurred on the Mississippi river. The steamer W. R. Carter, of the Atlantic Steamship Company Line exploded her boiler at 3 o'clock this morning at Island No. 98, twenty-nine miles above Vicksburg, involving the loss of a large number of lives. The boat was frightfully shattered and is a total loss. As yet no particulars of the catastrophe have been received." After hours of mortal anxiety, this second dispatch was received:



THE LATE DR. T. G. RICHARDSON.

“Among the lost are Mrs. Dr. Richardson and three children. There were 200 passengers on board the W. R. Carter, 120 of whom were lost.” Dr. Richardson at once started for the scene of the overwhelming disaster, and when there made desperate search for the bodies of his loved ones. Alas! All indefatigable researches, all that devotion, love and money could do were in vain; the mighty and merciless river did not give up its dead and the desolate mourner had no tomb to kneel down to and pray. But he prayed to Him who saw his crushing agony and the heroic courage with which he bore that ordeal of all ordeals. He was blessed with such a reverence for the will of his Saviour that he bowed low and long in resignation. When he raised his head, all could see, after that, the ineffaceable lines of grief, of sorrow, of struggle, deeply imprinted upon his noble face. It was, indeed, we are told, one of the greatest, sublimest struggles that any man had ever gone through, and for several months he was but the shadow of himself. However, time, prayer and God’s infinite mercy did their work and his pangs became more endurable. “*Rien n’est éternel ici-bas; pourquoi la douleur le serait-elle?*” He was just recovering from this when I met him. When I realized how he had been tried and yet remained so kind, so good, so considerate, I felt the immensity of my littleness and how unjust and pitiable I was to complain of my hardships. What were they compared to this fearful blow? For a second time the man grew higher and greater in my mind, and I again took him for a model and braced up under my own afflictions. I was ashamed to have complained when he had not and did not.

One morning I found him looking more worn out than usual, and upon inquiring he told me that it had been impossible for him to sleep and that he had sat up all night. “Doing what?” said I, “Reading the Bible,” he quietly replied. I again looked at him in admiration and envy.

I took great pleasure in following his lectures on anatomy so as to familiarize myself with the English language. One day I saw him a little annoyed because his prosector had failed to come on time to prepare the dissections necessary for his lecture. He told me of it and I at once eagerly seized the opportunity to do something that might please him, and offered

to do the dissection at once. He consented, remarking, however, that the time was short. I said I would prepare all I could during the short time before the hour of the lecture. I was so happy to have an occasion to show my appreciation of his many kindnesses that I hurried so that when he came for his lecture the work was almost all done. He thanked me simply in his reserved and undemonstrative way, but he was pleased, I could see in his face, and it did me good to have relieved his mind of a little anxiety. From that day on I did all his prosecuting and attended all his lectures to learn anatomy in English, and how to teach it properly.

He inquired once how I was doing since my arrival and from my answers he soon guessed that I was half starving here. With a delicacy of feeling quite in keeping with his big heart, he said he would be glad to have me stay as his guest at Stone's Infirmary, which he was running in partnership with Dr. Stone. I was only too happy to accept. My joy was only tempered by the fact that the steward assigned me to room No. 13! I shuddered when I saw the number, as it seemed as though my ill luck and trials were not to end soon. The doctor never would accept my payment for the several months that I passed there with him at his own board.

Upon sitting at the table he would always cross his hands, bow his head and say grace in a few impressive words that touched me deeply, coming, as I did, from a place that was not particularly reputed for its religious fervor. The pure simplicity and the deep sincerity of the prayer always impressed me deeply. I could not help remembering the beautiful picture representing the king, Louis IX of France, kneeling prostrate, before the image of the Holy Virgin, and these words of a great orator, "*Qu'il était grand en s'abaissant ainsi!*"

I had restored a number of his beautiful anatomical specimens which had become damaged and I refused to accept payment for the work, considering it a part payment for my board. But he insisted upon my accepting a check, which he had placed upon my desk, next to his in his office. I reluctantly took it because I could see that it would have displeased him if I had persisted in my refusal. But I was afterward so glad that he did so, because I needed the hundred dollars so very

badly. I have ever since suspected him of having done it on purpose.

He had provided for me a little table, which he placed opposite his desk so that at night the same lamp served for us both. It was there that I wrote out my thesis on "Aneurisms of the Arch of the Aorta." To this day I remember with sweetness the long hours thus passed during that winter, so far away already, and yet so vivid in my memory.

It was then that he thought that he wanted to learn French, and asked me to teach him. I at once entered upon that labor of love. He had already studied the language and could read some and understand a little. I happened to have then that charming little book of Gustave Droz—*Monsieur, Madame, et Bébé*. He would read in it and would often make such tremendous blunders in pronunciation that he would sometimes see them himself, and it would make us both laugh in the stillness of the night, as he surely had not laughed for a long time, and it made me so happy to see his good face glow with merriment, the sure proof that his poor crushed heart had at last a moment of forgetfulness. He reminded me so much of Dr. Sims in Paris, trying to learn French, and with about the same success, until, by an experienced friend's advice and with Mrs. Sims' consent, he engaged a young French widow to give him lessons; from that moment he improved rapidly. Dr. Richardson became discouraged and French was cast aside at about the time of the examinations and of the commencement exercises.

It was during one of these lessons that he remarked that the name of Edmond, with an *o*, as in the French, was, he thought, a prettier name than with the *u*. From that day I called and signed myself Edmond, and not Edmund, as I had begun to do since I had arrived in America.

Some two years later I announced to him my engagement to be married. He looked at me wistfully for a short while, and, pressing my hand, he said: "I am sure you are doing right, but you are entering upon the sorrows of life." Later, he himself became engaged to be married. I had never met the lady, and did not even then know her by sight; but I at once felt a kindly feeling for her, because I thought she could

not be an ordinary woman if she had been able to soothe that wounded heart, and if she did not hesitate to undertake recalling to life and happiness one so deserving. How she succeeded all know who have followed them in life for so many long years, and what greater tribute to her devotion!

When Dr. Richardson became Professor of Clinical Surgery he selected me for his Chief of Clinic. I filled that position for many years, so that, prosecuting for him, assisting him at the hospital in his operations and also at private patients' houses, I was thrown daily very much in contact with him, perhaps more than any other man. Every day my friendship for him, my admiration, and, I may say, my love, increased, so that like Marion Sims he became also a model, a guiding star to me.

I was with him in many desperate operations, both at the hospital and in private practice. I will ever remember a tragic one in particular. It was the case of an old gentleman affected with a tumor at the root of the neck, pressing upon the wind-pipe, causing most distressing suffocation and threatening impending death. The poor sufferer insisted upon having an operation performed in this region, the most dangerous of all the dangerous, and although he was told of the risks he was running, of the danger of succumbing during the operation, he insisted upon a trial. I will never forget the entrance of the man in the operating room. He was tall and powerfully built; his breathing was so laborious that it could be heard before he could be seen; his face was pale, haggard, the features drawn, the pupils widely dilated; a slight perspiration covered his whole face. He was supported by two male members of the family and could barely put one foot before the other. It was the living picture of walking death. Determined, brave, heroic, he dragged himself to the operating table and lay down, anxious to have relief or die in the attempt. The first part of the operation succeeded admirably, and marked relief had been gained by it, when a consultant surgeon present suggested to proceed further. Dr. Richardson's surgical instinct made him pause before following the suggestion, but the surgeon insisting upon another move he yielded, when a terrific hemorrhage took place. The pulse at once went up to the elbow,

the body collapsed and the face assumed that peculiar deadly waxy appearance; the respiration became weak and shallow. As quick as lightning, Dr. Richardson compressed the bleeding point between his fingers and thus controlled the hemorrhage. At each desperate and unsuccessful attempt made to stop the flow of blood, that would well up as soon as the pressure was released, the effects of the lethal hemorrhage showed his life gradually ebbing away. As the awful news reached the members of his anxious and prostrate family, in the adjoining room, the cries, the sobs, the moans of the loving ones would reach us in dismal and heartrending sounds. The poor martyr finally succumbed upon the operating table without it having been possible to carry him to his bed. There is no greater ordeal for even a bold and daring surgeon than such an overwhelming disaster. The courage and heroism displayed by Dr. Richardson under these most trying circumstances were a model of ancient stoicism. His face was set in firm determination and I fancied that I could see all the time his lips moving in low and fervent prayer. He bade all of us go since we could do nothing for the inanimate victim, and said that he would remain at that crucial post of duty, sparing us all the anguish that was torturing his own heart. It was the first time that I ever witnessed such a tragedy and I was so awe-stricken that as soon as decently possible, I picked up all the instruments and without taking time to clean them I hurried away from such a ghastly scene. Only when out in the pure air, on a balmy spring day, in the beautiful Garden District, did I begin to feel like myself with a relaxation of all my nerves. I could not cast the scene off my mind and I was wondering if the dead man was not less to be pitied than the brave surgeon who had remained alone to stand that greatest trial, to face the desolate and despairing family. Indeed, thought I, one must have a lion's heart to be a true surgeon.

Dr. Richardson, as a man, as a surgeon, as a teacher and as a lecturer, presented one of the best averages I ever met. As an operator especially he had no superior, planning carefully and deliberately an operation, and executing it fearlessly to the very end. The doctor was a man of strong, very strong feelings. He always remembered a kindness, but he never

forgot a wrong, though he might forgive it. Dr. Sims was thus also; he died forgiving all those who had wronged him, with but one exception, he said.

The self-control of Dr. Richardson was immense; time and again, under trying circumstances, I saw his face redden, then grow pale during the inward struggle that was going on to refrain from uttering a word unbecoming a man and a gentleman. A gentleman, he often said, never varies; he is the same under all circumstances.

To him the word duty came next to the word gospel; he was truly a living example of the accomplishment of all duties; he was thoroughly self-sacrificing to the extreme, and proved it on a memorable occasion. One day he was called in great haste by another physician to attend a lady who had been bleeding profusely. Upon realizing her critical condition he hurried to his office to get the instruments necessary to perform transfusion of blood. He took me along with him. As soon as the house was reached he proceeded at once to open the patient's vein at the bend of the elbow, and to introduce the tiny silver canula. This done, he quickly rolled up the sleeve of his left arm and told me in a most simple and natural tone, "Now, doctor, introduce the other canula into my vein," thus offering his own blood and risking his own life to try to save the dying woman. Unfortunately, all efforts were in vain; the patient had lost too much blood and was doomed.

His friendship was profound and as true as steel. He was a man of few, if of any, promises. Oftenest one realized his friendship by being the recipient of some kind act from him.

He always encouraged all the efforts of those who tried to accomplish something. Of this I can bear personal evidence, as he once gave me \$100 to carry out an idea which I had explained to him.

His veneration for his old friend and preceptor, Dr. Gross, was most profound and touching. We were all very much struck by it when Dr. Gross came to New Orleans in 1880. No wonder that one that could feel so keenly gratitude and friendship should inspire as he did himself most unselfish and unremitting admiration and respect.

His caressing love for children was a sure indication of his

noble nature. Whenever we entered a house, to perform some operation, and he caught sight of children he would attract their attention and they would immediately come to him without hesitation, instinctively recognizing a friend. I was many times painfully impressed by these scenes, as I remembered the loss of his own darlings.

His fortitude under the many vicissitudes of his life can stand as a worthy example to a great many; it was to me a most noble one.

All remembrances of the war were painful to him. He took the defeat of the South much to heart. Even allusions to its events awoke sad thoughts. The crushing of the stars and bars, followed by the awful loss of his family, had caused him to recoil and to live much within himself.

The windows of the prosecuting room opened on the Mechanics' Institute, now Tulane Hall, and the proceedings of the negro and carpet-bag legislators would reach us in their loud and vociferous speeches and votes. This particularly affected him, and he several times said to me: "This is no farce, as some people think; poor Louisiana has a worse time ahead of her than the terrible one she has just gone through." Alas! his predictions were but too true. How often in those days he expressed deep concern for the safety and future of the Medical Department. A bill voted by those unscrupulous men could have annihilated it. "My great security is that they know that if they managed it they would have no students and would make no money."

It is truly said that it is the towering and most superb tree of the forest that is oftenest stricken down. It was when going on a mission of mercy to the sick bed of a loved one that he felt the first touch of the disease that was to destroy such a powerful frame and such a rare union of the grand qualities that make man resemble his Creator. It was a very rare and remarkable disease that gradually, year after year, for several years, bent him down and finally killed him. What an example of resignation to the will of God during the long months of agonizing pain! How sad, discouraging and heart-rending to see him slowly waste away. How distressing to see his once strong and beautiful physique dwindle down, his

fine face lose its characteristic and Olympian beauty and his kind black eyes daily become duller.

He fulfilled his duties at the hospital and in the lecture room as long as he possibly could stand, longer than he wished, but the faculty, realizing the immense loss that was befalling them, besought him to stand as long as he possibly could. Many times in a lecture his voice failed him. Several times his hand wavered in operating when pain came suddenly upon him. In one instance especially where a most grave complication arose in a terrible surgical operation, he summoned all his will power and heroically stiffening against great distress, saw the patient safely through. It was an admirable moment to all who were standing by; but the bold and brave surgeon paid dearly for it, as it sent him home all prostrated and confined him to his bed for several days.

He lingered long, hoping always, hoping against hope, for the sake of the one he loved so much. There came a day, however, when discouragement crept in, at first faintly, then so strongly that he asked some of his surgeon friends to meet his devoted physician and decide upon his fate. It will ever be sweet to me to remember that he asked that I be one of them. It was a sad and memorable moment, when his consultants gave him a last and thorough examination. They endeavored to reassure him, but they were themselves so painfully affected by the condition of the dear patient that their voices were weak and their consolations weaker still. It was so difficult to lull such a one, who had so long observed his own case that he had passed sentence upon himself. But what was still more trying was to contemplate his loving and self-sacrificing wife standing at the foot of the bed, with her elbow resting against the foot-board and the hand supporting her head; the tears were gathering in her eyes; her lips were mute but quivering, and when she spoke, her voice was tremulous, unsteady and muffled by the grief that filled her heart as she realized the despairing result of this, the last consultation.

Time and disease slowly but surely did their dreadful work. He insensibly became weaker and weaker. One night, after much restlessness, he finally fell into a soft, peaceful sleep.

The sleep and the rest were so sweet after all the suffering

that he awoke no more. God's mercy had at last shown itself and called him to Heaven.

Soon after the death I was informed of the sad event, and I was told to come at a certain time prepared to make the autopsy. This was a great shock. To think that I, who had so often dissected subjects for him, should in the end have to do it on him. When the time came it was impossible for me to proceed until I had covered his dear face; the body was then to me like all other matter.

The funeral was one of the simplest and yet one of the most beautiful I have ever witnessed. The most solemn part was when the casket lay open in front of the pulpit and Dr. Palmer stood over it gazing intently on the features for awhile. Then raising his eyes to Heaven he repeated in English the grand words of Massillon before the bier of Louis XV: "*Dieu seul est grand, Dieu seul est éternel.*" It was so much more admirable that these words of the great Massillon were being repeated by that other modern Massillon.

Dr. Richardson died without having witnessed the completion of the new Tulane Medical College, which was an object for several years very dear to his heart. He realized more than any, even during his martyrdom, how important it was to have here a building and equipment that would enable this great city, so beloved by him, to compete with the other cities in the thoroughness of medical education. Thus his influence and example, so great during his lifetime, will stand for many and many generations, endearing his name to all who love science and humanity.

INHALATIONS OF OXYGEN, C. P., AND THEIR THERAPEUTIC INDICATIONS.

By DR. JUST TOUATRE, NEW ORLEANS.

Inhalations of Oxygen, C. P., have in the last two decades become a very important agent in therapeutics, particularly since the immortal discoveries of the genial Pasteur have well established the causes of acute diseases. Unfortunately the treatises on therapeutics do not yet recognize the importance oxygen medication deserves.

I was the first one in New Orleans, and I believe in the country, to use inhalations of oxygen in practice, and beg to summarily state here the result of my experience during the last fifteen years.

Oxygen, of course, is not a panacea, and it should not be prescribed at every turn and in all cases. By so doing, we would discredit a first-class medication, for which, in certain conditions, no other remedy can be successfully substituted.

It is, therefore, the indications for oxygen which I desire to indicate with precision.

Each remedy has an especial action, which must be well understood to administer it under the proper circumstances.

If it be true that the sulphate of quinine is all-powerful in acute paludism, that mercury and iodide of potassium succeed in checking the secondary and the tertiary accidents of syphilis, that the salicylate of sodium is the specific remedy for acute rheumatism, and colchicum seed that for acute gout, etc., *then it is also true* that oxygen is the most efficacious remedy in diseases of the blood.

These are numerous. Whether blood cells decrease in quality (chlorosis), in number (anæmia), particularly when the latter is due to abundant loss of blood, nutrition suffers, the cellular changes are less active—it is under such circumstances that oxygen affords rapid and extraordinary results.

One hundred litres of pure oxygen taken daily in four portions will increase the number of cells from two or three millions per cubic millimetre to four or five millions, in a short time. Appetite returns, nutrition becomes active, strength and complexion improve every day. If, in such cases, viz.: Chlorosis, anæmia, loss of blood, iron preparations are also given, and if, in addition, massage is performed all over the body, one month of this combined treatment is equivalent to several months of country cure.

Now that we know that all acute diseases are caused by microbes, that the secretions of these microbes carried into the cells by the blood alters the protoplasm and inhibit the nutritive exchanges by which life is maintained, inhalations of oxygen, naturally, have gained considerable ground.

In the declining period of all acute diseases, when the mi-

crobes and chiefly their toxins have rendered the blood infectious, inhalations of oxygen increase the number and the energy of the red corpuscles, multiply the leucocytes, burn out the toxins, render them more soluble, and consequently facilitate their elimination by the great emunctories, the kidneys, the intestines, the skin.

In pneumonia, when hematosiis is defective, when fever is very high, when the toxins are causing paralysis of the vasomotor nerves, when general asphyxia is imminent, oxygen in large quantity has often worked miracles.

In typhoid fever, when, owing to the congestion of the kidneys, elimination which purifies the blood is checked, when fever is very high, full cold baths, inhalations of oxygen, drinking of an abundance of pure water, for a lavage of the blood, so to speak, are capital measures which often save very serious cases.

What I said of pneumonia and typhoid fever is also applicable to many other acute diseases. Bear in mind, therefore, the following general principle, the safest guide in the applications and uses of oxygen inhalations: *These inhalations of oxygen increase and revivify the red corpuscles, multiply the leucocytes, oxydize the toxins, augment their solubility, and, therefore, facilitate their elimination.*

The time is near, I do not doubt, when the antitoxins, the serums, will give the cells the necessary energy to attenuate the toxins and even prevent their formation, but until then, with this end in view, no better remedial agent can be found than oxygen, the inhalations of which are easy to take and absolutely devoid of danger. In confirmed cases of tuberculosis, when the lungs are ulcerated, when there exist cavities, inhalations of oxygen are useless; but at the very outset of tuberculosis, when, on percussion, one finds a little dullness at the apices; on auscultation, a rough inspiration, a prolonged expiration, light crackling sounds here and there; when the patient loses flesh, has a little fever attended with perspiration at night—then, I say, inhalations of oxygen are capable of checking tuberculosis. I have obtained remarkable results by this medication in several cases of that kind. It is with pleasure indeed that I always recall the case of the son of an emi-

ment physician of New Orleans. Treated with inhalations of oxygen from the start, with that alone and in large quantity, this gentleman, affected with tuberculosis, improved rapidly. He gained twenty-eight pounds in two months. It is now ten years since the treatment and he is still in perfect health.

In cases of incoercible or uncontrollable vomiting in pregnancy and in hysteria, very often due to leucomaines arising from ill-nutrition, a true auto-infection, inhalations of oxygen afford positive results in a surprisingly short while.

In cases of nephritis, chiefly the acute ones, but also in chronic ones, when from the abnormal condition of the renal excretories the microbic poisons are retained in the economy when uræmia is impending as shown by headache, vomiting, œdema of the face, etc., inhalation of oxygen, together with purgatives (calomel chiefly) and a milk diet are nowadays, I may say, the only classical medication. Professor Jaccoud, of Paris, was the promoter of the treatment just indicated. I have followed it and often tested it in difficult cases, with the most satisfactory benefit to the sufferer.

I have for seven years made life endurable to one of my clients affected with renal sclerosis of gouty origin. He had had several attacks of uræmia and 40 per cent. of albumin in his urine. He took 100 litres of oxygen every morning, and I venture to say he would be alive yet had he only ceased using alcoholics. Oxygen, of course, has no action upon the renal lesions, but it combats the infectious condition of the blood, their consequence.

In chronic cases inhalations of oxygen must be taken while the stomach is empty, except that one-fourth of a glass of vichy water should be ingested just before beginning each time.

In acute cases thirty litres must be taken at a time and repeated four and five times in twenty-four hours.

It is all important that the gas should be prepared with the greatest care, and I can not, of course, claim that it will ever produce any of the good results here recorded unless it is chemically pure.



DR. PARHAM'S CASE OF CERVICAL ANEURISM,
INVOLVING THE INNOMINATE.

PRELIMINARY REPORT OF A CASE OF IMMENSE CERVICAL ANEURISM INVOLVING THE INNOMINATE BIFURCATION; UNSUCCESSFUL ATTEMPT TO PLACE A PROXIMAL INNOMINATE LIGATURE; DEATH; AUTOPSY.*

By F. W. PARHAM, M. D., VISITING SURGEON, CHARITY HOSPITAL.

CHARLES SCOTT, aged 48, native of Germany, single; laborer in lumber yard; white.

PREVIOUS HISTORY: Family history good, father dying at 93, mother at 78; several brothers killed in Franco-Prussian war; no sisters. Personal history good; describes a form of muscular rheumatism, of which he suffered one year ago, but which did not confine him to bed or cause him even to cease working; no syphilitic nor other venereal history; shows a prominent indentation of skull, caused by wound in Franco-Prussian war.

HISTORY OF PRESENT ILLNESS: Ten weeks prior to admission, just as he was about quitting work for the day, while lifting a heavy piece of timber (with four others) from the ground to a wagon, he felt something give way at the lower part of the neck just above right collar-bone, accompanied by a pain. He went home and at once went to bed, remaining in bed next day because of not feeling well. The following day, feeling better, he went out to work, but on account of suffering was able to work only half a day. Since that time has not been able to work.

He says a small lump was felt very soon after the accident. This has continued to swell up to time of admission.

Seven weeks ago, in Galveston, the tumor being considerably smaller than on admission into my service, Prof. J. G. Thompson operated upon him, making simultaneous ligation of internal and external carotids of the right side, as will appear from the appended note in answer to mine making inquiries of him.

† Statement of Dr. J. G. Thompson, *August 18, 1894.*

“ Charles Scott came under my care suffering from what I believed to be an *aneurism of the right common carotid*

*Read before the Louisiana State Medical Society, May, 1895.

† The letter conveying this information from Dr. Thompson was received after my operation, on August 20, 1894.

artery. Although there was a probability that it arose from the innominate, I was inclined, at first, to think that it arose from the right common carotid solely. I ligated both external and internal carotids and found them almost pulseless. The external was very atheromatous and was tied between the origins of the superior thyroid and lingual. The internal was not atheromatous at all. Carbolized cat-gut was the ligature employed."

"I proposed ligating the third part of subclavian, and, if necessary, the vertebral artery, but the patient lost confidence and departed."

The patient asserts that the aneurism increased as before.

The patient entered Ward 10, of my service, at Charity Hospital, on August 14, 1894.

I examined him the next morning, August 15, 1894.

Examination on August 15, 1894.

General Condition: Tall, rather spare, with some appearance of suffering, but otherwise in fair health. Respiration, somewhat more frequent than normal, but not much embarrassed, except as accounted for by the laryngeal conditions, as mentioned later. Heart sounds, rather harsher than normal, but no distinct, direct murmurs; area normal.

Pulse, between 90 and 100 per minute, can be counted easily at wrist and in temple on left side; very feeble, almost imperceptible at wrist, and entirely absent in temple on right side.*

Temperature, normal.

Examination of urine, August 18, 1894 (Pathologist of Hospital):

"A very faint trace of albumen; a few leucocytes and red blood corpuscles; some small uric acid crystals; excess of indican; strongly acid; specific gravity, 1019."

EXAMINATION OF LARYNX:

Both larynx and trachea pushed over to the left. Intralaryngeal examination by Dr. Joachim, one of the visiting laryngologists.

His report of examination made on August 16, 1894: "The epiglottis and rest of larynx are normal as to color; the vocal

*The temporal arteries were selected for comparison on account of my inability to feel carotid in right side, owing to the tumor.

cords, however, without being inflamed, not glistening. The antero-posterior axis of the larynx is deflected from the centre, the pomum Adami pointing to the left about 20 to 25 degrees, attributable to the external pressure of the tumor of the neck. Respiration and deglutition are not interfered with. Phona-tion is impaired to the extent of hoarseness. The function of the vocal cords is abnormal to the extent of immobility of the r. voc. cord, which remains in cadaveric position. The l. voc. cord moves freely and approaches the median line. Movement of the r. arytenoid is perceptible, but attributable to pulling from the left and considered passive. Tracheal inspection was on account of insufficient light impracticable. Diagnosis: Paralysis of the r. pneumog. nerve from pressure."

PUPILS: Right distinctly smaller than left and reacts less to light.

EXAMINATION OF TUMOR, *August 15, 1894.*—A prominent, pulsating, expanding swelling, occupying all that portion of the right antero-lateral region of neck up to the level of superior border of thyroid cartilage, extending from behind the r. sterno-mastoid to the anterior border of l. sterno-mastoid. The pomum Adami is somewhat concealed by the tumor and pushed a little to left and tilted. Pressure at this point causes pain and embarrassment of respiration.

The tumor has a rounded form and rises some distance above the general neck surface and goes well down into supra-clavicular space, somewhat hiding the sternal half of the clavicle. Palpation makes out marked pulsation with expansion, synchronous with heart's systole. Aneurismal bruit well marked.

Measurements of tumor: Vertical circumference of the prominent tumor, 4 inches; lateral (horizontal) circumference, $7\frac{1}{2}$ inches, over highest point about 2 inches above clavicle.

A scar is seen, well up on to the rise of the tumor, at upper part of antero-lateral aspect, marking the site of incision made by Dr. Thompson seven weeks ago.

PROGRESS: The tumor was examined daily. It perceptibly, indeed rapidly, increased in size.

On Sunday, August 19, 1894, examined in consultation with Dr. Edmond Souchon, Dr. Rudolph Matas and Dr. J. D. Bloom, house surgeon of Charity Hospital, all of whom had pre-

viously seen the man. All agreed that the tumor had become much larger. It could now be seen to have pushed its way under the left sterno-mastoid, strong pulsation being made out behind (external to) that muscle.

DIAGNOSIS: Aneurism, beginning in carotid, probably now involving innominate.

We did not know at this time the information furnished by Dr. Thompson.* Here was a large aneurismal tumor, probably projecting more or less deeply, behind sternum and clavicle, very likely involving the bifurcation, as well as the innominate itself. Peripheral carotid (distal) ligation had most probably been done only seven weeks previously by Dr. Thompson, an experienced surgeon. This ligation had accomplished nothing, having apparently no effect whatever on the progress of tumor. The size and rapid growth of the dilatation seemed to offer no benefit from ligation of subclavian, which might possibly be done in its third portion. Only two plans seemed worthy of consideration:

1. To treat the tumor itself by galvano-puncture, by Macewan's Needling, by introduction of foreign bodies, conjoined with Tufnell's plan and external application of cold and pressure; or

2. By proximal ligation, if healthy innominate could be reached.

The aneurism wall seemed at some points to be formed almost by skin alone and rupture seemed imminent; so the less radical measures were discarded and the following plan was agreed on:

We would trephine at centre of manubrium, and having enlarged upward sufficiently for intra-thoracic palpation we would explore with finger the upper part of superior mediastinum to ascertain the condition of the innominate artery; if found very slightly or not at all dilated as much as an inch from aorta (or a sufficient distance from the aortic current to permit of clot formation), we would tie with large kangaroo tendon ligature. Of course, if the innominate were not involved,

* We could not know at that time, not having his letter until afterward, whether he had ligated the common carotid or one or both branches, but it was evident that some ligation had been done.

but only carotid with sufficient space for prox. carotid lig., we would apply that ligature; but this we thought highly improbable. If the prox. lig. stopped the pulsation, I proposed laying open sac and cleaning out clot, then applying ligature to whatever peripheral carotid remained unligated, and, if practicable, put one also on subclavian, which I thought might become feasible after emptying the sac. Accordingly, this operation was begun on Monday at 10:30 A. M. in the operating room of the hospital. I was assisted by Drs. Souchon, Matas, Bloom and other members of the hospital staff.

The steps of the operation were as follows:

1. Incision along inner half of clavicle, continued down right side of sternum; another incision across sternum, just *below* upper border (on account of encroachment of tumor) and prolonged at right angles down left side of sternum.

2. This flap of skin was dissected up and turned down, and the lower three-fourths of manubrium and upper part of gladiolus a little below second rib denuded of periosteum.

3. A medium Roberts' trephine was applied with the pin a little above centre of manubrium and the disk removed. This opening was then enlarged to an oval of $1\frac{1}{4}$ inches.

4. The post-sternal periosteum and aponeurosis now presented a very thick, tense membrane. There being, however, no pulsation, a point was caught up with forceps and punctured, and a grooved director being introduced the membrane was incised the full length of the osseous opening, and then cut laterally. This being held open by an artery forceps introduced at each of the four corners, the index finger was introduced. I came directly upon a small pulsating tumor, about the size of a walnut, close behind the right side of sternum, about on a level with first intercostal space. Higher up, this tumor seemed continuous with the larger dilatation extending above the clavicle. Below this smaller dilatation, that is just opposite the middle point of the manubrium, the finger was easily insinuated through the areolar tissue until it came upon the aorta, which was distinctly felt pulsating. A large vessel was next found coming off at the site of the innominate. A little dissection with the finger showed this to be the suspected vessel, very much dilated and flattened from its origin as far

as it could be traced. My colleagues agreed with me that ligature of this enormous vessel would be impracticable and useless, if *possible*, owing to the dilated (diseased) condition and the presence of the aneurismal sac so low down. So further operation was abandoned, and the wound packed lightly with sterilized gauze between retractors. When these retractors were in place the aorta could be distinctly seen at the bottom of the wound.

The only bleeding that occurred was from the skin and sternum. The filled condition of these external veins led us to believe that we would be much troubled by the intra-thoracic venous turgescence. But from this we had no trouble whatever. There was no intra-thoracic bleeding at all, and no large venous trunk came into our view.

Our experience convinced us of the practicability of this operation in cases where the innominate is healthy and the encroachment of the sac from above does not contra-indicate removal of upper part of sternum. As will be seen by the notes of the necropsy, we worked with the finger below the left innominate vein, as it crosses the artery, being probably somewhat displaced upward. Ligation could only be properly made above this vein on account of the difficulties below, but chiefly on account of the proximity of the heart. If we had found the artery small and the tumor higher, we could have easily reached the innominate by removing the remainder of manubrium above and drawing down the left vein. For reasons given, however, we desisted. The man took the anesthetic—chloroform—well, and was sent to the ward very much depressed, but with the prospect of rallying. This, however, proved to be a false hope, for despite active stimulation with strychnine, atropia and digitalis, he gradually sank, although conscious, and died at 5:30 A. M., August 21, about seventeen hours after the operation.

Necropsy, five hours and a half after death, by Dr. Matas and myself. Only rough inspection was made, the body being injected through aorta for preservation until a careful dissection could be made.

The aneurismal tumor was found almost flat, only a small amount of clot remaining. The left brachial artery was filled

with a clot. The sternum being lifted and turned up, the aorta was found very large (dilated) and roughened, and the innominate admitting easily the second joint of my index finger introduced from the aorta. Some extravasation was found along the aorta and outer surface of pericardium. The left innominate vein was found at least three-quarters of an inch above aorta, separated by the interval made by the ante-mortem digital dissection. The left pleural sac, uninjured, was found close to the left edge of the sternal opening, near its lower part. The heart was partly dilated and filled with clot.

The further examination of relations was reserved for the more elaborate dissection after injection with plaster of Paris on the following day.

DISSECTION, AUGUST 22, 1894.

Brief Synopsis.—The innominate at the bifurcation was dilated directly to form the aneurism sac, the carotid and subclavian being also much dilated in their first portion. It would be more correct to say that the aneurismal sac was formed by the *dilatation of the bifurcation*, including the *innominate itself, the portion of the fork between the subclavian and carotid arteries and both these arteries* as well. In the figure all the walls marked *a, b, c, d* and *e* were concerned in the formation of the aneurismal sac. The internal jugular vein was practically obliterated, being found as a flattened fibrous band firmly imbedded in the aneurismal wall. The internal and external carotid arteries were contracted at the sites of supposed ligation, but not closed, as a probe showed them both patulous. The other arteries in right side were practically normal; the vertebral on left came direct from aortic arch. The specimen was preserved for a time in the museum, but unfortunately, owing to some misunderstanding, it was not properly cared for after its exhibition before the Louisiana State Medical Society, and was destroyed by decomposition. I had hoped to make a more careful study of its relations.

Burrell, in his article in *Boston Medical and Surgical*

Journal, August 8, 1895, gives the following list of unfinished operations:

“1. Porter, W. H., Dublin, 1831.

“2. Hoffmann, New York, 1839, for subclavian aneurism, attempt to ligate abandoned on account of size of the innominate.

“3. Key, London, 1844, ligature abandoned on account of size of aneurismal tumor.

“4. Peixoto, Rio Janeiro, 1851, ‘expectant’ ligature put on for five days and removed.

“5. Charity Hospital, New Orleans, 1894. In a personal letter, Dr. Edmond Souchon speaks of a case in which the innominate was exposed by removal of a part of the sternum, but not ligatured because it was found so greatly enlarged.”

This is my case now reported in full. At Dr. Burrell’s request, I sent him the manuscript report of this case, but for reasons not explained to me no other reference than that just given was made in his paper.

COMMENT.

From my experience in this case I can heartily agree with Burrell that resection of the sternum greatly facilitates the operation.

Indeed, it is the only feasible method for some cases and should be practised in all attempts to ligate the innominate. By the method of Mott and other methods one necessarily works more or less in the dark and finds it difficult to avoid the many important structures in close proximity to the vessel.

When, however, the sternum and, if necessary, a portion of the clavicle, has been resected, the view is vastly improved and the manipulation much facilitated, as I found well illustrated in my case. Cooper* in 1859, after a vain search above the clavicle, finally resected the sternum and secured the vessel. Cooper resected the sternum for the same purpose in 1860.

O’Grady,† of Dublin, in 1873, removed two inches of clavicle.

As to the methods of resecting the sternum, Chassaignac‡

* *American Journal Med. Sc.*, 1859.

† Burrell, *Boston Medical and Surgical*, August 8, 1895.

‡ *Traite des Operations Chirurgicales*, t 1, p. 345, Ed. 1857.

long ago (in 1857) proposed this resection of the sternum for gaining access to the innominate artery. So convinced was he of the advantages of the procedure that he considered it "absurd" for one to hesitate a moment about doing it. His plan was to make a small hole in the manubrium with a trephine, then pass a chain saw to each sterno-clavicular junction, and thus remove a triangle of bone with the base including the suprasternal notch.

Ollier§ thus expresses himself:

"More recently, Bardenheuer has put into practice the idea of Chassaignac and has recommended the lifting of the whole manubrium, the inner extremity of the clavicle and the cartilages of the first two ribs.

"He has often performed this operation either for tying the vessels of the region or for the extirpation of mediastinal tumors. We have never had occasion to perform the preliminary resection of the manubrium to get at the large vessels of the neck, but we share the opinion of Chassaignac and Bardenheuer as to the utility of that procedure for exposing the brachio-cephalic trunk." Ollier, further in commenting on Chassaignac's operation, says he would recommend the making first of a hole in the manubrium with a trephine and then from this opening cut away all the bone necessary with the bone shears.

He thus describes the operation on the cadaver:

"A large trephine (3-cent.) is first applied at the centre of the manubrium, nearer the superior border, and the bone is then excised with shears up to the level of the clavicle. Sufficient aperture is thus created for isolating and tying the vessels as low as one likes, and at the same time is preserved the external skeleton of the bone. In this way there would not be the risk of luxation of the clavicles inward and the consequent contraction of the superior thoracic aperture. As for the rest, one may thus enlarge the breach on all sides and remove piecemeal the greater part of the manubrium as required. But when the region is encroached upon or disarranged by a tumor (sarcoma, or prolongation of an aneurismal sac) and the field of operation is obscured by dilated veins, a

more extensive resection of the bone will be required, and, if the operation is undertaken, it would be better to remove first the sternal end of the clavicle, and, if needful, the first two costal cartilages, as Bardenheuer has done it.”

This method of Ollier is the one followed by me in my operation above reported. After making the opening with the trephine, I found it quite easy to enlarge it rapidly and safely to a sufficient size by using the excellent pliers of Hopkins, the flat blade of which easily slips in between the bone and the deep periosteum. Proceeding in this manner one can take away in a few moments any necessary amount of bone, and the best possible view of the post-sternal structures is to be had.

The same operation might, with advantage, be undertaken for getting at the left subclavian, whose ligature has now been demonstrated to be practicable by the successful case of Halsted.

THE PROGRESS OF SURGERY DURING 1895.

BY W. S. BICKHAM, M. D., NEW ORLEANS, LA.

[At the second annual meeting of the Charity Hospital Alumni Association Dr. W. S. Bickham read an interesting paper, which he arranged for presentation in three sections. The first two sections were illustrated while read with stereopticon views, which added to the interest and value of the paper. These, of course, it is impossible to reproduce in publishing the article, hence a material loss to the reader. The length of the paper in its entirety, interesting as it is, forbids its publication in one issue of our JOURNAL. The first section appears below.

—ED.]

The no small labor of covering the progress of surgery during the past year has been assigned this paper by the Alumni Association.

To have done this with absolute thoroughness would have involved the writer in a paper almost beyond his power to prepare, and which the association would hardly have had the patience to sit through, and, even as it stands, an apology is made in advance for its length and its imperfections.

It has been exceedingly difficult to "locate" the "New Surgery", and it has been difficult to limit it to the specified year 1895 without including work that strictly originated in 1894, or overlapped 1896. If, therefore, anything is found recorded below which understeps or oversteps the allotted year of 1895, such record has occurred inadvertently on the part of the writer, as this paper is meant to strictly cover the year to which it was assigned, with the one exception of Roentgen photography, which, having had its birth well within 1895, is carried in these writings up to the present date.

It is fair, therefore, to say that this can only justly be considered a "Partial Review of the Progress of Surgery During the Year 1895;" that progress being recorded which it has been possible to ascertain as belonging to the year for which the paper is written and which is considered of practical interest.

It is in minor matters, rather than in the ushering in of radically new principles and applications of surgery, that 1895 is to be considered from a professional standpoint. With the exception of one event, which may prove of inestimable value to mankind and epoch-marking surgery, should the Roentgen photography eventually realize the highest expectations, the year 1895 has been comparatively barren of great surgical events.

The subjects of general surgery are the only ones dwelt upon, it having been impossible for the writer, and beyond the scope of this paper, to go into special fields.

Criticism of work mentioned is not a function of the paper, and no originality whatever is claimed by the writer—his work having been assigned him by the association as merely a reviewer.

Following the valuable suggestion of my predecessor, one section of the paper is devoted to the interest of the Charity Hospital.

This paper has been divided into three divisions, in the first of which, will be considered "The Progress of Surgery at Large;" in the second, "The Application of Roentgen Photography to Surgery;" and, in the third, "The Charity Hospital."

Section I.

GENERAL AND SPECIAL PROGRESS IN SURGERY.

MORTALITY IN AMPUTATIONS.—It is interesting to note that the mortality was given in 1895 of 703 amputations performed at different hospitals in New York city at 15.5 per cent. In this connection it is to be mentioned that MacCormac gives the estimated mortality of amputations in the London hospitals as 12.8 per cent.

AMPUTATION OF FOREARM BY A NEW METHOD.—Dr. Charles McBurney, in operating for Sarcoma of Radius, made a vertical incision from the elbow joint downward over the radius to the middle of the forearm, completing the incision with a circular sweep about the forearm; the flaps of muscle and skin being dissected up, the whole radius was excised and the ulna sawn through just below the insertion of the pronator radii teres. The biceps tendon had been carefully dissected away from the radius, and this tendon was now strongly sewn with catgut to the base of the coronoid process of the ulna, so that flexion of the forearm might be strengthened. As a result, the biceps seemed to perform its function well, the patient gaining a good half-forearm with excellent power of flexion.

HIP-JOINT AMPUTATION BY A NEW METHOD.—The special feature of this operation consists in the control of hemorrhage by means of a clamp inserted beneath the femoral vessels. An antero-external incision is made vertically down the thigh, with a cut encircling the thigh at the lower end of the vertical incision. After the completion of the vertical incision, a clamp of special form is passed into the wound, guided by the finger in such a way as to include without particularly compressing the sartorius muscle, the clamping ends of the instrument being so applied as to temporarily compress the femoral artery and vein. Hemorrhage having been thus controlled, disarticulation and completion of the operation is effected in the usual manner.

Dr. F. Tilden Brown, of New York, the originator of this method, claims it to be of general application, and especially fitted for those cases which have *begun* as exploratory incisions about the hip-joint, and have *ended* as amputations.

A NEW OPERATIVE METHOD IN THE TREATMENT OF FRACTURE OF THE PATELLA.—Dr. Geo. R. Fowler, of Brooklyn, has devised a method of operating in these cases of note, more because of the manner of its performance than because of involving any particularly new principle. The chief feature of his method consists in exposing the fragments as an *intermediate* procedure, *i. e.*, after the immediate effects of the injury have subsided and before occurrence of ligamentous union, for the purpose of clearing their surfaces of intervening soft parts, and the application of fixation-hooks somewhat resembling Malgaigne's except that a single instead of a double pair is employed. The incision is made either vertically, transversely or U-shaped, as indicated, and, where possible, the hooks are inserted in the line of incision to avoid separate skin-wounds. Everything having been carefully removed from between the fragments, the parts are stitched with continuous subcuticular silk suture, sterile gauze and cotton are applied, and the limb is enveloped in a plaster of paris splint for three weeks, at which time the hooks are removed.

OPERATIVE TREATMENT OF PARALYTIC FLAIL-JOINT, FOLLOWING POLIOMYELITIS.—A considerable number of patients suffering from the effects of poliomyelitis exhibit complete paralysis of the muscles, influencing the movement in both knee and ankle, or in ankle only. Jones, of Liverpool, having had under his care six hundred cases of the effects of poliomyelitis, has advised a method of operative treatment to accomplish ankylosis of the knee and partial ankylosis of the ankle, putting the limb up temporarily in a retentive apparatus, after which the patient is generally able to walk, at first with a supporting splint, and then without any.

The knee-joint is opened by an anterior curved transverse incision; the semi-lunar cartilages are removed; the crucial ligaments are left intact; the soft structures are united; no drainage is used, and the part is done up in plaster.

The ankle-joint is exposed; several grooved portions of the articulating cartilage are removed, where partial ankylosis is desired, and portions of bone are gouged out where complete ankylosis is wished.

THE TREATMENT OF POSTURAL DEFORMITIES OF THE

TRUNK BY MEANS OF RAPID AND THOROUGH PHYSICAL DEVELOPMENT.—Dr. Jacob Teschner, of New York, has systematized a course of exercises for the treatment of such postural deformities as may result from such causes as pleurisy with adhesions; empyema; section of the ribs; paralysis from different causes; rickets; irregularities of the extremities; faulty attitudes; neuroses, etc.

A METHOD OF OPERATING FOR SUPERFICIAL VARICOSE VEINS.—Stoker has introduced a method of dividing the veins at selected points, removing about one-fourth inch of vein through a skin incision half an inch long, and applying pressure by compresses and a bandage from the toes up, and using no suture whatever—the patient remaining in bed for a week after the operation. After having lost two patients from septicæmia, after having followed operations by ligature, Stoker concludes that this method lessens the danger of infecting the vein and avoids the chance of a clot forming beneath the skin.

A NEW METHOD OF EXAMINATION AND TREATMENT OF DISEASES OF THE RECTUM AND SIGMOID FLEXURE.—Dr. Howard A. Kelly, of Baltimore, is the originator of a technique, enabling (1) an ocular examination of the ampulla, the upper rectum, and the sigmoid flexure; (2) the bowel to extend to such a degree that its walls appear smooth and with no concealed areas; (3) a large area to be seen at one time, so that a complete investigation may be made in a few seconds; (4) local treatment to be easily made, even in areas as remote as the sigmoid flexure.

The lower bowel is emptied; the patient is put into the knee-breast position, and preferably steadied in that position by some form of artificial support; a cylindrical speculum (up to fourteen inches in length) is introduced, provided with an obturator; on withdrawal of the obturator, the bowel is distended with air; inspection of the parts is accomplished by light reflected from a head mirror through specula of various lengths and diameters.

AN AID TO THE CATHETERIZATION OF THE MALE URETHERS.—Nitze has modified his cystoscope in such a way that a catheter-carrier forms a part of the original instrument and fits tightly into the original beak of the instrument while it is being intro-

duced. After its introduction the carrier is then drawn back a little; the eye sees the catheter projecting from the tube, and its entrance into the ureter can easily be controlled. The rubber catheter can then be pushed on even up to the pelvis of the kidney and the cystoscope withdrawn, leaving the catheter in place.

AN OPERATION FOR THE RADICAL CURE OF HERNIA.—Fergusson advocates a method which, he holds, combines some of the merits and excludes some of the objections of former procedures. An incision is made over the inguinal canal, laying open the anterior wall, from internal to external ring. The sac is dissected out and generally opened—then transfixed in the proximal direction with a stitch that has been firmly secured to the distal end—the needle is then carried between the peritoneum and transversalis fascia, and is brought out about an inch above the internal ring. Having removed the supernumerary veins, the suture holding the sac is pulled tightly and fastened to the external oblique muscle—the sac being made to occupy a position where the vas deferens and vessels meet, and more than fills the infundibuliform space. The transversalis fascia is then sutured to the root of the cord with inversion sutures. The conjoined tendon and external oblique lie beneath the cord. The approximation of the muscular aponeuroses and the abdominal wall is attained with three or four mattress sutures in such a manner, from below upward, as to bring the external and lower structures, Poupart's Ligament, fibres of external oblique, internal oblique and transversalis muscles over and in front of the internal and upper structures.

A MODIFICATION OF THE "INVAGINATION" METHOD OF OPERATING FOR THE RADICAL CURE OF HERNIA.—Dr. John H. Packard described a new plan by which he believed the hernial canal could be securely and permanently closed in a simple way. The feature of his operation consists in the complete *isolation* of the sac before fastening it as a plug into the canal at its inner end. The sac is isolated from the external ring down to its tip. A thread is passed through either wall of the sac and left long. The forefinger of the left hand now inverts and pushes up the tip of the sac as far as the internal

ring. Next, a slightly curved needle, with an eye near the point, is passed up along the finger and pushed out at one side of the tip of the sac, through the external oblique tendon—one end of the thread being caught, the needle is withdrawn slightly, and again pushed through the tendon at the other side of the tip of the sac, the other end of the silk is then detached from the needle which is wholly withdrawn. Steadying the tip of the sac with the external threads, the doubled-up sac is drawn down with the lateral threads, with a fine curved needle, a silk suture is passed back and forth from side to side, first from below upward and then from above downward, the lateral threads are now removed, the sac is crumpled up, by drawing on the running thread, and the plug of sac is pulled into place at the internal ring by drawing upon the two threads which have passed through the external oblique tendon, which are then tied and cut off. The skin flap is then closed in the ordinary manner.

THE TREATMENT OF THE SAC IN OPERATIONS FOR THE RADICAL CURE OF HERNIA.—The chief feature in the manipulation of the sac, in the operation of Dr. G. G. Davis, of Philadelphia, is that a pad is fixed on to the internal surface of peritoneum, made up of a sac which has not been *entirely* constricted. To avoid this usual constriction the following method was devised: The sac is isolated—opened at its extremity—and the contents returned to the abdomen. The left index is then introduced into the sac until the tip reaches its neck, the end of the sac being grasped by the thumb and remaining fingers. To further aid the manipulation, three hemostatic forceps grasp the continuation of the sac, a short distance away from the finger, one on either side and one behind. A curved needle, with silkworm gut, is passed in and out three times, encircling the neck of the sac, avoiding its blood vessels, and in such a way as to form a purse-string around the neck of the sac, only half of the circumference being, therefore, actually constricted by the suture, because, as each stitch emerges, it skips as much as was included in the previous stitch. Any excess of sac may be removed. The distal end of the sac is transfixed with stout catgut, the end of which is tied, the remainder being allowed, for the present, to hang

down. The extremity of the sac is grasped with long forceps, and, inverted like the finger of a glove, is pushed its full length into the peritoneal cavity. The purse-string suture around the neck is tied as the forceps are withdrawn; the hanging end of catgut is now drawn down and fastened by a couple of stitches in the tissues—thus the sac is folded on itself on the interior of the peritoneal cavity. The remainder of the operation may be completed in any desired manner.

A NEW INTESTINAL SUTURE.—Dr. Emerich Ullman, of Vienna, passes a fixation suture through the whole thickness of both of the divided ends of the intestine at the insertion of the mesentery, the knot being tied on the inside. The same is done on the opposite side, and then on the two lateral sides. Then, with a cut of the scissors, a longitudinal opening, five or six centimetres long, is made on the side opposite the mesentery in the afferent end of the intestine. Through this opening a pair of forceps is passed and the suture grasped and drawn up. As this is done, the proximal end of the intestine becomes inverted and drawn through the wound. With this comes the distal end, so that both ends of the intestine are drawn through this opening. The mucous membrane of the efferent end looks inward, and that of the afferent end looks outward. Between the two mucous membranes the peritoneum lies upon peritoneum. The four sutures are then drawn up and tied, dividing the circumference into four segments, so that the application of the other sutures is very easy. These sutures are, naturally, tied on the inside and are closely cut off. After the application of this series of interrupted sutures, the invaginated gut is drawn out again. The longitudinal opening is then closed by Lembert sutures. Silk is used throughout. The danger of invagination is prevented, because the distal end is sewed into the proximal end.

A CONTRIBUTION TO THE TECHNIQUE OF INTESTINAL SUTURING.—Landerer, of Leipzig, cuts a cylinder out of a potato or turnip, bevels it at either end, makes a groove in the middle, and perforates it for the passage of intestinal contents. Having disinfected this cylinder with sublimate solution, it is ready for use. The two ends of the intestine are brought over the cylinder and fastened by a running suture,

passed through the intestinal wall and over the edge of the gut, the ends of each suture being crossed and tied, the intestine is pushed over the cylinder from either end so that it rolls into the groove and the serous surfaces are brought into contact. This contact may be strengthened by Lembert sutures, if considered necessary. The cylinder is supposed to remain in five or six days before absorption takes place.

AN OPERATION FOR INTUSSUSCEPTION.—Paul suggests the use of a light metal tube in the following manner: The intussusceptum and intussusciens are connected by Lembert sutures—an incision is made in the long axis over the entering and returning layers, and the tube, grasped by forceps, is pushed into the intussusceptum—and a ligature thrown around both layers. The intussusceptum is then cut off beyond the ligature and withdrawn, and the outer wound closed with Lembert sutures.

A METHOD OF TREATING THE STUMP IN APPENDECTOMY.—Barker's method of treating this structure is to isolate the appendix and tie off its mesentery, make a circular incision around the appendix, $\frac{3}{4}$ in. from the cecum, and divide its serous and muscular coats, draw out the mucous tube, turning back the two outer coats toward the cecum like the sleeve of a cuff, tie the mucous tube with silk at its point of exit from the cecum, and cut it across $\frac{1}{8}$ in. below ligature; it will at once retract, turn down outer coats over stump of mucous coat and ligate with silk.

A MISTAKEN DIAGNOSIS.

BY R. D. SESSIONS, M. D., VISITING OCUList AND AURIST TO NATCHEZ HOSPITAL,
NATCHEZ, MISS.

On October 12, 1895, a negro woman presented herself at the Eye and Ear Clinic of the Natchez Hospital for treatment. Upon examination, a tumor nearly the size of a pigeon's egg was found on the right side of the nose, just over the sac of the naso-lachrymal duct. Upon being questioned, she stated that it had been there since she was a little girl, and that she was troubled with a constant overflow of tears on that side. Examination showed a depression of the bridge of the nose,

which, she said, was due to a fall on the face received in infancy. Pressure on tumor produced a slight discharge of mucus from the punctum. From the above symptoms the diagnosis of dacryo-cystitis, with largely thickened and dilated sac, was made, and it was thought that the pressure of the broken bone against the nasal part of the naso-lachrymal duct was the cause of the obstruction. As the duct could not be restored, I decided to obliterate the sac by a free incision and the removal of same. Under chloroform anæsthesia an incision was made in the tumor, and immediately a clear, thin fluid escaped. The finger being introduced, a small opening, which I took to be the upper opening, or rather entrance of the duct to the dilated pouch, was detected. The sac was dissected out and the wound packed with iodoform gauze. The operation lasted only a few minutes, and the patient was sent to the ward and left in the hands of the student in charge. On the following morning the patient died without ever having gained consciousness. Post mortem showed a congenital opening to the inner side of the orbit, through the ethmoid bone into the base of the brain. This was the first intimation that I had opened a meningocele and not a dacryo-cystitic pouch, as I at first thought. Death was, undoubtedly, caused by the sudden withdrawal of the cerebro and spinal fluid.

I report the case for two reasons: On account of its rarity; also to demonstrate the importance of being very careful in making your diagnosis, so as not to make the same error that I did.

ON THE TREATMENT OF ALCOHOLISM.

BY C. T. CLARK, M. D., CLARKSVILLE, TEX.

Alcoholism is a disease, and amenable to treatment. In regard to the disease itself, its importance as a factor of death and ruin has been an important element in rendering the "gold cure" popular. I feel safe in saying there is no enemy half so great to civilization as drunkenness.

There is no necessity of entering into a discussion as regards the classification of inebriety.

It is a disease, a pathological condition, and is placed in the group of disturbances of mental equilibrium, or state of

defective inhibition, and generally termed dipsomania. We recognize drunkenness, then, as a disease; an extra-physiological condition connected with that wondrous web of nerve-cell and fibre, wherein take place those activities which underlie the conscious state we term mind. Alcoholism being a disease, we naturally look for a cure; being a disease of the nervous system, we tend our energies in that direction, using specific therapeutic reagents, and as the maintenance of the physiological equilibrium of the nervous system depends on a healthy condition of the gross economy, we give general constitutional treatment; improving the patient's general tone; stimulating and strengthening his nervous mechanism, and surrounding him with such moral influences as will tend to reinforce his enfeebled volition. Of the drugs mentioned in formula below, I believe strychnine and atropin are almost specific. Strychnine is recognized as a most valuable neuro-tonic, and atropin seems to have a special aptitude in decreasing the appetite for alcohol.

In the summer of 1894, I treated thirty-two men for alcoholism. Of the thirty-two fifteen were at the bottom after having been prominent in business and society, and all are in good health to-day and fast gaining their former standing. The seventeen were young men that wanted to sober up without giving up their personal liberties and go on, all drinking as before, some abstaining five and others twelve months. Each and every one has told me, with whom I have talked about it, that they had no appetite for liquor till they began with beer or patent medicines. So I claim that I have had absolute success with this experiment, fifteen bright, prosperous and happy homes out of thirty-two cases.

Tonic as follows:

Aurii et sodii chlorid.....	gr xii
Strychnin nitrat.....	gr i
Atropin sulphat.....	gr ¼
Ammonii muriat.....	gr vi
Aloin.....	gr i
Hydrastin.....	gr ii
Glycerin.....	ʒ i
Fl. ext. cinchona.....	ʒ lii
Fl. ext. cocae erythrox.....	ʒ i
Aq. dest.	ʒ vi

Evaporate by heat till only ℥ vi remain, and then give one teaspoonful every two hours while awake, for three weeks, in half glass water four times daily at stated intervals, say 8, 12, 4 and 8. Give ten minims at each shot hypodermatically, of strychnia nitratis, 10 gr. filtered with ʒ ℥ distilled water. Give till the physiological effect is plain. Then drop to 6 or 8 minims for the remainder of the three weeks. Some should be treated, I think, four or five weeks.

There is no cause for fear with the use of the larger amount of strychnine. It is surprising the quantity an alcoholic will stand. I have given as much as one-sixth grain in addition to the 1-48 grain (usual dose) every two hours, but it is well to watch the man, as some bear much less than others. By this method, any alcoholic can be cured and by the general practitioner, though I believe it would be best done in sanitariums, as the regular hour for treatment will be needed both to keep up the regular effect of the drug and to impress the patient.

The patient is given all the liquor he wants; but if he wants this and will drink it after he has eaten, give him 1-10 gr. apomorphine with another drink, at the same time tell him that he can not drink any more with comfort, as the medicine is now taking effect.

Should the patient be delirious, ℥iii chloralamid in one-half pint of whiskey. About four drinks will produce a quiet sleep and he may not crave again.

Hot baths should be used two or three times per week and bowels should be kept well open with sulphate of the magnesia.

N. O. Medical and Surgical Journal.

Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

THE PATIENT'S CLAIM UPON THE PHYSICIAN'S CONFIDENCE.

The recent judgment upon a prominent physician in England, entailing large damages, only emphasizes the proneness of the medical profession to laxity in their consideration of the patient's rights to confidence and the privacy of the consultation.

The line of obligation is not too hard of definition, and such startling examples as the Playfair incident serve to establish a more marked respect for the relation which should exist between patient and physician in these matters.

The promiscuity in conferring diplomas upon all kinds and sorts of applicants for the medical degree is largely accountable for the general tendency of the profession to ignore what was once their accepted *sine qua non*, namely, the exercise of a discretion which belongs to every gentleman.

The multiplication of charlatanism has necessitated a sense of competition even among those in legitimate practice, and this has without doubt belittled the dignity of the physician and has reduced his vocation to almost a trade.

Every now and then some strong occasion offers us the chance to bring the attention of the profession to the necessity of raising the standard of our own ethics, and this case in point is such an one.

Too often the physician limits his obligation to his patient by the conclusion of the consultation.

While the discussion of a patient's condition may not be extended to laymen, it is no uncommon thing for two medical men to fully analyze a case without considering the possibility

of a repetition to a third, or even a number of brother members of the profession.

Then confidence has become anomalous, and the knowledge is public property.

While formulated ethics are difficult of administration, there are unwritten laws of honor which obtain, and these are the rules of conduct which all well-minded medical men obey.

If it were the habit of medical men to close their gates of speech when the door of the office, or the sick-room, is closed, less discredit would fall on the profession as a whole.

A garrulous physician is apt to impress the patient who confides in him with a general low estimate of the class he represents.

Well-minded as our lack of judgment may be, the sequel of an unwitting display, or abuse of confidence may bring unfortunate results upon all concerned.

There is another side to this question, which this homily should touch in passing. The lay public is given to a morbid inquisitiveness which has no bounds. The most impertinent queries regarding the sick are put by otherwise evenly constituted men and women. This prurient curiosity is fed, no doubt, by the willingness of ourselves to cater to it, but it is none the less reprehensible.

This, then, is another point of attack in the regulation of professional confidence. A physician should have no hesitancy in meeting an importunate request for undue information with the inelegant but expressive "It is none of your business."

The lesson is a broad one, and it is far-reaching. This dissertation is a timely suggestion for the absent-minded, while it is a reprimand, *con amore*, to the incontinent of speech.

THE SEVENTEENTH SESSION OF THE STATE SOCIETY.

The meeting of the Louisiana State Medical Society, which every one, for many good reasons, feared would be a comparative failure, proved to be a pronounced success. The three days during which it lasted were well occupied, principally with the reading and discussing of scientific papers,

and the attendance was larger than that at any meeting but one. It would have surpassed them all had the custom been followed of allowing temporary members, those presented but not finally balloted for, to sign the roll; very properly, the rule was enforced to delay their final acceptance until the next meeting, in order to give the judiciary committee ample time to consider all names.

The dread of failure was engendered by the fact that the transactions of last year were issued less than a month previous to this meeting; that, consequently, the announcement of chairmen of sections and committees was not made in time; that the president had resigned at the moment that active preparations for the meeting should have been well under way; all of which summed up means that, at the critical moment, the society was not properly organized. Besides, an exciting and all-absorbing political campaign was just closing.

According to the constitution, the duties of the presidency devolved upon the Vice President of the Congressional District, Dr. P. E. Archinard. He threw himself into the breach and, by faithful work, with the assistance of the other officers, that of the chairmen of a few of the sections, notably of that on surgery, and that of the chairman of the committee of arrangements, achieved a success of which the entire society can be proud.

That this was appreciated was evidenced by the elevation of Dr. Archinard to the presidency for the coming year. The Vice Presidents are: Drs. Jno. M. Thomas, H. S. Cocram, F. R. Tolson, R. A. Gray, D. R. Sartor, E. L. Irwin. Dr. A. J. Bloch was elected Treasurer, and Dr. F. W. Parham, Memorial Orator. Two names were decided upon for presentation to the Governor, according to law, for him to make selection of a successor to Dr. F. J. Kearny, whose term expires as a member of the Board of Medical Examiners. The Recording Secretary, who holds over, was gently but firmly warned that, if the transactions of this year were not published within ninety days, his honorarium would not be forthcoming. The genial corresponding secretary, who is always active, was also retained. We will publish the full list of the committees in our next number.

In addition to the scientific work and the routine business accomplished, something important was done in the line of recommendations to the Legislature. It was declared the sense of the meeting that compulsory vaccination should be adopted as far as practicable. Amendments to the law regulating the practice of medicine were endorsed, the chief provision of which is to change the process by which said law is enforced from a criminal to a civil one. It has been shown that under the existing enactment an alleged offender can practise while awaiting trial, and that a case handled by a tricky lawyer for a client who has some "pull" can be made to last indefinitely; this means an evasion of the law and a lack of protection to the people and the medical profession. The remedy proposed is process by injunction, which restrains the individual under trial from practising before his case is decided; the fear of punishment for contempt would ensure obedience of the law.

After the brain work was over, relaxation was obtained by means of a banquet at West End, tendered by the local members of the profession to the visitors. This was also a success, and the members separated in the best of humor with themselves and one another, determined to begin at once the preparations for assuring a still larger measure of success for the meeting of 1897, which is to take place in New Orleans on the first Tuesday in May.

THE MEDICAL PROFESSION OF LOUISIANA AND LEPROSY LEGISLATION.

Apropos of the report of the Board of Control of the Leper Home, referred to elsewhere in the JOURNAL, it is opportune to attract attention to the indifference of the medical profession to this institution. The report casts a stricture upon the physicians of the State, and it would seem a just one.

It were foolish to close our eyes for an instant and deny the existence of leprosy above and beyond the number of afflicted, now resident in the Leper Home, which is only a small percentage of the total number at large.

The promulgation of a legislative act does not mean the execution of its provisions. Intelligent interpretation of these

must direct the purposes of such an act. This interpretation should be found among the medical profession.

In all countries where legislation for the segregation of leprosy obtains, the fulfilment is reached through the medical profession.

It is indeed a just commentary, if timidity or apathy stands in the way of the investigation and report of suspected cases.

A number of recommendations, all pertinent, have been made by the Board of Control. Influence should be brought to bear upon the Assembly to frame these in suitable enactments so that every effort should be directed at a demonstration of the fact that the leprosy legislation in this State means something.

Department of Surgery.

In charge of DR. F. W. PARHAM, assisted by DRs. E. D. MARTIN and F. LARUE.

A SUCCESSFUL CASE OF PYLORECTOMY.

Jas. A. Adams, of Glasgow, reports (*British Medical Journal*, April 18, 1896) a successful excision of the pylorus for epithelioma. We summarize the points in the operation, as follows:

1. Turning back of a sero-muscular flap an inch away from each side of tumor.
2. Clamping of mucous membrane and cutting as far away from tumors as possible.
3. Stitching of sero-muscular layers only, disregarding the mucous layer.
4. The use of catgut for the suture.
5. Employing of continued suture.

He lays especial stress upon the continued suture as a means of saving time, so important in such cases.

The duration of operation in this case was sixty minutes. The case recovered. Comment: The excision of the mucous

membrane and the use of the continued suture in this case were the two important procedures, since they both certainly facilitate rapid and accurate approximation. The result in the case takes away from the force of Maunsell's advice against the use of the continuous suture in visceral surgery.

SENN ON THE OPERATIVE TREATMENT OF MALIGNANT DISEASE OF STOMACH AND PYLORUS.

Such cases as the foregoing are very encouraging when considered in connection with the case of Wölfler, which lived five and one-quarter years; that of Rydygier, two and one-half years, and that of Kocher, which still lives in good health five and one-half years after the operation.

We are, however, led to despond when we read in Senn's Address on Surgery, just delivered before the American Medical Association, that he has opened the abdomen for surgical treatment of malignant disease of stomach nineteen times, and in every case was compelled to abandon the radical operation. In eighteen of the cases pylorotomy, or partial gastrectomy, was out of the question, as the disease had extended to adjacent organs, or regional infection, through the lymphatic contra-indicated operation. In the nineteenth case the general condition forbade radical interference.

BARKER'S METHOD OF WIRING THE PATELLA.

Barker, in *British Medical Journal* of April 18, 1896, further elaborates his method for using the patella originally described in the *British Medical Journal*, February, 1894.

He now reports such excellent results in an extended experience that he feels that he can recommend it to the profession. He wishes, however, especially to emphasize certain points.

We summarize these as follows:

1. The method is only suitable to recent fractures.
2. It should be done as soon as possible, after injury, that is within a few hours, before firm clots have formed.
3. The immediate employment of active and passive mo-

tion, the patient being allowed and urged to move the leg as freely as he likes about the bed, and massage being carefully carried out from the first, to prevent atrophy of muscle and bone.

The operation consists in putting a wire of size of No. 1 English silver catheter completely around the patella in a longitudinal direction. The wire is subsequently placed by means of a long curved perineal needle, which is run first behind the patella through a puncture below, pulling the wire back as the needle is withdrawn and then in front, again catching the wire and pulling it down and out through the original puncture.

COMMENT: The operation seems quite a practical one, the main objection being that we have the wire always as a threat of trouble, especially on account of its running along the front of the patella. We believe a stout strand of Kangaroo tendon would be better, since this would hold the fragments together for ten weeks, most ample time for thorough union, but would, then, having been absorbed, cease to be a foreign body. Silk, we agree with Backer, can not be substituted with advantage. Wire has the advantages of greater firmness and a germicidal effect.—HALSTEAD & BOLTON.

TREPHINING FOR MENINGEAL HÆMORRHAGE, WITH LIGATURE OF COMMON CAROTID.

Francis J. Shepherd, in *British Medical Journal*, April 11, 1896, reports a successful case in which he took off a large piece of bone over the artery, but failed to reach the bleeding vessel. The hæmorrhage being violent, after release of the clot, he at once tied the common carotid and packed the cranial wound tightly with gauze. The case ultimately recovered.

The interesting points about the case are:

1. The slow development of the pressure symptoms, due to the low site of rupture of the artery in the foramen spinosum.

2. The ligature of the common carotid, as a means of immediately controlling the hæmorrhage; and

3. The further prophylaxis against hæmorrhage by careful tamponade of the wound itself.

4. The use of hot saline solution by rectum.

COMMENT: We do not believe the reasons given, ease of ligation and slower establishment of anastomosis, justified a departure from the surgical rule to tie the external carotid when ligation of that vessel will control the hæmorrhage. We believe that ligation of the external branch would have been quite as efficient, since the tampon after all was the main reliance on the permanent hemostasis.

HOT SALINE SOLUTION BY RECTUM FOR SHOCK.

In the reference to the case of Meningeal Hæmorrhage of Shepherd, just reported, the injection of a large quantity of hot salt solution by rectum was followed by an immediate lowering of the pulse frequency from over 180 to 140. This has proved useful in other cases, and we would recommend a trial of it in all cases where the intravenous method may be indicated but can not for various reasons be carried out.

THE POSITION AT A RIGHT ANGLE VERSUS EXTENSION IN TREATMENT OF FRACTURES NEAR OR IN THE ELBOW JOINT.

Dr. Charles A. Powers, in the *New York Med. Record*, May 2, 1896, from a consideration of (650) six hundred and fifty cases of fracture near the elbow, observed in the services of Hartley & Woodbury, Curtis, Van Arsdale and himself, makes the emphatic statement that these fractures are best treated in the flexed position, excepting some cases where the tendency to "gunstock" deformity was apparent. He refers in a foot note to a recent communication from Dr. Allis (the great advocate of the position of extension), in which he states that the success attained in treating these fractures with plastic dressings convinces him that manufactured splints held in place by roller bandages are largely responsible for the "gunstock" deformity. The article of Dr. Powers deserves thoughtful attention.

Medical News Items.

THE WARREN STONE MEDICAL ASSOCIATION met for their regular monthly session at Donaldsonville, on May 6, 1896. Dr. C. M. Davis read a paper on Sequestrotomy. Dr. W. M. McGalliard was in the chair and a fair attendance present. Routine business was disposed of, and the president was authorized to appoint five delegates to the State Medical Society.

THE TRANSACTIONS OF THE AMERICAN DERMATOLOGICAL ASSOCIATION at the nineteenth annual meeting, September, 1895, appear in the same neat cover as last year, and contain the proceedings with discussions of the various articles presented. These have appeared from time to time in the medical periodicals and need no repetition here. At this meeting Dr. A. R. Robinson, of New York, was elected president; Dr. F. J. Shepherd, of Montreal, Canada, vice-president, and Dr. C. W. Allen, of New York, secretary and treasurer. The active membership of this association consists of but thirty-seven, but is made up of the representative dermatologists of this country.

ANTITOXIN FUND.—The total amount on hand is \$13,707.36. We understand that the gentlemen who constitute the board for the antitoxin plant are busy making preparations with a view to the inauguration of the same.

DR. J. B. ELLIOT, JR., sailed for Europe on May 1. The doctor expects to make an extensive trip before he returns.

THE LOUISIANA STATE PHARMACEUTICAL ASSOCIATION at their fourteenth annual session, which recently was held in this city, elected the following officers: President, N. P. Roux, New Orleans; first vice president, P. L. Viallon, Bayou Goula, La.; second vice president, Dr. E. V. Bourg, Labadieville, La.; corresponding secretary, J. A. Legendre, New Orleans; recording secretary, Mrs. E. Rudolf, New Orleans;

treasurer, Eugene Lalmont, New Orleans. Executive Committee—N. P. Duplantis, chairman, New Orleans; E. J. Mitchell, Alfred Levy, J. E. Larrieu, New Orleans; L. E. Chartier, Slaughter, La.

MARRIED.—On April 22, 1896, in Memphis, Tenn., Dr. R. Fleming Jones, of Houma, La., and Miss Elise Wheaton Gill, of Rosedale, Bolivar county, Miss.

AT THE SECOND ANNUAL MEETING OF THE MISSISSIPPI MEDICAL AND SURGICAL SOCIETY, held at Jackson, Miss., May 15, Dr. W. F. Hyer, of Meridian, was elected president. The society adjourned after one day's session.

AS WE PREDICTED, English has been added to the list of languages which can be used at the International Medical Congress, in all its transactions, at Moscow, in 1897.

THE REPORT OF THE LEPER BOARD.—We reproduce below the timely recommendations of the Board of Control of the Leper Home, and call the attention of all the physicians in the State to their importance:

“ 1. If it is the purpose of the State to eradicate leprosy from within its confines, the Home now established should be made a permanent one. The ground on which the reservation stands should be owned by the State and the purchase should be made as soon as possible.

“ Suitable buildings should be erected, with view to fulfilling the purpose of segregation of all the lepers in the State, and the separation of the worst afflicted, of the separation of males and females, and with a view to colonization as the number of inmates increases. Provision should be made for the systematic study of the disease from medical, sociologic and sanitarian standpoints, with a view to ameliorating the condition of the leper, and at the same time protecting the public. The accomplishment of these ends would reflect only credit upon the State administration at the time of its conception and execution.

“ 2. To effectively attain these ends it is essential that money enough should be appropriated. A temporary appropriation means the questionable existence of the institution,

while a large appropriation, well directed, will insure the future success of the home.

“3. It is our opinion that influence should be brought to bear upon neighboring States, with a view to the creation of legislation directed at leprosy, to protect themselves and to prevent lepers from Louisiana emigrating, in their desire to escape the law.

“4. All effort should be used to encourage lepers throughout the State to come to the home in Iberville parish. As this is apt to fail in most instances, we believe that—

“5. POLICE AUTHORITY should be given the Leper Board as a body and as individuals, so that lepers could be apprehended, investigated and committed without the delay now entailed. As this is not practicable in all instances—

“6. THE STATE BOARD OF HEALTH should be distinctly empowered and be assigned the duty of investigating and causing to be apprehended all cases reported, which they find true cases of leprosy.

“This duty should be obligated by a special enactment, which should provide a special fund for this purpose.

“If this last attempt at controlling leprosy is to be a success, it must be a radical one; it must be an actual one, and unhindered by politics or other obstacles to its broad purpose.

“Heretofore, failure has only followed all attempts through the lack of interest of those in authority, or through an inadequate idea of the importance of their office.

“If now failure results, it can alone be attributed to a lack of support on the part of those in governmental power, of a board willing and anxious to drive home the wedge of success with successive blows, directed at an apathetic public, a disinterested coronary system, and a timid medical profession.

“With means and with authority, the board which has directed this report is willing to assure your honorable body that the purpose of action is in no wise lacking.”

THE VIRGINIA MEDICAL MONTHLY has changed its title to the VIRGINIA MEDICAL SEMI-MONTHLY. With the change of name, a radical change in the appearance of this welcome magazine has been made.

Now this periodical resembles more the weekly periodicals of New York, and the subject matter is arranged in much the same way. We wish the new departure all success.

THE UNIVERSITY OF VIRGINIA has decided to extend its medical course to three years to meet the requirements of most of the State examining boards.

THE UNIVERSITY OF MICHIGAN is considering the extension of its medical course to six years to correspond in this with the requirements at the Harvard Medical School.

THE WILLIAM F. JENKS MEMORIAL PRIZE.—Dr. Jas. V. Ingham, secretary of the Trustees, sends the information that the fourth triennial prize of four hundred dollars, under the deed of trust of Mrs. William F. Jenks, will be awarded to the author of the best essay on “The Etiology and Pathology of Diseases of the Endometrium, including the Septic Inflammations of the Puerperium.”

The conditions annexed by the founder of this prize are that the “prize or award must always be for some subject connected with Obstetrics, or the Diseases of Women, or the Diseases of Children;” and that “the Trustees, under this deed for the time being, can, in their discretion, publish the successful essay, or any paper written upon any subject for which they may offer a reward, provided the income in their hands may, in their judgment, be sufficient for that purpose, and the essay or paper be considered by them worthy of publication. If published, the distribution of said essay shall be entirely under the control of said Trustees. In case they do not publish the said essay or paper, it shall be the property of the College of Physicians of Philadelphia.”

The prize is open for competition to the whole world, but the essay must be the production of a single person.

The essay, which must be written in the English language, or, if in a foreign language, accompanied by an English translation, must be sent to the College of Physicians of Philadelphia, Pennsylvania, U. S. A., before January 1, 1898, addressed to Barton Cooke Hirst, M. D., Chairman of the William F. Jenks Prize Committee.

Each essay must be typewritten, distinguished by a motto, and accompanied by a sealed envelope bearing the same motto and containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay.

The Committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year.

The Committee reserves the right not to make an award if no essay submitted is considered worthy of the prize.

BOTANICAL DISPLAY.—A pleasing and novel feature of the Louisiana State Medical Association meeting, just held, was the botanical exhibit of Eli, Lilly & Co., of Indianapolis, Ind. The care and neatness with which the exhibit was arranged was a matter of favorable comment.

A PRELIMINARY INJUNCTION was issued by the Circuit Court of the United States against Dr. A. P. Beach, of Seville, O., on February 25, 1896, and in favor of the Drevet Manufacturing Company, makers of the well-known preparation, Glycozone. Some months ago, Dr. A. P. Beach put on the market a preparation of his own, which he was selling through female agents, all over the country, under the name of Glycozone, apparently infringing upon the trade-mark, labeling his bottles "Glycozene" and calling it "Glycozone" in his circulars.

ICE-COLD APPLICATIONS IN ACUTE PNEUMONIA.—Desirous of making as full a report as possible on this subject, Dr. Thomas J. Hays, of 1829 Spruce street, Philadelphia, addresses the medical profession through the *JOURNAL*, asking that all who have had experience with this procedure should advise him of the results obtained. Full credit will be given each correspondent in the published report. Blanks can be had from the doctor on application.

AT THE REGULAR MONTHLY MEETING OF THE EYE, EAR, NOSE AND THROAT HOSPITAL, the report of the secretary for the month showed 428 admissions, 2757 consultations, 91 operations and 23 free cards issued.

The resignation of Dr. B. A. Pope from the position of visiting oculist was received, and in accepting it the board instructed the secretary to write a communication to Dr. Pope recognizing his services and expressing regret at his withdrawal. In this connection, Dr. Paul L. Reiss was appointed a clinical assistant, not, however, to fill the position of Dr. Pope.

The secretary read a letter from Dr. George W. Little, of Glens Falls, N. Y., in which the writer took occasion to recognize and thank the board for courtesies extended to him while in New Orleans. He spoke in the highest terms of the Eye, Ear, Nose and Throat Hospital, and gave as his opinion that nowhere else in the country could a physician be afforded better advantages to study than within the walls of the institution.

The announcement was made that Senator C. C. Cordill, of Tensas, had donated \$50 to the board for the special purpose of buying a copy of the "Hospitals and Asylums of the World," by Harry C. Burdett. This is a famous work, containing diagrams of all the hospitals that have been erected, with data as to their work.

THE STATE BOARD OF MEDICAL EXAMINERS passed favorably upon the names of forty-two physicians who presented themselves at the recent examination. Following are those who passed the board: Drs. W. B. Summerall, A. J. Babin, M. O. Bicknell, E. C. Renaud, C. A. Gardiner, M. Herman, S. L. Mills, J. M. Roussell, E. B. Baker, A. F. Phillips, J. H. Miller, W. S. Lions, J. A. Devron, D. D. Mims, L. C. George, G. D. Ramsay, C. K. Parker, P. L. Cusachs, F. Sunceri, Miss Lola T. Clark, C. M. McCain, E. H. Walet, R. E. McBride, A. B. Gaudet, E. B. Young, E. O. Powers, C. F. Boagni, G. Richard, W. M. Lynch, R. W. Gray, W. R. Boudreau, A. M. Haas, W. R. Lastrappes, P. A. Carter, J. A. Pujol, S. D. Gustine, Charles Bruning, E. W. Peterson, W. G. Talley (colored), Paul Gelpi, Jr., C. P. Munday and M. Couret.

THE SECOND PAN-AMERICAN MEDICAL CONGRESS.—The committee on organization of the Second Pan-American Medi-

cal Congress has elected Dr. Manuel Carmona y Valle, President, and has announced November 16, 17, 18, 19, 1896, as the date of the meeting to be held in the City of Mexico. The most cordial invitation is extended to the medical profession of the United States.

Titles of papers to be read should be sent at the earliest practicable date to Dr. Eduardo Liceaga, Calle de San Andres num 4, Ciudad de Mexico D. F., Republica Mexicana. The zeal of the Mexican profession and the interest of the Mexican government are co-operating to make the Second Pan-American Medical Congress attractive. Those who contemplate attending should send their names and addresses at as early a date as possible to Dr. Charles A. L. Reed, St. Leger Place, Cincinnati, that the committee in Mexico may be advised of the probable attendance.

RELATIONS OF MEDICAL EXAMINING BOARDS TO THE STATE, TO THE SCHOOLS AND TO EACH OTHER.—Dr. William Warren Potter, of Buffalo, at the meeting of the National Confederation of State Medical Examining and Licensing Boards held at Atlanta, May 4, 1896, said there were three conditions in medical educational reform on which all progressive physicians could agree—namely, first, there must be a better standard of preliminaries for entrance to the study of medicine; second, that four years is little time enough for medical collegiate training; and third, that separate examination by a state board of examiners, none of whom is a teacher in a medical college as a prerequisite for license to practise medicine. It is understood that such examination can be accorded only to a candidate presenting a diploma from a legally registered school.

He further stated that a high school course ought to represent a minimum of academic requirements, and that an entrance examination should be provided by the state for those not presenting a high school diploma or its equivalent.

He did not favor a national examining board as has been proposed, but instead thought all the states should be encouraged to establish a common minimum level of requirements, below which a physician should not be permitted to

practise; then a state license would possess equal value in all the states.

In regard to reciprocity of licensure Dr. Potter thought it pertinent for those states having equal standards in all respects to agree to this exchange of interstate courtesy by official endorsement of licenses, but that other questions were of greater moment just now than reciprocity. Until all standards are equalized and the lowest carried up to the level of the highest, reciprocity would be manifestly unfair.

He urged that the states employ in their medical public offices none but licensed physicians. This, he affirmed, would tend to stimulate a pride in the state license and strengthen the hands of the boards.

He denied that there was antagonism between the schools and the boards, as has been asserted. He said that both were working on parallel lines to accomplish the same purpose, that there could not possibly be any conflict between them, and that they were not enemies but friends.

The medical journals of standing from one end of the country to the other, he affirmed, were rendering great aid to the cause of reform in medical education, and the times were propitious.

He concluded by urging united effort by the friends of medical education, saying that the "reproach cast upon us through a refusal to recognize our diplomas in Europe can not be overcome until we rise in our might and wage a relentless war against ignorance, that shall not cease until an American state license is recognized as a passport to good professional standing in every civilized country in the world."

DR. A. L. METZ, who was appointed temporary professor of chemistry in the medical department of Tulane University, at the death of Prof. Joseph Jones, has been elected permanently to the chair.

THE MEDICAL MEN who were carried safely by the C. L. wave of success in the municipal election in this city are; Dr. Y. R. Lemonnier, who gets the coronership; Dr. E. D. Fenner, who will be his assistant; Dr. S. L. Henry, who has

gone to the House of Representatives; Drs. Q. Kohnke and J. M. Sherrouse, who are now Councilmen. The Coroner and assistant take charge of their office on June 1.

“ONE JAR OF ALCOHOLIC REPTILES FROM HONDURAS” is the acknowledgment made in the list of donations to the museum of Tulane University. We are wondering what’s in that jar. Are they reptiles who are depraved enough to be addicted to the alcoholic habit; or are they the vertebrates with which the poor inebriate so often cultivates an acquaintance? That point once settled, the faculty can decide whether their duty is to transfer them to the Keely Institute or to keep them tightly stopped up so the mongoose can’t get to them.

THE ALABAMA STATE MEDICAL SOCIETY concluded a very interesting meeting at Montgomery on the 24th ult. There was a number of noteworthy papers read and discussed. The following officers were elected for the ensuing year: President, Dr. B. W. Toole, Talladega; vice president, Northern Division, Dr. J. C. Legrand, Anniston; vice president, Southern Division, Dr. J. A. Wilkinson, Flomaton; orator, Dr. R. S. Hill, Montgomery; alternate orator, Dr. G. C. Chapman, Birmingham.

THE BOARD OF HEALTH OF LOUISIANA was recently organized by the election of Dr. S. R. Olliphant as president, Dr. R. W. Walmsley as vice president and Dr. G. F. Patton as secretary and treasurer. Dr. W. H. Woods was promoted to the chief sanitary inspectorship and Dr. H. S. Olliphant was elected assistant inspector. Dr. P. E. Archinard, bacteriologist; Prof. A. L. Metz, chemist; Dr. Lamb, Dr. Gill and Mr. T. C. Wills retain their positions.

At a subsequent special meeting quarantine physicians were appointed as follows: Port Limon, Dr. L. A. Wailes; Bluefields, Dr. C. W. Knight; Bocas del Toro, Dr. W. B. Bonsal; Belize, Dr. W. H. Carson; Port Cortez, Dr. J. C. Stickney.

The following regulations regarding fruit vessels were adopted:

1. They shall not be allowed to bring to this port baggage, bedding or household effects of any kind.

2. After leaving New Orleans said vessels shall not take on board passengers during any part of their trip, nor shall they bring passengers to this port unless by special permit from this board.

3. They shall carry an acclimated crew, unless impracticable.

4. They shall not touch at any infected or suspected port; and have no communication with any vessel during their voyage, except in case of distress.

5. They shall only touch at such ports or stations as are mentioned in their schedule, which latter shall be communicated to the Board of Health.

6. They shall be required to make full disclosure, when arriving at quarantine station, of all the ports and places they have visited on that voyage.

7. They may take on board a crew of laborers known to be acclimated, and from some healthy point where they permanently reside and remain, the crew being as nearly as possible always composed of the same men. The captain or other officer may go ashore for the purpose of entering or clearing vessels only. Any further communication with shore or natives will be considered a violation of regulations, and vessels in default will be treated accordingly.

8. These vessels shall be cleansed, and, when necessary, disinfected in the city of New Orleans after discharge of cargo.

9. Vessels receiving night inspection at quarantine will not be allowed to discharge cargo on arrival at New Orleans until after a daylight inspection by the shipping inspector of this board, and the captain, owners or agents shall not allow any one to go ashore or to come on board until after such daylight inspection.

Should for any reason a fruit port become infected or even suspicious, vessels to that port will be liable to such additional regulations as the Board of Health may adopt.

THE FORTY-SEVENTH ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION took place in Atlanta, Ga., on the 5th, 6th, 7th and 8th of the current month. Altogether this meeting was a pronounced success. The attendance was very

good, and representative men from all sections contributed to the success of the session. New Orleans was honored in the selection of our esteemed friend and confrère, Dr. Edmond Souchon, for the second vice-presidency for the coming year. Dr. Nicholas Senn, of Chicago, was made president, with the following other officers to serve with him: First vice-president, Dr. George M. Sternberg, of Washington, D. C.; third vice-president, Dr. D. J. Thomas, of Pennsylvania; fourth vice-president, Dr. W. F. Westmoreland, of Georgia; secretary, Dr. W. B. Atkinson; treasurer, H. P. Newman; assistant secretary, Dr. T. F. Sneiderman, of Pennsylvania. Judicial council, Drs. Geo. W. Stoner, U. S. M. H. S.; C. W. Foster, of Maine; Dr. J. McF. Gaston, of Georgia; Dr. I. N. Snimby, of New Jersey; Dr. Brown, Dr. X. C. Scott, of Ohio. The next meeting, in 1897, will be held in Philadelphia.

DR. WILLIAM P. NORTHRUP has just been appointed professor of pediatrics of the Bellevue Hospital Medical College. Prof. J. Lewis Smith becomes emeritus professor.

Abstracts, Extracts and Miscellany.

EXHIBITION OF THE SKELETON OF A EUNUCH.—Mr. Lortet presented before the "*Société Nationale de Médecine de Lyon*" the skeleton of a eunuch, which he brought from Cairo (Égypt), and made, on that occasion, the following communication:

"In the large cities of Egypt, chiefly in Cairo, one meets on the streets quite a number of eunuchs attached as servants to wealthy families, and especially employed as guardians of the women confined in the harems.

As Godard had already observed, during his remarkable scientific journey in Egypt, these unfortunate fellows present, when they are adults, a very slender stature and shape, by which they are easily recognizable even from a distance. On the contrary, in childhood the castrated in no wise differ from other children of the same age. But, as soon as they reach puberty, their growth occurs with great rapidity and, in a short time, they almost all measure two metres and above.

During my last stay in Egypt I had the opportunity of dissecting in Cairo the body of a eunuch, about 25 years old, coming probably from the Echillouk's lands, situated in the regions of Bahr el Gazal, far south of Karthoum. The cranium was well formed, but the maxillary and dental prognatism is of the most pronounced type. The size of the skeleton is one metre ninety-six, while that of the subject alive was certainly above one metre ninety-nine.

The thorax seems very short when compared with the length of the lower limbs. The pelvis is very small, almost atrophied. On each side the obturator foramen is so large that there exists between them but a very narrow symphysis pubis.

The long bones are all exceedingly slender and do not present the crests intended for the insertion of muscles. The humerus is comparatively short. The radius and ulna are long and weak. The metacarpal bones very elongated and the phalanges alike, constitute a hand of lengthened and narrowed build, almost simian in shape. The femur, very weak, hardly shows any curvature. The tibia and the fibula, both very slender, are surpassingly long. The feet are flat. The metatarsal bones and the phalanges are also very slender and very long.

The unusual lengthening of the limbs, as shown above, is very remarkable, chiefly in the lower limbs. It was most interesting to point out this fact. It corresponds entirely with what we can verify in animals.

The wings of the capon are not more developed than those of the cock, but its very long legs give to that fowl a quite particular appearance.

The bull, whose limbs are shorter than those of the ox, has his hind limbs in particular less developed than the same in the ox. It is chiefly the lengthening of the hind limbs that straightens in the ox the line of the back at the hind quarter, which is always sloping in the bull.

The ablation of the testicles, therefore, when performed before the growing age, brings on an increase in length of the abdominal limbs.

In Egypt, castration is at present performed on boys from seven to ten years old, by the monks of certain Coptic convents, who reap a good profit by supplying the harems of wealthy Mussulmans with some of their mutilated victims. The operation is made in two different ways, and I am sure of these facts. The first operative method consists in cutting off with a razor the sexual parts as near as possible the pubic region, carrying away in a single stroke both the penis and the scrotum. Then the patient is buried, almost up to his neck, in some fine and

dry sand for the purpose of staying the hæmorrhage. After four or five days the sufferer is dug out and the wound is dressed with a few rags sprinkled with oil.

The second operative procedure consists in dividing or rather in crushing the spermatic cords and the penis by means of a strong twine whose extremities the operator pulls apart with all his might. The sufferings of the child are, then, horrible, but hæmorrhage is not to be feared so much in this case. The sufferer is, therefore, not buried in sand and his wound is dressed with acacia bark, which is rich in tannin. But in either of the two procedures entailing these barbarous mutilations, two-thirds of the children succumb."—*Lyon Medical*.

INDIGESTION OF STARCHY FOODS.—In the *Medical News*, of April 11, Dr. R. W. Wilcox summarizes an interesting article on the indigestion of amylaceous foods, with a favorable comment on the administration of taka-diasatase in these cases. The reported cases were under his observation for some time, long enough to allow him to draw his conclusions regarding the remedy. In only two instances was there unpleasantness from the administration of diastase. The dosage was not determined in his experiments. From two to six grains met the indications, and the author believes that more might be safely given.

He gave it preferably in powder. It is important that the diagnosis should be made, and should be exact. He concludes that taka-diasatase is useful:

1. In many cases in which the symptoms were wrongly attributed to proteid indigestion.

2. In the vast majority of cases as a substitute for the inefficient pancreatic extracts, malt mixtures and various combinations hitherto employed.

3. For the same relief of amylaceous dyspepsia, which, in the case of proteid indigestion, is obtained by acids and pepsin.

4. As a successful method by which the patients can preserve their nutrition upon mixed diet.

THE ACTIVE SUBSTANCE IN THE THYROID.—Idiosyncrasy plays a large part in the effects produced by the thyroid. This reaction was estimated and referred to a preparation of thyroid of known activity. The tablets were employed. This having been ascertained, comparison was made with the results obtained from the administration of isolated ingredients of the gland. The product of a mass of sheep's thyroids was first divided into proteids and proteid-free watery extract. The

proteids were found to be active. These proteids are practically only two in number, a nucleo-albumen and the colloid matter. The former was inactive, the latter active. The proteid-free watery extract was then concentrated. It was found to produce no effect, even in very large doses on a patient who had reacted distinctly to thyroid tabloids and to the isolated colloid matter.

The colloid matter is, therefore, the active ingredient of the thyroid. I have isolated it in a state of purity, but I do not propose here to deal with its chemistry. At present I shall only mention that among other peculiarities, it contains a considerable quantity of iodine in organic combination, and I have succeeded in splitting off from it a body apparently identified with that obtained by Baumann from the entire gland. If his substance be really active it would indicate that the colloid matter owes its activity to the presence in it of an organic compound of iodine.

The above statements are founded on observations conducted on normal subjects, and on two cases of myxœdema, the latter, however, being by no means marked examples of that disease. The object of this is to encourage the administration of the colloid matter in cases of advanced myxœdema or of hitherto untreated cases of cretinism. It is only by the results in such cases that the activity of the substance can be permanently established.—ROBERT HUTCHINSON, in the *British Medical Journal*, No. 1838.

THE TREATMENT OF ERYSIPELAS.

℞

Tannin.....	2 parts
Camphor.....	3 “
Sulphuric ether	15 “

The erysipelatous area is to be painted every hour or two from the edges toward the centre.—SPERANDINO.

Book Reviews and Notices.

Don'ts for Consumptives, by Chas. Wilson Ingraham, M. D.,
Binghamton, N. Y., 1896.

The advancement of self-study among pulmonary invalids and the promotion of public information upon the subject of tuberculosis are the chief aims of this little volume. It includes

rules for preventing infection by means of expectoration, handkerchiefs, rooms, etc.; considers the consumptive's duty in the matter from other people's standpoint; gives valuable hints to the afflicted as to their mode of living and to the predisposed as to how to avoid the disease.

The book is well arranged in thirty-eight chapters, clearly printed, and should prove interesting and useful to both the medical and the lay reader.

C. C.

Electricity in Electro-therapeutics, by Edwin J. Houston, Ph. D., and A. C. Kennelly, Sc. D. The W. J. Johnston Co., New York, publishers, New York 1896. Price \$1.

All the phenomena of electricity and magnetism have been considered as pertaining to either the electro-static, the electric, or the magnetic circuit, the laws of each being developed upon analogous lines.

The book is not intended exclusively for the profession, but aims to aid the general public in understanding the principles underlying the physics of electro-therapeutics.

The authors are electricians of high rank. This makes the work authoritative as well as eminently instructive. The volume can but be an addition to the library of any doctor who has had no special training in electrical science.

C. C.

Twentieth Century Practice. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by Thomas L. Stedman, M.D., New York City. In Twenty Volumes. Volume V. "Diseases of the Skin." New York: William Wood & Co. 1896.

No pains have been spared to make the work in review a modern exposition of diseases of the skin. Classification has been relegated, and the various material has been compiled in groups arranged according to the pathologic lesion. For example, bullous diseases are arranged together, without regard to etiologic significance.

In the present unsettled state of dermatologic classification, this is commendable. Many newer diseases are found discussed in this work, and in this regard the book is complete

and of service. There is, however, the constant evidence of our American tendency to sacrifice scientific presentation at the altar of our own convictions. We forget the fact that a text-book is the presentation of all that is known and accepted or advanced on a given subject, not what the individual writer may hold as his opinion.

The multiplication of cyclopedic text-books requires a more and more expanded and comprehensive handling of the subject undertaken. This volume of the Twentieth Century Practice is well edited, and the contributors are well selected.

The illustrations are carefully made, but are not numerous enough to be serviceable. The chapter on "Dermatoneuroses," by Dr. Leloir, of Lille, France, is particularly commendable for its breadth, treatment, and unquestionable originality.

DYER.

SURGERY.—*A Practical Treatise with Special Reference to Treatment.* By C. W. M. Moullin, M. A., M. D., assisted by various writers on special subjects, with 623 illustrations; third American edition; revised and edited by John B. Hamilton, M. D., LL. D. P. Blakiston, Son & Co., Philadelphia, publishers; A. Hawkins Co., New Orleans. Price, cloth, \$6; leather, \$7.

This is a condensed work on surgery, not only modern but up to date. It devotes special attention to the question of treatment, consequently it is practical in an eminent degree. The style is concise, and while the descriptions of most conditions and the theoretical considerations are usually short, details of operations and treatment are quite complete. The fact that a third edition is already reached speaks eloquently for the value which the profession seems to attach to the book.

The type is clear, though the paper is only fair. Of the numerous illustrations a large number have been made from special drawings, and many of them are printed in colors.

C. C.

Dame Fortune Smiled: The Doctor's Story. Cloth, \$1.25; paper, 50 cents. The Arena Publishing Company, Copley Square, Boston, Mass.

The narrative is simple and makes no pretence of literary excellence. The points, however, attract and hold the at-

tention. The doctor's aim is to show the reasonableness of giving during life. The doctor's success in restoring to health several invalid millionaires and in leading them to adopt his beneficial views is phenomenal. This volume suggests, it is believed, a practical solution of the problem that confronts those who regard their great wealth as a public trust.

The International Medical Annual and Practitioners' Index.

A work of reference for medical practitioners. 1896. Fourteenth year. E. B. Treat, New York and Chicago.

The usual mass of information is compiled in this work for the use of the busy practitioner. It is all it claims to be, and the various subjects are well handled. A long list of newer remedies, with their therapeutics, are enumerated. Several original articles are introduced on timely subjects, and the original investigations in all branches are referred to briefly or at length as the importance demands. Even the Röntgen photography finds place for discussion. We can only praise the volume and recommend it for its comprehensiveness, in which it certainly fulfils the labor-saving necessity of the busy doctor.

DYER.

PUBLICATIONS RECEIVED.

Transactions of the American Orthopedic Association. Ninth Session. Vol. VIII.

Dame Fortune Smiled: The Doctor's Story, by Willis Barnes. Arena Publishing Company, Boston, 1896.

Moullin's Treatise of Surgery. Third American Edition. Revised and edited by John B. Hamilton, M. D., D. D. P. Blakiston, Son & Co., Philadelphia, publishers. Armand Hawkins Company, New Orleans.

Practical Examination of Urine, by James Tyson, M. D. P. Blakiston, Son & Co., Philadelphia, publishers. Armand Hawkins Company, New Orleans.

Manual of Gynecology, by Hy. T. Byford, M. D. P. Blakiston, Son & Co., Philadelphia, publishers. Armand Hawkins Company, New Orleans.

Infantile Mortality During Child-birth and Its Prevention, by A. Brothers, B. S., M. D. P. Blakiston, Son & Co., Philadelphia, publishers. A. Hawkins Company, New Orleans.

Climate and Health, Weather Bureau, Washington.

Medicine as a Profession, by Louis T. Bishop, A. M., M. D., New York. Reprint.

Weekly Abstract of Sanitary Reports, Vol. X, Nos. 1 to 52. Issued by the Supervising Surgeon General, M. H. S., 1896.

Proceedings of the Philadelphia County Medical Society, Vol. XVI. Alfred Stengel, M. D., editor.

Twentieth Century Practice of Medicine. Vol. V. Diseases of the Skin. Wm. Wood & Co., New York, publishers, 1896.

An Improved Method of Diagnosing Diabetes from a Drop of Blood, by L. Bremer, M. D., St. Louis. Reprint.

Infantile Intussusception. By Fred. W. Wiggin, M. D., New York. Reprint.

Public Health Reports. United States Marine Hospital Service.

Contribution à l'étude l'électrolyse appliquée aux opérations chirurgicales, by Dr. J. A. Fort, of Paris. Reprint.

Tenth Annual Report of the State Board of Health of the Commonwealth of Pennsylvania. Benjamin Lee, M. D., secretary.

The Role of Fever in the Modification of Disease—Position of Patient During Parturition, etc., by Andrew F. Currier, M. D., New York. Reprints.

Obstetric Accidents, Emergencies and Operations, by L. Ch. Boisliniere, A. M., M. D., LL. D. Published by W. B. Saunders, Philadelphia. A. Hawkins Company, New Orleans.

Supplemental Report of a Case of Puerperal Septicæmia, by A. T. Currier, M. D., New York. Reprint.

Gynecology, Quiz-Compend, by William H. Wells, M. D. P. Blakiston, Son & Co., Philadelphia, publishers, 1896.

Diseases of Children, Quiz-Compend, by Marcus P. Hatfield, A. M., M. D. P. Blakiston, Son & Co., Philadelphia, publishers, 1896.

Borderland-Studies, by Geo. M. Gould, A. M., M. D. P. Blakiston, Son & Co., Philadelphia, publishers, 1896.

Catalogue 1895-96 Tulane University of Louisiana.

Annual Report of the Supervising Surgeon General of the Marine Hospital Service of the U. S. for 1875.

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the monthly statement of the Board of Health of the State of Louisiana.)

FOR APRIL, 1896.

CAUSE.	White	Colored....	Total
Fever, Malarial (unclassified).....	3	6	9
“ Intermittent			
“ Remittent		3	3
“ Congestive.....	3	1	4
“ Typho	2	6	8
“ Typhoid or Enteric.....			
“ Puerperal	3		3
Influenza.....	2	1	3
Small-pox.....		92	92
Measles	5		5
Diphtheria	1		1
Whooping Cough	1		1
Meningitis.....	9		9
Pneumonia.....	27	35	62
Bronchitis	8	5	13
Consumption.....	38	34	72
Cancer	8	4	12
Congestion of Brain.....	8	5	13
Bright's Disease (Nephritis)	17	5	22
Diarrhœa (Enteritis)	20	15	35
Cholera Infantum	29	5	34
Dysentery.....	2	2	4
Debility, General		1	1
“ Senile	13	5	18
“ Infantile.....	2	4	6
Suicide	4	1	5
Heart Disease.....	19	13	32
Apoplexy	8	4	12
Tetanus-Idiopathic	1		1
“ Traumatic	5	2	7
Trismus Nascentium.....	6	6	12
Hepatitis	1	1	2
Hepatic Cirrhosis	6		6
Uræmia			1
Injuries	15	4	19
All Other Causes	121	82	203
TOTAL	387	343	730

Still-born Children—White, 23; colored, 14; total, 37.

Population of City—White, 195,000; colored, 80,000; total, 275,000.

Death Rate per 1000 per annum for month—White, 23.66; colored, 51.45; total, 31.85.

METEOROLOGICAL SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure.....	30.15
Mean temperature.....	71.00
Total precipitation.....	4.84
Frosts	(light) 3
Prevailing direction of wind, southeast	



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