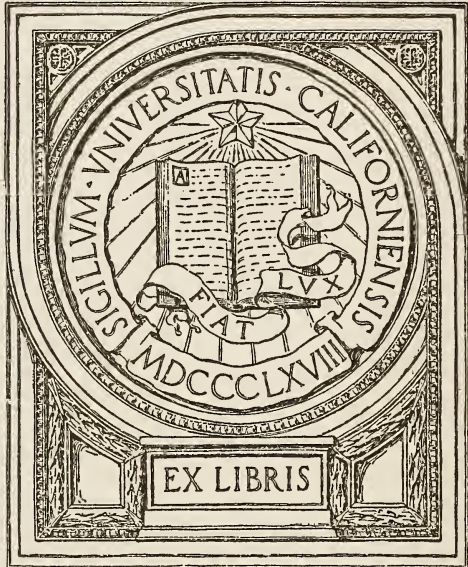




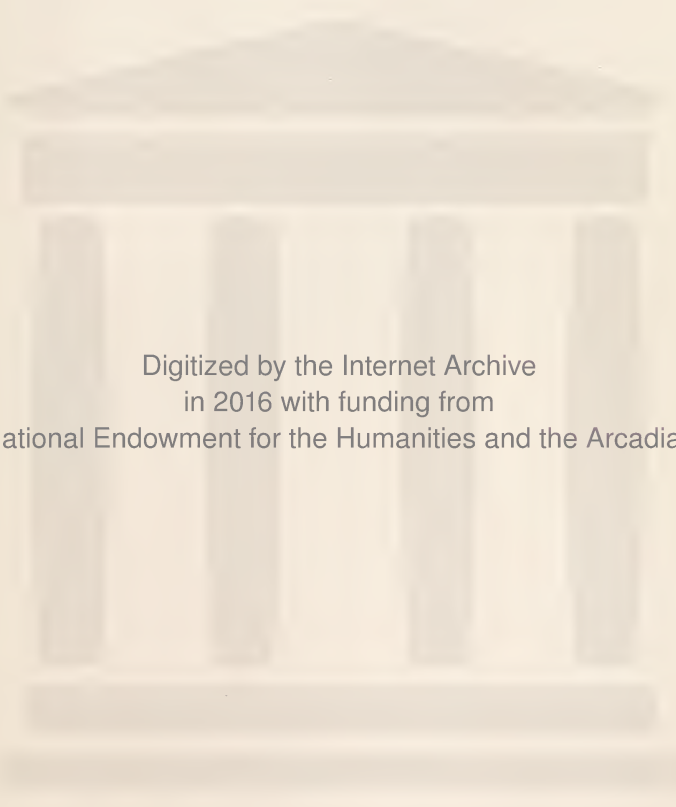
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# NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

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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.]

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SUPERSTITIONS, FADS, FETICHES AND FACTS: A RETROSPECT AND FORECAST; THE LINES ON WHICH THE PROGRESS OF THE FUTURE MUST BE WORKED OUT.

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BEING THE ANNUAL ADDRESS OF THE RETIRING PRESIDENT BEFORE THE LOUISIANA STATE MEDICAL SOCIETY AT THE MEETING IN NEW ORLEANS, APRIL 18, 19, 20, 1901.

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By F. W. PARHAM, M. D., Professor on General and Operative Surgery in the New Orleans Polyclinic, etc., New Orleans.

*Members of the Louisiana State Medical Society, Ladies and Gentlemen:*

When last year this society did me the honor to elect me as its presiding officer I am sure it did not fully realize the weight of responsibility it placed upon my shoulders, a responsibility that has steadily grown with me from the moment I accepted it. Now lest you may misunderstand me and think that I have not properly appreciated this trust and have found the labor a burden, I will make an honest confession to you—the cause of all my woe is that one of the duties of this high station is that the

president must "deliver at the annual session an address designed to promote the objects of this society." In other words, I must make a speech. When I responded last year accepting the election I gave as my reason for not making a speech then that I would be compelled to make one at the close of the year. That was a moment of fatal weakness; I should like a man have made my speech then and have had done with it; I could now get off easily with the excuse that I had already burdened you with an oration and, gentlemen, you would have been saved the sorrow of listening to one now. Being in for it then, I will state briefly that I purpose taking you back to the beginning of life on this planet and shall trace minutely year by year and month by month the evolution of progress in all departments of human endeavor up to the present grand and glorious burst of light born of the mighty deeds of the Nineteenth Century. And, should time fail me or your eyes grow prematurely dim and I should observe that you fall into peaceful slumber, then I shall pause and request my successor to continue it at our next. I believe I should be fully justified in doing all this because you have given me such a pain, a pain that has racked me in the day and sometimes even in the night when it would rouse me from fitful sleep. But seriously, my friends, I must tell you that while I intend doing no such thing I do believe that I ought to contribute my mite towards the work of this society and shall, therefore, without too much taxing your patience invite your attention to a brief retrospect of the past and a forecast of the future.

At no time in the history of man could it be more truly said that we are the heirs of all the ages, and such a heritage. The Nineteenth Century, "the Proud Century," as a well-known rabbi of this city has dubbed it on account of its inordinate conceit, has just closed. But justly proud could it be of its achievements, for did it not knock off most of the shackles of superstition and place truth in the fore-ground? Go with me for a few moments into the past and let us review briefly the history of medicine.

\* \* \* \* \*

Thus have we become the heirs of all the ages in all that makes for the welfare of humanity, but is this all we have inherited? We have seen some of the noble legacies of the past;

let us now look at some of the evils which have come to us along with this rich inheritance. If we are accustomed to look upon the middle ages as the dark period in history, filled only with myths and superstitions, we can but admit that much of it has descended to us through the centuries from the glorious time of the reformation. Did not Luther himself believe in an incarnate devil, Melancthon in astrology, and many physicians, like Ambroise Paré, de Haen and others, even down to the eighteenth century, credit demons with extraordinary power? Of course, among the common people, then as now, superstitions were matters of genuine belief and they were frequently imposed upon by the designing quack. Was belief in witches, however, confined to the ignorant? In 1749 a nun of 70 years was burned as a witch, in 1752 a maiden of 13 years was executed as a witch. And we all remember the story of the Rev. Cotton Mather and Samuel Parris, both ministers, the one an alumnus and the other a student of Harvard College, and how they executed witches in Salem in 1692. "It redounds to the credit," says Handerson, "of the physicians of New England, that their names are conspicuously absent" in the history of this delusion. And it was, too, a physician, Johannes Weyer (1555-1588), "an honest and learned man, without genius, though immortal for his sound understanding, who stood up first against this superstition" to the benefit of medicine yet entangled in the bands of astrology. Poor cracked brained creatures, who would now be perhaps subjected to the doubtful benefits of craniectomy and trepannings, were in the fifteenth century, under the unfortunate mandates of Rome, subjected to torture and death, and this continued far into the eighteenth century. Even Luther himself is said to have advised that a possessed maiden be cast into the river Mulde, and was greatly provoked when he found that his advice had not been followed. "The twelve-year-old child was simply troubled with a voracious appetite."

Although, then as now, physicians were the first to oppose evil, it was also true that, then as now, they had little influence to remove bad laws from the statute books. So it happened that not until almost on the threshold of the nineteenth century, under the influence of theologians and especially lawyers, were the laws against witches forever abolished. In Pennsylvania, a turbulent Swedish woman, was in 1684 tried before Penn and a

jury for witchcraft, the majority of whom were Quakers. The verdict: "The prisoner is guilty of the common fame of being a witch, but not guilty as she stands indicted," put an end forever to similar persecutions in that province, but in New England it was not until 1693 that the delusion came to an end.

In 1595 Jacob Horst, in accordance with the superstition of his time, prophesied the approach of the Golden Age, simply because a boy of Schweidnitz was said to have been born with a golden tooth. The search for the philosopher's stone and the art of making gold are interesting, says Baas, "from the fact that it was chiefly physicians who busied themselves with such investigations, and again that chemistry, which has proved so useful in medicine, originated therefrom." "Indeed," says he, "there is no folly so gross that it may not bring with it something good."

It seems very curious to us now in this enlightened age, to read of the dispute in the early part of the sixteenth century between the followers of Galen and the Arabian physicians on the one hand, and the medical reformers, led by Brissot, who were trying to bring about the renaissance of the Hippocratic methods. The world was divided into two camps, one holding with Galen and the conservatives that the proper place to bleed in pleurisy and pneumonia was on the opposite side, and drop by drop, whilst Brissot and the men of advanced ideas believed in free venesection on the diseased side. Only the death of one of Charles the Fifth's relatives from an Arabian bleeding saved from burning numerous medical heretics.

The best men were for a century ranged on one or the other side, until finally the Hippocratic doctrine was generally accepted at the end of the century. The sanguinary doctrines of Botallo, that blood ought to be drawn in all diseases, even chronic, gained much favor, especially among the Roman physicians, even retaining adherents down to Cavour, whose sad case testifies. But have we even now gotten rid of this heresy? In 1800, and perhaps later, people were bled for yellow fever, lying down so that they might not, by fainting too soon get an insufficient bleeding. And very recently, we see the tendency to argue for a return of the bleeding days. An overloaded right heart seems to be the great indication for bleeding by the Hippocratic method. But do we expect the blood from an



engorged heart to flow *back* to the open vein? But one answers, this will do good by preventing more blood from entering the auricle from that side. Would not, might I suggest, the end be much better accomplished by ligating temporarily the limbs in such a way as to stop the venous flow whilst permitting the arterial flow to continue?

Have we gotten rid entirely of our superstitious reverence for the blister? I remember that some years ago an ingenious member of the New Orleans Medical and Surgical Association used to contend that if for pneumonia you must put on a blister, put it on the heel, so as to get the blood derived as far away as possible.

The Arabians used to write with a purgative ink certain charms in cups, in order to purge the faithful mysteriously; almost as satisfactory as one of our well-advertised quack medicines has it, "they work while you sleep." Was this idea of the Arabians, or that of the Persians as to the amethyst cup (prevention from intoxication) much more absurd than our modern faith in bitters, carried even to the extent of drinking out of a quassia cup in order that the remedy might be practically inexhaustible?

The eminent naturalist, Conrad von Megenburg, crept under the grave of St. Erhard, in 1342, and was cured of his hemiplegia. The constant current, says Baas, could do no more at the present day.

Our ideas of the crisis in disease were carried much further in the Sixteenth century. Prevalent notions now about malarial fever might find their origin in the reasoning of Nipho of Sessa, in Calabria; which Baas puts in this wise: The body consists of four elements and the soul of three forces, hence the seventh day is the critical day; 7 plus 7, however, is 14, hence the 14th day is also critical. However we may regard this lucid explanation, yet we have to-day no more satisfactory statement of the matter. The numerical method of selecting from the approved remedies one especially fitted for a disease for which one is sought is gravely adopted by some of the later Homeopaths.

Superstition, astrology, and the making of horoscopes never flourished more freely than in the hey-day of the reformation; but, as Handerson remarks, even in sober-minded England (as late as the middle of the Eighteenth century) charlatanism of all grades and varieties reaped a rich harvest. For instance,

specifics for stone were purchased by the government from Joanna Stevens for the sum of £5000, and she received a certificate of their efficacy not only from many noble lords, but even from such eminent men as Cheselden, Hawkins and Sharp. Do we not see many instances equally as flagrant at the present? The osteopaths or bonesetters of the present day had their representative in Crazy Sally of the Eighteenth century. Her reputation was rather enhanced than hurt by her habits of drunkenness.

The Eighteenth century was marked especially by the rise and fall of systems in medicines. Deductive methods were in the ascendancy, "though the inductive efforts and acquisitions in the departments of anatomy, physiology and pathological anatomy must, however, be the medium of scientific connection between the Eighteenth and Seventeenth centuries. They likewise represent the bond of union with, and the germs of, that analytic method which has been revived, and has attained undue prominence in the Nineteenth."

A curious survival of systems originating in the latter part of the eighteenth century is that of Hahnemann. Hahnemann was a well educated man and an indefatigable worker, and it is hard to think that a man of his attainments could be so easily deluded; but in the light of the merciless persecutions to which he was subjected by the medical profession, by the intelligent class generally for many years, and even by his own family, who abused him for deliberately giving up a lucrative practice to become the champion of such absurd doctrines, thereby impoverishing them, we are forced to believe that he was honest, but misled. How could a sane man build up such a comprehensive system of mistakes and falsenesses, and what volumes it speaks for human credulity that such a system could grow with the years, and that at the end of a hundred years it can still force public and legislative recognition by the number and character of its professors and adherents. His whole system was founded on an incorrect observation, for any one can convince himself by actual experiment, that either the effect of the the Peruvian bark in throwing Hahnemann into an ague was incorrectly interpreted, or, at best, was highly exceptional. To justify a system of medicine there must be a sufficient number of effects flowing out of the operation of causes acting under

similar circumstances. These tests Hahnemann's system can not answer, so that its reputation depended largely upon the remarkable success in treatment reported by himself and followers, and not upon scientific demonstration of the efficacy of its therapeutics. Thus it is stated that after making his observation about Peruvian bark, he experimented upon himself with various drugs, then upon his family, and finally upon the insane patients in the asylum at Georghenthal, near Gotha, with complete success; and in Leipsic, in 1813, when, owing to the presence of the allied and French armies, patients afflicted with a malignant form of typhus became so numerous that they had to be allotted to various physicians, of the seventy-three assigned to Hahnemann, all but one old man recovered. Equally flattering testimonials could be collected from the works of the modern homeopaths, and yet in spite of its remarkable cures, the apparent simplicity of its therapeutics, which makes a knowledge of pathology of no use to its practitioners, and in spite of the absence of sins of commission of its votaries, its influence is at last on the wane. Its worst abusers are to be found among the honest homeopaths themselves. Thus, according to Roberts, Dr. Jabez P. Dake, a high authority in the homeopathic school, made this statement at the meeting of the American Institute of Homeopathy in 1894: "Applying all the rules of evidence to the witnesses whose testimony constitutes our *Materia Medica*, we must realize that very few of them have come up to the standard requiring 'the truth, the whole truth and nothing but the truth' concerning drug effects." Dr. Wild, vice president of the British Homeopathic Society, says: "Hippocrates was right when he said some diseases are best treated by similars and some by contraries, and, therefore, it is unwise and incorrect to assume the title of homeopathist." The extent of the defection from the ranks of pure homeopathy is indicated by the passage of the following resolution by the International Hahnemannian Association, at Milwaukee in 1880:

"Whereas, we believe the *Organon of the Healing Art*, as promulgated by Samuel Hahnemann, to be the only reliable guide in therapeutics; and

"This clearly teaches that homeopathy consists in the law of similars; the totality of the symptoms; the single remedy; the minimum dose of the dynamitized drug; and these not singly but collectively; therefore,

“Resolved, that, as some self-styled homeopaths have taken occasion to traduce Hahnemann as a fanatic; as dishonest and visionary; and his teachings as not being the standard of homeopathy to-day, that we regard all such recreant to the best interests of homeopathy” (Polk’s Directory). Dr. James B. Bell, President of this Association, in his address delivered in 1892 said: “Our Society numbers in active living members about one hundred and fifty, and it would be a generous estimate I think to double that number, as representing in the whole world all those who may be called true Hahnemannians, or who are becoming such. If we have patients going to other cities, especially in the West and South, how rarely can we recommend a physician to them, and if the patients are going to Europe or England, we know of but five or six men in the great cities to whom we can safely entrust them.” Thus we see the homeopathic house divided against itself and as the years pass we find the pure homeopaths becoming beautifully less and less, until as our Corresponding Secretary reports they number only nine in the State of Louisiana.

How can it be otherwise with a system built up on such absurd foundations? Hahnemann believed: that *similia similibus curantur* was the only therapeutic law; that the totality of the symptoms was the only guide in the administration of medicines and that the only true method of selecting proper remedies was to prove them upon persons in health. It followed naturally that only one drug could be used in any case and that external applications were contraindicated. Hahnemann indeed believed that external applications were not only not beneficial but harmful and likely to interfere with a homeopathic cure. The doctrine of infinitesimal doses was not originally an essential part of Hahnemann’s system, although the practice became soon so universal among its practitioners that the word homeopathic came to be synonymous with small doses. The minute subdivision or so-called dynamitization of drugs was, as shown by Browning, an after-thought of Hahnemann; “it was in reality a plank thrown out to rescue from destruction his system of medicine, which, otherwise, would have been shipwrecked by its inherent defects.” If nature itself did not cure the disease, at least no additional burden would be imposed by the medicine, since it was so much attenuated by the repeated dilutions. It

has been shown that chemical analysis cannot show the presence of the drug in even low dilutions, and yet Hahnemann makes the statement "that even the most violent pleuritic fever, with all its attending alarming symptoms, is cured in the space of 24 hours at the farthest \* \* \* by giving one globule of sugar impregnated with the juice of aconite of the thirtieth dilution;" and in the case of overloaded stomach "the patient should smell once a globule of sugar the size of a mustard seed, impregnated with the thirtieth dilution of pulsatilla" and be "infallibly cured in the space of two hours." Dr. Roberts says that Dr. Swan, who deals in homeopathic medicines in New York, advertises in his catalogue, grafts, saying "if a graft is put in a vial of any size and the vial filled with unmedicated pellets and corked, the whole will be medicated in half an hour" and if when a vial of medicine is nearly empty it be refilled with fresh unmedicated globules these will be medicated by being in company with the old ones. He says: "You will not have to purchase the remedy a second time." Some of the sources of his medicines are pus from rectal abscess, salt secreted with the perspiration from a gentleman's scalp, moonlight, sunlight and the louse of which Burns has written so beautifully.

In making medicine Hahnemann gravely cautions against shaking too much, for, by agitation, potency is increased. Hahnemann employed two shakes, Boericke and Tafel twelve shakes.

It seems strange that when the very salvation of the system has depended on the *vis medicatrix naturae*, that Hahnemann should have in express terms stated his disbelief in this healing power of nature. He called nature a bungler, and says that she "is powerless in the presence of disease, which can only be cured by means of medicines." Nature can throw off the effect of a drug, although she can not throw off a disease; in other words, she can throw off the stronger but not the weaker. The consistency is at once apparent. Paracelsus, three hundred years before Hahnemann, admitted the law of similars, and even Hippocrates had mentioned it, but both believed in the power of nature to heal. Rational medicine accepts this doctrine and admits into its materia medica any drug in any dose that can be shown to have any curative effect whatever. And yet we are called narrow-minded. We draw our medicines and measures from all the pathies, and recognize the merit of certain forces

in even Christian Science itself. What we do object to is the adoption of any exclusive dogma in medicine, thus depriving our patients of some of the most valuable means of treatment. Even if the principle of similia were correct, the method of getting at the proper remedies by "proving" leads one into so much complexity that only a genius could be likely to hit upon the right thing. The symptoms listed as effects of some of the commonly used drugs exceed in some cases over 2000. How often these must overlap and how difficult it must be to select the proper drug is evident in the statement of Dr. Berridge, an ardent homeopath, "who relates a case of congestion of the brain and condemns the homeopathic doctor who stopped giving arnica because, as he said, he did not believe it acted more on the head than on the big toe. The doctor was too ignorant to know that Allen's Encyclopedia gives seven symptoms of arnica belonging to the big toe and nearly one hundred belonging to the head." (Roberts).

Homeopathy has had all the recognition her practitioners could desire and yet we see her influence disappearing first in Europe and now at last in America. Shall we not however give her the benediction as she goes and thank her for her assistance in the battle against poly-pharmacy, which is still being waged by the adherents of scientific medicine? Homeopathy has served its purpose: it has enabled us to observe the natural history of disease on a large scale in homeopathic institutions, untrammelled by active drugs. It and the old medicine have both been succeeded by the skeptical spirit of the Paris and Vienna schools and rational methods must henceforward be cultivated by all who would merit recognition.

In the modern treatment of diseases, as Prof. Osler pointed out recently in his article in the *Sun*, one of the most striking characteristics of the new medicine is the return to what used to be called the natural methods—diet, exercise, bathing, massage—and the abandonment of a mass of useless drugs and the retention of a few whose uses we are learning better to understand. And we are giving more countenance to forces. Even Christian Science cannot be altogether tabooed. As Osler remarks, "The cures in the temples of Esculapius, the miracles of the saints, the remarkable cures of those noble men, the Jesuit missionaries in this country, the modern miracles at Lourdes and

at St. Anne de Beaupré in Quebec, and the wonder workings of the so-called Christian Scientists, are often genuine and must be considered in discussing the foundations of therapeutics." We surely all recognize something of value in hypnotism, however much of imposture there may be of it even in our own ranks and however great the danger may be of pushing it beyond the bounds of reason until it shall become little better than the old Mesmerism and other forms of animal magnetism. Do we not all make use of a silent hypnotic influence over our patients? Hufeland used to say that "successful treatment requires one-third science and two-thirds *savoir faire*," and a well-known minister of the Episcopal Church in this city, now Bishop Thompson, was so impressed with this truth that he took as the subject of an address "The value of high character in the physician in the treatment of disease." While admitting with certain limitations the power of these mental forms of therapeutics we must insist with Osler that the claims of the hypnotists have not been all substantiated and the usefulness of hypnotism has been grossly exaggerated. Of the Christian Scientists we can say with the editor of the *New York Medical Journal* that the real crime of the sect lies not in what they do but rather in what they do not do. "Suppose a Christian Scientist's own child were playing in front of a fast speeding car, and a man standing by did not even stretch out a hand to drag it away, not believing, forsooth, in material measures, but relying solely on the strength of Divine Mind; what would be the Christian Scientist's opinion of that inhuman creature? It is not because he believes in prayer that we condemn him, but because he will not make any effort whatsoever to attain that for which he prays." Can any sane person believe such things as the following from Mrs. Eddy's book, misnamed *Science and Health*? "If the case to be mentally treated is consumption, take up the leading points in this disease; show that it is not inherited, and that inflammation, tubercle, hemorrhage and decomposition are beliefs, images of mortal thoughts superinduced upon the body; that they are not the truth of man; that they should be treated as error and put out of thought; then these ills will disappear. If the lungs are disappearing, this is one of the beliefs of mortal mind. Mortal man will be less mortal when he learns that lungs never sustained existence, and can never destroy God,

who is our life. \* \* \* What if the lungs are ulcerated? God is more to a man than his lungs; and the less we acknowledge matter or its laws the more immortality we possess. \* \* \* Correct material belief by spiritual understanding and spirit will form you anew. You will never fear again except to offend God, and will never believe that lungs or any portion of the body can destroy you."

"And yet we know that in the United States alone, consumption kills every year 164,250 persons, or at the rate of 450 a day." And we know further that the percentage of cures is every year growing greater. In many of the sanatoria for consumption percentages of cures are reported ranging from 60 to 80. Is it not time to stop the wholesale slaughter of the innocents by the Christian Scientists? or should we rather believe with a recent editorial expression of the *New York Sun*, that "the best way to deal with a delusion is to let it alone." While we are waiting for common sense to assert itself, may not many valuable lives be sacrificed? The mental therapeutics of Christian Science it is justifiable for us to use and we do resort to them; but the imposture and fanaticism of their horrible creed we must combat by every force at our command. But what shall we say of the osteopath? Of what of value he has to offer we shall also freely avail ourselves; but we must resolutely oppose his charlatanism. Mr. Jakob Bolin recently stated the matter in a nutshell before the New York Legislature, when he said: What is good in osteopathy is not new, and what is new is not good. They are appropriately called osteopaths, for they see a bone loose everywhere. Their pathology seems to be founded on a misplaced bone. May it not be that, as Mr. Bolin suggests, it is their own heads that are out of place and not those of their patients? And yet one of the osteopaths stated in his hearing before the New York Assembly that his sect had treated more than half of our senators and representatives at Washington. "Charlatans first try their treatment on public men in order to use their names. Patent medicine men first try their drugs on clergymen who are trained to accept things on faith. Responsible physicians first try their theories on the dog." (Robert Morris).

What we want in medicine is keen Hippocratic observation and a truthful statement of facts. This is the method of science



in general, and medicine must progress along the same lines. The study of anatomy and physiology, the study of diseases at the bedside and of its effects on the post mortem table, the effects of drugs in health and in disease, and the effects of all forces must be recorded carefully, and only when sufficiently confirmed can they be accepted as facts. This is for medicine the real glory of the nineteenth century. Bichat in the last decade of the eighteenth century overthrew the speculative tendency in medicine and placed facts in the front rank. His early death, at thirty-two, was a calamity to medical science. In one winter he examined 700 bodies. He was about to submit the *materia medica* to proof when consumption carried him to an untimely grave.

Such men as Bichat and Haller shed a lustre upon the Eighteenth century. Whatever may be said of the materialistic tendencies of the present age, it must be admitted that they do seek at least to better the condition of men in this world. What we need is to establish the best means of accomplishing good for the human race and incidentally for all creation, but all forces and all bodies must be made subservient to man's uses. We want to know things and how to use them. We want steady, systematic work all along the line of human endeavor. And we want to settle doubtful points and bring them into the domain of knowledge as quickly as possible, and to keep them settled, and not have them constantly bobbing up like Banquo's ghost to plague us. Let us not, like even the great Aristotle, above all, deceive ourselves, and state as facts things which we could easily ascertain to be false. It is said of him: "He misstates many things which he could have verified with the utmost ease. He says, for example, that man has more teeth than a woman, and the ox and the horse have each a bone in its heart. Mice, he informs us, die if they drink in summer; and all animals bitten by mad dogs go mad except man. He also says that horses feeding in meadows suffer from no disease except gout, which destroys their hoofs, and that one sign of the disease is the appearance of a deep wrinkle beneath the nose." I have heard one of our old physicians, long since departed from this city, say that he could make a diagnosis of hepatic cirrhosis by the blueness of the lips, and that the best way to treat abscess of the liver was to make an opening in such away as to make

the pus, in seeking an exit, travel by the most circuitous route. Many such statements may be found even now scattered through medical literature as to matters which could easily, by a little close observation, be absolutely disproved. We are too disposed to hold on to fetiches in medicines. For years we held on to the spray, until the father of bacteriology cried, Away with it. And we can all of us remember how we used to smell of iodoform, which was blown into our clothes as we dusted it in powder over all our wounds. But do we not still use it as gauze to dress most of our wounds, even aseptic ones? Does any one of us assert from positive demonstration that aseptic gauze would not do as well in all but tuberculous wounds?

Peabody has recently called attention to some of the fallacies we still cling to in medical practice. Is not much of the reputation which tonics have acquired with the laity due to the alcohol which they contain? Ergot is frequently given for pulmonary hemorrhage and is still recommended by some of the best text-books on practice, and yet it is extremely questionable whether it can do any good there, for as Peabody states, the pulmonary capillaries contain no nerves and its use is contraindicated because it causes a rise in the pulmonary pressure. For the same reason it is contraindicated in cerebral congestion, says Foster. Certainly in the intestinal hemorrhage of typhoid fever it can rarely do good and may often do harm by constricting the arterioles beyond the point of rupture. So with many of our ideas regarding lithium and mineral waters in gout, and as to oxygen, we can not get good from it in the absence of some form of pulmonary obstruction though it is used in a great variety of conditions.

And finally, as to disinfecting, the disinfecting agents at our disposal have so little penetrating power that it is very doubtful whether they really do any good at all. After all disinfection will never take the place of fresh air in the purifying of rooms occupied by persons suffering of infectious diseases. And, if Reed and Carroll be correct as to the role of the *Culex* mosquito in the etiology of yellow fever, then all our disinfection is of no avail unless it kills the mosquito, as, indeed, formaldehyde seems to do, and all our quarantines have been more than useless, for being useless, they have perhaps inflicted more hardship than the disease itself.

We must as rapidly as possible give up our fetiches and deal only in facts. We must from time to time take an inventory of our knowledge. Let us put theories in the background as did Bichat, or rather let us make our theories fit our facts, not lay our facts in the Procrustean bed of theories. Let us hold fast to all that is good and discard once and forever all that is chaff and false. Let us remember that in all so-called new systems old principles reappear, and that the labors of the past are not sufficiently consulted to guard against the revamping of theories that had long ago been proved altogether futile. But let us above all take care of the facts and the theories will take care of themselves.

We need a more united profession.

Our motto is too much, every man for himself and the devil take the hindmost. The profession of this city and State needs a large reference library. Men here are discouraged from exhaustive research not so much by climate, which has, I believe, been much overrated, but by lack of proper medical stimulus. Nothing would, I believe, do so much as a good liberal library. We must progress from the known to the unknown. Unless we find out what has been done we will be continually discovering facts which we afterwards shall find accurately described in some dusty volume on the shelves of a good library. How often this is done is shown by the number of operations brought out as new. Witness the Trendelenburg operation for saphena varix, recently attributed to the surgeon of Bonn when a hunt into the literature would have disclosed an equally good description of the procedure in 1840.

Then, too, a careful search of literature would often bring to light many useful facts which without such industry would lie buried for years. The late history of spinal analgesia is a notable case in point. Years ago we should have been where we are now, and the field and limitations of these methods of analgesia would now be established. Recently gentlemen from the Chicago and Columbia Universities told us how they built up their libraries and how they found them the life and inspiration of the schools. We need one here and we ought to get together and have one. The Medical Department has one, the Parish Society has a splendid beginning of a library of current literature, and the Charity Hospital has some rare and valuable books.

If all these could be collected in one building the gain would be great, but as this is impracticable for various reasons, much good could be accomplished by cataloguing in multiplex form and exchanging catalogues one with another. As to our poor State Society library, our Library Committee inform me that they have so far found no books to keep.

This society ought also to do its part in the collective investigation of disease. One hundred cases well observed and carefully reported upon would give us more real information than a hundred desultory discussions of a subject. The subject of continued fevers has never been properly investigated with us, and see what possibilities are opened up to us by the discovery of the role played by the mosquito in malarial and yellow fevers, which is the province of the learned gentleman who follows me to discuss before you.

I submit these and other similar subjects for your consideration.

I thank you, gentlemen, for your very patient and considerate attention.

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#### THE BLOOD IN SYPHILIS—BEFORE, DURING AND AFTER TREATMENT.\*

BY L. H. WARNER, A. M., PH. G., M. D., NEW YORK CITY.

Reiss, in the *Archives for Dermatology and Syphilis*, 1895, says (Vol. 1): "The general constitutional influence of the poison of syphilis is best indicated by the condition of the blood," and well might he have added, and the efficacy of our therapeutic agents employed in the treatment of syphilis can be best observed by continued blood examinations. Blood, unlike other tissues, is restricted in its independence. It is subservient to other tissues. The reproduction of its cellular elements occurs in specific organs, the integrity of its intercellular or fluid part is dependent upon the general systemic metabolism, the state of the fixed tissues, proper maintenance of circulation, etc. Diseases of the blood are not primary disorders, but rather are results of underlying derangements of other structures. The study of the structure of blood with special reference to the

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\*Written in expansion of remarks made at a lecture before the Louisiana State Medical Society, April, 1901.

pathologic changes in the blood as appertaining to disease has been pursued by savants of both continents, and this day hematology is one of the important aids of the diagnostician. Of diagnostic value in syphilis is the occurrence of leucocytosis, with increased percentage of young leucocytes, and of eosinophiles as against in phthisis, typhoid, and other malignant diseases. While we were satisfied in former years to learn from blood examinations of syphilitic patients the stage and severity of infection, we are able now to make deductions based upon pathologic changes occurring. In the first stage of syphilis our patient appears weak, tired, pale, and the blood examination reveals low percentage of hemoglobin and high percentage of young leucocytes. The second stage reveals a leucocytosis, low percentage of hemoglobin and high percentage of young leucocytes, and the third stage reveals myelocytes, a marked (so-called) anemia, and frequently eosinophilia. Especially characteristic are the changes of the white blood cells; in the first stage they are either normal or slightly increased. The percentage of adult forms is low, and that of the young forms high (lymphocytes). If mercury or iodide of potassium is given at this stage, we note the increase of adult forms and a decrease of the young forms. Given to healthy persons the opposite effects are noted. Whether the term anemia applied to such condition is correct or not, is a question open for debate. Ricord and Grassi term it syphilitic chlorosis, and my own opinion sides with theirs. Let us compare the definition for anemia and chlorosis. Anemia, clinically, represents a variety of affections, and according to the amount of deteriorations has to be classified as primary, idiopathic or symptomatic anemia. In anemia the reduction of hemoglobin and red cells runs approximately very close. Chlorosis is a primary or essential anemia, dependent upon retarded hematogenesis characterized by peculiar pallor, reduction of hemoglobin, and to a less extent of the number of red corpuscles. This latter condition applies to the blood of all syphilitic patients. The chlorosis improves in most cases, but this is dependent upon the medication employed. Continued increase of white corpuscles will lead to leucocytosis, lymphatic anemia and, if the spleen is affected, to leukemia. Regarding the blood in syphilis, Kobried (International Dermatological Congress, 1892), says: During the first to the seventh

week, the red corpuscles remain normal, the hemoglobin falls 10 to 20 per cent., and continues to sink until treatment begins and causes a slight decrease of the red corpuscles. Newman & Conried (*Wiener klinische Wochenschrift*, 1893, No. 19) find decrease of hemoglobin but not of red corpuscles up to the secondary symptoms. Lezins (*Inaug. Dissert.*, Dorpat, 1889) corroborates Newman and Conried. Reiss (*Archives for Dermatology and Syphilis*, 1895, Vol. 1) finds that during the time between the chancre and secondary symptoms, red cells are slightly decreased, which is more marked after secondary symptoms appear. This continues for a time after treatment begins. Hemoglobin sinks from time of primary lesion and is not affected by eruption. Even under treatment, hemoglobin never gets up to normal, and prolonged mercury treatment lowers it, although it has at first a beneficial effect on the hemoglobin. Justus (*Verhandlung des 5 Congress d. dermatol. Gesellschaft*, Sept., 1895) states that he gives an inunction of mercury in cases in which secondary symptoms have not yet appeared. He thereupon notes a marked fall in hemoglobin, owing to the action of mercury on the weakened red corpuscles. This sudden fall is followed by a gradual rise, until within a few days, the coloring matter is at a point slightly higher than before mercury was given. The blood test remains negative in all other diseases.

Of late I have examined the blood of several hundred syphilitic patients and find Justus' statements corroborated. I noted the following facts while studying the fresh and stained blood of several hundred syphilitic cases in the N. Y. Skin and Cancer Hospital, and Bellevue Out-door Clinic, and private cases. The Justus hemoglobin test brings positive results, the red cells are variformed, no rouleaux and 3 or more crenated red corpuscles appear to each field. Before treatment, the lymphocytes are most numerous of the white cells, while after the beginning of the treatment the polynuclear neutrophiles are predominant, indicating a digestive leucocytosis. Occasionally we come across an eosinophilia. In severe cases we find megaloblasts, microcytes, poikilocytes, nucleated red corpuscles and gigantoblasts. This latter condition is found in severe anemia. Before citing my findings regarding the pathologic changes occurring in the blood of syphilitics induced by medication, I would like to dwell upon the etiologic theories. Is syphilis a disease caused by patho-

genic bacteria or influenced by a virus? Lustgarten claims he has found bacteria resembling the smegma or tubercle bacillus in the blood of syphilitics. He advocates the use of a staining method devised by him, and without discrediting his excellent work, I must say that I have found the identical bacillus of which he speaks, in all cases where a mixed infection of tuberculosis and syphilis prevails, while I never succeeded in finding the bacillus of Lustgarten in a clear case of syphilis. Pathogenic bacteria are always found within or surrounding pus, as the gonococcus within the pus cell, the tubercle bacillus within or between the pus cells, etc., and although I have repeatedly tried the Lustgarten staining method on specimens of pus taken from syphilitics, I have always had negative results. On the other hand I have examined the fresh and stained blood specimens of blood in syphilis, carcinomas and blood taken from a patient before and after vaccination, and in each instance found polynuclear neutrophiles with basophilic granulation. This basophilic granulation was especially marked directly within the nucleus. I have tried the same staining method on blood from tuberculosis, typhoid, malaria, pneumonia, etc., always with negative results. The danger of infection with these diseases is as great as from diseases due to pathogenic bacteria. A girl was infected while sleeping with her sister who had been recently vaccinated, and she acquired a vaccine pustule on the eyelid and medical records cite case upon case where infection was brought about through coming in close contact with carcinoma and syphilis sufferers. Treatment alone removes not only the manifestations of the disease, but also the disease, and with it its contagiousness, by about the end of the sixth year. Mueller & Kaunberg (*Archives Dermatology and Syphilis*, Vol. 35, No. 2) have resorted to serum therapy but have seen no influence on the course of the disease. The treatment of syphilis by mercury inunctions has its drawbacks, the soiling of clothing and the impossibility to control dosage. The hair and skin about the part of the body where mercury is applied locally, will show minute globules of mercury when examined under the microscope, showing how little of the medicament is available for therapeutic effects. Mercurial plaster, although especially useful in the syphilis of children, causes a great deal of irritation, and it also has the same disadvantages regarding graded doses, as in the case of inunc-

tions. The administration of mercury by the hypodermic method, in which are included the intra-cellular, intra-muscular and intra-venous, is the only method above all criticism. Lane (*British Med. Jour.* Dec. 12, 1896) says: The advantages of injections are, the functions of the digestive tract are not interfered with, the doses of the mercury salt are small, certain of absorption, and can easily be regulated to the varying susceptibilities of different individuals. Julien (*Arch. Gen. de Med.* No. 5, 1896) says: Subcutaneous injections of mercury possess two advantages, as the liver and alimentary mucous membranes are spared. He prefers to inject into the supra and infra-spinous fossæ of the scapular region. Strict asepsis must be enforced. As to advantages he points to the promptitude of effects, the intensity of action, and the persistent and positive character of its cures. Dabney (*NEW ORLEANS MEDICAL AND SURGICAL JOURNAL*, April, 1897) says: The hypodermic method of treating syphilis possesses many advantages over other methods, when used by physicians bold enough to disregard the dosage recommended by most writers on therapeutics. He never observed ptyalism or stomatitis in cases treated by this method, and claims as advantages: 1st, accuracy of dose; 2d, rapidity of action; 3d, small amount of mercury required, and short time needed to effect a cure; 4th, constant effect of drug day and night; 5th, absence of gastrointestinal disturbances; 6th, quick diagnosis in questionable cases. Hebra, Scarenzo and Hill were the first to use subcutaneous injections, but the incentive was given by Lewin. Mercury preparations suitable for hypodermic use are divided into soluble and insoluble salts. Although it seemed practicable to employ the insoluble salts hypodermically by suspending them in glycerin, oil, mucilage, etc., it was soon found out that the suspension of mercury in oil causes the metal to sink to the bottom, and even if thoroughly shaken, exact dosage is out of the question, and furthermore, there is no way to control the absorption of insoluble medicaments. Calomel and the bichloride of mercury in aqueous solution are much used but are accompanied by grave objections. They produce irritation, are painful to the patient, produce abscesses, and frequently bring on rigors. However, they have great advantages over the administration of the mercuric salts by the stomach. Panas, Fournier, Lanceroux, Brissand, etc., recommend a spe-



cific biniodized oil, ten parts of biniodide of mercury in a soluble condition, to 1000 parts of neutral aseptic oil. The injections should be made slowly in the midst of the mass of muscular tissue; the needle penetrating completely. The zones which are most adapted to the injections, are the sub and retro-trochanterian regions, and the sacro-lumbar mass.

The choice of a spot having been made, the epidermis should be rubbed energetically with some cotton wool imbibed with alcohol or even a few drops of the oil, in order to insure local aseptic conditions. This biniodized oil can also be given by the mouth in capsules, each containing two milligrams of active principle, or  $\frac{1}{30}$  grain of red iodide of mercury; in the stomach it is not affected by the gastric juices, but it is slowly emulsified in the intestines (as are all oils), the iodide becoming an alkaline iodide, a very fine mercuric oxide remaining, which still more slowly (and without any irritating effects) becomes very finely divided metallic mercury, which is assimilated along with the nutrition, and carried in the current of circulating fluids, penetrating every part of the body.

When hypodermically injected there is gradual emulsification of the oil by the alkalinity of the blood in the tissues, precipitation very slowly of mercuric oxide, and gradual reduction to metallic mercury, with final, but more prompt dissemination throughout the organism than when given in capsules.

While the hypodermic method entails more trouble, there is an entire absence of all doubt as to the assimilation of this form of mercury, and there is positive certainty of the digestive functions not being interfered with; besides, when mercurials are given by the mouth, the amount retained in the body must always be variable, whereas, by hypodermic injections, only small portions can escape by the ordinary excreting apparatus.

Successive examinations of the blood of the patient treated with such biniodized oil, given hypodermically, or when capsules are taken by mouth, show no destructive pathologic changes such as are exhibited after administration of the various mixed treatments, inunctions, etc. I have never come across a blood picture representing a digestive leucocytosis whenever the biniodized oil was given, and I always noted a gradual increase of hemoglobin and red corpuscles, and a gradual reduction of leucocytes wherever a leucocytosis prevailed.

## OBSERVATIONS ON SCARLET FEVER.\*

BY WHYTE GLENDOWER OWEN, A. M., M. D., White Castle, La.

In view of the wave of scarlet fever which has recently swept over the State, the discussion of this subject should be of exceptional interest to the members of our society. The scope of this paper will be limited to the consideration of the milder type of the disease, to which class, fortunately, the greatest number of cases belonged; but we hope by the introduction of the subject to induce the gentlemen from the different parishes to deal exhaustively in the discussion with the severe or complicated cases of the affection which may have occurred in their practice.

Scarlet fever appeared in the winter of 1899, and by the spring of 1900 prevailed in numerous localities throughout the State, some sections experiencing a veritable epidemic, while others escaped with a comparatively small number.

ETIOLOGY.—Scarlet fever is both contagious and infectious, and is supposed to have its origin from a specific bacillus.

The excretions of the patient during his illness, the desquamation of his skin during convalescence and all articles which may have been contaminated from either source are capable of conveying the infection. The latter statement has been repeatedly demonstrated by infected fomites being packed away and upon the occasion of their exposure at a later date causing another outbreak of the disease. The practical deduction is to institute isolation of the patient and attendants. If this is successfully accomplished, with proper disinfection of everything pertaining to the sick room, no difficulty need be anticipated in restraining the extension of the disease.

CLINICAL HISTORY—*Stage of Invasion*.—In the majority of cases the disease was ushered in with derangement of the intestinal tract, closely simulating an attack of acute indigestion. Nausea and vomiting, sometimes diarrhea, accompanied by fever, the thermometer generally recording a temperature of 101 degs., also a rapid pulse, and upon examination of the throat you would find an important symptom, which most materially aided in early diagnosis, consisting of a purplish discoloration of the fauces. Also there would be a slight enlargement and some tenderness of the cervical glands.

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\*Read before the Louisiana State Medical Society, New Orleans, April 19, as chairman of Section on Medicine.

*Stage of Eruption.*—The eruption, in most cases, developed by the expiration of 24 hours from the period of invasion. It first manifested itself upon the trunk, gradually extending to the upper and lower extremities. Generally by the time it had reached its acme upon the extremities it had commenced to fade upon the trunk. The character of the eruption was usually a bright red hue. The other symptoms of this stage were: a moderate febrile movement ranging from 101 to 103 degs., rapid pulse, strawberry tongue, anorexia, thirst, and restlessness to be attributed to the involvement of the cutaneous surface. Increased enlargement and tenderness of the cervical glands would also occur. The throat would be found to have assumed a more decided inflammatory hue, and in some cases ulceration would happen.

By the fourth day the eruption would commence to disappear in the same manner in which it was evolved, first from the trunk and then from the extremities, and in most instances every vestige of it would have vanished by the next day.

*The Stage of Desquamation.*—This stage usually marked the inception of convalescence; coincident with the fading of the eruption the symptoms would ameliorate, the fever gradually abate, the appetite become restored and the other indications of health be re-established. At this period would be developed the peculiar feature of disease, consisting of the desquamation of the skin. In most instances the desquamation was of the furfuraceous type, in fact, I witnessed but one case in which partial exfoliation of the skin occurred. The desquamatory process, however, would continue quite a while and it was especially necessary to impress upon the nurses the importance of disinfecting these cutaneous particles to avoid the infection of others with the disease.

**DIAGNOSIS.**—The diagnosis was based upon the symptoms previously enumerated, and, if a careful examination was made in the stage of invasion, could then be generally determined by the condition of the throat.

**PROGNOSIS.**—This was best to be made with reserve, inasmuch as complications would sometimes unexpectedly supervene, even in the mildest cases, with disastrous results.

**TREATMENT.**—Most cases required but little treatment. Detergent applications to the throat, a mild fever mixture, proper

nourishment and emollients, such as vaselin and cold cream used as unctions to the skin were about all the remedies necessary in the type of the disease about which I have written.

However, in the severe types of scarlet fever, or those attended with complications, all the resources of medical science were in demand, and often even these were unavailing.

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## Clinical Reports.

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### ACUTE VITREOUS PHOSPHORUS POISONING WITH SUICIDAL INTENT FOLLOWED BY DEATH IN 144 HOURS.\*

BY L. J. Y. GENELLA, M. D., NEW ORLEANS.

In order to better judge in what way this case followed out a typical or atypical clinical course, a very brief resumé of textbook descriptions is not irrelevant.

Poisoning with phosphorus as a means of suicide is uncommon in America.

Each average match contains  $\frac{1}{130}$  grain phosphorus; thus 100 sticks equals a lethal dose.

Rapid or delayed nausea, vomiting, and abdominal pains are common, and usually among the first symptoms exhibited.

A calm usually occurs in the course of every case.

Icterus appears in a few days and its intensity is usually an index to prognosis.

Hepatic enlargement is common, splenic hypertrophy to any great extent rare.

Albuminuria always appears in a few hours. Bile pigments appear with icterus. Hyalin, fatty and blood casts always present. Peptonuria occasionally occurs. Somnolence, coma, delirium and convulsions are common during the first few days.

Death comes in a comatose state, or suddenly from heart failure.

Odor of phosphorus and phosphorescence usually emitted by the body.

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\* Read before the Orleans Parish Medical Society, May 25, 1901.

Echymotic spots and other hematoid deposits and excretions are common.

ANAMNESIS.—Mrs. Flynn, age 26, Anglo-Saxon, small stature and apparently sane; no organic disease.

Saturday, April 26, this patient took the following lethal dose:

“ One box Parlor matches.  
One box Alligator matches.  
Sugar  $\mathfrak{z}$ i.  
Aqua (1 cup).  
Boil for 15 minutes.  
Cool for two or three hours.  
Sig. Take this if you wish to die.”

—*An American Newspaper.*

7 p. m. Started to take this and ended at 7:30. Roughly estimated as each match = 1-130 gr., 2 boxes (100 in box) = 1 and 7-13 grs. of phosphorus.

After 24 hours. No results, had slept and eat well. Tea and bread without butter for supper. Coffee and milk with small piece of meat for breakfast. Meat and custard for dinner. Tea and milk for dinner and supper.

30 hours. Slight nausea.

36-38 hours. Emesis occurred six or seven times.

39 hours after I saw the case and was told by the patient she was suffering from indigestion from sour apples.

Patient looked pale, anxious with dilated pupils, pulse 68, good tension and regular; temperature 97 4-5 deg. Resp. 21, hypersensitive on deep palpation over left hypochondrium. Emesis had ceased since one hour ago.

Ordered morphin sulphate, gr. 1-8, Schleich's tablet No. 1 dissolved in tablespoon of water. Clysters of warm water and salt with soap suds. Salines by mouth. Epsom salts.

42 hours. Hurriedly summoned to return and was told by relatives that they suspicioned poisoning. Upon questioning the patient she related the above matches, sugar and hot water story. It was now 42½ hours after the initial dose.

Although recognizing the fallacy of pursuing absorbed phosphorus with slowly acting antidotes I nevertheless gave her two doses of commercial oil of turpentine, 10 minims in  $\mathfrak{z}$ ii of water. Told her to drink freely of milk, water and eat ice cream *ad libitum*.

Every two hours ordered clysters of salt water.

Pulse 68, tension good and regular. Hepatic dulness three inches in mammary line. Urination free,  $\text{ㄩviii}$  in last four hours. No albumin or blood; color dark; sp. gravity 1022; not examined for casts. Nausea slight, tongue moist, no icterus.

Poultice of antiphlogistin applied over abdomen for relief of pain, 55, 60 and 72 hours; no change.

74 hours: Pulse 94, slightly irregular, tension good. Hypodermic of strychnin sulphate, gr. 1-50, every 4 hours.

84 hours: Pulse 70, regular, tension good; nausea absent; stage of calm had started, no icterus, no suggestion of delirium or somnolence, cheerful. Temperature 99 deg., respiration 21. Patient practically in a normal condition.

Patient wished to get up. I tried to impress her with the danger of such a course, but nevertheless, at 89th hour I was summoned and learned she had gotten up out of bed, had written two letters, made an olographic testament and apparently did other things. She now looked pale, worn and greatly nauseated, pulse 110, regular, tension good, sclera were icteric, abdomen also, nervous, slightly delirious, both lips with a zone of parched membrane.

90 hours Urinated  $\text{ㄩxv}$ , no albumin, no blood, no examination for casts, color smoky; bowels moved freely; no hemorrhages anywhere. Hepatic dulness 5 inches in mammary line; hypersensitive to palpation or percussion.

Icteric condition of abdomen and sclera deepening.

93 hours: Menstruation began (6 days before time), free flow. Strychnin sulphate, gr. 1-50, by hypodermic given every 3 hours.

100 hours: Pulse 100, regular, tension good, urinated  $\text{ㄩvi}$ , no albumin, no blood, no examination for casts.

101½ hours: Urinated  $\text{ㄩxv}$ , no blood, no albumin. Patient, up until now, had taken ice cream, 3 plates (small), 4 glasses milk, 2 glasses lemonade, 1 cup tea, all daily.

106 hours: Urinated  $\text{ㄩviii}$ , no albumin, no blood, no examination for casts. Pulse regular, tension good, hepatic dulness, 6½ inches in mammary line, abdomen slightly tympanitic. Patient objected to hypodermic, so I changed them to strychnin, gr. 1-25 per os, with normal liquid digitalis, minims iii, with clysters every 4 hours; every 3 hours carbonate of soda in water, gr. xv per os; oxygen, gallon 1, inhaled every 2 hours.

109 hours: Pulse regular, tension good.

114 hours: Pulse 177, irregular, tension diminished, free stool, no blood. Right and left hypochondrium hypersensitive; hypodermic of strychnin, gr. 1-50; gloin, gr. 1-100; pulse did not respond.

115 hours: Patient began to twitch nervously, and complain of pain in both kidneys. Ecchymotic spots on skin of arms.

117 hours: Had not urinated in 11 hours. Fearing uremic toxemia and believing the hepatic complications would not be materially affected, and hoping the vascular system would stand the depression of hyperidrosis, I injected gr. 1-20 pilocarpin muriate.

118 hours: Although I did not hope for any suggestion, yet thought it expedient to share the responsibility of decision with others.

Dr. Larue kindly responded in consultation.

119 hours: He accepted my history of acute phosphorus poisoning. He did not object to the antiphlogistic poultice, but advised addition of digitalin, gr. 1-100 to hypodermic of gloin gr. 1-100 and strychnin gr. 1-25, every 3 hours if indicated.

Pulse was now 155, diminished tension, irregular. Tongue moist, right hypochondrium hypersensitive.

120 hours: Pilocarpin began to act. Hyperidrosis marked. Urinated (?); stool large.

121 hours: Dr. Rudolf Matas saw the case with us; suggested gum arabic water and starch water; did not think the ecchymotic spots were due to constitutional defects, but thought they were local effects of mosquito bites.

121 hours: Pulse 140, tension and regularity improved.

122 hours: Consultants left. Pulse 130, regular, diminished tension, nausea increasing, delirium marked.

Urinated  $\bar{\zeta}$ vi. Normal stool. Clyster normal salt with two minim normal liquid digitalis added.

125 hours: Black vomit, patient delirious, hepatic dulness 8 inches in mammary line.

129 hours: Pulseless; respiration 80, pupils dilated, clyster coffee  $\bar{\zeta}$ v, whisky  $\bar{\zeta}$ iv; hypodermic digitalin, gr. 1-50, strychnin gr. 1-25.

131 hours: Pulse 155, regular; respiration 40, temperature 100 2-5 degs.

132 hours: Pulse 140, regular; tension diminished, nausea increasing; oxygen, gallons 2, inhaled. Urinated (?); good stool.

133 hours: Urinated. No albumin, no blood; hepatic dullness  $8\frac{1}{2}$  inches in mammary line. Photogenic property of the body here exhibited itself in a most extraordinary phenomenon. In the dark room, whose darkness was exaggerated by night and the nearness of the surrounding tenements, the emaciated body looked luminously bloody yellow; the eyes and nose and arms not having participated in the general illumination, looked as if amputated, and thus added to the ghastliness of the picture.

135 hours: Pulse 140, regular; tension good. Hypodermic strychnin sulphate, gr. 1-50. Clyster normal salt  $\mathfrak{Sxx}$ .

Patient up to this time had been taking nourishment per os well.

139 hours: Pulse 100, good. Respiration, 29; temperature,  $102\frac{1}{2}$  deg. Urinated: Albumin slight, cloudy with blood, not markedly luminous in the dark; sediment—loaded with unusual cockle-burr crystals of uric acid slightly colored, few oxalates of lime, dumb-bell shaped; leucin spheres and tyrosin needles attesting as they did to the grave tissue metamorphosis going on in the kidney; one or two crystals I took to be cystin but was unable to successfully differentiate them from six-sided crystals of uric acid; Ralfe's test for peptones gave a red color above Fehling's solution.

141 hours: Pulse 110; respiration 30, shallow; deep jaundice; nausea returning.

142 hours: Convulsions (nature unknown, could not say whether uremic, hepatic or psychic). Urinary bladder catheterized, slight cloud of albumin, blood, few hyalin and granular casts. Clyster of normal salt and coffee was given. Convulsive movements stopped in ten minutes.

143 hours: Patient became conscious and with comparatively audible voice asked for brother and advised him to take care of his money.

Pulse 180, irregular, tension diminished greatly. Resp. 95, shallow Cheyne-Stokes rhythm.

Emesis violent and hematic; delirious; involuntary urination and defecation continued at short intervals. Clysters of coffee and whisky given ad libitum.

144 hours: Patient died comatose.



GENERAL NOTES.—*Atypical characteristics of the case:* Phosphorus poisoning rare in America; absence of albumin and blood from the urine until a late date.

Delayed black vomit; absence of ecchymotic spots in this fatal case; absence of purging until late.

Absence of marked depression at first followed by marasmic condition, again a calm, then recrudescence of shock. Passive fatty degeneration of the vascular system evinced by delayed hematuria (hematochesia) and ecchymosis.

Passive effects upon the uropoietic system; *i. e.*, albumin and blood did not appear until late, while the quantity and quality of the casts and other debris did not show that the renal degeneration was correlative with the destructive changes of the hepatic and gastric tissues. Ecchymosis absent. Phosphorhidrosis not usually so marked.

*Typical Aspect of the Case:* Photogenic properties of the skin; symptoms of gastric intestinal irritation even when all the other symptoms were in abeyance; black vomit, bloody and albuminous urine; normal spleen; rapid hepatic enlargement with icterus.

*Remarks on Treatment Given:* Was not any antidotal medication 42 hours after the ingestion of so readily soluble a poison as phosphorus not only useless but absolutely contra-indicated?

Was not the course of stimulants followed in the beginning too mild although the pulse and respiration did not call for more heroic doses at that time?

Did the hypodermic of pilocarpin by its depressing sudorific action precipitate matters?

*Queries on Possible Treatment.*—Would early transfusion have helped, or would this increased pressure upon the vascular system have hastened failure?

Would early lavage (42 hours after ingestion) have helped any?

Could any other remedies or methods in this case have successfully promoted oxidation or delayed the destructive changes in the albuminous tissues?

Is there any specific that can stop this general metabolic process once it is started by a lethal dose of phosphorus?

No post mortem or blood count, or percentage of hemoglobin could be obtained.

## Clinical Lectures.

### APPENDICITIS.

Resumé of some snap-shot advice given a few physicians and surgeons present at the clinic of Prof. Dr. John B. Deaver, at the German Hospital, Philadelphia, April 13, 1901,

Reported by J. A. CRISLER, B. SC., M. D., Yazoo City, Miss.

“ You have witnessed various operations here, performed by me, for several hours to-day (and some of you for many days), so you will observe that in all these abdominal sections I never, or rarely ever, consider my operation complete—no matter what the pathologic condition might have been which prompted the section—until the appendix is removed.

The experience of many thousands of appendicular cases operated upon as such, to say nothing of these removals while operating for all manner of intra-abdominal diseases requiring a section, ought to have, by this time, impressed me that I could ‘speak as one with authority.’ On the other hand, I am constrained to feel that I am as yet in my infancy when it comes to the consideration of the vagaries of this hydra-headed monster, *appendicitis*.

“ There is one thing upon which I am a ‘Past Grand Master,’ if upon nothing else, and that is, that there is no cure for appendicitis except by the aseptic scalpel of the surgeon.

“ Delays are always dangerous, and portrayers of ignorance on the part of the attendant. The man who teaches his student any other method *than immediate operative procedure* as soon as the *first pain* is felt is positively a menace to human longevity and criminally ignorant of the ‘living pathology’ of the disease.

“ I pity these college professors who advise their classes to study ‘dead pathology’ of appendicitis. I wish it were possible to force an assemblage of all the professors who teach delay in these cases, to the German Hospital and let me teach them ‘living pathology.’

“ I believe I could be a benefactor to them and that when they saw what I see every day over and over again—when they realized what such teaching they give inevitably means—when they were forced to confession of error by their own eyes and conscience—they would rise up and call me blessed.

“Gentlemen, the highest calling of a physician is to save life and prevent suffering. He should not wait to study the ‘dead pathology’ of this disease, but should study the ‘living pathology,’ and when he did, he would conclude, if he were a sane man, that any delay was eminently dangerous, and that to satisfy his ignorant mind with such placebos as are commonly offered in the place of the surgeon’s aseptic scalpel is criminal neglect to those human lives intrusted to his care—a crime he must answer for to his Father and his God.

“Of what use is the appendix? Why should it be saved? Suppose you do remove a healthy one, it were better to remove ninety-nine healthy ones than to leave one, that is sure to suppurate and kill your patient. Suppose you get the reputation of operating when at times no inflammatory action is apparent. I am sure you deserve more from humanity than the man who waits. I now place before you a young man whose belly is full of pus. You see he takes ether badly—his belly muscles are slow to relax.

“Four days—just think of it—*four days* since his attack began; then finally his sister persuaded him to come to me, his physician still advising delay. With all the care in walling off the general cavity with gauze, as I always do, the danger of infection is exceedingly great. You now observe the adhesions and the bulging of the area through the incision as if to say let me out—when I try to separate these adhesions in order to reach the appendix you see the pus is welling.

“You get the terrible odor. You see me enucleate the appendix from its bed of inflammatory fixation to everything in reach.

“You observe these pathologic openings, these fecal fistulæ, this reeking, filthy, dirty belly.

“This is what delay means; this is living pathology; witness it, gentlemen, and then consider the ease and absolute safety with which this operation could have been done four days ago, when the disease was in its incipiency. I have mopped out the pus, having first walled off the general cavity. I have carried a gauze towel clear across the lower segment of the abdomen in order to establish a barrier against whatever products of infection that may lurk in the pelvis. I will drain with this glass tube and iodiform gauze and leave the wound unclosed.

“Drainage is our only anchor in this case, which has cost me

more effort and worry than this whole day's surgery combined. This is living pathology.

"This next case they are now etherizing is of similar nature, but I can not charge it up to negligence of his physician, who is present among you and says he was first called to this man at 12.30 to-day, that he forthwith hurried him here on the first train. The man had actually treated himself for the past three days. You observe the same difficulty of anesthetization, the same phenomena of rigidity, and as I make the incision you see pathognomonic evidence of infection in every tissue.

"We are down to the place where the appendix ought to be found, and I have carefully walled off with many yards of gauze. I separate gently and rapidly these adhesions and in all directions I have sought and separated and yet no appendix is found. My experience is, gentlemen, that there is always an appendix. It is never absent. Those cases reported about the missing appendix have no credence with me, and I think my many thousand operations ought to give some weight to what I say. I propose to find this one but it can not be found within four inches of where it should be in this wilderness of adhesions. I enlarge my incision, being very careful to follow every nook and corner with gauze, because wherever that appendix is, it is in a pool of pus and filth.

"Listen, I hear the old familiar sound of escaping gases through a perforation, one or many in the appendix. Here it lies away under the liver near the diaphragm. See the liver almost floating, in a veritable flood of pus! This I again mop away. The odor is terrific, stifling. Note the perforations in the appendix, all pathologic. Oh! this living pathology is worthy of thought and study. Consider this man's condition. Strong and promising in his youth, stands well in his community; had the promise of all that life and health could vouchsafe, only three days ago, and now, if he runs this gauntlet of sepsis with all the care and pains I have taken, think over his probabilities for hernia; for his wound must be dressed and treated like the case just preceding, consider as a sequel fecal fistula, secondary abscess in liver or elsewhere, months in bed beset by many dangers and complications. Now you see what delay means. This living pathology makes it clear without going to the dead house. Never delay, it means the same series of probable dangers to-day, to-morrow and forever."

## Correspondence.

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### THE CANCER PROTOZOON.

BUFFALO, N. Y., June 3, 1901.

*Editors New Orleans Medical and Surgical Journal:*

DEAR SIRS—In a recent number of your publication is a very fair-minded review on the etiology of cancer. Under the Department of General Surgery, in charge of Dr. F. W. Parham, reference is made to the report of the Cancer Committee of the Harvard Medical School. It states quite fairly that the principal objection to the parasitic theory brought forward in their report, is based upon an elaborate study of Pianese published in 1895. It may be of interest to those who have written this review to call their attention to the most recent publication of Pianese in the *Zeitschrift für Hygiene und Infektionskrankheiten*, Vol. 36, Part 3. This article, coming from Pianese practically reverses his entire interpretation of the bodies which he found in carcinoma. He has found, after studying a protozoon which infects the epithelium of the kidney in guineapigs, that the changes which this organism produce in the epithelium are practically identical in appearance with those which he had described in carcinoma. A careful perusal of this article will show that no other interpretation can be made than that Pianese has become convinced that had he been duly acquainted with the protozoa, he must have placed an entirely different interpretation upon his work. You will therefore see that Pianese's first publication, as opposed to the parasitic theory of carcinoma, not only loses its entire significance, but in all probability will ultimately be placed on the other side of the question by the author himself.

Very truly yours,

(Signed) H. R. GAYLORD.

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KEEN (*American Journal of the Medical Sciences*, July, 1901) reports two cases in which the lateral ventricle was injured during operation for traumatic epilepsy. Notwithstanding the escape of large quantities of cerebro-spinal fluid, no harmful consequences ensued.

# N. O. Medical and Surgical Journal.

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## Editorial Department.

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CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

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### IS THE MILLENIUM NEAR?

We realized long ago that we had come at the wrong time. We knew we were too late for the "good old times" you hear about and feared we were too early for the "good time to come" you read about. Our valued and beloved friends "the old practitioners" often have regaled us with the tales of how fine things used to be in the profession, how people paid their bills and good ones, how considerate of the doctor patients formerly were, and how nicely to their confrères doctors behaved once upon a time. We felt how much we had missed and, alas, there seemed little hope for the future, except, in a vague and indefinite way, that the millenium might come for medical men as for others but that it was too far off for us.

Is it nearer than we thought? The answer seems to depend upon when the socialists get in power. They will tell you so themselves. Listen to their organ, *Appeal to Reason*, of June 8, 1901:

"To illustrate what this democratic management is, take the medical profession and their relation to the public and themselves under Socialism, as the Socialist wants it.

"There would be a public department of health which would be in the hands of the medical fraternity as a whole, whose business it would be to serve the public in all matters of health, including the sanitary conditions of the surroundings—thus as much preventing as relieving illness. The members of this department would be public servants on a salary equal to the production of wealth divided by the number of hours served as to the total hours of the national labor. There would be no jealousy between physicians as individuals or schools, because no innovation would in the least affect the income of the individual members. Before such an organization every new thought could get an unbiased hearing, which it does not always receive to-

day. This organization of all physicians and surgeons into a mutual brotherhood would be supplied with the finest buildings and appliances, for the public would demand this for its benefit, and it would also enable the finest sub-divisions of the labor and skill of the members, or what is now known as specialization. This would give the public the best service and afford the members the best conditions. As no one but physicians and surgeons know the duties and the needs of the profession, so none but them would have a voice or vote in the management of the department. They could thus vote intelligently on all matters, and would have no voice in the management of any other department of the public service, but would not be without influence in other departments, as their lines would come in contact with semi-related vocations.

“It would thus follow that some would not be worked to death while others would be starved for lack of a share of the patients, while possessing the necessary skill. It would not affect the pay of the members whether there were many or few physicians. There would and should be enough so there would be no necessity for them to be in attendance at the department only as many hours as the average day of the national industries. Thus, if the day was five hours, each could work ten hours for six months, and have the other six months with pay to travel or whatever pleased them, and not lose any patronage or sustain other loss.”

A copy of the paper containing the above is supposed to have been sent to every member of the profession in the United States, yet, for fear that a few might miss the glad tidings and for the benefit of those who might not be convinced by the first excerpt, we give some detailed information from another article in the same issue. After explaining in what a bad fix we doctors are, and we know it too well to use space for that sad statement, the *Appeal* goes on to say:

“How different and how pleasanter would be their lives under Socialism. Students in all vocations would draw their living from the public. When they were qualified they would be attached to the Public Department of Health and Sanitation and receive a full compensation, and would enjoy life in its fullest sense. They could get at least half the year from their duties without losing a practice, and would have an income that would enable them to travel, or enjoy themselves in any manner they might find most pleasure. When the vacation was over they would come back, and others of the members of the department would take their vacation. No patient would be treated for a fee. The committee of reception for patients would be physicians selected by their fellows, who would examine and

assign patients to the physicians who best understood their particular disease. This would give every one the best treatment, for the physicians would have no interest in treating any malady when they knew another physician, specialized in the disease, could treat it better. Physicians would have entire control of the sanitation and health of a nation, for they best understand such matters. The public would provide the finest buildings genius and labor could erect, equipped with every appliance for the successful operation of the science of medicine—appliances now available to but a very small part of the physicians and surgeons. It would be to the interest of the physicians to keep the public well. If they kept the public well now they would starve to death. Under Socialism, after a number of years of service they would be retired with pay—and so would every member of every other profession or trade. There would be no envy, no bickering, no prejudice among physicians, for the success of one would benefit all. If physicians could realize how pleasant life would be to them they would all be Socialists.’’

Who would not be a Socialist? After reading the above all the doctors will be, and, as they are pre-eminent in political influence, the party is sure to secure control of public affairs in this country. Perhaps the millenium is not so far off.

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#### THE AMERICAN MEDICAL ASSOCIATION.

The recent meeting of our national association, while a very successful one, is noteworthy especially on account of the adoption by unanimous vote of the report of the Committee on Organization which is tantamount to a reorganization of the Association. The principal new features are as follows:

Hereafter the annual meeting will consist of general sessions, meetings of the House of Delegates, and meetings of the various Sections. The House of Delegates will meet at the same hours as the Sections and in effect the House of Delegates will be the legislative and business Section of the Association.

The functions of the General Sessions will be practically the same as in the past, minus the part which may be called legislative or business. The General Sessions will be held at such a time that it will not interfere with the work of the Sections.

The House of Delegates will consist of the following:

1. One representative from each of the Sections, the retiring chairman, 13.



2. One representative at large from each of the State societies, the president, 50.

3. One representative each from the U. S. Army, Navy and Marine Hospital Service, 3.

4. One representative from each 500 members or fraction thereof of the State societies (estimated), 77.

This House of Delegates, which will be composed of about 150, to all intents and purposes will be the legislative and executive body of the association and takes the place of the delegate body as it formerly existed. The only change from present conditions will be that the delegate body will be reduced in number and its members elected by the State societies only. It will elect all the officers; it will have control of all the affairs of the association; it will be the mouthpiece to give expression to the desires of the profession of the country in regard to business and legislative affairs, and it will consider other problems affecting the profession from time to time as they arise. It will be a confederation of the State societies of the country, which in turn must be a confederation of the local societies in the State. Being created by the State societies, it must be responsible to them for its actions. That its powers may be limited, certain fundamental principles are incorporated in the revised constitution. This constitution is not amendable except by the vote of a majority of the State societies after the proposed amendment has lain over for one year and then been adopted by three-fourths vote of the House of Delegates. This will remove the power to revise the constitution from the House of Delegates, except with the consent of a majority of the State societies.

No member of the House of Delegates shall be eligible to any office in the association.

The Board of Trustees shall have control of the finances of the American Medical Association as before, and be considered officers of the Association, and therefore can not be elected from among the delegates.

The officers shall be: President, First Vice President, Second Vice President, Secretary, who may and should be editor of *The Journal*, Treasurer, and nine Trustees. All officers shall be elected for one year, except the Trustees, who shall be elected for three years each, three going out each year. The Editor,

who should also be, but not necessarily must be, Secretary of the Association, shall be elected by the Board of Trustees.

Under the new conditions, Louisiana will be entitled to only two delegates, and this number can not be increased before such time as we can enlarge the membership of our State Society to 500 members, when we will be entitled to an additional delegate. Of course as many physicians of the State as desire can be permanent members as heretofore.

We believe the new arrangement will increase the power of the Association for good in a business and legislative way, while better attention can be given to Section or scientific work by those who are exclusively interested in that direction.

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#### UNJUST CRITICISM OF GAYLORD.

Editorially the *Journal American Med. Association* of June 22, says:

“In Gaylord’s overflowing announcement \* \* \* the parasites are said to occur freely in the blood. It is the duty of physicians and surgeons to not allow long established doctrines, such as the purely local nature of carcinoma in its early stages and its possible permanent curability at that time, to be overthrown or modified in the slightest by premature and unsupported statements of sincere but over-zealous investigators into the etiology of cancer. Great harm would result were the impression to grow that cancer is a blood disease, sure to break somewhere if removed.”

That this imputation is entirely unjustified requires only the statement of what Gaylord said. From his article in the *May American Journal of the Medical Sciences*, we quote:

“With the clue afforded \* \* \* we have examined since that time the organs of a number of cadavers which have died from cancer, and we are prepared to state that *all the organs, including the blood taken from all regions of all cases dying of cancer, including sarcoma and epithelioma, contain large numbers of the organisms.* Following the same lines we have likewise observed *in all cases of carcinoma and sarcoma thus far examined in which cachexia was well marked, that the organisms, especially the younger forms, can be detected in the peripheral blood.*”

Later on in the same paragraph occurs the following sentence within parenthesis:

“(The question of the time of appearance of these organisms and the utilization of this fact as a means of diagnosis already forms the subject of a piece of research in the laboratory).”

We fail to discover anything in these sentences or elsewhere in Gaylord's article denying the local nature of cancer in the early stages. Further, will any one deny that later the disease *does* become generalized, in other words, a constitutional or blood disease?

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## Society Proceedings.

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### ORLEANS PARISH MEDICAL SOCIETY.

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#### MEETING OF MAY 11, 1901.

The evening had been set aside for business, but at the request of DR. WERTENBAKER, of the United States Marine Hospital Service, he was allowed to report three cures of herniotomy by Phelps' method, as described in the *Medical Record* of February 2, 1901. The essential feature of the method, a mat of coiled fine silver wire sutures, left to strengthen the scar tissue of the deeper layers and to prevent return, was well shown in the patient presented for examination. This man, a negro adult, had been operated on six weeks before. The mass of wire could easily be felt.

No discussion.

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#### MEETING OF MAY 25, 1901.

DR. L. J. GENELLA read a paper on *Report of a Case of Acute Phosphorus Poisoning*. (See page 24 this JOURNAL.)

*Discussion.*—DR. LARUE had seen the case, and thought that Dr. Genella had been called to the case too late. Gastric lavage, with permanganate of potash, is a specific if used early. Absolute rest for the stomach advisable after the lavage. Lime water and demulcent drinks beneficial. Had suggested digitalin and nitro-glycerin hypodermically, as stomach would not absorb. Tongue and fauces were red. Colonic region not sensitive. Regions of stomach, liver and small intestines sensitive. Danger of perforation to be remembered when using stomach tube. In recent literature from Austria, twelve cases of phosphorus

poisoning treated by gastric lavage, with solutions of potash permanganate from  $\frac{1}{2}$  to 5 per cent. Only five deaths, and of these four had taken over 3 grs. of phosphorus.

DR. STORCK suggested that the fat in the ice cream in Dr. Genella's case might have increased solubility of phosphorus. Had himself seen symptoms of phosphorus poisoning follow in six hours after ingestion of a rat poison. Temperature was subnormal, pulse 100. Urine continued to contain albumin for 10 days. In this case had used lavage with cupri sulph., gr. v. to 1 pint. Hematemesis for 2 or 3 days. Old oil of turpentine is difficult to obtain.

DR. DABNEY had seen a child poisoned with parlor matches, who, after great suffering, died in convulsions within 24 hours.

DR. GENELLA, in closing, said that lavage had been considered unnecessary because of the delay.

DR. NELKEN reported the following case: Married woman, menstruation delayed 2 days, took one-half tablespoonful of quinin. When seen was extremely nervous, refused to stay in bed, was almost delirious. Sedatives were given, patient much better next day. No influence on menstruation.

DR. GENELLA reported the following case: Child ate five balls of pop-corn and a meat supper. Well next day until about noon, when vomiting and purging began. Temperature 104.5. Calomel and salines administered. Scarlet rash appeared. Convulsions. Membrane and bloody froth came from nose and mouth. Child died.

DR. LARUE saw the case. Tonsils very large. Suggested antitoxin. From appearance of membrane considered the case one of diphtheria, malignant, complicating malignant scarlatina. Little if any albumin in urine.

DR. THÉARD remarked that vomiting was usual in the beginning of scarlatina.

DR. GENELLA stated that the depression had appeared only with onset of rash. At one time the child was comatose and nearly suffocated, but traction on the tongue had improved respiration very markedly, although other methods had failed.

DR. THÉARD considered by no means unusual for scarlatina and diphtheria to be associated early.

## Abstracts, Extracts and Miscellany.

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### Department of General Surgery.

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In charge of DR. F. W. PARHAM, assisted by DR. F. LARUE, New Orleans.

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THE PUPIL-REACTION TOWARDS LIGHT A SIMPLE GUIDE FOR THE REDUCTION OF THE AMOUNT OF CHLOROFORM TO THE MINIMUM WITH THE MAINTENANCE OF SATISFACTORY ANESTHESIA.—Adolf Flockemann, of Kümmell's division of the Hamburg-Eppendorf Hospital, makes in the *Centr. fur Chir.*, No. 21, 1901, some practical remarks on the value of the pupillary reaction in guiding the anesthetist in maintaining a satisfactory anesthesia with the maximum of safety.

Most surgeons have recognized the importance of watching the pupil, the sudden dilatation of which without vomiting or return of consciousness to account for it, has been very properly considered a sign of imminent danger. The difficulty is to keep the patient well under the anesthetic, the pupil remaining contracted but not reacting to light; some guide would be useful, whereby one could quickly determine that the line of safety was about to be passed. Schleich's plan, which he had carried out in hundreds of cases without bad result, was as follows: After complete tolerance had been established with increasing contraction of the pupil, he maintained the narcosis by continuing the chloroform in such a way as that the pupil was held half way between extreme contraction and maximum dilatation, without reaction to light. It was, of course, necessary for the anesthetist to keep always a sharp lookout on the pupil, adding cautiously more chloroform when the contraction was too great, removing the mask when dilatation was too much increased. This required the absolutely undivided attention of the anesthetist. Although Schleich had no bad result in the carrying out of this method, still we must agree with Flockemann in believing that this stage of even moderate dilatation is attended with great hazard; it is too near death not to signify the gravest

danger. Even should the mask be at once removed, there is still enough chloroform in the air spaces, waiting entrance into the blood, to explain certain deaths which have occurred. Besides we believe with Flockemann that there is a prior stage in which the pupil is still contracted and quite irresponsive to light and that in this stage anesthesia is entirely sufficient for all surgical work without the danger of suddenly passing into the stadium paralyticum, indicated by the dilating pupil. We believe with Kappeler that this stage should not exist during the continuance of any narcosis, for the suddenly widening pupil is generally but the forerunner of the paralysis of the centres of circulation and respiration and death. It behooves the operating surgeon, then, to see to it that his anesthetist is thoroughly impressed with this fact. However true, theoretically, these observations may be, and we must recognize them as absolutely true, still, in order to preserve the maximum of safety throughout a narcosis, there must be some way of exactly proportioning the amount of chloroform to the effect produced. In other words, seeing that the pupil when held in contraction, its reflex to light being at the same time abolished, may suddenly dilate on the addition of the slightest amount of chloroform in excess of that required to hold this reflex simply in abeyance, we must have some guide to aid us in checking up the indications of the pupil.

Flockemann continues as follows: The extreme limitation of the amount of chloroform which the maintenance of the stage of tolerance (to operation) allows is attainable by making use of an observation of mine on the behavior of the pupil which occurred to me several years ago during the course of a narcosis, and which I have since utilized.

It is easy to show that the first sign of awakening out of the stage of toleration, during which the voluntary muscles are relaxed and the pupil moderately narrow and without reaction, is the following: Whilst still the narrow pupil fails to react perceptibly, when as is usual only *one* eye is opened, yet in this same stage a small but distinct narrowing of the interpalpebral space may be observed if the lids of *both* eyes be suddenly and simultaneously elevated.

This slight resistance indicates an impending return of the reflexes and necessitates the giving of more anesthetic if one would not presently have his patient becoming restless again.

This end-stage of light reaction manifests itself after such fashion that either it lies still in the range of tolerance or else is not far removed from it. In the first case it is only necessary slowly to add the chloroform drop by drop until the pupil becomes again contracted; in the former case the chloroform must be given more rapidly so that the patient does not become again unquiet. In some cases, particularly with young persons and females, the corneal reflex is maintained after the pupil ceases to react to light. In this case the corneal reflex will be taken as the guide. One then gives the anesthetic until the cornea ceases to react, which indicates that the state of tolerance has been reached.

Flockemann credits Strassmann with the first description of this phenomenon, but Strassmann failed to take practical advantage of it as a guide in regulating the amount of chloroform.

We believe these observations of Flockemann of value to any anesthetist who is willing to give his undivided attention to the anesthesia; one who is not willing thus to do ought rather to refuse altogether to give a poison capable of giving rise to sudden and irretrievable death.

THE CANCER QUESTION AGAIN.—Since our reference last month this subject of the etiology of cancer has been kept steadily before the medical world. Certainly, there is no subject which has excited so much interest, and none which should arouse so much as this. Any surgeon of large practice can point to many cases of malignant disease in his own practice before which he stands utterly helpless; all he can do, and all the luckless patient can do, in such cases is to wait for the relief which death alone, the healer of all ills, can give. In the meanwhile, as we watch these sufferers one by one pass away, we get some cheer and hope out of the researches of those pathologists, who believe that cancer is due to a parasite. There is more of promise in these investigations than in any other line of search yet attempted. The diathetic approach has long been abandoned; the embryologic theories of Cohnheim afforded for years the most probable explanations of the origin and course of cancer, but were barren of practical results, and must soon, notwithstanding the advocacy of distinguished surgeons, be relegated to the rear; for, even supposing Cohnheim to have

been correct in assuming the migration and lodgment of epithelium in heterologous tissues, we have still to explain why these particles so transplanted should, apart at least from the few cases evidently due to trauma, take on this abnormal growth which makes them malignant. So, it would seem, if we shall hope for humanity's delivery from this relentless scourge, we must plant ourselves firmly on the foundations now being prepared by the chemist, the biologist and the pathologist. Is it, after all, outside the realm of the possible that under the influence of a parasite connective tissue may be so changed as to permit of the development of carcinoma in even mesoblastic tissues? But if this be considered impossible, these parasites may take hold on Cohnheim's embryologic tissue and give them the impetus which they needed to grow. In any case, whether the parasite cause cancer or not, these researches, now so enthusiastically carried on under the stimulus of the theory, will ere long show the truth.

Since our last issue a remarkable work, a monograph of 128 pages on the etiology of cancer, has been published by Schüller, of Berlin. We have not seen the original work, but there is before us an admirable abstract in the June 15 issue of *American Medicine*. The writer of this abstract appears to think that Schüller's work does not confirm Plimmer and Gaylord, basing the statement upon some of Schüller's interpretations of his results and comparisons of his own bodies with those of Plimmer. But we are inclined to agree with Gaylord in a recent personal communication, that these last researches afford in many respects a striking and very important confirmation of the latter's investigations.

CANCER IS AT FIRST A STRICTLY LOCAL DISEASE, AND ERADICABLE BY EXCISION.—We would like in this place to throw out a caution. The statement made by Gaylord that toward the last in fatal cases of cancer the protozoa described by him are found in the peripheral circulation has been extended by the lay press and by even some medical writers to all cases of cancer at all stages of their development. This is a very unfortunate application, and if true would negative all surgical efforts to relieve. That cancer is for a time local and amenable to treatment by the knife or caustics, is one of the demonstrated facts of surgery; to admit that in cases where intervention has not been had, these



cases ultimately become constitutional, merely emphasizes the necessity of early surgical treatment, in order to prevent the generalizing of the disease, one of the typical ways of producing death in the course of spontaneous cancer in the human being and in experimental cancer in animals. We believe this correction of misstatements should be emphasized by all surgeons, otherwise our patients would be left in a deplorable state indeed.

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## Department of Obstetrics and Gynecology.

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In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER,  
New Orleans.

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THE TOXEMIA OF PREGNANCY, ITS DIAGNOSIS AND TREATMENT.—Dr. S. Marx, contributes to *Medical Record* (April 20), an extremely interesting and practical article on this subject. It seems to reflect in a concise way everything necessary in recognizing and preventing this most dangerous malady. The only organic product which in all human probability is the most dangerous one is the chief solid constituent of the urine, namely, urea, or its congener, nitrogen. Marx places himself on record as having never seen except once a case in which constitutional symptoms did not arise or manifest themselves. When the amount of urine excreted was normal, toxic symptoms were always present when diminished urea excretion was noted. He was always sure that as soon as a hypersecretion of urea could be established, there would be marked improvement in the general symptoms. In the typical cases of nephritis gravidarum it is not the amount of albumin that should be our index as to when to induce labor, but always the amount of urea excreted. He has always refrained from interfering even though large quantities of albumin were present as long as a good average of urea excretion could be estimated. On the contrary, women apparently well, exhibiting not the faintest trace of albumin, have been attacked with eclampsia as by a lightning stroke, who might have been saved if the urea estimation had been depended upon rather than albumin. A timely

urea estimation might save many women, or at least give a clue as to our line of action. The sooner we all realize that it is this factor and not the amount of albumin in the urine, which should be our sole indication when and when not to induce labor, the fewer eclampsias we shall meet. Eclampsia is as absolutely preventable as is puerperal sepsis. Nay it is more so, since even among the best and most careful, sepsis will occasionally creep in. Not so with eclampsia; for if men were taught or would remember that regular examination of the urine should be made and is as essential during the whole of pregnancy as asepsis is during labor, fewer eclampsias would occur.

Men depend too much upon the presence or absence of albuminuria in determining the condition of pregnant women. Even in the presence of constitutional symptoms the physician rests satisfied so long as no albumin is present in the urine and declares his patient safe, and yet while temporizing he is dealing with one of the most malignant states in which there is uremia without albuminuria. As toxemias pure and simple these cases are not so fatal, but nevertheless they are distinctly treacherous, because they are not recognized at all or too late. Since it is the urea or its compounds that kills and not the albumin, Marx makes a special plea for regular and methodic urea estimation instead of the time-honored examination for albumin and casts, or at least relegate the latter method to secondary importance. The estimation of the amount of urea must always, if possible, be obtained from the twenty-four-hour urine. The specific gravity is generally low, and chemical examination shows no albumin or but a trace. Microscopy reveals little or nothing, an occasional hyalin cast being perhaps found after a lengthy search. But positively characteristic and always found is a marked diminution of the total amount of urea excretion. Instead of being the usual average 0.02 to one cc. it is repeatedly found down to 0.005 and 0.001. There are very often present larger or smaller quantities of sugar, but whether this shows a possible involvement of the liver in the toxemia, or is the cause of the latter, it is impossible to say. It is only after a very severe convulsion or after the uterus is emptied that both albumin and casts are found in the urine in the great majority of cases.

## Department of General Medicine.

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In charge of DR. E. M. DUPAQUIER, New Orleans.

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**MALARIA.**—The gifted editor, Malcolm Morris, of our excellent British contemporary, *The Practitioner*, had already devoted special numbers to burning questions, as he calls them, viz.: Cancer, Pneumonia, the Plague; and, now Malaria follows in the March number, 1901. Let it be remarked *en passant* that these special numbers are most useful. Each one represents a valuable monograph, and of the four, the malarial number is the most precious to us who practice in these Southern States. The *Medical Record* for April 27 has very properly called attention to the most striking feature of the malaria number, viz.: The Etiology of Blackwater Fever.

Though we are sorry to have been forestalled in his report on this subject, we will, however, make a few remarks on the subject, as the latter can bear repeating, and moreover, the information given by him is partly original. It is a fact that not a few of our country practitioners, chiefly in western Louisiana and in Texas, are able to plainly differentiate between hemorrhagic malarial fever and the blackwater fever by the chief clinical manifestations only, just as Sambon describes them. Natives and plain backwoods doctors on the Sabine river have thought for years, as have the primitive peasantry of Greece and Sicily, that blackwater fever was a morbid "entity," separate and distinct from malarial fever. They knew from experience that quinin in that particular fever was fatal as a rule. It is therefore evident from this fact gathered from authentic sources that there exists a kind of blackwater fever which is not similar to ordinary intermittent fevers.

As to the theory that blackwater fever is caused by quinin poisoning, a theory advocated by Koch himself, very rare, very exceptional cases justify its acceptance. Following the views of those British practitioners who have had the most experience with blackwater fever in Africa, the quinin theory, it is thought, should be repudiated.

In our mind, the "specific theory" of blackwater fever is

the correct one. A few years ago the writer of these lines was deeply impressed by a case in a patient who had come directly to this city from a journey in Texas and western Louisiana districts where blackwater fever prevailed. The case, an adult male, presented in the main: *green vomit, deep ochre jaundice, porterlike black urine from the onset, an irregular type of temperature, and a spontaneous recovery* (rest and plenty of water were the only measures employed), and all these are characteristics belonging to that specific entity termed 'blackwater fever.' This fact, although a single one, and a rare one in our city, corroborates the well-known statement from men familiar with this blackwater fever, that it is capable of being imported (it appeared in Texas in 1886 and more recently in Virginia and North Carolina), and that it is milder in America than in Africa where the mortality varies from 22 to 50 per cent. Referring to mosquitoes, and in particular to *anopheles maculiperinis*, it had been stated in conversation with a local authority on the subject that the entire cycle from egg to egg is completed in about fifty days, and this seemed to cause surprise, bringing out the statement that *things worked more quickly here in Louisiana.*

Reference to Manson's article in this special malarial number, page 253, is therefore advised.

Before concluding, attention is also directed to an editorial on *anopheles* and malaria in the *Medical Record* for May 4, 1901. It says "that Grassi's assertion, viz., the geographical distribution of the genus *anopheles* coincides with that of malaria, does not hold good in all parts of the world, and that there may be another intermediary host besides man capable of harboring the parasite. This proposition put forward by Dr. Nutthall and his collaborators is well worthy of consideration, and would, if proved, explain much that is, at present, incomprehensible in the problem."

Attention is called to the fact that such is Manson's opinion, and it appears very plainly in the following words in the *Practitioner's* special malarial number: "There can be little doubt that the principal and usual source from which the mosquito derives the malaria parasite is man; but to assert, as some have done, that man is the only source is, I consider, going beyond the evidence," etc.

## Department of Therapeutics.

In charge of DR. J. A. STORCK, New Orleans.

CHLORALAMID-FORMAMIDATUM, the chemical name which pharmacy requirements shorten into chloralamid, is constructed by the interaction of chloral (not chloral hydrate) and formamide. It dates from the experiments of Von Mering, the Strasburg clinician, in 1889, and has grown into universal esteem. The pharmacopeias of all other nations will assuredly follow the German in recognizing its value. The formamide is a stimulant which counteracts the blood-pressure fall of chloral and, according to Reichmann's sphygmographic tests, chloralamid influences blood-pressure but little. Nor is there unfavorable action upon the temperature, respiration, circulation or digestion.

It is decomposed by alkalies and heat and in water at 140 deg. F. (60 deg. C.), hence it should never be given in hot water, as has been improperly done at times. Twenty parts of water at ordinary temperature are said to dissolve the crystals, but I have found that 30 to 40 parts of water save much time in making the solution; weak acids facilitate its dissolving, and one and a half parts of alcohol rapidly unite with it; therefore, about three parts of brandy or whisky, if standard, will also do so. Taken in powder, the effect is delayed, though some practitioners persist in this form of dosing. With stomach acidity there would be more rapid assimilation. Claret is used occasionally, but in all instances where vinous or watery vehicles are solvents and time is to be saved, a concentrated alcoholic elixir dose should be poured into the vehicle.

Its slightly bitter taste is scarcely worth consideration, but to disguise it an approved formula is:

℞	Chloralamid .....	℥ ii
	Whisky .....	℥ i
	Syrup of raspberry .....	℥ i

M. et Sig.—Teaspoonful dose.

Lettow's prescription for an enema is:

℞	Chloralamid .....	gr. 45
	Muriatic acid .....	gtt. 2
	Alcohol .....	℥ 15
	Water .....	℥ iii

A solution made with 12 grains in two and a half drachms of water may be used hypodermically when such disorders as rectal carcinoma deprive a patient of sleep.

The usual dose of chloralamid is 15 to 60 grains one half-hour before bed time. It takes effect usually in one hour. One dose has sufficed to secure sleep on a subsequent night as well as upon the night when used. The German Pharmacopeia mentions 60 grains as the largest single dose and 120 grains as the largest daily dose.

There is no liability to addiction, no ill consequences, no cumulative effect, and as it does not influence the viscera and is not an irritant to any mucous membrane it should more rapidly supersede chloral hydrate, as it is gradually and surely doing.

The relative strength is assumed to be 45 grains of chloralamid equalling 30 grains of chloral hydrate, but in practice the doses are about the same with the advantage that, while a minimum dose of chloral hydrate has killed, no amount of chloralamid has been attended with fatal result so far as reported. The blandness and safety of chloralamid without after-effects should certainly recommend it against the danger and harshness of chloral hydrate which destroys digestion by setting up gastritis, and its constant administration has cut off chances of recovery from insanity. I believe that insane asylums should in the name of humanity use chloralamid in preference to chloral hydrate. In organic heart disease chloralamid is safer and there is less danger and dread in giving it where there is cardiac complication.

Cervello claims that chloral injuriously affected the heart, and that it created a difference from normal blood-pressure of from 50 to 80 mm., while chloralamid differed within the limits occurring during ordinary sleep 17 mm., so chloralamid, he infers, influences the heart but slightly.

—S. V. CLEVENGER, M. D.—*Notes on New Remedies.*

URANIUM ACETATE IN DIABETES.—Dr. Knopetjy (*Medic. Obosrenie*, 1900, No 18) has used uranium acetate in the treatment of diabetic patients. The first patient was a man of thirty-seven, who passed daily 10½ pints of urine, containing 5½ per cent. of sugar. The dose of the uranium acetate was 1½ grn., repeated three times a day. In the first case there was a very

rapid amelioration of all the symptoms; in the second case the result was absolutely nil, in spite of long-continued treatment. Whence this difference in effect? asks the author, and he answers that it is hard to say, unless we accept, with Duncan, the possibility of a different etiologic origin in different cases of diabetes. At any rate, uranium acetate can not be considered a specific in diabetes, no more than the preparations of opium, the bromides and the salicylates.—*Merck's Archives*.

FOR OBSTINATE TUBERCULAR DIARRHEA.—Ichthoform, 5 grains; tannalbin, 10 grains; bismuth subgallate, 10 grains; codein,  $\frac{1}{4}$  grain; oil of peppermint,  $\frac{1}{4}$  min., for one powder. One such powder every two to six hours.—*Ibid*.

POISONING BY PICRIC ACID.—J. Winterberg (*Wien. Med. Presse*, 1900), reports the case of a woman of 23 who drank 25 gm. of commercial picric acid in solution. Bloody vomiting and profuse diarrhea followed immediately, and two hours later the entire skin, the nails, and cornea showed an intense yellow color. Consciousness was unimpaired. Other symptoms were pain in the stomach, weakness, headache, leucocytosis. Picric acid was present in the urine and feces. The stomach was repeatedly washed out. The patient was well by the ninth day, but the yellow coloring persisted for five weeks.—*Ibid*.

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## Department of the Ear, Nose and Throat.

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In Charge of DR. A. W. DE ROALDES and DR. GORDON KING,  
New Orleans.

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ORTHOFORM IN THE TREATMENT OF ACUTE CORYZA.—Gustav Spiess, of Frankfurt, highly extols the value of this drug in alleviating the symptoms and curtailing the course of acute cold in the head.

Pure orthoform powder, or a mixture of equal parts of orthoform and sodium sozoiodol, is blown into the naso-pharynx and

posterior nares, and through the nostrils, so as to cover the mucous membrane of the nasal fossa with the powder. This is done several times a day until the local symptoms have subsided, which usually occurs very soon. The effect of the orthoform is to produce a certain amount of anesthesia of the mucous membrane and reduce the congestion of the parts, so that the local inflammation is in a measure aborted.

The sooner this is done after the onset of the cold the better the chance of aborting it. Some patients show an idiosyncrasy as regards the local effects of the drug and are not benefited thereby.—*Archiv fur Laryngologie*, 12 Bd., 1. Heft.

**SUPERHEATED AIR IN THE TREATMENT OF CHRONIC CATARRHAL OTITIS MEDIA.**—Any efficacious remedy that could be discovered for the treatment of this obstinate condition which is responsible for a large percentage of deafness, would be hailed with prayers and thanksgiving by those who have the affection to treat with the present means at our command.

Dr. George Hopkins, of Cleveland, Ohio, highly recommends a method of treatment practised by him which in sixty-three cases treated gave excellent results in fifty-nine. The method consists in subjecting the affected ears to a high degree of dry heat on the principle practised for the relief of articular rheumatism. The auditory canal is first thoroughly cleansed with alcohol and then packed with dry aseptic gauze, and the hot air generated by means of an ordinary gas or oil stove is conducted to the ear through a canvas sleeve, the extremity of which fits over the auricle. A temperature of 400 deg. F. may be attained without great discomfort to the patient, only causing at times a slight headache. After an application of a few minutes' duration, the treatment for the day ends with a catheterization of the Eustachian tube and vibratory massage of the temponic membrane. This is done on alternate days for two or three months, and according to the author gives better results than he has obtained by other methods. The hearing improves wonderfully.

The treatment is contra-indicated in arterio-sclerosis, serous effusions into the tympanum or perforations of the membrane. The method deserves a thorough investigation.

—*Medical Record.*



## Department of Ophthalmology.

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In Charge of DRs. BRUNS and ROBIN, New Orleans.

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AFFECTIONS OF THE EYE AND ITS APPENDAGES IN BRIGHT'S DISEASE.—In a succinct paper in the March 15 number of the *American Practitioner and News* Dr. William Cheatham, of Louisville, reviews our knowledge of this subject, adding brief comments suggested by his own experience. This paper was read before the Louisville Medico-Chirurgical Society and the discussion confirmed, in the main, the assertions of the writer: Affections of the deeper parts of the eye occur more frequently in contracted kidney. All forms of nephritis, both acute (scarlatinal and of pregnancy) and chronic may affect some parts of the eye. We may have edema of the lids and conjunctiva, subconjunctival hemorrhages, paralysis of the extrinsic muscles, cataract, mydriasis, iritis, cyclitis, or the well-known changes in the optic nerve and retina. Paralysis of the extrinsic eye-muscles is more common from this cause than is commonly supposed, and the urine should always be examined. In the acute forms (pregnancy) the prognosis is much better than in the chronic, especially if the contents of the uterus can be removed and potass. iod. be exhibited. When the typical changes in the optic disc and retina, from which alone a diagnosis can be made, are present, the prognosis is bad. A majority of Dr. Cheatham's patients died in six months or less after the eye lesions were discovered, though he has seen cases last from three to eleven years. The amount of lesion does not indicate the amount of vision nor the length of time the patient may live. The neuro-retinal changes occur late in the renal disease, and one or two small hemorrhages may indicate as short a life as many and typical lesions. With extensive and typical changes in the retina the vision may remain perfectly normal. Optic nerve and retinal involvement is found in about 30 per cent. of Bright's disease of the kidneys. Many of the cases presenting retinitis albuminurica have not been suspected by any one before the ophthalmoscope makes the diagnosis. Often the urine shows no derivatives for

days, weeks or months. "I have seen one case in which the urine showed nothing but a low specific gravity for six months; the patient lived but a short time after that." Edwards, in the *Amer. Jour. of Med. Sciences*, October, 1898, reports three cases in which the urine showed no derivatives. Diabetes, anemia, lead poisoning, cause *somewhat similar* changes in the nerve and retina. With them, especially with diabetes, we are liable to have a concurrent albuminuria.

REMOTE CONSEQUENCES OF INJURY TO THE HEAD.—MR. X—a white farmer, æt. 30, came to our office March 9, 1899. He says that about two months ago he fell on his head from a wagon and was unconscious for about eight hours. During this time, however, he would come to himself long enough to understand what was said to him and then lapse into unconsciousness again. He made a good recovery, but since then he has had headaches every day.

The patient has now a subacute catarrhal conjunctivitis. His vision is R. and L. E.  $\frac{20}{xxx}$  and Sn. No. 1 with difficulty. Stevens' phorometer shows the muscle balance to be: Exophoria = 2 deg. at 20 feet; left hyperphoria =  $1\frac{1}{2}$  deg. With the ophthalmoscope both optic nerves appear hyperemic. Under atropin he was found to have a low hypermetropia. We advised prolonged rest of the eyes under atropin and the use of potassium iodide for at least two months.

May 15, 1899—The patient's physician reported that he thought Mr. X's eyes were about the same as on March 9, but he has the K. I. eruption. May 13, 1901, an opportunity presented to re-examine the patient. His vision had sunk to about  $\frac{20}{L}$  each eye, and the optic nerves are now a pale, bluish white—going into atrophy—BLINDNESS.

The moral of this brief recital is two-fold:

First—One should never be too sanguine in one's prognosis concerning an injury to the head nor feel sure of having escaped evil consequences until a very long time has elapsed.

Second—That in such injuries a very careful examination of the eyes, including the functional perfection of the extrinsic ocular muscles will often aid us to detect, when nothing else will, the coming danger that is casting its shadow before.

THE SUCCESSFUL USE OF QUININ AND HYDROGEN PEROXIDE IN A CASE OF OPACITY OF THE CORNEA, INTERSTITIAL KERATITIS.—L. K., white girl, *aet.* 11, applied to our clinic on October 19, 1897, complaining of poor vision for three years, R. and L.  $\frac{10}{cc}$ . Had suffered from interstitial keratitis three years previous. Patient presented well-marked evidences of inherited syphilis and was puny and ill-nourished. Pupils dilated well under atropin. The local treatment consisted in instillations of 12 per cent. solution of bisulphate of quinin in peroxide of hydrogen three times a week. The systemic indication was comprised of  $\mathfrak{z}$ i of cod liver oil and gr.  $\frac{1}{48}$  of bichloride of mercury three times a day. Patient weighed 77 pounds.

After a month's treatment patient had gained three pounds in weight and cornea were clearing up markedly.  $RV = \frac{12}{cc}$ ,  $LV = \frac{20}{cc}$ .

February 21, 1898.—Patient's general condition very good. Weight 86 lbs.  $RV = \frac{20}{cc}$ ,  $LV = \frac{20}{cc}$ .

December 2, 1899.—Twenty-five months since beginning of treatment. Patient weighs 101 lbs; is improved in every way.  $RV = \frac{20}{1xx}$ ,  $LV = \frac{20}{cc}$ .

Patient unable to continue treatment.

This case shows that while local irritation is very valuable in promoting absorption of the products of inflammatory processes in the cornea, attention to the patient's general nutrition is of no small importance.

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## Miscellaneous.

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AUTOMATIC SAFETY-VALVE STOPPER FOR PREVENTING THE BURSTING OF PEROXIDE OF HYDROGEN BOTTLES.—If containers of peroxide preparations are tightly corked, the oxygen which is set free accumulates until the bottles can not stand the pressure and burst, or the corks are driven out. To prevent these difficulties, Mr. Marchand, the manufacturer of well-known brands of peroxide of hydrogen, has devised an ingenious stopper,

which he calls the "automatic safety-valve rubber cork." The material of the stopper is vulcanized rubber. The beveled end is punctured so that when the pressure in the bottle rises above five to eight pounds to the square inch, the excess of oxygen finds egress and the tension is relieved. The capping consists of vegetable parchment, covered with paraffined muslin, no wiring being needed.

It is easily seen that this style of closing the bottle obviates the possibility of bursting. Assuming that the puncture should close, as soon as the pressure rises to a point within that required for rupture of the bottle, the stopper will be forced out.

The medical profession is being thoroughly advised of Mr. Marchand's new method of closing his bottles of "peroxide of hydrogen medicinal" and "hydrozone," and will be certain to avail themselves of the advantages thus guaranteed them. There is no popping when bottles are opened.—*National Druggist*.

HYDROPHOBIA; ITS PREVALENCE AND PREVENTION, is the title of a paper read by Dr. Henry R. Slack before the Medical Association of Georgia, meeting of 1901, at Augusta. The pathology is first taken up. In the intervertebral ganglion of a rabid dog the cells are degenerated, shrunken, and may have disappeared. In their place are capsules filled with masses of small irregular nucleated cells; these cells proliferate and fill the capsule and, together with a leukocytic infiltration which occurs in the stroma, give a distinctive picture to the section. These changes occur early in the disease and enable a good pathologist to make a diagnosis within twenty-four hours after the death of the suspected animal.

The prevalence of the disease is then considered. Within two months seven white persons have died from rabies in Georgia. Two of the fatal cases are reported clinically.

On the question of prevention, statistics from various countries are quoted to show that muzzling is of the greatest value and a strong plea is made for its adoption. The Pasteur method is recommended as the only successful preventive treatment.

DR. EDWARD C. REGISTER writes interestingly of the "Hospitals of Japan" in the *Charlotte Medical Journal*. There are only ten public hospitals and a few private ones that do not

amount to much; the Imperial University Hospital at Tokio is the largest, with an average of 2200 patients, and there Kitasoto has his laboratory.

The author notes the Buddhist prejudice against bloodshed, which accounts for the pronounced conservatism of the Japanese surgeons, although they are skilful and courageous.

Other points of interest noted are the prevalence of tuberculosis, 32 per cent. of all deaths in Japan, and the small number of diseases of the skin.

IN A PAPER ON "ADRENALIN AND ADRENALIN CHLORIDE," Dr. E. N. Fletcher Ingalls, of Chicago, reports experiments with solutions, varying from 1 to 1000 to 1 to 10,000, of the chloride of adrenalin in distilled water or normal salt solution. In nine cases a very small quantity of a spray, of one part of chloride of adrenalin to 10,000 parts of water, was applied to the nasal cavities, with the effect of blanching the mucous membrane quickly, and in most cases causing contraction of the swollen tissues similar to that caused by cocain. The first solution was made with distilled water and caused smarting; normal salt solution was used instead with perfect satisfaction. The smarting may have been due to a small quantity of formalin in which the atomiser had been just washed.

Experiments were made with insufflation of a dry powder consisting of 1.5 (75 parts) each of biborate of sodium and bicarbonate of sodium; 3% (150 parts) light carbonate of magnesium; one part of adrenalin to 5000 parts sugar of milk. This cleared the nasal cavities when obstructed by swelling of the turbinated bodies, and diminished the secretions. A daily epistaxis was relieved by sprays of a 1 to 10,000 solution. Conjunctival congestion from overwork was relieved by the instillation of a similar solution. The author has had equally satisfactory results in cases of conjunctivitis; laryngitis, acute and chronic; acute laryngitis with edema glottidis; acute coryza; chronic laryngo-tracheitis with acute exacerbation; and in preparation for operations upon the nose.

The following conclusions are drawn: This remedy will be of great value in the treatment of acute inflammatory affections of the nasal cavities, either in spray of 1 to 5000, or in powders of 1 to 5000 or 1 to 2500 sugar of milk; in acute coryza, in

hay fever, in epistaxis; in acute inflammation of the fauces, with solutions of 1 to 1000. In acute or subacute laryngitis, solutions of 1 to 1,000, applied with moderate force, will give great relief; it is probable that vocalists may obtain relief from congested cords, for at least two or three hours, and obtain normal efficiency in the use of the voice.—*Journal of the American Medical Association.*

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## Medical News Items.

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AT THE TWENTY-SIXTH ANNUAL MEETING OF THE AMERICAN ACADEMY OF MEDICINE there were about 100 members in attendance. Papers were read on the Reciprocity in Licensing, Institutionalism, etc. The meeting was altogether interesting. Prof. V. C. Vaughan, of the University of Michigan, was elected President.

THE SECOND ANNUAL MEETING OF THE ROENTGEN SOCIETY OF THE UNITED STATES will be held in Buffalo, N. Y., at the University of Buffalo, September 10–11, 1901. The preliminary announcement gives a list of committees together with the constitution and notes regarding the meeting.

THE 1876 CLASS OF THE DEPARTMENT OF MEDICINE OF THE UNIVERSITY OF PENNSYLVANIA held its First Annual Banquet, at the University Club, Philadelphia, at 7 P. M., on Alumni Day, the 11th of June, and effected a permanent organization for the benefit of its Alma Mater. The following officers were elected: President, Charles A. Oliver, A. M., M. D.; vice president, William H. Klapp, A. M., M. D.; secretary, Francis M. Perkins, A. M., M. D.; treasurer, Benjamin F. Baer, M. D., with an executive committee of twelve members who will meet at the call of the president.

DR. F. W. COLEMAN, an old practitioner of Rodney, Miss., died suddenly in this city May 29.

DRS. J. T. SCOTT, P. W. FALLS and A. G. MAYLIE have been appointed inspecting surgeons in the United States Pension Bureau for this city.

DR. F. S. SCALES, for many years on the Quarantine Board of Mobile, died June 5.

DR. A. J. KENNEDY GENELLA has returned to New Orleans after spending the past two years in Europe.

DR. A. J. BLOCH, aged 33 years, died June 7 in Denver, Colorado. Dr. Bloch was well known in New Orleans, where he had many friends in and out of the profession.

THE LIBRARY OF THE MEDICAL SOCIETY OF THE COUNTY OF KINGS, at 1313 Bedford Avenue, Brooklyn, announce that the library is open free to the public, daily (Sundays and legal holidays excepted), from 10 A. M. to 10 P. M.

The library especially solicits authors to donate a copy of each of their published writings (both books and reprints).

Publishers to contribute a copy of their publications, new or old.

Editors to furnish a current file of their journals, transactions, etc.

THE MONTEFIORE Home for Chronic Invalids with Consumption was dedicated May 30, at Bedford Station, N. Y. The home is open to all persons afflicted with consumption.

THE ROCKEFELLER INSTITUTE OF MEDICAL RESEARCH.—Within a comparatively few days the work on behalf of science and humanity which the newly incorporated Rockefeller Institute of Medical Research is to carry on will be started in the pathologic laboratories of half a dozen universities in this country and one in Canada and the laboratory of the health department of New York. Among the centres of the work will be the University of Chicago.

Indications are that the \$200,000 which Mr. Rockefeller has given as the capital of the new institute, is a trifling sum compared to what he contemplates giving ultimately to the same cause.

The work will be done at Columbia University, Harvard University, the University of Chicago, the University of Michigan, the University of Pennsylvania, Johns Hopkins University, McGill University of Montreal and the headquarters of the New York Health Department.

The directors of the new Rockefeller Institute will have supervision over it, but it will be performed by physicians

whom they will employ and who will work more or less independently in the different places mentioned.

The heads of the various pathologic laboratories will have general charge of the investigations, whether they happen to be directors of the institute or not. Periodically, the directors, whose joint judgment will be the sole regulator of the expenditure of the \$200,000 provided, will meet to discuss the result of the work, and will jointly give out the information which it may have developed through the original channels. The work may go on for a year or two before definite plans are made for a permanent institution.

The investigation of the country's milk supply will be the first important problem which the directors will take hold of. Their work will be chiefly bacteriologic.

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## Book Reviews and Notices.

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*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

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*A System of Practical Therapeutics.* Edited by HOBART AMORY HARE, M. D. Second Edition. Revised and Largely Rewritten. In Three Volumes, Number of Contributors, sixty. Philadelphia, Lea Brothers & Co., 1901.

There is something dignified in this work, an exclusiveness, if you will which seems to say: "I am a library of advanced therapeutics in myself." It is not a mere compilation from other works, but contains separate articles by different men each representative of modern therapeutic thought in his own particular line. For the most part the articles are written in essay form, and are replete with solid information. Volume one opens with an article on "General Therapeutic Considerations", by that Nestor in Therapeutics, Dr. Horatio C. Wood.

Volume II begins with an article on typhoid fever by the author of the system, Dr. H. A. Hare. In his characteristic way, he has grouped much valuable information. A fact too little emphasized as a rule is brought out by the writer when he says: "It is a mistake, however, to suppose that



typhoid fever is spread by water alone. Wide observation and bacteriologic research have proved that the bacillus may enter the body with all kinds of raw food; and epidemics have occurred in which oysters planted in river waters, for the purpose of fattening them, have become the host of the bacillus of typhoid fever, and when eaten raw have conveyed the infection to human beings. Raw clams have done likewise, and doubtless uncooked celery, lettuce, and cabbage often act in a similar manner. That this accident is very prone to occur is evident when we recall that truck growers, in order to force their vegetables, often use as much fecal matter as possible for fertilizing purposes."

Speaking of antityphoid inoculations, the writer says: "While the results which have been obtained by Wright are not sufficiently positive to justify us in considering that we have a true protection against typhoid, at the same time it can not be denied that his figures are most encouraging. Thus out of 11,295 men under observation, 2835 were inoculated and 8460 were not. The percentage of cases of typhoid fever amongst those who were not inoculated was 2.5 and amongst the inoculated 0.95, which is certainly a very extraordinary difference. Unfortunately, the statistics in regard to mortality are not equally good. The percentage of deaths amongst the inoculated was 0.2, and amongst the uninoculated 0.34."

The chapter on Malarial Fevers is contributed by James M. Anders. This writer lays great stress on the drainage of swamps, and low places, and the planting of trees. He gives bare mention to the mosquito as a factor in the dissemination of malaria.

Small-pox, by Dr. William M. Welch, is well written and profusely illustrated.

Yellow Fever, by Dr. D. T. Lané, is a fair presentation of the subject. Dr. Lané recommends the use of cocaine hydrochloride as an antiemetic, but mentions the fact that: "Have cautions against the poisonous effects of this drug if given too liberally." Our own experience is that menthol is the better and safer antiemetic. Dr. Roger Post Ames has furnished Dr. Lané with a description of the manner in which bedside sanitation was carried out in the Touro Infirmary during the yellow fever epidemic of 1897.

Diphtheria, by Floyd M. Crandall, M. D. Dr. Crandall says: "Fumigation by sulphur, as it is ordinarily done, is ineffective. It is more effective when the air is charged with moisture. It is wise, therefore, to dampen the various objects in the room and to cause steam to be generated during the time of fumigation. Three pounds are necessary for each 1000 cubic feet of air space. Formaldehyde is unquestionably superior to sulphur for room disinfection." This is practically the same conclusion that Dr. J. J. Archinard reached after a series of experiments (NEW ORLEANS MEDICAL AND SURGICAL JOURNAL, May, 1901).

Nervous Diseases of the Heart, by Sir Lauder Brunton. This article will well repay careful perusal. Under the head of Angina Pectoris, we notice the following, to which we subscribe: "In cases of fatty degeneration we may combine elimination with the administration of iron and arsenic, Schott's system of baths and exercises, or with re-

striction of fluids, and Oertel's method of gently graduated exercise, may be exceedingly beneficial if used with great caution; but if used carelessly they may be most injurious and greatly shorten the patient's life."

Diseases of the Stomach, by Thomas G. Ashton, M. D., are treated of in a rational and conservative manner.

In the article on Headache and Neuralgia, by Dr. Wharton Sinkler, is given in tabular form a list of drugs and their doses, along with other measures recommended by different authorities.

Dr. Duncan, writing on the drug habits, mentioning "Husa" as a remedy for the cure of the opium habit, says: "According to Winthrop, it is a diffusible stimulant, causing gentle excitement, followed later on by sedation and sleep. From three to four months are necessary to effect a cure. It appears also that precautions must be taken to prevent the formation of a husa habit. The treatment of the opium habit by this means appears to be open to the same objection as are other methods which depend upon the substitution of one drug for another."

Dr. Stelwagon's article on The Modern Treatment of Diseases of the Skin closes volume second. The doctor writes: "Many remedies and some methods which have found space in the advertising columns of current medical literature during the past few years will not be found in this chapter; some for the reason that experience has demonstrated their unworthiness, and some for the reason that as yet their claim to be considered valuable has not been conclusively shown."

Volume three, devoted to surgical therapeutics, opens with an article on anesthesia and anesthetics, from the pen of Dr. Charles Lester Leonard. He is in favor of ether as a general anesthetic, but for brief operations mentions nitrous oxide as the safest of all. The importance of making examinations of urine before the administration of an anesthetic is emphasized. He says: "It is also best for the urine to have been voided shortly before the anesthesia." In the article on Local Anesthetics in Minor Surgery, Dr. Spencer says: "A few years ago eucain A was introduced as a substitute for cocain. It has been extensively used, and has become popular. Its range of usefulness is more extensive than that of cocain. Cardiac and respiratory depression does not contraindicate its employment. It does not lose its strength when kept in solution, and is not decomposed by boiling. "As a local anesthetic, it is claimed that eucain B retains all the advantages possessed by the preparation called eucain A, and at the same time it is less toxic, more prompt in action, and is also less irritating."

In Dr. McCosh's article on abscess of the lung, he says: "The balsamic drugs, as turpentine, creosote and tar, are chiefly employed for this purpose. If they could be used freely considerable benefit might be expected, but the stomach generally cries halt! The most easily borne is terpene hydrate or terebene." We can call to mind one instance where a well defined abscess of the lung was cured with terpene hydrate.

In his article on hemorrhoids, Dr. Mathews quotes Dr. Edmund Andrews who collected 3304 cases of the use of carboic acid injections. He points out the following dangers: "Death, 13; embolism of liver, 8; sudden and dangerous prostration, 1; abscess of liver, 1; dangerous

hemorrhage, 10; permanent impotence, 1; stricture of the rectum, 2; violent pain, 83; carbolic acid poisoning, 1; severe inflammation, 10; sloughing and other accidents, 35." Dr. Mathews adds that in his practice he has seen a number of cases where stricture of the rectum resulted from the treatment, more than a score of abscesses and fistulæ, and other conditions equally bad. The consensus of opinion is that it is a dangerous and needless plan of treating hemorrhoids.

It is impossible in a review of this kind to give even a partial summary of all the good articles in this splendid work, so we have contented ourselves with simply making mention of some of the most salient points.

We have found this system to be an almost inexhaustible mine of information, and hope that many will share in its treasures.

STORCK.

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*Lectures on Nasal Obstruction*, by A. MARMADUKE SHIELD, M. B., F. R. C. S., London. P. Blakiston's Son & Co., Philadelphia, 1901.

A neat little volume comprising three lectures delivered by the author on that subject of such vital importance to the rhinologist, nasal obstruction.

The first lecture is devoted to the study of the causes and diagnosis of the principal varieties of nasal obstruction, in which attention is called to the importance of the condition and its frequency, the varying clinical forms encountered, their examination, diagnosis and general symptoms.

The second chapter treats of the different methods employed in the removal of the various causes of nasal stenosis, the complications and sequels, and the choice of anesthetics for special operations.

The third chapter is a special lecture on the treatment of nasal polypi, and their relation to nasal obstruction.

The teaching is based on the large experience of the author with this class of cases, and is of much practical value.

DEROALDES AND KING.

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*Laryngeal Phthisis*, by RICHARD LAKE, F. R. C. S., London. P. Blakiston's Son & Co., Philadelphia, 1901.

A small volume of ninety-four pages, devoted to a study of the etiology, symptoms, local treatment, and prognosis of the various clinical forms of laryngeal tuberculosis. The author gives the subject a thorough and systematic review, bringing out clearly the different forms observed, and offering some interesting statistics to show the influence of age and certain occupations as predisposing causes.

The various forms of treatment advocated by different clinicians are discussed in detail and their values carefully weighed. A number of formulæ recommended in the local treatment are given in an appendix. The clinical histories of twelve cases are detailed, illustrating the course and treatment of the clinical varieties usually met with. The book ends with a table of statistics and a few colored plates descriptive of the diseased larynx. The latter are scarcely up to the standard of colored illustrations.

DEROALDES AND KING.

*Diseases of the Nose and Throat.* By CORNELIUS GODFREY COAKLEY, Lea Bros. & Co., Publishers, Philadelphia and New York, 1901.

A second edition of the work written by this author a short time ago, which was very favorably received and assigned to a merited rank among the text-books on diseases of the nose and throat. The original publication has been revised in accordance with the more recent advances in the practice of this specialty, and several new colored plates and other illustrations added to further enlighten the reader.

A valuable and much needed chapter has been added which treats of the pathologic phenomena occurring in the upper respiratory tract in the course of the infectious diseases, such as scarlet fever, measles, pertussis, small-pox, etc., a subject of great importance to the general practitioner of medicine. The value of the work has thus been considerably enhanced.

DE ROALDES AND KING.

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#### PUBLICATIONS RECEIVED.

*System of Physiologic Therapeutics*, edited by Solomon Solis Cohen, M. D., Volume II, *Electrotherapy*, by George W. Jacoby, M. D. P. Blakiston's Son & Co., Philadelphia, 1901

*Photographic Atlas of the Diseases of the Skin*, by George Henry Fox, M. D. Part 1. J. B. Lippincott Company, Philadelphia and London, 1900.

*Transactions of the Associated Physicians of Long Island*, January, 1900, to June, 1901. Vol. II.

*Progressive Medicine*, edited by Hobart Amory Hare, M. D. Assisted by H. R. M. Landis, M. D. Vol. II. Lea Bros. & Co., Philadelphia and New York, 1901.

*Principles of Surgery*, by N. Senn, M. D.—F. A. Davis Company, Philadelphia and Chicago, 1901.

*System of Physiologic Therapeutics. Vol. I. Electrotherapy*, by George W. Jacoby, M. D.—Edited by Solomon Solis Cohen, M. D.—P. Blakiston's Son & Co., Philadelphia, 1901.

*Fifty-Second Annual Report of the Central Indiana Hospital for Insane*, 1900.

*Monthly Bulletin Indiana State Board of Health*, March 1901.

*Essentials of Diseases of Children*, by William M. Powell, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*Atlas and Epitome of Labor and Operative Obstetrics—Anatomical Atlas of Obstetrics*, by Oscar Schaeffer, edited by J. Clifton Edgar, M. D.—W. B. Saunders & Co., London and Philadelphia, 1901.

*Atlas and Epitome of Ophthalmoscopy and Ophthalmoscopic Diagnosis*, by Prof. Dr. O. Haab, edited by G. E. de Schweinitz, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*Atlas of the Nervous System*, by Dr. Christfried Jakob, edited by Edward D. Fisher, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*Food Analysis*, by Henry Leffmann, M. D., and William Beam, M. D.—P. Blakiston's Son & Co., Philadelphia, 1901.

*A Text Book of the Practice of Medicine, Vols. I and II*, by Dr. Hermann Eichorst, edited by Augustus A. Eshner, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*Uterine Fibromyomata*, by E. Stanmore Bishop, F. R. C. S.—P. Blakiston's Son & Co., Philadelphia, 1901.

*Monthly Bulletin: Department of Health of Chicago*, March, 1901.

*Eczema*, by L. Duncan Bulkley, M. D.—G. P. Putnam's Sons, New York and London, 1901.

#### REPRINTS.

*Study of Man—The Study of Children*, by Arthur MacDonald.

*Syphilis As a Non-Venereal Disease*, by L. Duncan Bulkley, M. D.

*The Public Health and the State's Duty to Protect It*, by M. M. Smith, M. D.

*Maladministration of Public Medical Affairs in the State of Texas*, by H. A. West, M. D.

*Report of a Case of Nephrectomy for Pyonephrosis Due to Impaction of a Stone in the Ureter—Report of Two Cases of Epithelioma of the Vulva*, by Charles P. Noble, M. D.

*The Digestive Power of Pepsin*, by Benjamin T. Fairchild.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR MAY, 1901.

CAUSE.	White.	Colored.	Total.
Fever, Malarial (unclassified) .....	5	4	9
“ “ Intermittent .....	.....	.....	.....
“ “ Remittent .....	.....	.....	.....
“ “ Congestive .....	.....	.....	.....
“ “ Typho .....	.....	.....	.....
“ Yellow .....	.....	.....	.....
“ Typhoid or Enteric .....	7	6	13
Bronchitis .....	3	3	6
Diphtheria .....	3	.....	3
Influenza .....	1	2	3
Measles .....	.....	.....	.....
Whooping Cough .....	2	.....	2
Pneumonia .....	16	24	40
Cancer .....	14	4	18
Consumption .....	43	40	83
Diarrhea (Enteritis) .....	.....	.....	.....
Dysentery .....	6	2	8
Gastro-Enteritis .....	60	18	78
Hepatic Cirrhosis .....	2	1	3
Other Diseases of Liver .....	3	.....	3
Peritonitis .....	.....	.....	.....
Debility, General .....	.....	.....	.....
“ Senile .....	14	9	23
“ Infantile .....	6	4	10
Bright's Disease (Nephritis) .....	23	21	44
Uremia .....	.....	.....	.....
Heart, Diseases of .....	22	17	39
Apoplexy .....	17	7	24
Meningitis .....	11	4	15
Tetanus .....	2	2	4
Injuries .....	15	14	29
Suicide .....	3	.....	3
All Other Causes .....	78	43	121
TOTAL .....	356	225	581

Still-born Children—White, 21; colored, 18; total, 39.

Population of City (estimated)—White, 210,000; colored, 90,000; total, 300,000.

Death Rate per 1000 per annum for month—White, 20.34; colored, 30.00; total, 23.24.

## METEOROLOGIC SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure .....	29.30
Mean temperature .....	75.
Total precipitation, inches .....	1.08
Prevailing direction of wind, southwest.	

# 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.]

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### THE NOSE AND THROAT IN THEIR RELATION TO DISEASES OF THE CHEST\*.

BY WILLIAM SCHEPPEGRELL, A. M., M. D., NEW ORLEANS, LA.

In the treatment of a disease the removal of the cause, where possible, should be the most important consideration, and yet how frequently do we find cases of bronchitis that have been treated for years without the possibility of the nose being considered as an etiologic factor in this condition. We know it to be a physiologic fact that the nasal chambers prepare the air for respiration. In its passage through the nose, it is practically saturated with moisture, freed of grosser impurities and warmed to within a few degrees of the temperature of the body. Any disease or abnormality of the nasal chambers will inhibit this function to a more or less degree and very soon the effects are found in the respiratory organs below.

The mucous membrane of the bronchial tubes differs very materially from that of the nasal chambers in resisting the

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\* Read before the meeting of the Louisiana State Medical Society, April, 1901.

effect of cold. Even at the freezing temperature, the nose, in its normal condition, will not only allow the air to pass without injury to itself, but will impart to it sufficient heat and moisture to prepare it for the important physio-chemical changes which are so important to the perpetuation of life. In cases, however, in which, for any reason, the nostrils cannot be used in respiration, as in cases of nasal obstruction in which the inspired air passes through the mouth, or as in diphtheria, in which it can enter only through the tracheal tube, with every precaution that may be taken for warming and moistening the air, it is rarely possible to prevent a certain amount of irritation to the bronchial tubes, and unless every precaution is taken, especially in tracheotomized cases, the effects may be serious and even fatal.

In chronic diseases of the nasal chambers, in which the obstruction to nasal breathing develops slowly, the bronchial tubes exhibit a certain amount of tolerance, so that the effects are not so marked as above stated, but usually it is a question only of time before the effects are apparent.

There are two conditions met with in the nasal chambers which from a physical standpoint appear to be opposite in character and yet which may have a similar effect on the respiratory organs below; the first being nasal obstruction, and the second atrophy. The former may be due to intumescence or hypertrophy of the turbinals, deformities of the septum, polypi, etc., while the latter is usually due to chronic atrophic rhinitis or specific disease. In children, the most frequent obstruction to nasal breathing is hypertrophy of the pharyngeal tonsil.

Where obstruction exists, the nasal function cannot be fully carried out and the complement of air must pass through the mouth. Even in cases in which the obstruction is not sufficient to demand mouthbreathing, the air passes so rapidly through the narrowed nasal channels that the preparatory function cannot be completed and the unprepared air acts as an irritant to the organs below.

In considering the effects of cases of atrophy on respiration, we must remember that the air is not prepared in its passage through the nostrils *per se*, but through the exercise of a special function in its passage. In atrophic and ulcerative disease, in which the mucous membrane has been destroyed to a more or less extent, the air passes through the enlarged nasal cham-



bers without receiving the warmth and moisture provided by the healthy nostrils, and acts as an irritant on the mucous membrane of the throat and bronchi as effectually as if the breathing had taken place through the mouth. It is in fact a matter of common observation that well developed cases of atrophic rhinitis are usually accompanied by bronchitis, especially in winter, when the colder temperature and the lower hygroscopic condition of the atmosphere call for a more energetic exercise of the nasal function, and a large proportion of the so-called cases of "winter cough" are due to this, or some other form of nasal disease.

By tending to maintain the lower respiratory organs in a healthy condition, the normal nasal cavities give valuable aid in resisting the entrance of the germs of infectious disease that may enter the organism by way of the respiratory passages, and it thus undoubtedly acts in the case of the prevalent and most fatal of such diseases, viz., tuberculosis. Nor do they simply act in the manner above described, but they also form distinct barriers against the entrance of pathogenic germs. Whether the nasal mucus is simply sterile, and the resistance to the entrance of pathogenic micro-organism is purely mechanical, or whether, as some bacteriologists claim, it has decidedly germicidal properties, the fact remains that the healthy nasal passages form one of our most powerful protections against the invasion of such germs.

Inversely, the unhealthy nostrils not only fail to provide the respiratory passages with the necessary protection, but may even vitiate the inspired air in its passage. In fully developed cases of atrophic rhinitis, Dr. Moure, of Bordeaux, and others have shown that the tendency is decidedly to a tubercular issue.

Another affection which should cause the physician to make a careful examination of the nose is asthma. Since the first report by Vololini of a case of asthma cured by the removal of a nasal polypus, rhinologists have given careful attention to this subject and medical literature now contains the reports of a large number of cases successfully treated in this manner. While the majority of cases of asthma may be due to other causes, nasal disease or abnormalities, as an etiologic factor in this condition have been so frequently shown that no physician can consider that he has thoroughly exhausted every effort in

the treatment of such cases without having first thoroughly examined the nasal cavities.

The conditions with which asthma may be associated vary; it may be due to a polypus, a spur or deviation of the nasal septum, and even ordinary hypertrophy of the turbinals has been found to be the cause, as has been shown by the reduction of the enlarged turbinal being followed by a cure. Among the records of cases of asthma successfully treated in my own practice, I will simply mention one, in which a small but pointed septal spur impinged upon the opposite turbinal, two cases of nasal polypi and several cases of enlarged turbinals. In a case recently sent me by Prof. John B. Elliott, M. D., of this city, I found a complete stenosis of one nostril due to a deflection of the nasal septum. Although the paroxysms of asthma had continued for ten years, they ceased spontaneously upon the correction of the nasal deformity and have not since recurred.

In children, one of the most frequent causes of bronchitis is hypertrophy of the pharyngeal tonsil, which not only mechanically impedes or prevents nasal respiration but aggravates the difficulty by retarding the development of the nasal cavities and by inducing congestion of the nasal mucosa. In these cases the mucous membrane of the bronchi has not yet developed the certain degree of tolerance which we sometimes see in persons of more advanced years, and the air, partly or wholly inhaled through the mouth, acts as a distinct irritant, varying in degree with the temperature of the atmosphere and the season of the year. Such cases are usually fairly well in summer, especially in latitudes in which the air is warm and moist, and where, therefore, the defect of the nasal function is not brought so conspicuously into play. As soon, however, as the weather becomes colder, and the unwarmed and unmoistened air comes in contact with mucous membrane of the bronchial tubes, an irritation is at once set up followed by congestion, hyperemia and inflammation. As is usually the case cold, which is only one of the factors, is given as the reason, and the parents of such children will tell you that they take cold with every change of the weather.

The effects of the treatment in such cases is usually marked, if it has not been neglected too long. In fact, the result is sometimes so conspicuous, that it is a source of astonishment to

the family who frequently regard the defective breathing of the child as something unusual but not abnormal. In a case referred to me some time ago by Dr. Wm. Brickell, in which the child suffered from hypertrophy, not only of the pharyngeal, but also of the faucial tonsils, so that the breathing was very labored, the result was so marked that in the course of a few months the emaciated, nervous and anemic child became strong and hearty, the picture of health. Nor is this an unusual instance. On the contrary, I know of no procedure in medicine which is followed by so prompt and successful a result as the relief of obstruction to nasal respiration especially in children, in which the duration of the disease has not set up secondary changes, difficult and sometimes impossible to correct, that we may find in persons of more advanced years.

Nor should this be a source of surprise to any one who has seen the struggle of a sleeping child suffering from nasal obstruction; the labored breathing, the gasping breath, the restless tossing from side to side, the frequent nightmares, and, on arising, the dejected appearance of the child, which, as the mother will tell you, is more tired after its night's sleep than when it retired. The benefits of an operation will enable the child to breathe naturally, and relieve it from the fatigue due to the forced efforts of respiration and its effects on the nervous system, will prevent the irritation on the bronchial tubes, and correct the defective oxygenation of the blood, can not easily be overestimated.

While diseases of the nose and naso-pharynx are more frequently followed by pathologic conditions of the chest, the lower part of the throat may also prove an etiologic factor in such cases. Chronic pharyngitis or laryngitis may cause inflammation of the bronchial tubes, not only by continuity or through infection, but we not infrequently find that the cough due to a diseased throat may give rise to such irritation of the bronchial membrane as to eventually give rise to chronic inflammation in this region. This is strongly illustrated by a case which came under my treatment some years ago. The patient had suffered from a cough for about two years, was emaciated, and a physical examination of the chest gave every evidence of chronic bronchitis, and he had been unsuccessfully treated for this by several physicians. Accompanying the cough, however,

was a marked hoarseness, and it was for this that he first consulted me. An examination of the larynx showed a small tumor between the vocal cords, which fully explained the hoarseness and laryngeal irritation. The removal of the tumor was followed by complete restoration of the voice, and the cough began to diminish, and entirely disappeared in three days. The most noteworthy part of the case, however, was that the bronchial symptoms disappeared entirely without any further treatment, and in six weeks the patient had gained twelve pounds. I was afterwards told that the family and friends, and even some of the physicians, had considered him a tubercular subject, with every prospect of a fatal termination.

The treatment of the cases, which have been herein referred to, covers a field which involves almost the whole of rhinolaryngology, as the causes which may develop disturbances in the lower respiratory organs differ widely in character and degree. The object of this communication, however, is to emphasize the fact that abnormalities of nasal respiration, whether due to partial or total obstruction, atrophy, or other disease of the nasal cavities, may develop irritation of the lower respiratory organs. The possibility, therefore, of irritation due to disturbance of the upper respiratory passages should not be forgotten in treating diseases of the chest, and no case of bronchitis or asthma should be considered incurable, unless the nose and throat have been carefully examined and any abnormal condition corrected if possible. In many cases this examination, if made at all, is delayed so long that secondary changes have taken place, so that even when the affection of the nose and throat has been corrected, the disease may have developed secondary changes, making a cure no longer possible. Even in such cases the patient may obtain a certain amount of relief and the treatment may at least prevent the further development of the disease.

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#### THE IMPORTANCE OF AN EARLY DIAGNOSIS IN TUBERCULOSIS.

BY JAMES KILBOURNE, M. D., ST. FRANCISVILLE, LA.

The civilized world is being aroused to the necessity of vigorous and well directed action against the continued spread of

tuberculosis, as well as toward its cure, and now seems an opportune time to iterate and reiterate the importance of an early recognition of this disease, if we are to hope for any great measure of success in the cure of individual cases, and indirectly for a successful curtailment of its spread.

No matter what theory of treatment may be adopted, whether climatic, open air or therapeutic, the saving of the lives of those afflicted will be confined, as now, to a relatively small number, so long as the disease remains unrecognized, and consequently untreated, until those grosser changes have taken place in the lungs of the victim to consumption that make its markings so clear that he who runs may read.

Many cases of tuberculosis have recovered, as evidenced by autopsies, showing unmistakable signs of a past existence of the disease; most of these recoveries having taken place on account of some accidental circumstance of environment or constitutional vigor; and most of these spontaneously cured cases show that the curative process took place very early in the course of the disease.

The reason for the failure to cure cases of tuberculosis of long standing becomes very evident when we come to study the natural history of the disease. In its early course the invasion is one of tuberculosis only, the bacilli invade the organism—they form a localized area of infiltration—the body is in the best possible condition to wage a successful warfare against them, and probably in every instance the attempt is made to wall the invading parasites in, and cut them off from the balance of the body. With help, from climate, from a better mode of living, from medicine, etc., this may become successful, and the enclosed area of disease, with its hosts of parasites, may remain enclosed until the germs, poisoned by their own excrement, or starved by want of food, perish, and nature by one mode or another closes the gap made in the affected organ and the victim escapes.

But under adverse circumstances the critical time is neglected—pure air, sunlight, change of scene or mode of life is not taken advantage of—the unhygienic surroundings continue, the powers of the body weaken, the enclosed germs break through the wall built, make new foci, draw more heavily upon the resources of the host, and, what is probably of most importance in the fight, they let down the bars, as it were, for the entrance

of a host of other micro-organisms, which assist most materially in sapping the strength of the sufferer.'

While some advance has undoubtedly been made in the direction of specific medication in the treatment of tuberculosis, and the immuring effects of these remedies have proven themselves in many instances of undoubted value, still they are only directed against the tubercle bacilli, and not against those other organisms which take such an active part in the downward course of all cases of true consumption.

And it is upon this point that the importance of an early recognition of the disease rests. I believe positively that an early case of tuberculosis can *almost certainly* be cured. All cases that have advanced to the second and third stages become doubtful of prognosis in proportion to their assuming a form of mixed infection. Probably the fact of the mixed infection is a more important factor in the final outcome than the extent of the area of tissue involved.

But with all this assured as proved, what is the remedy? I would say greater care on the part of the family physician, in looking with suspicion upon all those cases of ill-defined, run-down conditions, which always form the beginning of tuberculous troubles. Under the past pessimistic view taken of this disease both by the profession and by the laity, where to pronounce a case one of consumption was like reading a sentence of death, there might be some excuse, for every examination being made with a view of proving the *non-existence* of the disease rather than its *existence*. Some one has truly said, in making a physical examination of the lungs, not only believe all you hear, but believe twice as much as you hear.

Physicians should use two means of diagnosis in all cases of suspicion, before the time has come for the successful use of the stethoscope, or the microscope, and those are first the thermometer and second, some extract of the tubercle bacilli that will give a positive reaction in the presence of even a small area of tubercular infiltration. Very valuable time will always be lost when we wait for the revelations of the stethoscope or the microscope. The writer has seen a case where the first sputum obtained in a comparatively recent case showed an abundance of staphylococci, and other forms of cocci as well as bacilli that did not retain the stain of the carbol-fuchsin. We do not know

how soon a case of tuberculosis may become a case of mixed infection and while the tuberculosis may be cured the case may succumb to the assault of these many forms of poison breeding germs.

A very great difficulty lies in the way of an early recognition of this disease, and that is in the prejudice and the fears of the patient himself or of his family. To many people, it is an affront to tell them that they or one of their loved ones show evidences, or suspicion of consumption, and unless the family doctor has a strong hold upon their confidence his warnings are almost certain to go unheeded.

This can only be remedied by a course of popular education, based upon the hopeful fact that consumption can be cured, and and with certainty in proportion to its early recognition.

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#### THE COMBINATION OF CHLOROFORM AND NITRITE OF AMYL AS AN ANESTHETIC.

BY PAUL A. McILHENNY, M. D., NEW ORLEANS.

Anesthetics in general have been dealt with so extensively, that there now remains very little that can be written upon so broad a subject; so far as I can ascertain, however, very little if anything at all, has ever been written on the combination of chloroform with nitrite of amyl.

For some time surgeons have been looking for something that would, in a measure, do away with the ill effects of chloroform and ether, and although numerous combinations have been tried, few, if any, have come up to the desired point, many of them having to be given in such quantity that it was difficult to keep the patient in a state of anesthesia. Up to June, 1900, chloroform and ether had been used by Prof. Senn, at St. Joseph's Hospital, Chicago, without his having any serious ill-effects from either agent; just at that time several patients were very much depressed after operations and did not recover from the anesthesia for several days, the cardiac depression being marked and excessive vomiting continuing for some hours.

We then had a patient to whom chloroform had been given, who gave us a great deal of worry and trouble for two days

after the operation; he did not recover from the effects as he should have done, and cardiac stimulants were kept up to a remarkable degree.

The day following we had a patient for a simple operation which required a general anesthetic, although the operation would last but a short time.

Prof. Senn suggested that I take a drachm of amyl nitrite to a pound of chloroform and try it on the patient. The experiment proved satisfactory beyond our hopes, although the operation only lasted a very few minutes. I then tried it on several other cases with good results, and in the course of a few months had the opportunity of keeping a record of thirty-eight cases, although it was given to a good many more.

The nitrite of amyl acts as a decided "check rein" to the chloroform, and especially so to its action on the circulation and respiration. It seems to modify the ill effects of chloroform without interfering with its anesthetic properties.

To take up the action of this combination, we might first start with the stages of ordinary chloroform anesthesia.

The preparation used was five minims of the nitrite of amyl to the ounce of chloroform, making one part of the first to ninety-six parts of the second; the drop method was used entirely, with a semi-cone covered with four thicknesses of gauze.

The stage of stimulation is much modified, the pulse being strong, full, and not rapid; the face does not become flushed, as is often the case with chloroform; the breathing becomes slightly deeper than normal, but is not labored nor does it become rapid. The patient at first answers questions promptly, but gradually answers more slowly, and soon becomes muddled; the stage of resistance is very short, and in a great many cases a slight stiffening of the muscle alone indicated any resistance whatsoever. The stage of depression is often absent, the heart regular and strong, the breathing deep and slow; if there is any depression it is very short; the patient going into a deep sleep, which is easily controlled.

The pupils respond very slowly to light, and the conjunctival reflex is also very slow. To a person giving amyl nitrite with chloroform for the first time the pupils would be very misleading, as it requires very close attention to notice their response



to light. Vomiting is very rare, and when it does occur lasts only a short time. Out of thirty-eight cases to which I gave chloroform and amyl nitrite only one vomited, and then it was when I had given only a little of the anesthetic. As a general rule the patients go to sleep very quickly without any struggling or hallucination.

The shortest time from when I began to give the anesthetic to when the patient was completely anesthetized was six minutes, and the longest fourteen minutes. After the patient is asleep it is very easy to keep him unconscious, and it requires very little of the anesthetic.

In regard to the post-operative effects, the patient generally recovers consciousness very rapidly; in about twenty minutes after the anesthetic has been stopped he will answer questions rationally. There is absolutely no headache or fullness of the head such as we might expect.

The amount of urine is increased, but contains no sugar or albumin. The body temperature is somewhat lowered, but the rectal temperature shows no appreciable change. From the experience that I have had with chloroform alone and chloroform in combination with amyl nitrite I greatly prefer the latter, and believe that anyone who tries this combination will be better satisfied with it than with the chloroform alone, especially if the operation is a long one and it is necessary to give a quantity of an anesthetic.

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## Clinical Reports.

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### A CASE OF MALARIAL REMITTENT FEVER TREATED WITH LARGE DOSES OF ARSENIC.\*

BY C. J. GREMILLION, M. D., ALEXANDRIA, LA.

Georgia B., single, thirty years old. Family history good. Her previous health has been good with the exception of a uterine fibroid about the size of a seven months fetal head, which gives her very little trouble. Never had malarial fever before.

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\* Read before the Louisiana State Medical Society, New Orleans, April 1901.

On September 21, she had a chill which was followed by a temperature of 106. The fever continued irregular until the 28th, when I saw her. I found her suffering from nausea and vomiting, pains throughout the body, but especially marked in the region of the stomach. Temperature  $102\frac{1}{2}$ , pulse 126. Examination showed a few sonorous and sibilant râles throughout the lungs. Spleen slightly enlarged. She told me most emphatically that quinin was a poison for her and consequently she was unable to take it. I prescribed cocain, codeia and bismuth for vomiting, and persuaded her after the vomiting was better to take one grain of quinin. Thirty minutes after she took it I was summoned hurriedly to see her. I found her suffering from agonizing pain in the stomach, cramps in the legs, cold, clammy perspiration and rapid and labored respiration. I gave her  $\frac{1}{4}$  grain of morphin with  $\frac{1}{30}$  grain strychnin hypodermically, which relieved her. I then gave her 10 drops of oil of eucalyptus, and 5 drops of Fowler's solution every four hours. Her evening temperature was 104 deg. The following morning temperature was  $99\frac{2}{3}$  deg.; evening temperature  $105\frac{1}{2}$  deg. which was relieved by cold sponging. During the 30th her temperature ranged between 101 deg. in the morning and  $105\frac{1}{2}$  deg. and 106 deg. in the evening. Dr. Randolph then saw the case with me; she was very nervous, pulse 126; she was given Peacock's bromides in teaspoonful doses every two or three hours, and arsenic continued every four hours. On the 1st and 2d she showed no improvement; temperature still ranged between  $105\frac{1}{2}$  and 106 deg. in the evening. On the morning of the 2d, at 8 A. M., we put her on 5 drops of Fowler's solution every hour; this was continued without intermission until 1 P. M. of the 4th. She was then slightly nauseated and her bowels moved twice during the morning, but without any griping. She was advised to take 5 drops every two hours for twelve hours, and afterward 10 drops three times a day. She made an uneventful recovery.

She left the city and went to Monroe to visit, and while there her attending physician gave her one grain of quinin by enema followed by the same symptoms.

This case is interesting:

1st. Because of the marked idiosyncrasy to quinin.

2d. The large amount of arsenic which she took without showing any signs of arsenic poisoning.

Trousseau and Pidoiux in the *Traité Thérapeutique* quote M. Goudin as recommending 1 to  $\frac{1}{2}$  grain of Fowler's solution every fifteen minutes until patient shows symptoms of intolerance, and as the tolerance diminished to lower the doses. He says further that, in cases of acute malaria, patient shows a marked tolerance to arsenic which should be take advantage of from the beginning. If the stomach shows signs of embarrassment to give it by the rectum, which will tolerate 15 to 10 centigrams of arsenous acid when the stomach is unable to keep one centigram.

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#### A CASE OF MALARIAL POLYNEURITIS.\*

By C. J. GREMILLION, M. D., ALEXANDRIA, LA.

Clarence F., age twenty years, single, student. He is a native of Evergreen, La., where he has lived all his life. No hereditary or nervous disease in his family. His previous health has been good with the exception of malarial fever from which he suffered almost every summer. He consulted me on October 15, 1898, for complete loss of sensation and motion in feet and legs, and partial loss of motion and sensation in hands and forearm. As he was carried into the office the dyspnea and characteristic drop foot were very marked.

He gave the following history: During the summer of 1898 he often suffered from chills and fevers which were easily controlled by calomel and quinin; however, every attack left him weaker. During the last six weeks he began to complain of a numbness and tingling sensation in the feet and knees, and occasionally he would suffer from shooting pain through the feet. In about three weeks his ankles had grown so weak that he was unable to walk. His breath began to be very short, his sleep was very bad and appetite very poor. The hands also became involved and so weak that he was unable to write. His feet and hands soon became edematous and then he came to see me. I found him suffering very much from dyspnea, very edematous about the ankles, and likewise the face. He was very anemic and a soft systolic murmur was heard at the base of the heart, which was transmitted up. Liver enlarged,

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\*Read before the Louisiana State Medical Society, New Orleans, April, 1901.

spleen could be distinctly palpated two inches below the costal arch.

Chemical examination of urine showed nothing abnormal. He could not feel the prick of a pin over the feet, legs and thighs up to the anterior superior spine of the ilium. In the hand and forearm the loss of sensation was not complete but very much diminished. Motion was entirely absent in anterior muscles of legs and thighs. He could not cross his legs and after his leg was crossed the foot would drop and he could not move his toes.

The grip of both hands was very weak, though he could move his fingers, however he was unable to stand unsupported, the patellar reflex was entirely absent. He was given quinin, arsenic and iron and told to report in seven days.

October 22 he returned but was not improved, and same treatment was continued with 1-30 grain of strychnin, three times a day.

On December 3 he returned very much encouraged as he was now able to walk into the office by being supported; the dyspnea had entirely disappeared, his sleep was better though not natural, and appetite better. The edema had about disappeared. The muscles did not respond to the galvanic current. The same treatment continued with galvanism, three times a week.

March 27, 1899.—The anemia is much better, sleep and appetite good. He is now able to walk with a stick, the muscle of legs still sore. The muscles of the hand have almost regained their normal strength, though he has some difficulty in writing,

On June 7, 1900, he returned for treatment. He said he felt perfectly well from October, 1899, to May 27, 1900, when he had an attack of bilious fever, followed in a few days by inability to run, with numbness and tingling in knees and feet. He was not anemic; his tongue was large and indented. Liver and spleen enlarged. The ankles are slightly edematous, and sensation normal. Patellar reflex absent. I gave him Arsenaurolin in increasing doses, and advised him to go in the pine woods of North Louisiana. He improved gradually but slowly, and on March 29, 1900, he wrote me: "I am in perfect health; never suffer, and weigh 175 pounds—more than I ever weighed before."

This case would be more complete with a microscopic examination of the blood, but unfortunately it was neglected.

I report this case because the literature of this subject is rather scarce, and the occurrence of this condition in this country is very rare, though multiple neuritis as a sequel of malaria has been described by various neurologists—Gowers, Raymond and others. Gowers states that he has noticed people living in malarial regions who have suffered from weakness of the muscles of the lower extremities, especially the anterior tibial group.

Chariani described a case occurring in the hospital of Rome, a young man of twenty-three who contracted the fever in June, 1895, and had relapses until November, when he suffered from weakness of limbs which prevented him from walking.

Bardellini also reports a case occurring in Rome in which the principal symptoms were, paresis of the left side of the face, left pupil larger than right, weakness of muscles of mastication and deglutition infused with general motor weakness, making it impossible for him to sit or rise. The patellar reflex was abolished and he suffered very much from dyspnea. This case did not recover.

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#### CLINICAL TEST OF SODIUM CACODYLATE.\*

BY E. M. DUPAQUIER, M. D., PROFESSOR ON CLINICAL THERAPEUTICS IN THE NEW ORLEANS POLYCLINIC, NEW ORLEANS.

Since the summer of 1899, I had read so much about cacodylic acid and sodium cacodylate in the French journals that I was anxious to test its value.

It was claimed to be far superior to the usual preparations of arsenic and what attracted my attention was the statement that it was not toxic.

We all know the disadvantages of arsenic trioxide ( $As_2O_3$ ) in liquor acid arsenosi (U. S. D.), of true arsenous acid  $HAsO_2$ , the monobasic acid forming the arsenites (Fowler's solution contains free arsenous acid) and even of the best of all, the sodium arsenate, as regards their irritative effects.

I had tried and discarded in practice the various well known arsenous preparations, granules of dioscaride, Boudin's solution of the French Codex and the commonly employed arsenic preparation, Fowler's solution.

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\* Read before the Louisiana State Medical Society, New Orleans, April, 1901.

Instead, as a rule, I had been using sodium arsenate giving it in granules of 1 milligram or 1-60 of a grain each at a dose, and Pearson's solution from two to sixteen minims, equivalent respectively to one to ten milligrams of sodium arsenate, when I thought of trying sodium cacodylate.

Last summer I started with the French cacodylic preparations of Leprince and Clin which, it is claimed, are chemically pure and of accurate dosage, a relative having brought from Paris two syringes of Professor Renant for the rectal administration of cacodyle. Lately I have used Merck's cacodyle acid and sodium cacodylate which it is claimed are C. P. preparations.

Comparing, therefore, the best arsenic preparation at our command, the sodium arsenate, with the sodium cacodylate I started to watch the results.

While one gram of sodium arsenate contains thirty-two centigrams of arsenic, one gram of sodium cacodylate, I was told, contained forty-seven centigrams of arsenic, and while by the mouth the maximum dose of sodium arsenate I usually gave was one-sixth of a grain, I was told I could safely give of sodium cacodylate one grain at a dose, for weeks, without causing any toxic effect, any irritative effect and this because sodium cacodylate is claimed to be absorbed as arsenic in the form of organic combination.

Out of twenty-one cases under treatment I can report at this writing with any certainty only as to nine, viz. : four cases of pulmonary tuberculosis; two cases of skin diseases, and three of severe anemia, two of malarial, one of rheumatic origin.

*Four Cases of Tuberculosis.*—All with cavities of recent date. No cachexia. Three in private practice have taken by the mouth ten centigrams of sodium cacodylate, per day. No other drug. Hygienic and dietetic treatment, exclusively. They all not only gained in flesh which is by itself alone no index of improvement, but in flesh and in muscular force and general tone. Their appetite was increased, while at the time they were taking creosote and alcohol, it was dull.

Case of tuberculosis number four, in my ward in the Charity Hospital, has been taking hypodermically five centigrams daily for twenty days and ten centigrams by the mouth for over two months. He left the hospital going back to his home in Tennessee, with no fever, a better appetite. He had gained eight

pounds. Now you know that in city hospitals these cases never fare so well.

In these four cases there were no ill effects, no garlic odor in the breath, sweat or urine.

*Two Cases of Skin Disease.*—A case of chronic urticaria has taken twenty-five centigrams of sodium cacodylate by the rectum and ten centigrams by the mouth, for two months, with decidedly good results; eruptions appearing at longer intervals and lasting but a few hours hardly and itching almost nil, notwithstanding the fact that his mode of life was not changed. He had the same multitude of cares, the same worry, the same physical fatigue, all of which tells in chronic urticaria. No ill effects.

A case of intractable dry eczema of old standing, on both knees, in an elderly gentleman. He has taken from ten to twenty-five centigrams of sodium cacodylate daily, increasing gradually for over three months. Splendid result. No ill effects.

*Three Cases of severe Anemia* in growing children, of nervous temperament, one having chorea. Splendid result. No ill effects. My other cases yet under observation have given, so far, encouraging results. In five only I have noticed no apparent good effects. In eight I have noticed the garlic odor which is the chief objection to the use of sodium cacodylate.

I have never, however, had any toxic effect and no irritative effect as when using Fowler's solution. No puffiness of the lower eyelids as when pushing sodium arsenate.

I could continue the course of arsenic for ten days without having to interrupt the medication for toxic or irritative effects as wont to in employing Fowler's solution or sodium arsenate.

I was careful, I must say. I gave average doses. I gradually increased the dose and discontinued the drug at intervals of ten days, giving ten days rest between each course. This is a good plan in treating, with drugs, chronic cases. Those who doubt that there is any arsenic at all in sodium cacodylate because of the large doses given are referred to the 1900 student's edition of the *Practical Treatise of Materia Medica and Therapeutics*, by Shoemaker, pages 82 and 85, and also to the *Druggist's Circular and Chemical Gazette*, March 1901, page 47, in which a communication of Dr. William Murray to the *Lancet* is reported under the heading, "Cacodylate of Sodium, a Dangerous Agent." Many of the ill effects and accidents reported are due to the

fact that the sodium cacodylate used is not always C. P., and because the mode of administration is not proper.

It is now a settled matter that the best mode of administration is the hypodermic. No fermentative decomposition of the drug occurs as when given by the mouth or by the rectum, forming cacodyle oxide.

Next the manner of preparing the solution for hypodermic use is capital.

The following formula is the correct one:

Chemically pure cacodylic acid.....	5 grams.
Caustic soda or sodium carbonate.....	q. s. to saturate.
Distilled water.....	q. s. for 100 c. c.

This can be sterilized and remains, then, absolutely neutral

The wrong formula, which has given detestable results in otherwise well-meaning investigators, is the following:

Sodium cacodylate .....	6 grams 40.
Distilled water.....	q. s. for 100 c. c.

This does not keep, becomes yellow, and this is the sign of decomposition; upon moving the stopper, also, a strong odor of garlic is then evolved. In taking the precautions indicated here, I think we can handle arsenic rather safely under the form of sodium cacodylate, in quite undreamed of doses when employing the usual arsenic preparations.

My opinion is that cacodylic medication is worthy of your attention, gentlemen, and if you ever try it I would ask as a favor that you would please report to me the results obtained.

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#### A CASE OF MALIGNANT PUSTULE OF THE LIP,—RECOVERY.\*

BY T. S. DABNEY, M. D., NEW ORLEANS.

On November 26, 1898, I reported to this Society a case of anthrax that ended in death on the tenth day. To-night I have a case of anthrax to report that ended in recovery. Before giving you the brief outlines of this case, let me call your attention to the difficulties of making a diagnosis sufficiently early to save your patient's life. First of all let me remind you that the bacillus of anthrax was the first micro-organism discovered, known to be the real and only cause of an infective

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\* Read before the Orleans Parish Medical Society, June 8, 1901.



disease. The very fact of the bacillus anthracis being the longest as well as one of the best known of all bacilli, would lead us to infer that the microscope would clear up the diagnosis *ab initio*; but such, alas, is not the case; for the bacilli are disseminated chiefly through the system, not by way of the blood current, but through the lymphatic channels of the glands. These physiologic barriers must first be surmounted before the bacilli gain entrance to the general circulation and by means of it be carried to all parts of the body, and when this occurs the patient's condition is well nigh hopeless. Virchow has shown that in external anthrax as seen in man, 84 per cent. occur on the exposed parts of the body, head, face, neck and forearms. A case seen in the beginning might well be mistaken for a flea-bite—a tiny red spot, accompanied by much itching, being the only thing seen.

During this prodromal stage the patient presents no marked symptoms of any grave disorder. Indeed most patients usually attribute the burning pain and swelling to the scratching caused by the itching. This condition may continue for a few hours only or it may last two or three days, when the local symptoms suddenly markedly change. A papule now takes the place of the red spot. This rapidly grows in height and circumference and soon shows a black spot at its apex. The itching and burning become intolerable and a vesicle takes the place of the papule. This vesicle rests on an elevated and indurated base and contains a bluish black serum.

After rupture by scratching or otherwise a dark red base is visible, which is quickly covered by a brown or blackish crust, which soon becomes gangrenous in the centre. If left unchecked this crust tends to constantly enlarge. Before this latter stage, however, the patient usually has rigors, pyrexia, intense headache, nausea, anorexia, insomnia and all the symptoms of a general toxemia. Gradually a doughy or boggy infiltration supervenes. The patient becomes apathetic, the heart's action becomes rapid and weak and the patient presents every appearance of collapse. The lymph channels can be detected as red lines of induration, the glands become enlarged and the veins often look like blackish channels and are not infrequently the seat of thrombi. The treatment of this disease depends much upon the time when the diagnosis is made. In no disease is a

surgeon's skill more apt to be crowned with success, provided complete excision of the diseased part be made *before* the disease becomes a general infection.

But after the disease has entered the general circulation a surgeon, unless he be possessed of rare judgment, is more dangerous than the disease itself. Unfortunately no antitoxin is as yet available, so the physician has to content himself with remedies that promise good results.

Without going into details of treatment I will merely mention that Koch prefers bichloride of mercury; Vaughn, McIntosh and G. W. Perkins claim good results from nucleinic acid (*Boston Med. and Surg. Journal*, June 18, 1896). Ipecac locally and internally in 5-grain doses every four hours is recommended by Market (*Med. Chronicle*, Aug., 1891). Carbolic acid is highly commended by many writers.

Scharnowski reports 28 cases treated by hypodermics of carbolic acid in 0.7 gram doses daily without any toxic effects. All recovered. It has been claimed by some that patients suffering from anthrax have an increased tolerance of carbolic acid.

Having weighed carefully the evidence as to the merits of the various treatments outlined above, I decided that carbolic acid, both from its local and systemic action, offered the best hope of recovery to my patient, and for that reason I selected it in my case.

The case is as follows: About one year ago Mrs. W. White, about forty years of age and of good physique, presented herself at my office complaining of having been kept awake the previous night on account of the burning and itching of a little bite she had received the day before on her upper lip. She also complained of a terrific headache. Upon inspection a very small red spot with slightly inflamed edges was detected slightly to the left of the nose on the upper lip. No acceleration of pulse, no elevation of temperature. Patient stoutly denied being sick and only wanted a salve. I at once suspected malignant pustule, hence I questioned her very closely as to whether she had been handling hides, horsehair, horses or cows. I also asked her husband's business. He was a carpenter. The examination failed to bring to light any probable source of infection, yet on account of her residence near the river in a part of the city occupied exclusively by laborers of all kinds, I still clung to my diagnosis and insisted upon giving

her a hypodermic of carbolic acid. which she emphatically declined. Reluctantly I gave her a salve, containing 10 minims of carbolic acid to an ounce of lanolin, and urged her to send for me as soon as she felt any bad symptoms. I warned her of the danger of delay.

Next morning I was called hurriedly to see her. When I reached the house I found her in bed in a dull, apathetic condition, with temperature 103.5, pulse 120, and almost in a state of collapse. The lip was enormously swollen, and the left eye closed by edema. She had not closed her eyes the previous night. The husband said she had walked the floor all night and acted like a crazy person. Without asking any questions I filled my syringe with carbolic acid, and, after plunging the needle in the centre, now a gangrenous, mushy mass, and injecting slowly as I went ten minims, I withdrew it and encircled the entire pustule, injecting two drops each in five different portions of the indurated base.

So hard was this mass that I had great difficulty in forcing the acid in the tissues.

Upon my evening call I found patient's condition somewhat improved. I swabbed out cavity with pure carbolic acid. This I continued for several days, until entire mass had sloughed out, leaving a healthy granulating wound, which healed very quickly, leaving but little disfigurement. On the second morning after the injection all pyrexia, cephalalgia, nausea, stupor, insomnia and anorexia had disappeared, and my patient considered herself well, barring a sore lip.

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#### A CASE OF ABDOMINAL PREGNANCY.\*

BY L. G. STIRLING, OF BATON ROUGE, LA.

Elizabeth Baker, colored, first seen by me on the morning of Saturday, October 6, 1900.

The history of the case, obtained from herself and the two physicians who had previously treated her, was as follows:

She had one child six years before; had been in rather delicate health ever since. The first week in February she missed her menstruation, and commenced feeling pains in lower

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\* Read before the Louisiana State Medical Society, New Orleans, April, 1901.

abdomen with nausea. About March 1, she consulted a physician who gave her some medicine without benefit. Two weeks later the pains were more severe, and there was a thin, bloody discharge from uterus. At this time the uterus was curetted and irrigated.

The doctor did not see the case again for three weeks, when he discovered a tumor about the size of an orange low down in the abdomen on right side. He proposed an operation, which was declined, and she then went under the care of Dr. T. A. Walker, a colored physician, who made a diagnosis of pregnancy, and she remained under his observation, supposing herself normally pregnant, though suffering much pain all the time.

About the middle of September she ceased to feel life and commenced having fever. On October 4, she had violent intermittent pains and profuse hemorrhage from uterus. At this time Dr. Walker suspected something wrong, and intimated to me that it was probably an extra uterine pregnancy.

When first seen by me her condition was as follows:

Body emaciated to last degree; extremities cold.

Pulse 140 and intermittent; temperature 101 deg.; no placental or fetal sounds.

I did not think she would stand an examination, so did not attempt to make a diagnosis. Ordered elix. Duero, as much to be given as the stomach would stand.

Next seen by me on Monday morning; had been suffering great pain all night; was supposed by the family to be in labor. I found her general condition much improved, and made a careful examination. The cervix felt exactly like the cervix of a pregnant womb at term, but I soon determined that the uterine cavity was empty, and advised bringing her to town—six miles—which was done Tuesday evening. Drs. Morgan and Allen saw the case with me, and confirmed the diagnosis of abdominal pregnancy. We operated on her next day, at noon, incised the abdomen from umbilicus to near symphysis pubis. Placenta found attached to abdominal wall in line of incision. Cut through and found fully matured dead child of about seven pounds weight, back presenting and head in left hypochondrium, floating in about two gallons of sero pus. Considerable hemorrhages from small part of placenta, which was accidentally detached at lower angle of wound, no bleeding from cut surface

of placenta. The cavity was hastily emptied with exception of placenta, and packed by putting in a piece of iodoform gauze, like a bag, and filling it tightly with absorbent cotton, by which means we could press the detached portion of placenta tightly to abdominal wall.

We could not take time to examine condition of the organs, though it was apparent that the intestines were thoroughly walled off. Patient put to bed in good condition; pulse made no worse by the operation.

Friday morning temperature normal, and pulse improved in force. Saturday and Sunday continues to improve. Wound dressed at noon on Sunday. No evidence of placenta loosening. Pulse 108.

Monday, morning temperature,  $99\frac{1}{2}$  deg.; pulse, 116; evening temperature, 100 deg.; pulse, 120. Complains of some pain.

Tuesday, morning temperature, 101 deg.; pulse, 132. Wound dressed and placenta found sloughing, could not be detached.

Wednesday, not feeling well. Pulse, 132; temperature,  $100\frac{2}{5}$  deg. Considerable sloughing and fetor, used solution of potassium permanganate, to wash out cavity.

Thursday had a bad night, much pain. Pulse, 144, and intermittent; temperature,  $100\frac{1}{5}$ . Sloughing and some signs of detaching.

Friday has had a better night. Morning pulse, 132; temperature,  $100\frac{4}{5}$ ; considerable sloughing; evening pulse, 136; temperature,  $101\frac{1}{5}$ .

Saturday, pulse and temperature same. Slight effort at removing placenta, caused considerable hemorrhage.

Sunday, 21st, condition about same, prescribed quinin, salol and iron.

Monday, about the same. Tuesday, feels better, placenta sloughing out in large masses. Morning temperature,  $99\frac{2}{5}$  deg.; pulse, 120; evening temperature, 102 deg.

Wednesday morning, feels very well. Pulse, 132; temperature,  $99\frac{2}{5}$ . Not much placenta left.

Thursday, just two weeks after the operation, cavity cleaned out.

Saturday morning, temperature normal again.

She made a fine recovery, wound closing entirely in six weeks.

A question that is not settled in our minds, is, if this was a tubal pregnancy, when did the rupture occur?

# N. O. Medical and Surgical Journal.

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## Editorial Department.

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CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

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### OPPORTUNITY IN THE ART OF MEDICINE.

Mr. Rockefeller's gift for the foundation of an Institute for Medical Research might with reason be held as the laying of the corner stone of Academic Medicine in the United States.

The paternal governments of Europe are ever ready to bestow honorariums or to foster the scientific effort of any individual or class when such effort is in anywise meritorious. In this country public institutions are too full of commercialism and politics to recognize any extraneous endeavor with commensurate approval or encouragement.

It is all the more estimable, then, that the philanthropy of one man should have taken so long a step into the future in having organized a beginning of the broader interpretation of the field of medicine as an art. In the vast army of licensed practitioners of medicine, there are too few who are either able from their wealth, or willing on account of the everyday competition to step aside and plan the future campaign against disease. Here and there the salaried student of medicine in some chair at a medical college, or the paid official of some metropolitan community health board, may have the leisure and the consequent desire to further scientific investigation in medicine, but these are very few among the multitude.

The possibilities of medical research are greater than might be at first estimated, and they mean much to future generations of medical men. The lack of opportunity hitherto has been a powerful deterrent to the better educated young men of to-day seeking a professional career. A careful survey of the probabilities in a medical practice has indicated to the college grad-

uate that after a period of years he might acquire a competency at the expense of both vitality and time, and that only in the few larger cities could he hope at best to attain the distinctions and pleasures of a successful professional life, even then to have these discounted by lack of opportunity, jealousy and a competition fierce and swift.

Medicine has gradually evolved a place in the history of progress and civilization. It has risen from the commonplace to a plane of dignity. The wear and tear of time, however, expressed in the attacks upon its integrity and evidenced in the parasites upon it have only tended to make the force of the evolution greater. The very possibility of the practices of charlatanism and its fledglings have only stimulated the more elevated standard among those who wish to raise the profession of medical practice from a trade to an art. The acknowledgment of this in the intelligence of even one member of the lay public shows that medical research is a necessity and this is moreover a potent argument of attack against the practice of that same public in supporting the ignorance which is only too common in the present medical profession and flagrantly evident in those too base to be qualified even with a license to practice. Other institutions like the one we discuss will arise to further the higher ideals. It is a far finer stimulant to the honest minded worker to feel that ideals are being created for minds like his than for him to grope and fall before he may rise above the many who are satisfied with the dross of pecuniary reward, as if this was the ultimate.

With opportunities afforded the higher medical education must inevitably arrive, and with a vanguard of higher intelligence the medical education of the future must carry with a necessitous restriction as to the degree of mentality required, a condition which to-day seems to have small part in the requirements for a doctor of medicine to be legally qualified.

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#### LEPROSY IN THE UNITED STATES.

Every now and then the medical and lay press grow transiently interested in the subject of leprosy in the United States. The late investigations of the Marine Hospital Service have in part been made public and this has again elicited comment from the press.

It is not time, however, to decide upon the action to be taken with regard to the work of the Marine Hospital Service. So far this work has not demonstrated the expected prevalence of the disease. In the statements as currently reported the total of cases is only 277, with a larger number in Louisiana than in other States.

The method of acquiring knowledge regarding cases of leprosy is open to some discussion and comment. While health authorities are supposedly in touch with such questions, it often happens that, unless forced upon them, the recognition and disposition of cases of exceptional contagious diseases are not commonly accepted as a part of their duty.

We have already called attention to the fact that many cases of leprosy escape observation because of their milder character or because the occasional occurrence of the disease has created an ignorance of the diagnosis.

Even where leprosy occurs, especially in Louisiana, where it is now endemic among natives of French, Spanish and German descent (rarely among Italians, although so stated in current reports) and spreading among those sometime resident in the State, the reports of existing leprosy have hitherto been made by a few observers only, these especially interested in the study of the disease. The balance of the medical profession in leper centers are either indifferent or have reason for concealing the cases which occur in their practice.

It is interesting, however, to note that the establishment of one or more national leper hospitals is mooted and it is quite certain that sooner or later this must be done. The history of the experiences of the Louisiana Leper Home and the difficulties in its administration speak for a higher authority in control. A federal jurisdiction with adequate funds for maintenance would insure a proper home for lepers under better conditions than any number of State institutions, existing under favor of political indulgence and conducted with no system of thoroughness in method of handling the disease from the standpoint of either prophylaxis or therapeutic care.

The subject has not yet matured nor can it until the investigation of leprosy has been more thorough.

The agitation of a popular interest, however, can only help the cause, and by disseminating the knowledge of the fact that



the National Government is on the way to provide some care of this disease, the work of investigation will be made easier.

We do not believe that a compulsory isolation will be obtained, but voluntary entrance into a proper institution like the one projected will be certain when those afflicted are made to know that the chance of recovery is offered at the same time that the comforts and safety of a decent asylum are assured.

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## Society Proceedings.

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### ORLEANS PARISH MEDICAL SOCIETY.

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MEETING OF JUNE 8, 1901.

DR. LARUE read a paper on "*A Household Epidemic of Parotitis; Recurrent Epistaxis Complicating These Cases*":

I will relate to you this evening the history of six cases of mumps or parotitis, a disease with which you are all familiar.

Now the little household epidemic of parotitis which I was called upon to attend presented both very mild and very severe types. Fortunately they all recovered as is generally the case in this disease. On April 1, I was summoned to see a young boy, aged 11 years, who had had a severe chill, followed by intense headache and fever, the temperature at one time reached 103 degrees.

The left parotid gland was found swollen and painful at my first visit; the right became enlarged the next day. He was ill altogether about eight or ten days. About four days after the initial symptoms he had two profuse attacks of epistaxis, which, however, did not interfere with a rapid convalescence. Whenever this little patient is stricken with any illness he is subject to nasal hemorrhage, but not otherwise. On April 21, I saw the second case, a little boy aged 4 years, who presented the very mild and ephemeral type. The illness did not last more than twenty-four to forty-eight hours, consisting in slight malaise,

headache and fever with an almost painless puffiness of both parotid regions. This little patient nevertheless kept on eating as much and as well as usual. No epistaxis and not at all subject to it.

On April 23 my third case developed in a young girl aged 14 years, with soreness about the neck and slight fever.

April 25, she was seized with a chill, nausea and vomiting; both parotids were very much swollen, also the sub-maxillary regions, producing quite a grotesque appearance. The temperature then reached 104.4 degrees.

Between April 27 and 29, she had seven attacks of epistaxis, followed by repeated nausea which continued for several days. Her convalescence was rapid.

The patient was well May 2. She was several years ago subject to occasional nosebleed.

On April 28, another boy, aged 3 years, became suddenly ill with general malaise and fever, the temperature reaching 103 deg.; only the left parotid region was swollen, but the pain was so severe that the little patient refused all nourishment. His illness lasted not more than 24 to 36 hours. No epistaxis, to which he is not subject.

On May 7, a younger sister, aged 7 years, had a slight fever with an apparent but indolent swelling of the parotids. Her case proved to be a very mild ambulant case, and in less than a week all symptoms had disappeared. Has never been subject to epistaxis.

On May 9 the only other child in the family and house, a boy aged 9 years, had general malaise, fever 101 deg., and pain in the left parotid region. May 10, nausea, vomiting, temperature 102.4 deg., both parotids involved; May 11, gastric symptoms persist, cephalalgia, temperature 104 deg. From 3:30 P. M. May 11 to 6 P. M. May 12 this little patient had ten hemorrhages from the nose, some very copious. After the tenth hemorrhage the temperature rose to 105 deg., with marked delirium, pulse 136. Eleventh and last hemorrhage occurred at 4 A. M. May 13, with a temperature of 104 deg. May 14, temperature 101 deg., pulse 100; May 15, temperature 99 $\frac{2}{3}$ , pulse 80. May 16, pulse and temperature normal; patient naturally very anemic; ordered rest in bed. May 19, up for first time and a few days after was running about.

The treatment in some of the above cases was nil; in the others, especially the last one enumerated, it consisted in the symptomatic administration of phenacetin, quinin and a purgative, and sponge baths with water at the temperature of the room. For the epistaxis hot water applied to the nose from a basin, powdered tannin snuffed up, forcible compression of the nares by relatives were all resorted to. As for the local treatment of mumps, camphorated salve was sometimes applied.

REMARKS.—It is the first time I have witnessed as a practitioner a household epidemic of mumps. Some twenty years ago I was a victim of the mumps whilst at college in Lancashire county, England. There then raged quite an epidemic, and I vividly remember how hideous we all looked, with our faces all painted with three thicknesses of tincture of iodine, and a more or less large compress of absorbent cotton. I recollect how the iodine burnt and then itched, but as to its efficacy I can not answer. One sure thing is that I will not prescribe it as a topic agent in this disease, especially in children or in adult patients with delicate skin.

Pardon this retrospective personal history, but it leads me to say that in mumps, topics, not even the much vaunted belladonna ointment, seldom, if ever, do good in checking the evolution of the disease. Some patients will find warm applications agreeable, such as heated flannel with or without the addition of sweet oil.

As to the general treatment, nothing in medicine can be done but to advise a purgative and a light diet, and the avoidance of cold air.

Our attention must be directed to the detection of the metastatic complication which sometimes appears and which we could properly call, I think, for etiologic reasons, parotid orchitis. This complication has never, to my knowledge, been met with in young children.

This orchitis, which is generally unilateral, has an unfortunate tendency to atrophy of the testicle. Laveran cites that 33 per cent. of the soldiers treated for mumps in a certain epidemic became affected with orchitis; in two-thirds of these cases testicular atrophy followed. I have had the opportunity of treating several cases of mumps, but never accompanied by orchitis, ovaritis, mammitis or any other complication.

The disease sometimes manifests itself solely in the testicle; such cases occur during a typical epidemic.

As for epistaxis as a complication of mumps, I must admit this has been my first experience. I am anxious to hear the experience of my colleagues with complications of mumps. No examination of the urine was made; possibly albumin may have been present in one or two of my cases. The amount of urine voided, however, was normal. Cases of parotitis, with nephritis and anasarca have been observed, but like all complicated cases, mostly in epidemic times.

DISCUSSION—DR. DUPAQUIER had never seen epistaxis complicating parotitis; had seen three or four cases of parotitis complicated with orchitis and ovaritis. Had seen a lymphadenitis of the two glands over the parotid; suppuration, temperature 104. Sent to a surgeon for treatment; glands ruptured. Case got well.

DR. KOHNKE related a case of parotitis occurring in a patient whose brother had orchitis which was not venereal. The only explanation was that the patient with orchitis had an unnoticed parotitis.

DR. LARUE, in closing, stated that the differentiation of orchitis produced by mumps and that from venereal disease was that in venereal disease the epididymis was first to take on the inflammation. Recommended 50 to 75 per cent. solution of peroxide applied to the nose in epistaxis; also adrenalin, 1 to 10,000 solution. Was afraid of absorption of antipyrin, especially in young children.

DR. DUPAQUIER cautioned about the use of pure solution of suprarenal extract, as it caused an intense blanching of the nasal mucosa.

DR. DABNEY reported a "*Case of Malignant Pustule of the Upper Lip.*" (See page 84, this JOURNAL.)

DR. LARUE said that from the rapid recovery of the case he was doubtful as to its being anthrax. In diabetes complicated with carbuncles he would object to injecting carbolic acid pure. Saw a case of carbuncle of the upper lip—great induration—mostly to one side; but the whole lip became swollen. Made a crucial incision after the use of cocain. Cocain did not act well owing to the great induration. Used a hot spray of 10 per cent. solution of cocain and one per cent. solution of carbolic acid.

Patient had no sugar in urine. He also asked Dr. Dabney if a urinary examination was made in his case.

DR. LAZARD spoke of a report of 10 cases (*London Lancet*, 1900), treated by excision and local application of ipecac and internal administration of the drug in 5 grain doses every hour. All cases recovered. He asked Dr. Dabney if a bacteriologic examination was made in the case.

DR. DABNEY said that his patient did not complain of the injection of the pure carbolic acid. He also injected brandy in the arm without complaint of the patient. A carbuncle he considered to be a pustule with exudation of pus. In anthrax there was an exudation of a thin serum, sometimes it was blackish. The hardened base, rapid development and systemic reaction pointed to the diagnosis. No bacteriologic or urinary examination was made.

DR. ROUSSEL reported "*A Case of Obstinate Constipation Treated with Thyroid Extract with Cure.*" The urticaria produced by the constipation was also relieved.

DR. LARUE reported "*A Case of Extensive Laceration of the Extensor Surface of Forearm.*" Case was grafted with the Lusk grafts, and what the doctor called "autografts." The Lusk grafts were taken seven months previously from a case of abscess of the liver by means of a fly blister applied by another physician. The grafts were prepared with formalin and bichloride by Dr. Genella. The grafts taken from the boy were successful, but the others failed.

DR. ASHER believed the formalin was the cause of the modified Lusk grafts.

DR. GENELLA thought that Lusk made it a special point that one could boil the grafts or subject them to anything else without hurting them ultimately, as the grafts only served as a frame-work for the growth of new cells.

DR. DUPAQUIER reported "*A Case of Intubation in an Infant of Nine Months.*" Called attention to the indications of the localization of membrane as follows:

1. Dyspnea meant subglottic.
2. If hoarseness it was glottic.
3. If cough it was supra-glottic.

DR. DUPAQUIER also reported "*A Case of Septicemia in Diphtheria*" in which 9000 units of diphtheria antitoxin were used.

## MEETING OF JUNE 22, 1901.

As the regular program of the evening was unavoidably omitted, some cases were reported.

Dr. DUPUY spoke of the case of intubation reported by Dr. Dupaquier at the last meeting, and emphasized the fact that a tube for a two-year-old child had to be used on the patient, who was only nine months old. The result was absolutely successful.

Dr. LEBEUF reported a case of nausea, tender breasts and darkened areolæ in a married man. These symptoms seemed to be sympathetic with similar ones in the wife, who was in the third month of pregnancy.

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## Abstracts, Extracts and Miscellany.

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### Department of General Surgery.

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In charge of DR. F. W. PARHAM, assisted by DR. F. LARUE, New Orleans.

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A SUGGESTION INTENDED TO DO AWAY WITH SOME OF THE OBJECTIONS TO ETHER AS AN ANESTHETIC.—In our last issue we pointed out some observations, which we believe should materially assist the anesthetist in foreseeing and preventing the overdosage of a patient with chloroform, thereby increasing the safety and extending the legitimate field of this admirable narcotic agent. We take now advantage of an article by Becker, of Hildesheim, published in *Centr. f. Chir.*, June 1, 1901, to give a hint for assisting in making ether narcosis safer and more comfortable and altogether satisfactory.

The disagreeable effect, so often encountered and so difficult to prevent or overcome, is bronchorrhea, which often, indeed, actually puts the patient's life in jeopardy, to say nothing of the after-dangers following in its train. It is doubtful whether the lung complications sometimes ascribed to ether can always

with justice be attributed to the ether itself; certain it is that sometimes, and perhaps more often than to the ether *per se* these complications must be placed to the account of the resulting bronchorrhea. While it is true, that although these troubles must at least be due to the ether, still if some way could be found to prevent the occurrence of the bronchorrhea one of the greatest objections to ether would be done away with. This abundant secretion of mucus during ether narcosis interferes mechanically with respiration, and not only this, but the aspiration of this mucus, or the irritation of certain decomposition products resulting from the action of air and light on the ether, add materially to the dangers of the ether irritation itself. The suggestion of Reinhard to inject atropin subcutaneously an hour before the narcosis can not be regarded as entirely devoid of danger. Some simpler and safer method must be sought. Some agent which will check the secretion and yet not itself add an element of danger to the narcosis was the desideratum and this Becker thinks he has found in the volatile essential oils belonging especially to the oxygen-free group, the terpenes. The pure oil of turpentine\* and the oil of *pinus pumilio* or, as the author calls it, *Latschenöl*,† are the two oils he has found of special service.

Either of these oils may be used but Becker has found oil of *pinus pumilio* best adapted for inhalation because it has a more agreeable odor. He adds it to the best anesthetic ether in the proportion of 1. O. g. (about 20 drops) to 200 g. (about 6½ ounces). Larger quantities may be added without harm but not with advantage. The objection has been urged against these substances that they render the ether less appropriate for anesthesia, but Becker thinks that the absence of the oxygen molecule renders them peculiarly advantageous by reason of their greedy taking up of oxygen.

By this method Becker has narcotized with ether 500 times and is quite satisfied with the results. Even in cases of existing

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\*The oil of turpentine as found in commerce always contains oxygen, but when perfectly pure consists exclusively of carbon and hydrogen, and is composed of one or more terpenes; this rectified oil of turpentine is the kind to be employed with ether, in which it is freely soluble.

†*Latschenöl* or *oleum pini pumilionis* is a very fragrant oil commonly known as Hungarian Balsam. When pure it is said to be a very fragrant, volatile oil, especially adapted for the purposes of inhalation." It is "the most potent agent in the so-called "*pine-cure*" in the German spas."—(U. S. Dispensatory.)

bronchitis, pulmonary tuberculosis, empyema and emphysema in old people he has failed to see the condition made worse.

If these statements be actual facts then Latschenöl and rectified oil of turpentine will merit a fair trial at the hands of all surgeons who believe ether the best anesthetic.

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## Department of Obstetrics and Gynecology.

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In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER,  
New Orleans.

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THE DANGERS AND DIAGNOSIS OF BREECH PRESENTATION AND ITS TREATMENT BY EXTERNAL VERSION TOWARDS THE END OF PREGNANCY.—The danger, both immediate and remote, of breech presentation are not generally supposed to be so great as Herbert Spencer has related in the *British Medical Journal* (May 18, 1901), and his article is, therefore, quite valuable and opportune.

Hegar showed that 35 per cent. of the children were born dead, and that an additional 5 per cent. died on the first day.

Ramsbotham, Hecker and Pinard give a mortality rate ranging from 18.7 to 22 per cent. In ten thousand labors under Spencer's supervision two hundred and seventy-five presented by breech or lower limbs and one-fourth were born dead. The mortality of the male children was 30.82, the females 18.3 per cent. It is well to consider the causes of high rate of death in children born by the lower extremities. The chief cause is the low insertion of the cord relatively to the cervix, which permits pressure while the head is passing through the pelvis. This leads to attempts at respiration by which the liquor amnii and vernix caseosa may be sucked into the lungs with fatal effects. But more important than these factors is the injury to which the child's body is subjected by reason that the small buttock takes the brunt of the labor instead of the harder and larger head. The consequence is that the abdominal and thoracic viscera are unduly pressed upon and hemorrhage into



and even ruptures of important organs may take place, injuries so severe that they not unfrequently cause death, or if it survives leave behind life-long ill effects. All the viscera are liable to be injured by the pressure to which their delicate tissues are subjected during birth, and while cerebral hemorrhage is more frequently found in children delivered by forceps than those born by the breech, it is met with more frequently in the latter than in those born naturally by the head. The other viscera are more frequently injured in pelvic presentations.

The thoracic and abdominal organs most frequently injured are the lungs, liver, suprarenal body and testis. Lung injuries frequently cause death by pneumonia after a few days. The largest hematoma of the liver Spencer has met with occurred in a child born by the breech. The testis is an organ especially liable to injury during birth by the breech, both on account of obstruction of the spermatic veins, by the pressure in the parturient canal, and the hands of the medical attendant.

In 26 cases of breech presentation, necropsies showed in 8 cases that hemorrhage had taken place in the body of the testis, compressing and apparently disorganizing the tubules, so that it seemed impossible for the organ to have recovered its normal structure had the child survived. This suggests the important point of handling the genitals as gently and as little as possible during delivery. Spencer believes that the orchitis he has frequently observed and which may be a cause of sterility in the adult is due to this. Sometimes an hemocele is formed either in the tunica vaginalis, or cord. When it occurs into the processus vaginalis while the testis is in the abdomen it may prevent the testis from descending. The uterus sometimes has hemorrhage into the mucous membrane of the body in cases of difficult breech delivery. Spencer has published two observations of this kind and they explain the occurrence of some cases of so-called menstruation in young infants. Hemorrhages into muscles are very frequent.

The most frequent sites are the muscles of the leg, buttocks, the erector spinae, pectoralis and the superficial and deep neck muscles. Of these muscular injuries the most interesting is laceration of and hemorrhage into the sterno-cleido-mastoid muscle, which gives rise to the common so-called "sterno-mastoid" tumor. Fortunately, the injury usually disappears in the course

of a few months, though it sometimes gives rise to permanent wry-neck. Another injury, which, though not fatal, is very serious, is the so-called obstetric palsy from damage to the brachial plexus, during violent traction on the shoulders. Thirty cases have been recently published as occurring in the practice of one midwife. The bones and joints of the infant also suffer. The ligaments of the knee and hip-joint may be strained or torn by traction, and other bones may be broken. Even the pelvic bones may be fractured if the barbarous practice of applying forceps to the breech be adopted. The frequency of fractures of the clavicle is spoken of, and the liability to overlook such a condition is impressed upon the reader. These remarks are particularly valuable, as they are mostly the conclusions of autopsies which Spencer has made, and the work is unusually complete. He dwells at length upon the diagnosis and treatment of breech presentations, advising diagnosis and treatment by external version, but at  $7\frac{1}{2}$  to  $8\frac{1}{2}$  months of pregnancy. The tendency of the malpresentation to recur after being rectified can usually be prevented by an ordinary abdominal belt. Multiple pregnancy is a contraindication to version for breech presentation.

RECENT STATISTICS ON THE PRIMARY AND ULTIMATE RESULTS OF HYSTERECTOMY FOR CANCER OF THE UTERUS.—Of the various contributions to literature on the subject of the radical treatment of cancer of the uterus, none now interest the surgeon more than those dealing with the ultimate results. The profession feels that the limit of operative procedure has about been reached in some of the later proposed abdominal operations and will now wait with interest the collection of the final history of cases subjected to these methods. Dr. John G. Clark (*Univ. Penn. Med. Bulletin*, May, 1901) contributes an extremely interesting article on this subject, which deals with the work of the most eminent surgeons of the world, and the following statements are gleaned from it:

From the statistics now collected Clark is forced to confess that operative treatment has not yielded as satisfactory results as had been anticipated. The latest statistic studies are those of Cullen and Winter. Cullen reports sixty-one cases of squamous cell carcinoma of the cervix in which further histories were

closely followed: In four cases, after starting operation it was abandoned, as it was impossible to remove it; nine died as direct result of the operation; thirty-one have died or given unmistakable evidence of a return of growth; thus out of sixty-one patients, there are thirteen living and well. He speaks further of the length of time since operation and the vast number that came too late for any operative measure. Winter's statistics are discussed at great length, but as the general trend is in line with Cullen's, it may be summed up in Clark's statement, viz., as a result of Winter's review of 308 cases, he reaches the conclusion that vaginal hysterectomy can not be considered a radical means of cure, and also that the indications for operation can not be further extended.

In discussing the various methods of operating, Clark also concludes that, if vaginal hysterectomy is the operation of election, the clamp method is to be preferred to the ligature method, first, when it is necessary to complete rapidly the operation, and, secondly, when it is difficult or impossible to place ligatures on account of the dense fixation of the uterus.

On the subject of wound inoculation during operation he states that inoculation and growth of cancerous tissue into fresh wounds may be accepted as an established fact; that this factor unquestionably plays a role in the local recurrences after cancer operations, and on account of the lack of statistics it is impossible to state the frequency of recurrences, but unquestionably a simple recurrence of the local growth is much more frequent than inoculation growths. Concerning metastases he states that in a considerable percentage of cases of cancer of the uterus regionary metastases of the pelvic lymph glands occurs early. Even in the incipient stages of cancer the glands may already be the seat of metastases. The discovery of metastases is frequently only made by microscopic examination. Infiltration of the broad ligament is not an evidence of cancerous involvement, for it may be due to an inflammatory exudate.

THE REPAIR OF LACERATED CERVICES DIRECTLY AFTER LABOR.  
—Among some clinical memoranda published in the *American Journal of Obstetrics*, B. C. Hirst reports a case of immediate suture of a torn cervix and discusses the propriety of such a procedure. Lusk advocated primary repair of lacerated cer-

vices, but Hirst doubted the advice when he first read it. In order to test it, he conducted a series of operations upon lacerated cervixes at various stages after labor and has reached the conclusion that the primary operation is *not* satisfactory. This result might be expected in view of the conditions. The cervix after labor is enormously enlarged and edematous, and the stitches after a few days hang like ear-rings. It is not surprising to find a considerable proportion of primary repairs turning out unsatisfactorily. After two weeks there is the same certainty of success that there is in secondary operations. Aside from the advantage of waiting, if an operation is necessary, one finds most excellent spontaneous repairs occasionally, even in the most extensive injuries. In Hirst's judgment these operations should be postponed for at least four days; better on account of the lochial discharges, for nine days or two weeks. Then if the laceration is bad it should be repaired. The woman then recovers from the repair of the injury and childbirth at the same time.

In case the laceration of the cervix was accompanied by laceration of perineum we might hesitate as to the best course. Hirst has usually let the perineum go, when he has decided to operate upon the cervix, for two weeks, and operated upon both together. In a private case where the element of time was not so important, he might not operate for four weeks. He often thinks it is an advantage not to sew the perineum immediately and that better work is done and more secure and permanent repair is obtained by delaying the operation.

In the course of the discussion of this paper W. R. Wilson stated that he entertained some doubt as to the result of stitching the cervix as early as the fourth day. The chance of local infection of the wound appeared to be a disadvantage. Involution at this period is always an unknown quantity; the placental site may be the site of unorganized or septic thrombi, which by reason of the traumatism of such operation, notably traction upon the cervix, may be dislodged, giving rise to a pyemic process.

Dr. Stricker Coles sutured after labor in the majority of cases, and if the result was not good, a second operation was done in two weeks.

Dr. Edward P. Davis' experience with immediate closure of the cervix had not been unfavorable.

He had not been able to trace infection to immediate closure of the cervix. He would prefer to close a badly torn cervix by uniting the greater portion of the torn tissue, not attempting a complete operation, and if union did not follow, it would be best to operate later. Regarding the choice of time for closure of the perineum and cervix, we must decide in accordance with the condition of each individual case. Involution should be well advanced and lactation well established. There is always the risk that the operation may disturb lactation in the sensitive patient.

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## Department of General Medicine.

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In charge of DR. E. M. DUPAQUIER, New Orleans.

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CAUSATION OF TERTIARY SYPHILIS (Clinic of Professor Fournier, Paris). The etiology, as it were, of tertiary syphilis is yet undetermined. It is difficult, indeed, to say why one case of syphilis should progress right along into the tertiary stage and why another should proceed beyond the earlier stages. There are, however, a number of conditions favoring the production of tertiary syphilis, viz.: 1st. The virulent nature of the infecting material so that cases are, as it were, from their very origin either benign or malignant, and, for practical purposes, it is well to remember that malignancy is in most cases not manifested during the earlier stages, for 91 out of 100 cases of tertiary syphilis were mild in the beginning. 2d. The patient's age, condition of health, his inherited tendencies, intoxications, depressing influences, traumas, falls, injury from burns, all sorts of wounds including wound from surgical operation are also potent factors. Syphilis, indeed, is remarkably serious and grave, as a rule, in cases of anemia, cachexia, scrofula, tuberculosis, alcoholism, malaria, want of proper food, neglected hygiene, physical and intellectual overwork, venereal abuses, worry over financial risks, excitement of gambling, lesions of bones from fractures and dislocations, of testicles, of liver in habitual drinking, of legs from ulcerated varicose veins, of tongue from use of tobacco, etc.—(*Journal de Médecine et de Chirurgie*, April 10, 1901.)

DIAGNOSIS AND TREATMENT OF INTESTINAL PERFORATION IN TYPHOID FEVER.—Diagnosis is sometimes easy, often difficult, but rarely impossible. It ought to be made early. With this end in view, it is well to remember, in the first place, that peritonitis in such cases, owing to the adynamic condition of the patient, manifests itself but faintly; it is merely outlined. Seldom can we expect to find the complete set of symptoms together. In most cases of perforating peritonitis, only a few and at times only one of the usual symptoms are present; but, in the latter case, it suffices to express the condition clearly enough. Considered in point of importance, the following will lead us, viz.: Pain, pulse, temperature, facies, tympanites, decreased hepatic dullness, muscular defence, vesical disturbances, constipation, chills, vomiting, hydropneumatic bruit.

*Pain.*—Almost always present. Varies in degree; at times severe, causing syncope; at times as light as a simple colic.

*Pulse.*—Frequent, weak, gaseous.

*Temperature.*—Hypothermia more frequent.

*Hypothermia* and no change at all, at times.

*Facies.*—Precious symptom for attendant when familiar with daily appearance of case. This sudden change, associated with but a slight pain and a moderately frequent pulse, is indicative of perforation.

*Tympanites.*—Almost always present.

*Hepatic dullness* is reduced in area; gas in cavity drives the liver above its normal inferior limits.

*Muscular defence.*—Contraction of muscles over seat of perforation, first; then it extends to all abdominal muscles.

*Vesical disturbances.*—Painful micturition, usually accompanied by arrest in movements of bowels.

*Chills.*—Not always present.

*Vomiting.*—Tardy.

*Hydropneumatic Bruitt.*—Levaschoff's sign, due to passage of gas through intestinal fistula. Mentioned here for the sake of completeness. Reported by no one else in literature.

Finally, if the service of an up-to-date pathologist be available, blood examination will prove a great help by eliciting special characteristics. (Keen, Finnez.)

Regarding treatment, medical treatment is useless. Surgical treatment by laparotomy, even though carried out in cases of

errors of diagnosis, has proven to be the very best. It is the only treatment the general practitioner when confronted by a case of perforation should recommend. Not only is prompt action required, but the selection of an up-to-date surgeon is capital.—DR. MANGER in *Journal de Médecine et de Chirurgie*, May 25, 1901.

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## Department of Therapeutics.

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In charge of DR. J. A. STORCK, New Orleans.

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THE TOXICOLOGY OF TELLURIUM COMPOUNDS AND THEIR THERAPEUTIC VALUE.—Dr. Wm. J. Gies (*Phil. Med. Jour.*) says: Passing to the action of tellurium salts on the human organism, it was early observed that they have a nauseating effect and cause vomiting; also that they impart a strong garlicky odor to the sweat and breath. The odor of the breath is especially persistent, to such a degree as to render seclusion often necessary. A case is on record of a student who accidentally swallowed a dose of tellurium, and for the remainder of the session had to sit apart from his fellow students. In another case the odor of the breath persisted for nearly one year. It is not even necessary to inject the drug, since merely touching it with the fingers will diffuse the odor through the body and impart it to the breath. The same result follows the inhalation of tellurium compounds. Severe constipation is another effect, frequently together with short periods of drowsiness and nausea.

These data acquire additional interest when compared with the old observation that certain preparations of bismuth also produce a fetid breath. Accordingly the presence of tellurium in commercial bismuth compounds was early suspected and finally demonstrated conclusively. The medicinal use of bismuth thus implies frequently the simultaneous action of tellurium. (Formerly this "bismuth breath" was supposed to be due to arsenical impurities in bismuth salts.)

The therapeutic value of tellurium compounds was first pointed out by Neuser. He observed that the night-sweats of

consumption were noticeably reduced after daily doses of  $\frac{1}{3}$  of a grain to 1 grain of potassium tellurate. In most cases  $\frac{1}{3}$  of a grain sufficed, though sometimes cumulative dosage was required. Beyond mild dyspeptic symptoms, such as eructations, coated tongues, poor appetite, no toxic effects followed. The appetite seemed to increase at first; a slight narcotic action was also observed. The characteristic garlicky odor quickly appeared in the breath, even after the smallest doses. On the disease itself (phthisis) no influence was exerted in the later stages. In the earlier period, however, increase of appetite and improved nutrition was noticed after the administration of one-sixth to one-third grain of potassium tellurate. The anhidrotic action appears in from fifteen minutes to one hour after the exhibition of the drug, and persists from five to seven hours. The garlicky odor continues four to eight weeks. Even in perfectly healthy persons potassium tellurate greatly hinders the secretion of sweat.

Sodium tellurate in daily doses of one-third to five-sixths of a grain was also found to exert a marked antidiaphoretic action in phthisis, rheumatism, dyspepsia, etc.

The minimum dose capable of producing anhidrosis is stated to be one-third of a grain; the most effective quantity, five-sixth of a grain. If the result does not follow immediately after the first administration, repeated dosage with five-sixth of grain for a few days will bring it about.

Combemale and Dubiquet consider sodium tellurate the very best antihidrotic agent, preferable to camphoric acid, agaricin, atropin, etc. The chief objectionable feature of the tellurates is the alliaceous odors which they impart to the breath.

—*Merck's Archives*.

“THIOSINAMIN; ITS PHARMACOLOGY AND THERAPEUTIC USES,” is the title of an article in *Merck's Archives*, which says:

If we summarize the literature on thiosinamin—both that which has been abstracted above and that which has not been so utilized, the following conclusions seem justified:

1. The beneficial effects of thiosinamin in cicatrices, keloid, chronic glandular enlargements and lupus are undoubted.
2. The drug seems to possess a beneficial influence in cor-



neal opacities and in deafness due to sclerosis and adhesions. Further testimony is needed in this direction.

3. The drug is claimed to have given good results in urethral strictures and in gynecologic affections; but the number of reports is small and further evidence is necessary.

4. Taking into consideration the softening and resorbent effects of the drug, it seems rational to believe that it would produce good effects in such conditions as hypertrophied tonsils, hypertrophied turbinates, and in various hypertrophies of the skin. A cautious trial of the drug in the above conditions seems highly desirable.

5. From the latest reports it appears that when used locally—applied to or injected directly into the lesion—thiosinamin produces a stronger and more prompt impression than when administered internally.

#### FOR INSOMNIA :

##### (Of *Delirium Tremens.*)

Chloral Hydrate .....	4 dr.
Tinct. Capsicum.....	1 oz.
Peppermint water.....	5 oz.

One tablespoonful every two or three hours until sleep results.

##### (Of *Hysteria.*)

Potassium Bromide.....	4 dr.
Chloral Hydrate.....	3 dr.
Tinct. Asafetida.....	4 dr.
Simple Syrup.....	6 dr.
Distilled water to make.....	6 oz.

One tablespoonful every three hours until sleep results.

##### (During *Climacteric.*)

Ammonium Bromide.....	3 dr.
Tinct. Hops.....	6 dr.
Camphor water to make.....	3 oz.

One dessertspoonful in water at bedtime.

##### (General *Nervousness.*)

Dormiol (50 per cent.).....	1 oz.
Comp. Spt. Orange.....	$\frac{1}{2}$ dr.
Syrup Raspberry.....	$1\frac{1}{2}$ oz.
Distilled water to make.....	4 oz.

Shake well. Tablespoonful at bedtime. May be repeated in two hours.

##### (During *Dentition.*)

Chloral Hydrate.....	8 grn.
Sodium Bromide.....	15 grn.
Syrup Lactucarium.....	4 dr.
Distilled water.....	4 dr.

One teaspoonful every hour until quiet. (For a child six months or older.)

*(Due to Gastro-Intestinal Disturbance.)*

Sodium Carbonate.....	1½ dr.
Arom. Spt. Ammonia.....	5 dr.
Ammonium Bromide.....	1½ dr.
Comp. Tinct. Cardamon.....	1 oz.
Peppermint water to make..	4 oz.

One dessertspoonful at bedtime, and repeat in one hour if necessary.

*(Due to Overwork or Worry.)*

Oil Turpentine.....	30 drops.
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Take in capsule, at one dose, as a stimulant.

*(Of Alcoholism).*

Strychnin Sulphate.....	⅓ grn.
Potassium Bromide.....	4 dr.
Simple Elixir to make.....	3 oz.

One dessertspoonful in water at bedtime. Or,

Syrup Ginger.....	2 oz.
Arom. Spt. Ammonia.....	2 oz.
Tinct. Valerian.....	2 oz.
Sat. Solut. Potassium Bromide to make.....	8 oz.

One tablespoonful in water every three or four hours.

*(In Chronic Bright's Disease.)*

Chloral Hydrate.....	1 dr.
Syrup Orange Peel.....	1 oz.
Simple Syrup to make.....	2 oz.

Two teaspoonfuls in water at bedtime.

—Merck's Archives.

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## Department of the Ear, Nose and Throat.

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In Charge of A. W. DE ROALDES, M. D., and GORDON KING, M. D.,  
New Orleans.

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RHINORRHEA EXCLUSIVELY SYMPTOMATIC OF NEURASTHENIA—  
TREATMENT.—Dr. Marcel Natier, of Paris, has recently concluded a serial article in *La Parole*, which is destined to mark a new epoch in the study of rhinorrhea as regards its etiology and treatment. The article is a brilliant and thorough exposé of the subject in which the author essays to prove that nasal hydrorrhea is invariably dependent upon a state of general neurasthenia and exclusively a symptom of that affection. His views are based on the closest observation of a number of cases, fourteen of which he records in fine detail, observations extending over a considerable period of time in each case, showing the

well defined neurasthenic condition, the affection of the nose and the satisfactory results obtained by a course of treatment directed solely toward curing the neurasthenia and thus removing the cause. In a study of his cases the author brings out some very strong proofs in support of his theory, which he further strengthens by a careful review of the etiology as regards sex, age, occupation, hereditary and personal antecedents and diverse causes, all of which correspond to those recognized as giving rise to the neurasthenic state. He finds the affection more frequent in females than in males, and between the ages of 30 and forty years, in persons who inherit a tendency to neurasthenia or who acquire it through overwork, depressing surroundings, sickness and similar causes. Being a symptom of a general and not a local affection, the lesions found in the nose, such as polypoid degeneration of the mucous, swelling of the turbinates, etc., are the effect rather than the cause of rhinorrhea. The hypersecretion in the nose is due to over excitation of the glands, which is dependent upon disorder in the nervous system. This condition is analogous to the derangement of function noticed in other glandular organs of the body occurring in neurasthenia. According to Natier the mucous membrane of the frontal sinus plays a large part in the production of the watery discharge, which fact accounts for the frontal headache which accompanies this condition. After a review of the symptomatology of nasal hydrorrhea and the character and frequency of the attacks, the author treats of the chemical analysis of the watery fluid itself and compares it to the analysis made of the fluid in those cases of so-called "cerebro-spinal rhinorrhea." He combats the theory of these cases in which the discharge is supposed to be cerebro-spinal fluid on the ground that no distinct difference has been shown between the analyses of the fluid in the two kinds of cases, and that the so-called cerebro-spinal cases could be shown to be well defined neurasthenics.

He does not choose to consider hay fever as a distinct morbid entity; but rather as a special form of vaso-motor rhinitis, or nasal hydrorrhea. The prognosis of the affection, heretofore considered as very bad in so much as a radical cure was concerned, he considers favorable if proper and persistent treatment is carried out to combat the nervous disorder. Local treatment, he claims, is only palliative and unnecessary, as the

local lesions will disappear under the general treatment adopted. Natier's method of treating such cases is as follows: A strict milk diet. The patient begins by taking three litres of milk per day and increases to five. To overcome the constipation when present, a dose of purgative water every morning. Fifteen hours repose in the reclining posture is ordained. A cold bath every day, with brisk rubbing of the skin. The patient is made to avoid all fatigue, physical, mental or moral.

This method has given the author excellent results in his cases.

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## Miscellaneous.

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TREATMENT OF CUTANEOUS CANCER.—Before the Section on Cutaneous Medicine and Surgery at the recent A. M. A. meeting at St. Paul, Dr. Heidingsfeld discussed the prevailing practice of caustics for skin cancer. A deserved stricture is passed upon the charlatan abuse of these and a general plea is made for a proper and advised use among physicians. The paper is concluded with a favorable expression of opinion upon a modified Marsden's paste:

Acid arsenos .....	5 q. s.
Pulv. gum acaciæ .....	5 q. s.
Cocain mur. cryst. ....	2 q. s.
Glycerin .....	2 q. s.
Aquæ .....	q. s.

M. Ft. paste: Sig. apply.

The paste is applied directly to the ulcerated surface, after being uniformly spread on a piece of muslin or linen, of the size of the affected area. The paste dries quickly and should be left on 12, 24 or 36 hours according to the effect desired and inversely to the size of the growth. The reactionary redness may be present, but limited.

Dr. Heidingsfeld urges as advantages of this method, that it is prompt in results, easily limited and controlled, spares the healthy tissues, exerts a marked specific influence and produces relatively little distress and subjectic disturbance. It promotes prompt cicatrization and speedily converts a freely discharging,

foul-smelling ulcer into a clean, firm sore, inhibits its discharge and diminishes surrounding inflammation.—*Jour. Amer. Med. Assoc.*, July 13, 1901.

INTESTINAL DISEASES OF CHILDREN are considered by Geo. Edward Thompson, M. D., in a recent article. He thinks dentition is only incidental to the gastro-intestinal disturbances known as cholera infantum. Children are highly susceptible to reflex disturbances prompted by irritation in the gums during teething. Cholera infantum coincident with teething is apt to be regarded as a result of this physiologic process. We must differentiate between a coincidence and a cause. Cholera infantum may take place at any season of the year; so may teething. They frequently take place simultaneously. Indiscretions in diet are the exciting causes. When teething is coincident we can more readily understand the influence of indiscretion. The child must be supplied with food different from mother's milk. It gets bread to bite, for which its gastro-intestinal apparatus is not ready. That ferments and sets up a gastro-intestinal irritation; nausea, vomiting and purging results, and finally the doctor is called.

This summer in a large number of cases of cholera infantum, sub-acute gastro-intestinal indigestion and marasmus, my best results were derived from the following:

Baby was given podophyllin, one-fortieth of a grain, or calomel, one-tenth of a grain, until the passages became distinctly bilious. Then an intestinal antiseptic sedative and astringent consisting of:

℞ Bismuth subcarbonate ..... Dr. i  
 Glyco-thymolin (Kress)..... Fl. oz. ss  
 Misturæ cretæ..... Q. s. ad. fl. oz. iij

M. Sig.—Shake the bottle and take a teaspoonful every three hours.

Give the baby an enema of a pint of warm water, in which is an ounce of glyco-thymolin, in order that the colon may be relieved as rapidly as possible of its fermenting and decomposing contents and the lining meet the antiseptic and healing application. This may be done daily.

LAVAGE OF THE STOMACH IN GASTORRHAGIAS.—M. Linocier, of Lyons, in *Semaine Médicale*, March 6, 1901, said "that M. Lucas Champonnière had seen the good effects of stomach lavage

against hematemesis. I myself had occasion to employ this method of treatment in two cases of cancer of the stomach which had determined abundant and repeated gastorrhagias. In these two cases the lavage caused the pains and the vomiting to cease rapidly. As soon as the stomach was emptied by lavage it became retracted and in a state of rest, not possible when containing blood and food. The dread is that lavage might cause a rupture of a friable vascular wall or freezing of a clot formation. This fear seems exaggerated. The vomiting caused by the introduction of a sound into the stomach is less dangerous for the stomach than the emesis caused by the hemorrhage, the first being caused by a pharyngeal reflex, in the second case the reflex starting in the stomach itself."

THE STERILIZATION OF COCAIN SOLUTION.—M. Reclus, in *Semaine Médicale*, March 6, 1901, says that "lately M. Tuffier studied the different means by which cocain solutions can be sterilized. I think that the problem was solved in 1898, by M. Herisse, who was then my externe in pharmacy. He noticed that the rotatory power of cocain solutions is not in the least modified by boiling; on the other hand, I found that in practice anesthesia was obtained as well with a boiled solution as with a non-sterilized one. M. Herisse then substituted heating to 115 to 120 degrees in the sterilizer to boiling, and the results were identical. It should be noted that solutions prepared in the sterilizer are preserved indefinitely. I was able yesterday to perform an important operation, perfect anesthesia being produced with a cocain solution which had been heated to 120 degrees thirty months previous." [The testimony of others is to the effect that boiling does impair the analgesic power of cocain, but it is not at all unlikely that this damaging effect has been much exaggerated.]

THE ETIOLOGY OF ALOPECIA.—In the July 13, 1901, number of the *New York Medical Record*, Dr. Delos L. Parker, presents a most interesting theory of the occasion of alopecia.

In the premises the theory is advanced that the pathologic condition of alopecia is due to autoinfection, arising from absorption by the blood of some offending substance from the air-cells of the lungs, where it has been elaborated by decompo-

sition of the organic material normally present in respired air. The distinction is strongly drawn between the completeness of respiration in the two forms of breathing, known as costal and abdominal, the latter being insufficient for complete removal of the accumulated air in the extreme upper air-cells of the lungs. The mode of respiration, therefore, determines the amount of undisturbed respired air, more or less full of organic matter, which, under conditions of warmth and moisture, undergoes decomposition.

If this condition persists, decomposition takes place, with retrograde changes, the product is elaborated, which taken up by the blood exerts a selective poisonous action upon the growth of the hair, and thus becomes the cause of the form of alopecia under consideration.

Young adult females employ superior costal breathing, while males of corresponding age, seldom do so. This applies as well, generally speaking, to all females and all males, the former through modes of dress employing, almost enforcedly, costal respiration. More than this the anatomic differences, more rigidity of the ribs, etc., explain the more marked abdominal breathing in the male.

Tubercular patients are notably not bald, in fact, their tendency to hirsutic blessedness is remarked, and explained by the fact that usually the lungs are attacked first at the apices, when destruction or solidification, or diseased tissue prevents absorption into the economy.

The desk attitude of those of sedentary habit is urged to explain their proneness to alopecia. The lack of energetic breathing in the aged explains the loss of hair among those advanced in years. Personal observation has impressed upon the author the presence of irregular breathing in those who have come under his notice and having alopecia.

In the way of confirming the argument of his theory, Dr. Parker conducted a series of experiments on animals, birds, etc., all of which are related in the article under consideration.

The plan was to keep respired air in the presence of warmth and moisture long enough for decomposition of its organic matter, then to inject the resulting substance into the blood of animals and to note the results. A sterile bottle was filled with warm distilled water and respired air was forced into this,

the air derived from "a middle-aged man who had long suffered from alopecia." He was placed in a pneumatic cabinet and his expired air was collected in a collapsible rubber bag.

A fox terrier and a large hen, after numerous injections of the liquid, showed patches of baldness, which disappeared upon cessation of the injections and after some days.

A second set of experiments was made under like conditions, this time with one fox terrier, five hens and five pigeons. The history of the resulting alopecia and regrowth of hair is related.

This seems to justify, in the author's opinion, the conclusion that "the results of the experiments show that when respired air from the human lungs is kept chambered long enough for decomposition of its organic matter to take place, there is developed a substance which, when introduced into the blood of certain animals, exerts a selective poisonous action upon the hair, or tissues analogous to hair, with which such animals may be endowed, and that beyond this, so far as careful observation can determine, it produces no effect whatever."

"Trichotoxicon" is the name given by the author to the substance toxic enough to produce alopecia.

[*Comment:* The above abstract is interesting, in the light of Elliot's statistics of over 90 per cent. of all alopecia being due to seborrheic dermatitis, the pathologic history of the seborrheic process following the morococcic or spirillary infection, and the keratinic tendency in this affection. The author holds accountable for the "alopecia of the type under consideration" (which type he fails to clinically indicate even by remote suggestion except as "commonly met with in male adults") a substance which he has not separated in the laboratory but names "trichotoxicon" as if it were a definite substance instead of some probable organic part of respired air of presumably toxic properties. The effect of the injection upon animals is interesting in the reading, but we confess to a lack of conviction as to the deduction that baldness comes from faulty breathing, especially when the laboratory has already found adequate proof of an exact tangible local cause for most cases of baldness, while the evidence is on the way to prove that among the other cases nearly all are of other local or well known constitutional origin—Ed.]



CAN CLOTHING CARRY DISEASE?—The popular ideas on this subject appear to be much exaggerated. The notion that infection is carried by clothes is held by almost every one, and wonderful tales, as *The Hospital* reminds us, are told about bits of flannel, old petticoats, and other articles of clothing, which, after being exposed to scarlet fever, have been put away for years, only to set up fresh outbreaks of disease when restored to service. “The daily life of every doctor appears to give the lie to any such idea,” says *The Hospital*, and it quotes from a paper read recently by Dr. Doty, health officer of the port of New York, before the American Public Health Association, in which he held that infectious diseases are rarely communicated by means of clothing. Dr. Doty reaches this conclusion from observations made as health officer during a continued experience of twenty years with infectious disease. Says the doctor:

“As a matter of fact these views are apparently endorsed by the medical profession both in private practice and in matters relating to public health, inasmuch as physicians daily visit infectious diseases and go from them directly to other patients without disinfection or change of clothing. Moreover, health departments throughout the country permit their inspectors and diagnosticians to visit infectious disease in the same manner. \* \* \* In families where scarlet fever exists the adult members, who are actively employed outside, are allowed to continue their business without interruption. Of course they are usually admonished not to enter the apartment of the sick when at home, but in a large percentage of cases the patient roams about the house or apartment at will. Therefore, if the clothing worn by well persons were a medium of infection to the extent which is commonly believed, we would certainly and surely have indisputable evidence of it, which we do not.”

Dr. Doty admits that infection may in some cases be transmitted through clothing, but he holds that this does not commonly occur, and that in making regulations for the protection of health we must not give it undue consideration. On this the writer of *The Hospital* article comments as follows:

“We think that on the whole Dr. Doty is right. . . . It is obvious enough that infection by the clothing of ‘well people’ only rarely occurs, and we take it that in this matter the element

of time and the amount of exposure have much to do with the result. We are constantly being asked by nurses, 'Why all this fuss when the doctor goes in and out without taking any precautions?' and if we were to admit the theory of mediate contagion in its extreme degree it must be confessed that no answer would be forthcoming. But we must consider the shortness of the doctor's visit and the comparatively small opportunity of direct infection of his clothes, compared with the prolonged exposure and intimate contact with the patient which occurs in the case of the nurse. Still it must be confessed that the possibility of infection being carried by the medical attendant has always been somewhat a nightmare to us, and although it is a relief to find that Dr. Doty with his undoubtedly extensive experience is able to speak as strongly as he does, from the practical point of view, about the improbability of infection being often carried from case to case in the clothing of 'well persons,' we can not but feel a certain sympathy with the 'walking doctor,' or the one who on horseback, or on cycle, or even in an ordinary 'doctor's gig,' does at least get some aëration between his cases; and a little doubt about the comfortable person who, in furs and brougham, carries with him little whiffs of sick-room atmosphere from case to case."—*Literary Digest*.

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## Medical News Items.

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THE ASSOCIATION OF AMERICAN MEDICAL EDITORS held their annual meeting at St. Paul, June 3-5, 1901, the sessions being convened in the library hall of the Ramsey County Medical Society. This was the most successful meeting held for fifteen years, both from point of attendance and the high standard of excellence of the papers presented. Of especial moment was the paper presented by Dr. Burnside Foster, of St. Paul, entitled "Some Thoughts on the Ethics of Medical Journalism," which was discussed by Drs. Lancaster, Gould, Love and others. At the instance of Dr. Foster, a committee consisting of Doctors Simmons, editor of the *Journal of the A. M. A.*, Gould of Amer-

ican Medicine, and Foster, of the *St. Paul Medical Journal*, was appointed to amend the constitution and by-laws of the association by adding certain rules concerning the nature of the advertising which is to be admitted to the pages of the journals in affiliation with the association. These rules are to be binding on all members, the committee also being advised to suggest such revision of the constitution and by-laws as may be deemed advisable.

Among other papers read were those of Dr. John Punton, entitled "The Relative Value of Medical Advertising; that of Dr. Dudley S. Reynolds, entitled "Improvements in Medical Education;" Dr. Harold N. Moyer, "Relation of the Medical Editor to Religious Articles."

The association adopted resolutions favoring the establishment of a psycho-physiological laboratory in the Department of the Interior, at Washington, D. C. It also appointed a committee to draft a resolution requesting the Board of Directors of the Louisiana Purchase Exposition Co., in charge of the St. Louis World's Fair to recognize and commemorate in a suitable manner the great work done in medicine and surgery. *The American Medical Journalist* was selected as the official journal for publication of papers and proceedings.

The annual dinner of the association was held at the Metropolitan Hotel on the evening of June 3.

At the session of June 5, the officers for the ensuing year were elected as follows: President, Dr. Alex. J. Stone, of St. Paul; vice-president, Dr. Burnside Foster, of St. Paul; secretary and treasurer, Dr. O. F. Ball, of St. Louis.

The executive committee appointed for the ensuing year consisted of Doctors Gould, Matthews, Lillie, Fassett and Marcy.

The next meeting will be held at Saratoga Springs, N. Y., in June, 1902.

NEW YORK HEAT AND ITS RESULTS.—The *Medical News* relates 250 deaths and 400 prostrations as the history of the recent hot spell in New York City.

HARVARD MEDICAL COLLEGE has received a donation of \$1,000,000 or more from Mr. J. Pierpont Morgan, to be used in the erection of the new buildings for that institution.

COLORADO AND CONSUMPTIVES.—Considerable concern is being felt in Colorado on account of the increased mortality from tuberculosis. In a report to the State Medical Society, Dr. Henry Sewall, of Denver, states that in sixteen months up to May 1, 1901, there were 1674 deaths from consumption reported, 970 cases originated outside the State. In 480 cases the origin was not given. In 224 cases, or 13.32 per cent., the disease originated in Colorado.—*Jour. Amer. Med. Assoc.*

THE FOURTEENTH INTERNATIONAL MEDICAL CONGRESS.—The preparatory work for the Fourteenth International Medical Congress has been inaugurated. The Executive Committee has been constituted as follows: President, Prof. Julian Callejo y Sanchez; secretary, Dr. Angel Fernandez-Caro y Nouvilos; treasurer, Dr. Jose Gomez y Ocana; members, the presidents and secretaries of the sections.

*Extracts from the Rules:* Art. 1. The Fourteenth International Medical Congress will meet in Madrid under the patronage of King Alphonso XIII and his august mother, the Queen Regent, on April 23 to 30, 1903. The object of the Congress is exclusively scientific.

Art. 3. The dues will be 30 pesetas, to be paid to the secretary general, who shall remit a card of identity to the payer.

Art 9. The Congress shall be divided into the following sections: I. Anatomy (Anthropology, Comparative Anatomy, Embryology, Descriptive Anatomy, Histology and Teratology). II. Physiology, Physics and Biologic Chemistry. III. General Pathology, Pathological Anatomy, and Bacteriology. IV. Therapeutics, Pharmacology and Materia Medica. V. Internal Pathology (Medicine). VI. Neuropathies, Mental Diseases and Clinical Anthropology. VII. Pediatrics. VIII. Dermatology and Syphilography. IX. Surgery and Operative Surgery. X. Ophthalmology. XI. Otology, Rhinology and Laryngology. XII. Odontology. XIII. Obstetrics and Gynecology. XIV. Military and Naval Medicine and Hygiene. XV. Hygiene, Epidemiology and Technic Sanitary Science. XVI. Legal Medicine.

Ladies accompanying congressists may benefit by the reduction on railways and may take part in the social features of the congress provided they have obtained a special card upon payment of 12 pesetas each.

THE SANITARIUM AT SHREVEPORT, hitherto owned by Dr. Schumpert, has been organized into a stock company.

DR. J. C. PERRINE is still connected with Messrs. E. J. Hart & Co., reports to the contrary notwithstanding.

DIED.—Dr. J. H. P. Wise died July 9 at Morgan City, aged 56 years, after twenty years of practice at that place.

PHYSICIANS visiting New York are invited to make their business home at the office of the M. J. Breitenbach Co. (Gude's Pepto-Mangan), at 53 Warren street.

ENNO SANDER PRIZE.—This prize, open only to persons eligible to active or associate membership in the Association of Military Surgeons of the United States, consists of a gold medal worth \$100 and \$100 in cash. The subject for this year is: *The Most Practicable Organization for the Medical Department of the United States Army in Active Service*. Conditions of the competition provide that the prize will be awarded upon the recommendation of a Board of Award selected by the Executive Committee. The Board will determine upon the essay to which the prize shall be awarded, and will also recommend such of the other papers submitted, as it may see fit, for honorable mention.

In fixing the precedence of the essays submitted, the Board will take into consideration—primarily—originality, comprehensiveness and the practicability and utility of the opinions advanced, and—secondarily—literary character.

Essays will consist of not less than ten thousand, nor more than twenty thousand words, exclusive of tables.

Each competitor will send three typewritten copies of his essay in a sealed envelope to the Secretary of the Association, so as to reach that officer on or before February 28, 1902.

The essay shall contain nothing to indicate the identity of the author. Each one, however, will be authenticated by a *nom de plume*, a copy of which shall, at the same time as the essay, be transmitted to the Secretary in a sealed envelope together with the author's name, rank and address.

The envelope containing the name of the successful competitor will be publicly opened at the next succeeding annual meeting of the Association, and the prize thereupon awarded.

The successful essay becomes the property of the Association of Military Surgeons of the United States, and will appear in its publications.

Board of Award, 1901-1902.—Hon. William Cary Sanger, Assistant Secretary of War; Brigadier General George Miller Sternberg, Surgeon General, U. S. Army, and a distinguished officer of the line to be announced later.

John Van Rensselaer Hoff, President; James Evelyn Pilcher, Secretary, Carlisle, Pa.

THE HEALTHFULNESS OF HAVANA.—From the June report of the health conditions of Havana, Major Gorgas, the chief sanitary officer, draws some interesting conclusions: The general sanitary condition is excellent. A total death of 498 from all causes made a mortality rate of 23.28 per thousand, the lowest death rate for June in Havana since 1889, the next lowest being 24.90 for June, 1900. During June there did not occur one case of yellow fever. Since 1761, this is the first June free of any sign of this disease. The average number of deaths from yellow fever in June for the last nine years of Spanish occupation was 47.88, the smallest number occurring in June, 1898—three deaths; the largest number in June, 1897, with 174 deaths.

The last death from yellow fever occurred March 16, 1901, which immunity is considered attributable to the conditions at present existing.

Beginning in February, the whole management of yellow fever was based upon the conclusions of Dr. Finlay and the Yellow Fever Commission, that the mosquito was the source of transmission of the disease. Disinfection was rigorously instituted along this line of suggestion, with the result that, since May 16, the city of Havana has been entirely free of fever.

There has been no small-pox in Havana since July, 1900. The report in this direction urges precaution against New Orleans as a small-pox center, relating that there have occurred at this point 240 cases, with 46 deaths (nearly 20 per cent.), from December 2 to June 15, *ult.*

THE MEDICAL DEPARTMENT OF TEXAS UNIVERSITY at Galveston graduated six doctors of medicine and fourteen in pharmacy on June 15. The total attendance for the session was 191.

THE NEW ORLEANS BOARD OF HEALTH is taking steps to locate the breeding spores of mosquitoes and to study the varieties prevailing in this city. The following is excerpted from the *Times-Democrat* of July 23:

To facilitate economic and efficient operations against the mosquito pest it has been found necessary to conduct certain investigations regarding the possible localization, in the city, of various species of mosquitoes and their specially selected breeding places.

The mosquito, as a rule, does not travel far. It is quite possible, for instance, that the residents of St. Charles avenue are annoyed by a different kind of mosquito from that which infests the neighborhood of Claiborne canal; and it is possible that the mosquito that selects clear water cisterns is characteristically different from the shallow-pool mosquito.

These differences may seem unimportant to the average citizen, whose desire is an indiscriminate destruction of all mosquitoes, but they are of vast significance to the entomologist and to the sanitarian, who must necessarily be guided in this matter by the latest discoveries of entomologic science, and who is, at the same time, limited by a curtailed revenue; they are of serious economic importance.

Every cistern does not contain wiggletails, although each is liable to become a breeding place if not oiled, and very many cisterns have already been oiled and are, therefore, free of wigglers.

Householders who find wiggletails in their cisterns or water barrels are requested to send a few to the Board of Health office, in the Cora building, from which place the specimens, with others, will be sent to Professor Beyer, of Tulane University, whose valuable assistance has been enlisted in this important work for differentiation.

Bottles to contain wiggletails may be of any size, and should be about half full of water.

A two to four-ounce transparent bottle is suggested for convenience of handling and inspection of contents.

Bottles should have a card attached, bearing the name of sender and the address, for the purpose of localization, and, in special cases, perhaps, of further investigation.

It should be stated, also, whether the wigglers were taken from a barrel or cistern, and, approximately, its height from the ground.

These specimens are desired during the next ten days, and will be received from 9 to 4 o'clock, and on Sunday until noon.

By kindly giving publicity to this request, you will greatly assist the Board of Health in the accomplishment of its determination to rid the city of mosquitoes, which task can be made easy, difficult or impossible, according as the co-operation of citizens is secured.

Respectfully,  
(Signed) QUITMAN KOHNKE,  
Health Officer.

THE NEW MEDICAL PRACTICE LAW OF TEXAS went into effect at noon, July 8, 1901, and on the following day the Governor announced the following appointments, nine to each board, selected from lists of eighteen names submitted by each of the three State associations:

*Board of Medical Examiners for the State of Texas.*—Drs. J. W. Scott, Houston; J. H. Evans, Palestine; D. J. Jenkins, Daingerfield; J. T. Wilson, Sherman; M. M. Smith, Austin; John C. Jones, Gonzales; J. H. Reuss, Cuero; Frank Paschal, San Antonio; Sam R. Burroughs, Buffalo.

*Board of Homeopathic Medical Examiners for the State of Texas.*—Drs. Geo. D. Streeter, Waco; Joseph R. Pollock, Fort Worth; William R. Owen, San Antonio; A. O. Buck, Corsicana; M. S. Metz, McKinney; Geo. E. Thornhill, Paris; William T. Smith, Denison; N. O. Brenizer, Austin; T. J. Crowe, Dallas.

*Board of Eclectic Medical Examiners for the State of Texas.*—Drs. G. W. Johnson, San Antonio; G. Helbing, Bonham; E. L. Fox, Houston; C. D. Hudson, Speegleville; J. N. White, Queen City; L. S. Downs, Galveston; W. J. Bell, Gainesville; N. V. Mitchell, Dallas; Charles Dowdell, Ennis.



## Book Reviews and Notices.

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*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

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*Panama and the Sierras; A Doctor's Wander Days*, by G. FRANK LYDSTON, M. D. The Riverton Press, Chicago, 1900.

In running anecdote, filled with a delicious sketchiness characteristic of the style of the author, this little book carries the reader through a series of experiences selected as worthy of record in a trip from New York to San Francisco, by way of the West Indies, Panama and Mexico. Much original description is introduced, directed more largely at types than at places. The illustrations are all good, excepting one which is grewsome enough to have been omitted, as it presents a graphic horror in the exhibition of four criminals hung in a row. Dr. Lydston has the facility of the pen which makes his work readable, and this little volume of travel is no exception.

DYER.

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*Memoranda on Poisons*, by THOMAS HAWKES TANNER, M. D., F. L. S. Eighth Revised Edition by HENRY LEFFMAN, A. M., M. D. P. Blakiston's Son & Co., Philadelphia, 1901.

This handy vest-pocket edition of so necessary a subject is comprehensive and succinct as well. It contains a brief outline of all poisons and their antidotes, while the best part of the book is given to general indications and what to do in cases of poisoning, whether the poison is determined or not.

DYER.

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*Eczema*, by L. DUNCAN BULKLEY, A. M., M. D. Third Edition. G. P. Putnam's Sons, New York and London, 1901.

This manual will be essentially useful to the general practitioner because of the attention to detail which is evident in the whole work. Dr. Bulkley has made the subject of eczema understandable from the clinical standpoint, and this is what the general practitioner is looking for.

Of especial value are the chapters devoted to the etiology and the varieties of eczema, for in these are made quite clear the abuses of terms applied to eczema and the proper idea of differential types of this common disease.

An extensive formulary concludes the book, having in regular arrangement a number of prescriptions for local and internal use, all of which have been more or less indicated in the text.

DYER.

*The Acute Contagious Diseases of Childhood*, by MARCUS P. HATFIELD, A. M., M. D. G. P. Engelhard & Co., Chicago, 1901.

This little book of something over a hundred pages of text is timely. It is made up of a series of chapters devoted to the consideration of the diseases of acute contagious character which may occur in children. Included among these are scarlatina, measles, varicella, variola, mumps, grippe and whooping-cough.

The article on scarlatina is excellent and it bears the marks of the care in preparation which is true of the other subjects considered. Modern views of the treatment and of the pathology of these diseases are presented.

Our chief criticism of the book must be directed at the brevity with which the all-important eruptive evidences of the several exanthemata are dismissed. Too much is presumed as to the reader's information upon the differentiation of varicella and variola and there is a distinct absence of careful detailed accounts of the distinctive diagnostic differences in these two diseases which is regrettable. The lesions, for example, of the mucous membranes are referred to, but the difference in the appearance of a variolous and a varicellar mouth is scarcely indicated, let alone discussed. In the chapters on the varieties of measles, the eruption is dismissed with a few lines of description.

Aside from these staring points of incompleteness, the work is characterized with a number of distinct qualities of excellence.

The author has made a clear exposition of each subject in a readable and impressive style. The typographic work is all that could be desired, as is the binding, letter press and general style.

The value of such a work must appeal to the author in a second edition which should be made more extensive and which should embody more of the points of real difficulty to the physician who has to use the information contained in an authoritative work, such as Dr. Hatfield's already has the right to be.

DYER.

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*A Reference Handbook of the Medical Sciences.* By various writers, edited by ALBERT H. BUCK, M. D. Volume II., Bla-Chl. William Wood & Co., New York, 1901.

As we commented in reviewing the first volume of this most excellent work, the vast field covered by a cyclopedic medical compilation forbids readily a detailed and critical review. The present volume (II), however, speaks for the consideration of a special notice of the articles on the blood and on the brain, which together fill almost one-half of the book. The former article is descriptive in large part, but is especially valuable for the excellent illustrations which are explanatory of a text devoted to the methods of the examination of blood under the varying conditions of its healthy and morbid changes.

The article on the brain must be considered a classic for its analysis and thoroughness. The usual care marks the lesser articles, which lack only in length and extent of handling to make the discrimination above indicated.

If the future volumes of the Reference Handbook are as complete and as thorough as the two so far published, the profession may congratulate the publishers upon their success in presenting a work fulfilling even more than the mere needs of the busy practitioner. DYER.

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*Pulmonary Consumption, Pneumonia and Allied Diseases of the Lungs; their Etiology, Pathology and Treatment, with a Chapter on Physical Diagnosis,* by THOMAS J. MAYS, A. M., M. D.—E. B. Treat & Company, New York, 1901.

The fundamental conception of the work may be formulated into the following propositions:

1. That pulmonary phthisis in the large majority of cases is primarily a neurosis, and that the pulmonary disintegration is secondary;
2. That any agent, influence or condition which undermines the integrity of the nervous system will engender pulmonary phthisis, or some other form of pulmonary disorder;
3. That the only remedies of value in the treatment of pulmonary phthisis are those which appeal to, and act through the nervous system;
4. That of special value in the treatment of phthisis is the counter-irritant action of silver-nitrate introduced hypodermically over the vagi in the neck; and
5. That acute pneumonia, and other forms of acute pulmonary disease, are closely affiliated with disorder of the nervous system.

After considering and reconsidering these propositions *seriatim* we find that the whole of the statements, affirmations, discussions and illustrations in this discourse finally fail to bring us over to the author's views.

As much as we are glad to praise original workers we regret that with due regard for the author's paradoxical and pertinacious merit, we can not recommend his curious book, any more than we could now, in 1901, sustain Professor Peter's arguments in the early eighties against Pasteur's genial and pregnant views. DUPAQUIER.

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*A Text-Book of the Practice of Medicine.* BY DR. HERMANN EICHHORST. Translated and edited by AUGUSTUS A. ESHNEE, M. D. W. B. Saunders & Co., Philadelphia and London, 1901.

The name of Hermann Eichhorst is familiar to every close student of medicine. Standing in the foremost rank of German physicians, noted for his clinical acumen and exact methods in teaching, no man is better qualified to address the student on the practice of medicine.

The work under consideration deals with the most manifest points in the recognition of disease and also with the best methods with regard to treatment. The work is practically a condensed edition of the author's work on Special Pathology and Therapeutics. Embodied in the work are chapters on diseases of the skin, the venereal diseases, impotence and sterility in the male, and spermatorrhea. Considering the work to be especially intended for students, we do not think these subjects out of place. The subject matter is presented in a clear, readable manner, and the student for whom this work is primarily intended will find it a source of reliable information.

It is well for the student to commune with the masters of medicine, and we think it well to begin in the early college days, when the mind is plastic and easily molded; for it is at this receptive period, that careful methods of thought, observation, and manipulation, should be inculcated. Impressions received at this time, like the odor of musk, are very likely to cling.

Dr. Eshner deserves the thanks of English readers for his translation of this work. STORCK.

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*The Medical News Pocket Formulary for 1901.* By E. QUINN THORNTON, M. D. Lea Bros. & Co., Philadelphia.

To the physician who wishes to carry ready made formulas about his person, this work may have some value. We deprecate the use of works of this kind, for what we want most is not mere copy, but more original thought. STORCK.

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*A Syllabus of New Remedies and Therapeutic Measures; with Chemistry, Physical Appearance and Therapeutic Application.* BY J. W. WAINWRIGHT, M. D. G. P. Engelhard & Co., Chicago, 1901.

In a book of 224 pages, Dr. Wainwright has grouped the most important of the New Remedies and Therapeutic measures.

The information here imparted comprises not only the author's personal experience, but much that he has gathered from medical literature scattered throughout the different medical journals. The author quotes Dr. Matas' directions for spinal cocainization.

The work makes no attempt at exhaustive treatment of the different subjects, making mention of only such remedies, etc., as are of recent date; or, where a well known drug is put to some new use, the information is conveyed in as brief a manner possible. STORCK.

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*Select Methods in Food Analysis.* By HENRY LEFFMAN, A. M., M. D., and WILLIAM BEAM, A. M., M. D. P. Blakiston's Son & Co., Philadelphia, 1901.

This work is entirely free of superfluities, embodying in its 383 pages a concise summary of analytic methods adapted alike to the needs of practising analysts and advanced students in applied chemistry.

It is assumed that a previous knowledge of chemistry has been acquired, and with this object in view, no consideration is given to elementary chemistry or to ordinary laboratory manipulations. But, wherever new or not well-known methods are dealt with they are described in minute detail. Care has been exercised to be explicit in describing manipulations, and in methods for detecting preservatives, and poisonous metals. As these matters are of vital interest to medical and pharmaceutical students, they give the work special value to them.

Containing as it does fifty-three illustrations in the text, four full page plates, and many tables, accurate as to detail and comprehensive in scope, combining in a high degree the best contained in more voluminous

works, the student in chemistry will find this work invaluable. The authors are well known chemists, and their standing in the chemical world makes the work authoritative. STORCK.

#### PUBLICATIONS RECEIVED.

*Bulletin of the American Academy of Medicine*, June, 1901.

*Bulletin of the Agricultural Experiment Station of the Louisiana State University and A. and M. College*, 1901.

*Twenty-Fourth Annual Report of the Board of Health of the State of New Jersey*.—The John L. Murphy Publishing Co., 1900.

*Practical Surgery*, by Nicholas Senn, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*The Hygiene of Transmissible Diseases*, by A. C. Abbott, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*Essentials of Refraction and of Diseases of the Eye*, by Edward Jackson, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*Proceedings of the Philadelphia County Medical Society*, June, 1901.

*Diseases of the Intestines*, by Dr. I Boas, translated by Seymour Basch, M. D.—D. Appleton & Co., New York, 1901.

*The Microbe-Producing-Disease Theory Inconsistent with the Laws of Nature*, by Prof. J. P. Schmitz, M. D., 1901.

*Bulletin of the Mount Hope Retreat Laboratory*, 1900.

*The Johns Hopkins Hospital Reports*, Nos. 1-2, 1901.

#### REPRINTS.

*Charbon*, Louisiana State Board of Agriculture and Immigration.

*Some points in the Administration of Chloroform*, by T. M. McIntosh, M. D.

*Clean Surgery versus Mutilating and Unscientific Obstetric Procedures as Practiced Upon the Viable Unborn Infant*, by J. E. Summers, Jr., M. D.

*What Routine Shall We Adopt in Examining the Eye Muscles? A New Clinometer for Measuring Torsional Deviations of the Eye, Delimiting Paracentral Scotomata and Metamorphosis and Detecting Simulation of Blindness*, by Alexander Duane, M. D.

*Industrial Insurance and the Prevention of Tuberculosis*, by Frederick L. Hoffman.

*Surgical Treatment of Palatal Defects*, by Truman W. Brophy, M. D.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR JUNE, 1901.

CAUSE.	White.	Colored.	Total.
Fever, Malarial (unclassified) .....	....	....	....
“ “ Intermittent.....	9	3	12
“ “ Remittent .....	....	....	....
“ “ Congestive .....	....	....	....
“ “ Typho .....	....	....	....
“ Yellow .....	....	....	....
“ Typhoid or Enteric.....	17	3	20
Puerperal Diseases .....	4	1	5
Bronchitis .....	2	1	3
Diphtheria .....	1	....	1
Broncho-Pneumonia.....	5	1	6
Measles .....	....	....	....
Whooping Cough.....	3	3	6
Pneumonia.....	12	8	20
Cancer.....	12	9	21
Consumption.....	53	34	87
Diarrhea (Enteritis).....	50	26	76
Dysentery.....	10	1	11
Small Pox.....	1	1	2
Hepatic Cirrhosis .....	1	....	1
Other Liver Diseases.....	2	3	5
Peritonitis.....	4	1	5
Debility, Senile .....	9	8	17
“ Infantile.....	7	1	8
Bright's Disease (Nephritis) .....	33	7	40
Sunstroke .....	1	2	3
Heart, Diseases of .....	36	24	60
Apoplexy .....	22	4	26
Congestion of Brain } .....			
Meningitis .....	13	6	19
Trismus Nascentium .....	3	2	5
Injuries .....	16	11	27
Suicide .....	5	....	5
All Other Causes .....	69	43	112
TOTAL .....	400	203	603

Still-born Children—White, 19; colored, 13; total, 32.

Population of City (estimated)—White, 210,000; colored, 90,000; total, 300,000.

Death Rate per 1000 per annum for Month—White, 22.85; colored, 27.03; total, 24.12.

## METEOROLOGIC SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure.....	29.97
Mean temperature.....	82.
Total precipitation .....	4.46
Prevailing direction of wind, southeast.	

# NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

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VOL. LV.

SEPTEMBER, 1901.

No. 3.

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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.]

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### THE MOSQUITOES AND THEIR RELATION TO DISEASE.\*

BY PROF. GEO. E. BEYER, LABORATORY OF BIOLOGY AND NATURAL HISTORY, TULANE UNIVERSITY, NEW ORLEANS.

My address to you to-night is intended only as a preliminary study of a subject which seems to be destined to become of even vaster importance than heretofore, not only as regards the hygienic conditions of our State, but also from the point of social and commercial relations which, off and on during the last few years, have been interrupted by the establishment of apparently necessary quarantine regulations.

It is only a little over twenty years ago that Laveran discovered the microscopic parasite in human blood, but it was not until seventeen years later that Ross indisputably established the true relation of the development of certain diseases existing between the already troublesome enough family of *Diptera* on the one hand and man and birds on the other. Other investigators took up the subject immediately, and, thanks to the efforts of a Bagnami, Manson, Golgi, Koch, Nuttall and Grassi, the dissemination of certain diseases is no longer a matter of conjecture and doubt. That the life-histories of the known and suspected hosts and disseminators of the dreaded protozoans

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\* Read before the Louisiana State Medical Society, April 19, 1901.

should and do receive now the most inquisitive attention is but natural and necessary, and this subject, therefore, I have chosen for my address this evening. There is, however, nothing more to be regretted on my part than the fact of my not having to report to you more than possibly the majority if not all of you already know. As I enter into the subject it may not be out of place for me to state briefly the position which our well-known and, at times, well-felt enemies occupy in the animal world.

The *Culicidæ*, to which our mosquitoes belong, constitute an extensive and cosmopolitan family of one of the largest orders of insect-life, the *Diptera*. As their name implies the members of this order possess but one pair of well-developed wings borne upon the mesothorax; the second pair of wings of other orders of insects are in the *Diptera* represented by a pair of pediceled knob-like appendages called halteres or balancers. The appendages are, however, not merely ornamental but serve to maintain the equilibrium of the insect during flight, a fact which is easily proven by their removal, when flight at once becomes erratic and unsustained.

Like all insects the *Diptera* are developed from eggs which are deposited by the female in suitable places, but the young hatching from them have to pass through a metamorphosis, more or less complete, before they assume the adult or imago appearance of their parents. This change is a complete one in the *Culicidæ*, and consists including egg and imago of four stages, of which the second, or larval stage, takes up by far the larger portion of the entire lifetime of the insect.

The eggs of the mosquito are laid generally during the latter part of the night or early morning hours, often, however, during midday and the afternoon. The female alights fairly upon the water, being, no doubt, sustained by the film which all perfectly tranquil bodies of water form upon their surface. The process of depositing the eggs was carefully noticed in a number of species, and is usually completed in from ten to fifteen minutes. The eggs are excluded with the pointed end first, and are most frequently laid in masses in which the number may vary from ten to three hundred, and often more. It is, however, not always the case that a mosquito, especially if kept in captivity, will deposit her eggs in one agglutinated mass, for under such



conditions she has been observed to deposit them singly by rapid dipping of her abdomen during her flight to and fro in her place of confinement. Moreover, the method of ovipositing is not the same in all *genera* of *Culicidæ*, as for instance, in *Anopheles* and *Stegomyia*, which deposit their eggs always singly, and which never stand on end as it were, but are floating upon the surface of the water upon their side, for in these eggs an upper and lower side can be readily distinguished by the presence of a peculiar and highly ornamental membrane, which nearly envelopes the egg completely. This membrane is tightly adherent to the egg of *Anopheles* everywhere, excepting in the middle third of the body of the egg, which bulges considerably over the contour of the shell. This bulging part is drawn into a number of wrinkles which are filled with air and float the egg.



Fig. 1. Eggs of *Anopheles crucians*, Hatching.  
Author's Illustration.

The silvery sheen of this membrane against the black background of the shell certainly makes the egg of *Anopheles* one of the handsomest objects under the microscope. As in all *Culicidæ* so far known, the young larva escape from the under side of the egg; only, in *Anopheles* the opening occurs in a somewhat more complicated manner. The little cap in the blunter end is freed from the body of the egg by the falling off of a small eight-shaped piece from the under side; as soon as this has occurred the little larva passes its head through the aperture and crawls forth. This process the writer was for-

fortunate enough not only to observe, but also to prepare in permanent mounts, from one of which the accompanying illustration was prepared. (Fig. 1.) I also observed that *Anopheles* does not stand behind any others of the *Culicidae* in regard to the number of eggs deposited by one female; this number varied from 57 as the lowest to 382 as the highest in at least ten cases.

The *Culex* proper usually deposits its eggs in a mass (Fig. 2, No. 3), which on account of the peculiar shape is said to be "boat-shaped," but unlike such a vessel, neither the entire egg-mass nor a single egg can be swamped or submerged, no matter how much they may be shaken about in the water containing them.

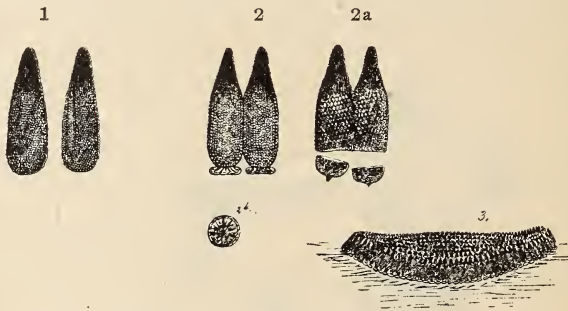


Fig. 2. 1. Eggs of *Culex perturbans*. 2 and 3. Eggs and Egg-Mass of *Culex pungens*. Author's Illustration.

This is due to a similar membrane as that of the eggs of *Anopheles* which covers the individual egg from tip to base, where it terminates in some species, not in all of *Culex*, into a small pleated and transparent disc, upon which it rests. (Fig. 2, No. 2.) As each new egg appears from the oviduct point foremost, it ranges itself against its predecessor, and gradually pushes the mass farther and farther from the insect which, with the exception of the characteristic swinging motion of the posterior legs, remains perfectly quiet. Numerous observations on *Culex perturbans*, *pungens* and *taeniorhynchus* failed to corroborate the statement that the female arranges the egg mass with her legs. The appearance of the eggs, floating on the surface of the water, is rather striking, in so far as the entire mass presents a distinct silvery line on its under surface, which is due to a film of air sustaining them. The individual eggs of the *Culicidae* are exceedingly small, ranging, however, in the different genera and

species from 0.55 to 1.00 *m. m.* in length and from 0.3 to 0.6 *m. m.* in thickness. Their shape, also, is variable, in some, as in *Culex*, it is cylindric, somewhat cone shaped and prolonged to a point, whereas the base resting on the water is rather blunt and broad; in others the shape is more or less navicular in outline and nearly black in color as, for instance, those of the genus *Anopheles*. The color of the eggs of *Culex* proper as soon as deposited, and for more than an hour afterwards, is pure white, after that time becoming darker and darker, until they are uniformly brown, excepting the tip, which becomes perfectly black.

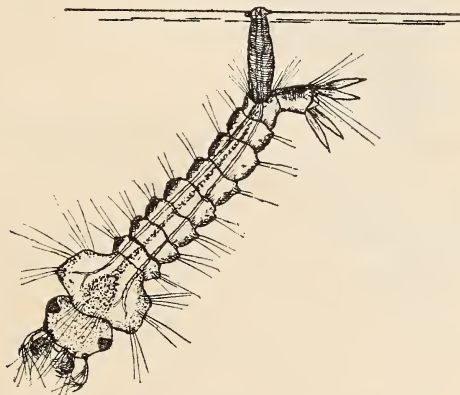


Fig. 3. Mature Larva of *Culex perturbans*.  
Author's Illustration.

Under ordinary circumstances the eggs hatch in from 18 or 20 hours to three or four days, although I have known the hatching to occur as late as five days, which, however, was due to a sudden and considerable fall of the temperature. In another case again, the young larvæ, issuing as they always do from the basal end of the egg appeared as early as 10 hours.

The young larvæ so well known to all of us under the expressive title of wiggletails are exceedingly lively, wriggling at once from underneath the egg mass to the surface to breathe, a process which they effect by means of a tube emanating from the dorsal side of the eighth abdominal segment, and whose double orifice is exposed to the air. This tube, or, as it is called, respiratory siphon, leads into the tracheal system which may readily be traced with the naked eye in the half or full grown

larva. The position which the larva assumes while thus breathing is characteristic of the genera for while the larvæ of *Culex* and *Aedes* breathe with their bodies held in an oblique position, the larva of *Anopheles* lies perfectly horizontal to the surface of the water which here is mainly due to

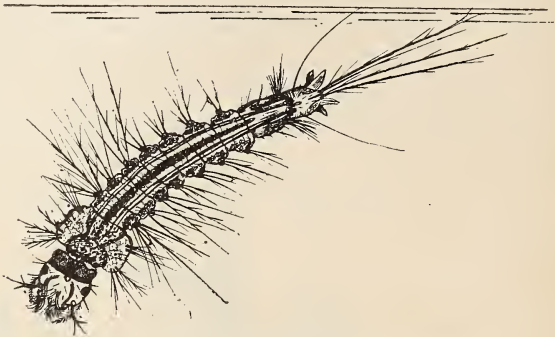


Fig. 4. Mature larva of *Anopheles erucians*.  
Author's Illustration.

the shortness of the respiratory siphon. But even in the shape of the larvæ themselves there is considerable generic difference, in *Culex* and (Fig. 3) *Aedes* the proportions of the thorax and head are much greater in comparison to the abdominal segments than in *Anopheles* (Fig. 4) where the disparity of dimensions is not nearly so great. The larva of all dipterous in-

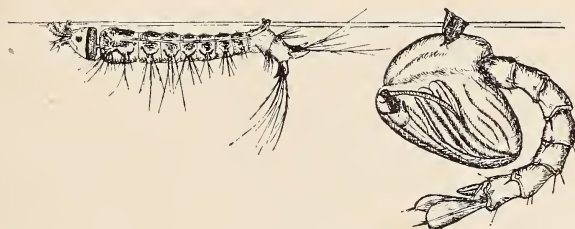


Fig. 6. Pupa of *Culex perturbans*.  
Author's Illustration.

sects are voracious feeders and those of the *Culicidæ* are no exceptions to the rule. It is exceedingly interesting, however, to observe the continuous mobility of their mouth parts, abundantly supplied with facts of retractile cilia, keeping up an uninterrupted current of water around them, and bringing into the stream, thus kept up, the foodmaterial, consisting in broken up bits

of minute vegetables and their spores, and, in fact, everything small enough to pass through the mouth and into the alimentary canal. If reared in captivity and with an abundance of food the larva will reach maturity at the end of seven or eight days. If the weather, however, is very cold, or food material scarce the change into the pupa state may be deferred to ten or fourteen days. The larvæ of all *Culicidæ*, as far as I could determine, change skin three times before final transformation into pupæ.

The pupa differs from the larva most essentially in the greater dimensions of the thoracic segments which now become, even in *Anopheles*, three times as large in diameter as the abdominal parts (Figs. 5 and 6). The greatest difference, however, struct-



Figs. 5. Young Larva and Pupa of *Anopheles crucians*.  
Author's Illustration.

urally is in the respiratory apparatus. The breathing tube of the eighth abdominal segment of the larva being lost, is replaced in the pupa by two thoracic funnel-shaped sclerites fully one-third the length of the longest diameter of the thorax. This change of structure naturally alters the position of the pupa in the water, it now stands upright at the surface instead of being like the larva pendant by its abdominal siphon. This new form and position of the pupa is very essential, for at the expiration of two or three, and sometimes four days the skin of the pupa bursts open on a median line, and the perfect imago carefully clambers out upon its former prison using it as a raft, and while resting thus it expands and dries its wings preparatory to its journey of torment, which may possibly be at the expense of a human life.

The perfect insect is too well known to need a detailed description, excepting those structures which are so important to the subject coming under our observation later

on. As in all insects, the head is well differentiated from the body and is carried upon a slender, flexible neck. The visual organs consist of a pair of large half-moon-shaped compound eyes, or *ommatidia* only, the absence of single *ocelli* being characteristic of the families *Culicida* and *Tipulidae*. Just above the compound eyes arise a pair of segmented filiform appendages, the antennæ or feelers. Above all other differences, the structure of these appendages affords visible sexual characteristics. In the male mosquito the joints of these antennæ are thickly beset with long, stiff hairs, of which those of the basal joints are often more than half the length of the entire antenna. In the female these hairs are very much shorter and fewer in number.

The mouth parts of the females of the *Culicida* are constructed both for piercing and sucking but in the males they can only be employed for the latter purpose. Unfortunately the number of females in a generation is very nearly double the number of the males. The duration of life of the perfect insect is, as I mentioned before and as a rule very much shorter than the larval stage; if at all prolonged beyond that period it is due to the non-fulfillment of the natural law of reproduction, and this is applicable to both sexes. The male dies very shortly after completion of the sexual act, the female as soon as her eggs have been deposited. Should this completion of the reproductive process be prevented either by thermal conditions or by the absence of the necessary medium for the deposit of eggs and their development (in confinement, for instance) then the life of a female may probably be prolonged and sometimes considerably beyond the natural limit of life. Under the first condition the insect would enter into the state of hibernation in order to preserve her future progeny against the risk of losing them by unfavorable temperatures, and in the second instance, the absence of water would deter her from placing her eggs into the only environments capable of engendering their further development.

In no instance, however, was I able to lengthen the life of a female beyond a period of 22 days. In all experiments I resorted to all kinds of methods to test the longevity of the insects. Mosquitoes, bred from the eggs deposited in captivity as well as from larvae collected in the gutters, did not copulate unless placed into fairly commodious receptacles and

provided with some plants and water. Not fed on blood, none of the females laid eggs but died on the fifth day. Those which had been fed on blood (I caught each female into a test tube and placed it on the back of my hand allowing her to gorge) deposited eggs on the second and third day.

Females which had been fertilized and had then been placed into large jars containing water and pieces of raw beef, often inserted their proboscis into the meat and evidently nourished some but never gorged. They died on the fourth and fifth day without laying eggs.

Other fertilized females confined in large vessels with water and continually provided with pieces of ripe banana died on the third and sixth day respectively without ovipositing. Numbers of females caught in the adult state but not fed on blood lived for a full week and then died without laying, while others deposited their eggs within from eight hours to two days; but they had probably had their share of blood before capture.

Females of *Anopheles* and *Stegomyia* alone seemed to survive oviposition longer than any other mosquitoes with which I experimented, moreover, some of them actually appeared to live only for the sake of feasting upon blood whenever I felt disposed to let them suck it, and time and again, I have noted blood in three stages of digestion through their distended body walls.

In three of twenty experiments (18 *Anopheles* and 2 *Stegomyia*) the females died in one and two days after laying eggs; in nine they partook of a second meal of blood after oviposition and then died within two days; five oviposited within fifteen and twenty-four hours after being fed, and continued feeding, or rather gorging (often twice a day), until they died, nearly twelve days after being fertilized. Two females lived one day longer, but the last one in this set of experiments capped the climax by not only living one day longer than the other nineteen, but also by laying a second batch of eggs on the seventh day after her first oviposition. Her first complement of eggs numbered between 60 and 70, and the second by actual count 182. All of the eggs hatched, and many eventually became complete imagos. This female was an *Anopheles maculipennis*.

This instance, however, only brings the longevity (even under the most favorable conditions for a mosquito) to nearly fifteen

days. How other investigators should have succeeded to keep mosquitoes on "various substances" for a month and longer is inexplicable to me. It is true mosquitoes will often alight on stale beer, sugar, liquids and semi-liquids, but I have never found one which would do more than taste them. Actual feeding, of the females at least, is performed on blood, to obtain which there seems to be no obstacle great enough to prevent them, and their endeavors to crawl through even too small meshes of mosquito bars would indeed be praiseworthy if their object were a better one.

The observations made in colder climates cannot in my opinion apply to our immediate surroundings as in our southern clime these insects never enter into a prolonged state of hibernation. During last January I collected quantities of mosquito larvæ in the little pond of the University grounds, some of which were probably not more than two or three days old while others were nearly full grown. The adult insects may be found in immense numbers in sheltered places of houses or the high grasses of our prairies during the coldest days of our winters, fully active and alive to their blood-sucking propensities, and any slight increase of temperature inducing them to oviposition. A subsequent severe cold spell will probably destroy the eggs or young larvæ if deposited, and we will, as amply demonstrated by the present time, suffer less from our torments than we might have expected from the immense numbers of adults living during midwinter.

Our mosquitoes, moreover, are not limited to seasonal appearance to any great extent for, while any given species may occur in greater numbers at certain times of the year, nearly all of the commoner species may be found contemporaneously all the year around.

The substitute food of adult mosquitoes consists, no doubt, of plant juices, and I suppose but a very small percentage of them ever taste the blood of animals among which they do not confine themselves to the warm blooded ones only, but of lizards and snakes as well, which fact I discovered by accident some years ago, when I found some five or six fully gorged mosquitoes in a cage in which a number of copperheads were confined whose skin also was distended by food. Since then I have noticed the occurrence frequently. It has been surmised



that a meal of blood is essential for the fertilization of the female for this reason that mosquitoes bred from larvæ in captivity and afterwards kept apart in test tubes and fed on ripe banana juice never laid eggs, whereas such as had been fed on blood had invariably done so. Before being isolated, however, all of them had been for some time in company with males. As a rule females of the *Culex* species captured after being gorged will deposit their eggs readily in the vessel in which they are confined, provided it contains water.

So far my experiments above related and made to test the validity of the assertion seem to indicate that blood is necessary not for the fertilization of the female but for the maturation of her eggs, and that other albuminoids are insufficient to bring



Fig. 7. *Culex teniorhynchus* Wied., Female, and Front Tarsal Claws.  
Author's Illustration.

them to that stage. Further experiments, however, will be necessary before we can allow the statement to be conclusive.

As I mentioned before, the distribution of the mosquitoes of our State is fairly general, several species are often found at the same time and in the same place. It appears, however, that the species of *Anopheles* are more essentially the true swamp mosquitoes, and will rarely if at all choose such places for the deposit of their eggs, as some of the *Culex* proper, for which a few spoonfuls of water in an old tomato can will often suffice to rear a numerous progeny. It is with greater difficulty that we can determine the distribution of generations. As a rule, I think the insects remain confined to the vicinity of their birth-place, and it is only by high winds over unwooded areas that they may be driven for several miles.

The *Culicidae* of North America have all been referred to nine genera, with a large but scarcely determined number of species. The faunistic work on this family, especially as far as our own State is concerned, is scarcely begun, and for all work that has been done so far, the credit undoubtedly belongs to your fellow-member, Dr. Veazie, of New Orleans, as pioneer worker in this important field. The list of the mosquitoes of Louisiana promises to be a very comprehensive one. The genus *Culex* is by far the most numerous one in species. It is represented in the State, as far as I have determined, by eight species, viz.: *Culex consobrinus*, *excrucians*, *perturbans*, *pungens*, *stimulans*, *teniorhynchus*, *impiger* and *sollicitans*. *Culex pungens* is, I think, the commonest species all the year around, especially



Fig. 8. *Culex excrucians* Walk., Female, and Front Tarsal Claws.  
Author's Illustration.

in the city. During the latter part of May and beginning of June I visited almost every locality of the city and invariably found *C. pungens*, at least fifty to one of other species.

*Culex consobrinus* I found to be a rather early form. During February and March it was far more common in the city than other species, and while I was spending several days on the west coast and islands at the end of March and earlier days of April the few *Culicidae* which I encountered belonged to this species.

Previous to the appearance of *C. pungens*, especially from the middle of April and the beginning of May, *Culex perturbans* Walk. became very numerous. Owing to its large size and pertinacity this mosquito may be counted, undoubtedly, one of the most troublesome species. It diminished in numbers, however, very rapidly toward the middle of May.

*Culex tæniorhynchus* Wied., a species closely resembling the previous one, very much in size, coloring and proclivities, is the more common *Culex* of the coast line and salt marshes. Of a hundred or more mosquitoes sent me each time from Weeks' Island during the early part of April, and again in the beginning of May and the middle of June, every one belonged to this species. I think it is the only one of *Culex* proper whose larvæ can develop in brackish water. *Culex excrucians* Walk. and *stimulans* Walk. have, as yet, not been determined as far as their seasonal appearance in numbers is concerned. I have only found them, and still continue to do so, one or two at a time. *Culex impiger* was for the first time recorded by me for Louisiana on April 25 of the present year, when I took four males, and on May 7, two females. As far as this form is concerned, I have to agree with Mr. Pratt, of Washington, in that it seems to be essentially a water-closet mosquito.



Fig. 9. *Culex impiger* Walk., Male, and Toothed Front Tarsal Claws.  
Author's Illustration.

The former species *Culex fasciatus*, has now been placed into a new genus by the English expert on mosquitoes, Mr. Theobald, of Wye, England. He proposes the name *Stegomyia* for this genus, and according to his determination we have so far only two species in the United States belonging to this genus: *Stegomyia fasciata* and *Stegomyia signifera*. The latter I have so far not discovered in our State, and I greatly doubt its occurrence in the South.

(Figs. 10, 11 and 12.) The so-called "day mosquito" of Dr. Veazie, *Culex teniatus*, as well as *Culex excitans* have been pronounced synonymous with *Stegomyia fasciata*. Owing to the great importance which this mosquito has gained recently on account of its supposed connection with the transmission of yellow fever it is necessary for us to enter a little closer into the

details of its bionomics than into those of any of its predecessors of the genus *Culex*.



Fig. 10. *Stegomyia fasciata* Fabr., Female.  
Author's Illustration.

The eggs which have been for the first time described and figured by me in these pages are deposited by the female singly and not in boat-shaped masses like those of *Culex*. In their position in the water, and their shape also they differ from them, resembling in these particulars the eggs of *Anopheles* described further on. (Fig. 13.)



Fig. 11. *Stegomyia fasciata* Fabr., Female, from the Side.  
Author's Illustration.

In outline the individual egg is elongate, navicular, black in color and enveloped by a thin membrane resembling ordinary mosquito netting, without exhibiting the peculiar saddle-shaped structure of the egg of *Anopheles*. The egg floats upon the water like that of *Anopheles* and the rupturing of this membrane will

cause it, like the latter, to sink to the bottom. The usual number of eggs deposited by one female appears to be about fifty or sixty, scattered over a larger area, though, than those of *Anopheles*, which are invariably clustered. The eggs hatch in from ten to twenty hours.



Fig. 12. Wing of *Stegomyia fasciata*.  
Author's Illustration.

Not only do the eggs of *Stegomyia* differ from those of *Anopheles* and *Culex*, but the larvæ as well show considerable deviation in structure and habits. The former applies especially to the exceedingly well-developed mouth parts, and the respiratory syphon, which, however, is shorter and stouter than that of the *Culex* larvæ. It is therefore that they hang like the latter but in a

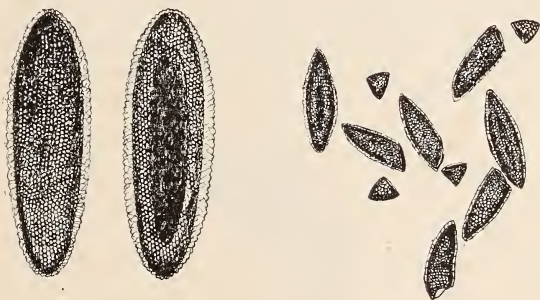


Fig. 13. Eggs of *Stegomyia fasciata*.  
Author's Illustration.

more vertical direction from the surface of the water while breathing. The greater peculiarity, however, is in their method of feeding, which they most successfully effect by rapid scurrying along of such surfaces which present their food material in the shape of growing algae and decaying vegetable substances. As the larvæ thus pass rapidly along and do not remain stationary for almost an indefinite period, like those of *Culex*, and more so like those of *Anopheles*, they bite off bits of algae and engulf them and their spores in the same manner as the larvæ of the other two genera. (Fig. 14.)

Since by this method of [feeding they are not as dependent upon circumstances their growth and development are much more rapid than other mosquito larvae, for in little more than six days they are transformed into pupæ from which the adult mosquitoes emerge within two days. The pupæ do not exhibit very marked characteristics excepting a more elongate outline

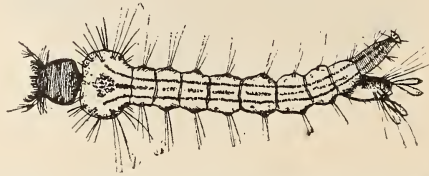


Fig. 14. Full Grown Larva of *Stegomyia fasciata*.  
Author's Illustration.

of the thoracic portion and two very sharp ridges on the sides of the abdominal segments which are apparently less pronounced in either the pupæ of *Culex* or *Anopheles*. (Fig. 15.) The time of development of a generation as observed and given here may possibly be the minimum but it will scarcely be extended to that of other mosquitoes. The feeding habit of the larvæ alone would, in my opinion, preclude that, and again *Stegomyia* is essentially



Fig 15. Pupa of *Stegomyia fasciata* Fabr.  
Author's Illustration.

a southern and a summer mosquito which first makes its appearance about the middle of April, gradually increasing in numbers until it is in full flight in the latter part of June and remains thus into November and sometimes later.

The genus *Anopheles* is represented by, at least, three species, with a probability of the occurrence of a fourth. Dr. Veazie established *Anopheles maculipennis* Meigen. as common in the vicinity of and in the city, and I can now add the hitherto sup-

posed rarer species, *Anopheles crucians* Wied. (Fig. 16, 17 and 18), as an abundant pest in the salt and brackish water marshes along the lake shores east of the river, where they occur throughout the year, not even diminishing in numbers during freezing weather, as all duck hunters have experienced to their discomfort while in their blinds among the tall grasses of the prairie. While on the lower coast during the two weeks from March 25 to April 6 of the present year, I collected a large number of an *Anopheles* which I then believed to be *Anopheles crucians*. On my return to the

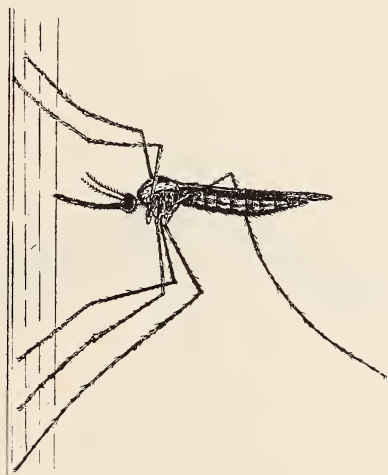


Fig. 16. *Anopheles crucians* Wied., Female. Typical Resting Position Drawn from Life. Author's Illustration.

city I examined these specimens more closely and discovered my mistake, especially after collecting hundreds of typical *Anopheles crucians* at Lake Catherine, and found it to be an entirely different insect from either of the three recognized species of *Anopheles* of the United States. Even with the unrecognized species described by Dr. Howard, it can not be made to agree. While there may still exist some slight doubt of its being a new species altogether, there is none whatever about its being new to the known fauna of Louisiana, and the United States.

At any rate, I deem it sufficiently important to give a brief description in these pages. (Fig. 19 and 20.)



Fig. 17. Wing of *Anopheles crucians*.



Fig. 18. *Anopheles crucians* Wied., Female.  
Author's Illustration.

*Anopheles spec.?* female, Sea breeze, Terrebonne parish, La.,  
March 27-29, 1901:

Proboscis with a black ring near the tip.

Palpi with dark yellowish ring at the base of each of the last  
three joints.

Joints of antennæ shorter and stouter than in *Anopheles cru-*  
*cians* Wied. Wings broader and posterior edge more convex





Fig. 19. Wing of *Anopheles Sp.*, Terrebonne.



Fig. 20. *Anopheles Sp.*, Female, Terrebonne.  
Author's Illustrations.

toward the tip, all scales of veins longer and narrower than in *Anopheles crucians*, or *maculipennis* Meigen. (Figs. 17 and 21.) Those of last vein not white. All veins without spots of black scales. Thorax and abdomen uniformly brown, the former without longitudinal stripes. In size rather smaller than *Anopheles crucians*. The insects at the time of my visit were very abundant, and, incidently, I was informed that malarial fevers



Fig. 21. Wing of *Anopheles maculipennis* Meigen.



Fig. 22. *Anopheles maculipennis* Meigen., Female.  
Author's Illustration.

were the rule rather than the exception throughout the district. The genus *Psorophora* has but one species to its credit, *Psorophora ciliatus* Fabr. It is a very large and conspicuous insect, which while on the wing appears quite black, but in reality is of a brownish yellow color. It is known in sections where it does

occur under the name of "Gallinipper." Until quite recently its life history was unknown. It was taken in New Orleans by Dr. Veazie. Under the same popular title as the preceding mosquito, one of the largest forms of the whole tribe is a native of our State: *Toxorhynchites rutilus* Cog. It may be at once recognized from all other mosquitoes of Louisiana by its size, greenish color and downward curved proboscis. I have seen the adult insects but once in the Tangipahoa swamps. Nothing is known, however, of its life history.

The sixth and last genus\* which I have so far determined for our State has also but one species in *Aedes fuscus* O. S., an exceedingly minute form and, I believe, one of the smallest of the mosquitoes of North America. As a rule it is of rare occurrence. Its developmental life history is nearly like that of *Culex*.

While, unquestionably, all mosquitoes are noxious, there are, however, certain species which are of more particular interest to my audience this evening. They are, of course, those of the now famous genera *Anopheles* and *Stegomyia* of which the former have been proven positively the transitory hosts of the malaria-producing blood corpuscle parasites, and the latter, at least, the transmitters of yellow fever. Too little of the exact history of transmission is known as yet, and I must, therefore, confine myself to-night to the outline of the malaria history.

The animal micro-organisms causing malarial fevers belong to the protozoan division, *Sporozoa* and a sub-division of the latter, the *Hæmosporidia*, and were first discovered by Laveran in 1880, by examination of the blood of one of his fever patients. He detected in the red corpuscles minute and nearly transparent bodies, usually only one in each corpuscle, which, however, were slowly and continually changing their form. His conclusions that they were the cause of the disease were quickly reached, but the means through which they found their way into the blood remained a mystery and a matter of speculation until Ross, in 1897, firmly established the manner of infection through the bite of mosquitoes. This discovery was confirmed by Grassi, in 1898, and by Koch, in 1899.

Malarial infection is caused by a variety of these parasites in

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\* Since going to press I have found another genus and species: *Conchyliastes musicus* Say., a rather remarkable insect and not uncommon. G. E. B.

which, however, the method but not the time of development is very nearly alike. This difference in the time of development is, of course, the reason for the recurrence of a fresh attack of fever either at the end of every 48 or 72 hours.

In their earlier stages these parasites, which are found in the red corpuscles of the malarial patient, are exceedingly small ameboid cells. (Fig. 23, No. 1.) Unstained they are nearly transparent but possessed of a readily detected nucleus. By disintegration and absorption of the hemoglobin they grow rapidly, (Fig. 23, No. 2,) and gain in about 24 hours one-fifth of the size of the corpuscle which they inhabit. The residue of disintegration of the hemoglobin is deposited in the form of

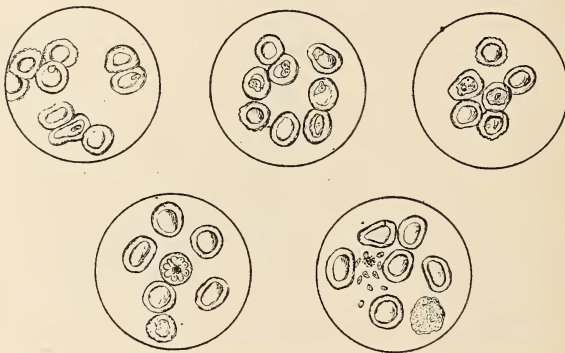


Fig. 23. Plasmodium of the Quartan Fever in Five Stages of Development. Drawn from Nature. Author's Illustration.

small pigment bodies or melania in the protoplasm of the forming spore or spores. After a further lapse of about 24 hours the parasite attains to nearly half the size of the corpuscle, finally increasing so much as to nearly fill the bloodcell, when it begins its process of reproduction. (Fig. 23, No. 3.) This is effected by mitosis, or indirect division of its nucleus. The result of this mitosis is the formation at the end of 72 hours of from six to twelve nucleated spores, or mononts, which are freed from the now completely disintegrated blood-cell. (Fig. 23, No. 4.) Simultaneously with the final disintegration of the corpuscle and liberation of the mononts or spores occurs a new attack of fever in the infected patient. The liberated spores (Fig. 23, No. 5) now attack immediately fresh blood-cells, and after passing through another cycle of growth and sporulation like the one just related, cause at the end of 72 hours a renewed

paroxysm of fever, which, owing to the greater number of spores generated may be even more severe than the previous one. The generations of this asexual reproduction are thus kept up indefinitely. Numbers of the parasites, however, which penetrated into the corpuscles do not again develop into ordinary spores but, instead of dividing as in the former manner, become, through not as yet determined conditions, individuals of another process of development. Within the blood-cell some of them gradually grow into a form, which differs materially from that of the mononts; becoming usually first half-moon shaped and later on spherical, they attain, eventually, to a size larger than the corpuscle containing them. At the same time others of the former mononts develop in the beginning in a similar manner, but, eventually, their nucleus commences to break into a small number of sections (4-7) which, gradually approaching to the surface, surround themselves with a layer of plasma. In this condition both forms of development of former spores remain for some time within the corpuscle without making any further progress. If, however, a mosquito should now chance to obtain a meal of blood of a malarial patient, the corpuscles containing mononts as well as the just described two forms of resting spores, break down in the stomach of the insect. The mononts are digested by the mosquito but the resting spores develop at once into sexually mature macro-and micro-spores. Fertilization of the former by a micro-spore immediately takes place, and the result of this karyogamy is a so-called zygocyte, spindle shaped in outline, and for a time fairly mobile and active. The zygocyte penetrates into and through the epithelial coat of the stomach and intestine, and becomes rounded and at rest. Increasing gradually in size, reaching 5 and 6 times its original dimension, it gradually raises and distends the *tunica elastica muscularis* of the stomach and appears upon the outer surface of that organ as a cyst, without, however, forming a cyst wall for itself. The zygocyte after a short period of rest enters now into a process of oft-repeated nuclear division, each newly formed nucleus surrounding itself with a small portion of hyaline plasma, which eventually elongating itself into filiform structure, becomes now the gymnospor of the second generation. While as yet confined within the capsule of the parent zygocyte, the gymnos-

pores are arranged in bundle-shaped packages, which upon full maturation break the confining capsule, the filiform gymnosporæ becoming dispersed in countless numbers within the body-cavity of the mosquito. Penetrating by their slow wriggling or serpentine movements the tissues of the body, they eventually reach the salivary glands of the insect. (Fig. 24.) Here they remain until they are ejected with the secretion of the glands. If now a thus infected mosquito stings a healthy human being, (other mammals and birds possess parasites similar to those of man) some of the gymnosporæ are transferred into the blood where they at once enter the red corpuscles, and begin the new asexual generation with all the attending manifestations with which we are now acquainted.

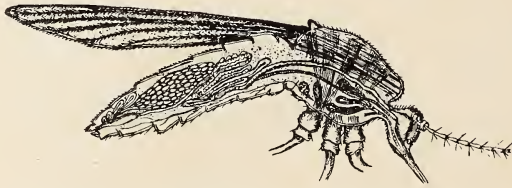


Fig. 24. Longitudinal Section of a Female *Anopheles crucians* Wied. Poison and Salivary Glands in the Prothorax. Author's Illustration.

It will thus be readily understood that the only mode of introducing the malarial fever into the human body is by the proboscis of the mosquito. If the results of the investigations, carried on in Cuba by the U. S. Marine Hospital surgeons can be confirmed in regard to yellow fever, it will be again the proboscis of this pestiferous insect which is responsible for the misery and death of thousands of human beings every year. But even admitting at present the causation of malarial fevers alone, it is sufficient to call for the destruction of the pernicious insects. That this can be accomplished, at least, to such an extent as to minimize the danger of infection, there can be no doubt; but it can not be effected by simply wire-screening our houses or the burning of old rags. The destruction of the breeding places and with them the larvæ and pupæ is the only way to reach the root of the evil. The former must be effected by drainage of the larger areas to be undertaken by the municipalities and the clearing of small areas by the Board of Health in conjunction with the property holders. The larvæ and pupæ

may be readily destroyed by a variety of agents at once cheap as well as effectual and lasting.

But to accomplish the extermination of the mosquito will require concerted action on the part of all classes of people, and to that end education of the masses will be required, or otherwise the efforts of the intelligent will be rendered futile by the ignorance and negligence of others. These two dangerous causes must be removed by education, by proper lectures on the subject in our schools and colleges, and by the most powerful medium of general education of the masses—the press. The subjects of biology and hygiene receive by far too little attention in our schools and from the public at large, and yet, what a world of trouble would often be spared to our physicians, health boards and communities if education along these lines had been better than it is.

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SOME OBSERVATIONS ON THE VARIETIES AND HABITS OF  
THE MOSQUITOES OF NEW ORLEANS AND THE  
REMEDIES.\*

BY H. A. VEAZIE, M. D., NEW ORLEANS, LA.

*Introduction.*—The following observations were made and the presented specimens taken and mounted at spare times during my rounds as a physician. At first I did not intend writing a paper on mosquitoes; the observations and microscopic mounts were simply made for my own instruction and recreation and the good it might do this great city. A mosquito hunt is somewhat of a diversion and at times quite exciting, and demands some quite active exertion and a possible tumble or mishap, especially if pursuing a rare specimen that is about to escape.

Having been requested to read a paper on mosquitoes before this association, I present this. I am sorry to say that it is not as complete as I would like, as I am simply an ordinary every day doctor of the family physician type, and not an entomologist.

A few words about New Orleans and its peculiarities I think are in order, especially for those living away from here. New

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\*Read by title before the La. State Medical Society, April, 1901.

Orleans is situated on latitude 29 deg. 56 min. 59 sec. north, longitude 90 deg. 4 min. 9 sec. west of G., State of Louisiana, left bank of the Mississippi river (really both banks if we include Algiers and Gretna). This city is situated behind a levee, or embankment of earth, which protects it from high stages of water in the river. The city drains from the river back, or northward, into two large lakes, Pontchartrain and Borgne. The surface gently slopes from the river to Claiborne Avenue, which I am told is on the gulf or sea level. Then there is an area of quite level country which eventually gently rises and forms the Metairie Ridge. Back of the Metairie Ridge and north, east and west of the city is an extensive area of swamp, covered with cypress trees and rank vegetation. This swamp drains into Lake Pontchartrain and Lake Borgne. The drainage of the city proper is by what is called the surface or open gutter system, and quite a number of miles of well constructed and covered drainage canals, also many miles of open drainage canals. Two large navigation canals, which contain brackish or lake water, are deep, and are in continual agitation from the winds and passing vessels. Our population is estimated at three hundred thousand, with sixty-five thousand premises, and on nearly every premises there is an open water-closet, one or more cisterns, or open water tanks. In the suburbs are occasional wells.

Water is of vital importance to mosquitoes; so we have plenty of it and enough mosquitoes. We have very many beautiful and well-kept gardens, and a large area of vacant lots and squares overgrown with weeds.

The temperature in winter goes below 32 deg. F. at times, but not often, and does not remain that cold long. In summer as high as 90 deg., but averages in the 70's and 80's, with a pleasant southeasterly wind, which is considered healthy and normal for the summer. Some years we have northerly, easterly and westerly winds, and they are not considered by our people as healthy winds in summer.

If you will glance at a map of this city, you will see that a large area is bounded on three sides by the Mississippi river south, east and west. My observations are that mosquitoes do not ordinarily like to cross large bodies of water, and we get few mosquitoes from the right bank, or opposite side of the river, unless blown by quite strong winds.



I would like to say that many of the factors contributing to the growth of mosquitoes in this city will be soon remedied, as we are now spending several millions on drainage, and are about to spend more than fourteen millions on sewerage. Our water supply will also be soon changed, and by these improvements we will rid ourselves of our gutters, closets, and water tanks, or cisterns, and thereby rid ourselves of mosquitoes, as it is from these that nearly all our mosquitoes come.

Mosquitoes are very small insects, but the subject is a large one. It has carried me into nearly all the ologies, botany, and allied sciences. I do not intend to write on mosquitoes in general, or give the observations of others to any great extent—simply the subject as it relates to the city of New Orleans and my own observations here; otherwise, my task would never end.

*History.* Mosquitoes were never discovered by man; they discovered man many centuries ago, much to his annoyance. The most ancient authorities, the Bible, Humboldt, La Salle, and most explorers, mention them. The earliest explorers of Louisiana were victims to their sting and its consequences. The proud and brave De Soto succumbed to fever on the banks of the great river which he discovered. I expect some *Anopheles* helped to dispatch him. When Bienville, in 1718, founded this city, he and his followers were annoyed, and we will be annoyed until we adopt the proper remedies. Mosquitoes are vermin as much as bedbugs or fleas, and should be exterminated. The history of mosquitoes begins with the history of the world. No country is too hot for them; none too cold; but water, water, they must have, unless they are hibernating.

In making these investigations, my greatest difficulty was in knowing how to catch, or, as the entomologist says, "take" the specimens, preserve them, identify them, breed them. As the subject was new, not only to me, but to others, much time was lost in useless work. I destroyed and lost many good specimens by not knowing how to preserve them, etc. I will try and help others by giving the methods I used.

*Paraphernalia necessary for taking the mosquitoes, larvæ, etc.* I find a short wide-mouthed test tube the most convenient to catch the mosquito while it is resting, as was shown me by Prof. W. S. Thayer, M. D., of Baltimore. The test tube is placed over

the mosquito, and thumb or finger quickly placed over opening of the tube. They are quite expert in escaping, and you must be quick to prevent it; a little pledget of raw cotton placed in the mouth of the tube will permit enough air to get in and you can keep it separate, or transfer it to a larger receptacle, such as I have found convenient, which is a large-mouthed bottle with a truncated cone of paper, truncated end inserted into the bottle, which forms a sort of trap. You can then transfer the mosquito from the catching tube to the large bottle by knocking, or letting it fly from one to the other, when the mouth of tube and bottle are placed together. A pledget of cotton in base of cone will prevent escape, and by this means you can carry home many specimens. A little water, some moist sugar, fruits, etc., will keep them for twenty and thirty days, as I have kept them. You must have some plain water, as the moist sugar alone will turn them into crystallized dead mosquitoes. A mosquito net (bobinet) house, or cage, is, however, the best to keep them and breed them. Arranged with a draw-string at top, to insert hand and tube to catch specimens as wanted. Some potted plants, a dish of water, some other insects or small animal, or fresh beef, or blood, every day, some succulent fruit, and you can keep them, I do not know how long, but as long as thirty days, as I have done. Some die, it is true; it is likely they have been injured in some way. It seems necessary that the female have a meal of albuminoid food before she will oviposit; this they, in the natural state, get from animals, insects and other living creatures.

An entomologist net is of service at times. An ordinary tin dipper or cup, fastened to a cane, is best to take the eggs, larvæ and pupæ; place it near the mass of larvæ, and let the water flow in, and the larvæ, eggs, etc., will go in with it. With the cup, or dipper, you get the water, algæ, etc., which the particular larvæ are fond of, which is important, if you wish to raise them to maturity. They will all die in a short while if the water contains no food for them. A clear glass, or tumbler, is also of use in hunting for the eggs and small larvæ, as by transmitted light you can see with the naked eye the eggs and small larvæ, but not usually identified without a hand glass or microscope. The way I get the eggs of a given species is to

place several females of a known species in a glass jar, mouth covered with bobinet, and a little water in the bottom; usually after 12, 24 or 36 hours I find quite a batch of eggs; select fat looking females.

The eggs are then placed in some gutter water, containing water, weeds, etc., freed as much as possible from other organisms that might cause confusion or destroy them, the mouth of jar covered with bobinet, and the whole affair under cover to protect from a chance shower, which might cause an overflow and loss of specimens, but so arranged that moderate sunlight can reach it. A hand lens of about six inch focus and an ordinary insect microscope of low power are sufficient to see the scales and markings, but one of the highest to show the zygote cysts in stomach wall and blasts in salivary glands (most beautifully shown by Prof. Beyer (*supra*)).

If you wish to kill the specimens, a drop or two of chloroform dropped on cotton pledget in mouth of bottle or tube will suffice. The vapor of chloroform will also kill the larvæ and pupæ.

To pin the specimens, use O. O. entomologists' pins, and stick them through the thorax, or do as the Department of Entomology does, glue them on a small triangular piece of paper, and pass the pin through the paper. An ordinary cigar box is the best receptacle to keep the insects mounted in this way. My attention was called to this by my friend, Mr. J. C. Smith, the celebrated microscopist, a naturalist of this city.

I lost my first batch by not knowing of this, by ants eating my specimens. I have lost none since using cigar box.

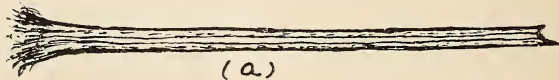
I find that for the microscope the dry cell is the best for the preservation of the markings on body and wings, as balsam and glycerin make the insects very transparent, and the markings are invisible. Balsam mounts of the whole insect are best made with a cell of about 1-16 of an inch deep, a small drop of balsam being placed on glass cover, heated and spread, the mosquito placed with its back on cover glass, and with dissecting needles place the legs and other parts in desired positions; the specimens permitted to dry for about 24 hours, and then dropping balsam on insect's body, and the whole placed over cell and gently pressed to expel air bubbles. The larvæ and pupæ are best mounted in glycerin; eggs mounted either in glycerin or

balsam. I have made many mounts and spoiled many, as the subject is new and nearly all experimental.

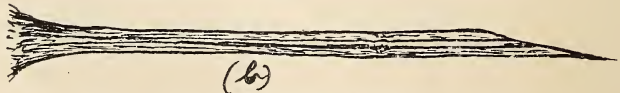
Most authors state there are about two hundred and fifty varieties of mosquitoes in the world, but nothing definite is known, as the nomenclature and classification is not perfectly reliable; for instance, the *Anopheles quadrimaculatus* is known in Europe under the names of *Anopheles claviger* and *Anopheles maculipennis*. The same with the *Culex*, the same variety having a different name in different countries. There is some dispute now as to the *Culex taniatus* and *fasciatus*, if they are each true species or not, or if they are the same mosquito. I am not prepared to settle it.

Male and female mosquitoes differ in habits and structure. The proboscis is a regular little tool chest, filled with a number of instruments; the labium, or sort of sheath ending in its labellæ, or movable little lips, covered with short hair, which are voluntarily moved by the mosquito. In the sheath of the female, we find two maxilla, two mandibles, hypopharynx, and labrum epipharynx. They are all well developed in the female, but rudimentary in the male. The maxillæ have a serrated end, just like a little saw, or comb. It is well known that the female bites or stings, and that the males do not, but I never have seen the reason given. I think I have found out the reason; the male can not pierce the skin, as his labrum epipharynx is blunt, and the female's extremely sharp, very much like a hypodermic needle, and for its purpose, a much more perfect instrument. I know I differ from celebrated authors, who state they are the same.

Fig 1



(a)



(b)

Fig. 1. (a) Male labrum epipharynx.  
(b) Female labrum epipharynx.  
Greatly enlarged. (H. A. Veazie.)

In dissecting the proboscis of quite a large number of mosquitoes, I noticed that the ends of labrum looked as if broken, but I observed that it was only the males that had that appearance, and I finally came to the conclusion that I had not broken

it, and that it was naturally as I saw it, blunt. (See Fig. 1.)

The labrum of both sexes has the small canal, or tube, through its length. The male palpi, or feelers, are not rudimentary, but are in some species as long, and sometimes longer than the proboscis, and are usually covered with hair at distal end, which makes them look like long-handled dusting brushes. The palpi of females are usually shorter than of the males.

The antennæ, or supposed hearing organs, in the males are large and well developed and covered with long hairs, and look under the microscope like a frayed palmetto fan. (See Fig. 5.) In the female the antennæ are not so well developed and are sparsely covered with hair. The male must usually find the female at night, consequently his hearing organs are well developed, and, as Dr. L. O. Howard has pointed out, different species of mosquitoes give a different note, when flying, the utility of well developed hearing organs in the male is evident.

The eye of the mosquito is what is called the compound eye, and is a beautiful sight under the microscope. Mosquitoes can see, and are attracted by a light, a great distance. The thorax in male and female are much alike, as is also the abdomen. Differences, however, can be observed. The ultimate segment of the abdomen differs very much in the sexes. The male has little hooks (Fig. 10b) and the female a simple aperture.

The clouds of mosquitoes we see hovering over us and other animals are nearly all males; it is well known that the females, if any are near, are sure to come to get the albuminoid material they require for the eggs, and that he can act his part in procreation. The female, it seems, must have an albuminoid material, not necessarily from a warm-blooded animal, from insects and other living creatures. The act of fornication, as far as I have observed, always occurs when the pair is flying, the male overtaking the female. The male seems to like the house in the daytime and can be found in large numbers resting on the walls, also some females, but usually more males.

The interior anatomy I will not speak of. (My friend, Prof. Geo. E. Beyer, with the greatest of artistic skill, close observation and long training in these matters, has shown you far better than I am prepared to do. See his article in this JOURNAL.)

The position which the different *genera* take while resting is peculiar, and usually distinctive. (See Figs. 2 and 3.) More

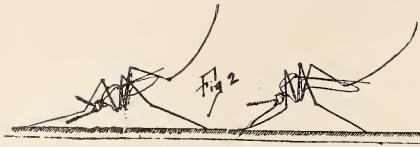


Fig. 2. Resting position horizontal surface. *Anopheles* at left, *Culex* at right.  
(From C. O. Waterhouse of the "British Museum.")

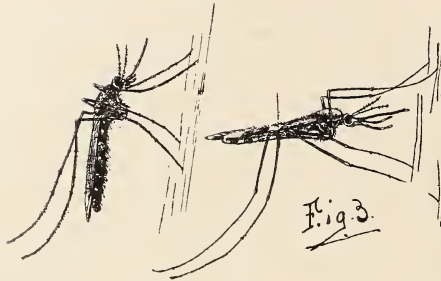


Fig. 3. Resting position on vertical surface. *Anopheles* at right, *Culex* at left,  
—*British Medical Journal*. (Reduced from *Bulletin No. 25*, U. S. D. Agriculture,  
Division of Entomology, Dr. L. O. Howard).

especially with *Anopheles* and *Culex*. I have observed, as has been described by authors the world over, that it is the *Anopheles* at very nearly right angles to the surface on which they are resting, the body perfectly, or nearly, straight; in other words, no-humpbacked, as *Culex* and others. The body of *Culex* and others are usually parallel to the surface, and are humpbacked; that is, there is an angle at juncture of thorax and abdomen.

The *Anopheles* is quite awkward in lighting on a vertical surface, such as a wall, and bobs around like "daddy-long-legs." The *Culex* and others do not seem to have so much trouble and light almost immediately. I have watched an *Anopheles* try for five minutes before selecting a suitable landing place.

Mosquitoes belong to the *Diptera*, or two-winged insects, sub-order *Nemocera*, or hornbearers, *attæneæ*, having fancied resemblance to two horns. They belong to the *Culicidæ*, or true mosquito, or gnat tribe. The word "mosquito" comes from the Latin, and means a gnat, or fly.

In the United States, we have five *genera* of long-beaked mosquitoes. According to the report of Dr. L. O. Howard, Chief Entomologist, Department of Agriculture (*Bulletin No. 25*), *genera* and species are being gradually increased. Specimens of

of them all have been taken in this city by Prof. Geo. E. Beyer and myself. Actual specimens which are shown can describe better than words. (The cuts I introduce in this article are nearly all from Dr. L. O. Howard and his assistants, to whom I am under the greatest obligations for his and their kind assistance in helping me in this study, identifying specimens and other valuable aid.)

*Mosquitoes taken in New Orleans:*

(1) *Anopheles* (Figures 4, 5 and 6). The palpi as long or nearly as long as the proboscis, the wings spotted. (Prof. Geo. E. Beyer has found a species with no spots on wings.) The *Anopheles* are the *proven disseminators* of malaria. I have taken three species here :

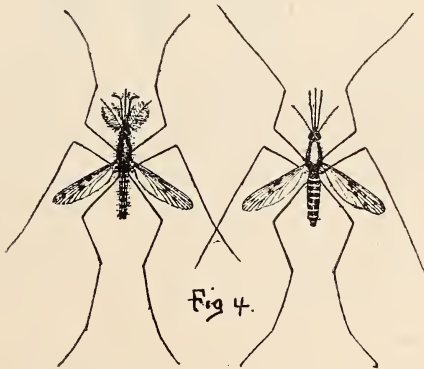


Fig. 4. *Anopheles quadrimaculatus*. Adults, male at left, female at right. (L. O. Howard, *Bulletin No. 25*, U. S. D. Agriculture.) It is the now celebrated *Anopheles claviger* or *Anopheles maculipennis*.

*Anopheles quadrimaculatus* (Fig. 4). Four little black spots on each wing. Taken in large quantities during the summer and fall at and near the Tenth Precinct Suburban Police Station, Metairie Ridge.

*Anopheles crucians* (Fig. 6). Many black spots on both wings, palpi with two white bands near distal end. Taken here in summer and late fall. Not very numerous.

*Anopheles punctipennis* (Fig. 5). Yellowish spot near tip and anterior border of wings. Taken here in fall and winter; not very numerous.

I find this genus breeds in our swamps, natural ponds (where there are no fish, or few) and suburban gutters; ponds that re-

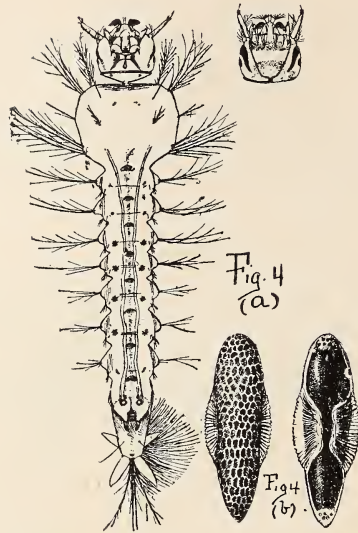


Fig. 4 (a). *Anopheles quadrimaculatus*, larvæ full grown (head reversed, in feeding position) seen from above. Dorsal side of head above at right enlarged.

Fig. 4 (b). *Anopheles quadrimaculatus*, egg from below at left, from above at right. Sculphising and Hyalin vesicular float. (Dr. L. O. Howard, *Op. cit.*)

main with more or less water all the time. They take from twenty to thirty days to go from egg to mature insect, temperature, wind, sunshine and rains influencing their growth, also the amount of food products; if the water contains few micro-organisms, they do not thrive well.

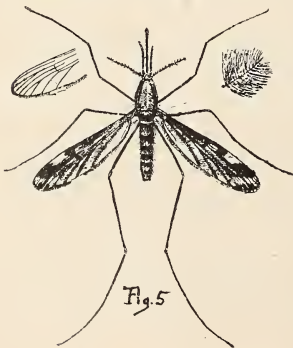


Fig. 5. "*Anopheles punctipennis*, female, with male antennæ at right, and wing tip showing venation at left" enlarged. (Dr. L. O. Howard, *Op. cit.*)

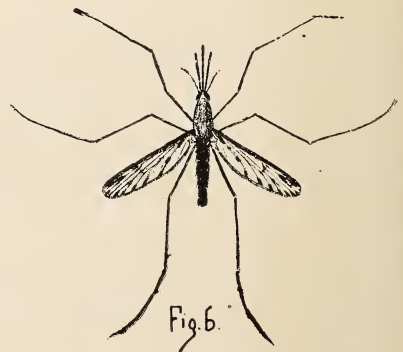


Fig. 6. *Anopheles crucians*, female (enlarged). (Dr. L. O. Howard, *Op. cit.*)

(2.) *Aedes* (Fig. 7). Palpi less than one-half as long as proboscis; proboscis enlarged at end; very small mosquito. Taken here by Prof. Beyer.



(3.) *Megarhinus*. Has a long and curved beak and is of a bluish or greenish color. (Taken here by Prof. Beyer.) (See Fig. 15.)

(4.) *Psorophora ciliata* (Figs. 8 and 9).

A very large mosquito. Only variety so far found in the United States. Legs have many erect scales on them. Taken near Audubon Park.

(5.) *Culex*. (Fig. 10, *Culex pungens*.)

Very short palpi; no spots on wings; wings well covered with scales; no scales on legs. The most numerous of all mosquitoes in this locality.

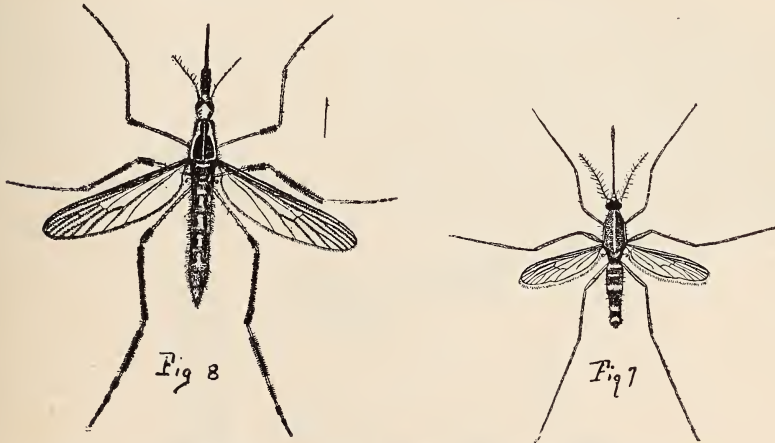


Fig. 7. *Aedes sapphirinus*, female, enlarged. (Dr. L. O. Howard, *Op. cit.*)

Fig. 8. *Psorophora ciliata*, female, enlarged. (Dr. L. O. Howard, *Op. cit.*)

A very large mosquito commonly called "gallinipper."

The above was compiled from Mr. Coquillet's table. (See *Bulletin No. 25*, Dept. Agriculture, New Series.)

I have taken here the following varieties of *Culex*; *Culex pungens* (Fig. 10); *Culex fasciatus* (or *Culex taeniatus*) Fig. 11; *Culex consobrinus*; *Culex perturbans* and *Culex impiger*.

This genus is by far our greatest pest, and breeds from about April until about the latter part of November. It is the one that breeds in untold and incomprehensible numbers in our gutters, water-closets, cisterns and large drainage canals.

Of the about thirty varieties of mosquitoes found in the United States, we have here the above named; the list is gradually getting larger, as the observers are also more numerous. However, the fauna of a locality is usually very quickly exhausted.

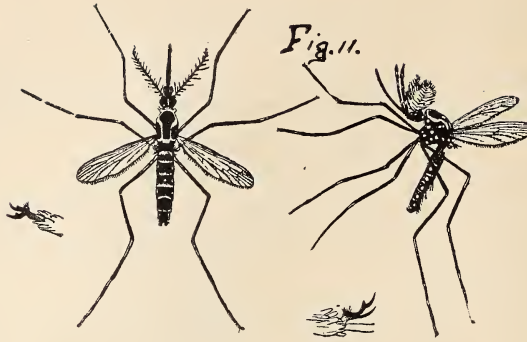


Fig. 11. *Culex fasciatus*, *Culex taniatus*. Now, July, 1901, it is considered a genus-*Stegomyia*, with two species *fasciatus* (fabi) and *signifer* (Coquillett). There is strong proof that it does disseminate yellow fever.

(Dr. L. O. Howard, *Canadian Entomologist*).

I shall not be able for the want of time to describe all the varieties found in this city; the cuts, actual specimens of insects, and mounted specimens of various parts, eggs, larva, pupa, moult skins, etc., will demonstrate better than words. (I refer the reader to the cuts which I have taken from *Bulletin No. 25* of the Department of Agriculture.) (Also refer to Prof. Geo. E. Beyer's cuts in his article.)

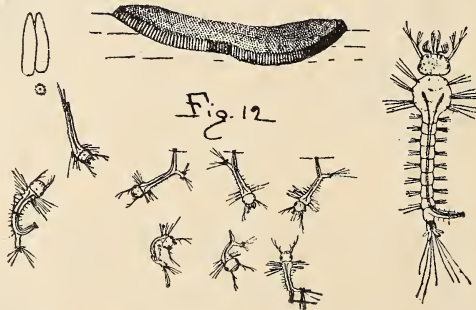


Fig. 12. *Culex pungens*, egg mass or boat, several hundred eggs in each boat, or rather egg raft I would call it, center and top of cut, two eggs as they stand on water on left of cut. Small larvæ below, full grown one on right of cut. Enlarged.



Fig 13. *Anopheles quadrimaculatus* eggs scattered about and floating flat on top of water, seen from above. One female will deposit several hundred.  
(From Dr. L. O. Howard, *Bulletin No. 25*, D. A., U. S.)



Fig. 9.

Fig. 9. *Psorophora ciliata*, adult female, showing position on side wall and ceiling, enlarged. (Dr. L. O. Howard in the *Canadian Entomologist*, December, 1900.)

All mosquitoes come from an egg. (See Figs. 12 and 13.) The egg hatches and forms the larvæ, or masked form (See Figs. 9, 10, 12, and 14); this changes into the pupa, meaning little girl, boy, or child (See Figs. 9a and 10c); from that into the imago, the mature form of insect, so-called by Linnaeus.

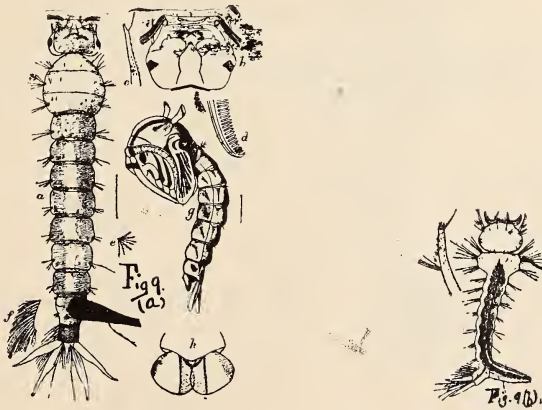


Fig. 9 (a). *Psorophora ciliata*, larvæ full grown. b, Head of same from below. c, Antenna of same. d, a mandibular filament. e, Tuft from penultimate segment of same. f, Fringe from same. g, Pupa. h, Anal flap of same.

Fig. 9 (b). *Psorophora ciliata*, young larva with large antenna at left (Dr. L. O. Howard, *Canadian Entomologist*).

The natural place for mosquitoes to deposit eggs is in or near water; the larvæ and pupæ, or what is popularly known as wiggletails, live in the water, but are both air breathers. The imago, or mature insect, emerges from its moult skin, and uses the moult skin as a float, or boat to stand on until its wings and other parts have time to unfold, dry and assume their natural condition for the new phase of its existence.

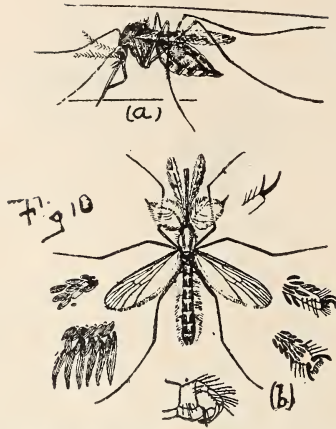


Fig. 10 (a.) *Culex pungens*, female in the act of biting (or stinging).

Fig. 10 (b.) *Culex pungens*, male. Tarsal claw at top and right of cut, ultimate abdominal segment of male, showing hooks on right and lower portion of cut. Scales to left.

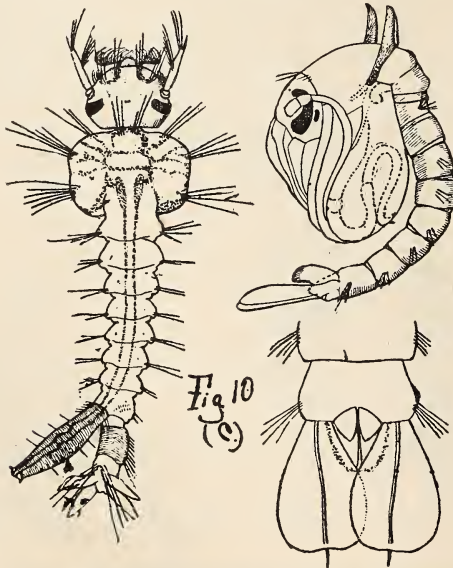


Fig. 10 (c.) *Culex pungens*, full grown larva at left, pupa at right with gill flaps.  
(Dr. L. O. Howard, *Bulletin No. 25*.)

Each genus, and in fact, every species, has peculiarities of its eggs; the *Culex* makes little boats of them (Fig. 12); the *Anopheles* eggs are scattered about, and not in masses. The *Culex* eggs stand on end, whereas the *Anopheles* lie flat (Fig. 13). The *Anopheles* and *Culex* larvæ and pupæ have also different positions (Fig. 14). The *culex* larvæ have long respiratory

siphons, the *Anopheles* very short (Fig. 14). The *Anopheles* lie flat on surface, while resting and feeding: the *Culex* with just the tip of the respiratory syphon above the surface film of the water. *Anopheles* larvæ, up to about five days old, seldom, if ever, go down under the water; after that time do go down similar to *Culex*, and remain seldom longer than one and a half minutes at bottom of experimental glass jar. It might be different in natural conditions.

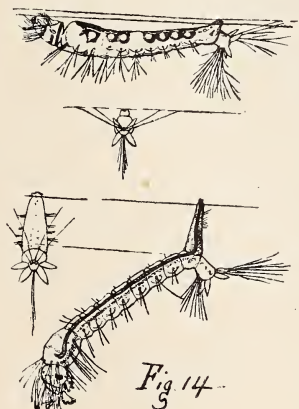


Fig. 14. Shows *Anopheles* larvæ in feeding position, parallel to and just under the surface of water, top figures. *Culex pungens* figure at bottom of cut. Note its long respiratory siphon as compared to *Anopheles* and its head far under surface of water and body at an angle to surface.

(Dr. L. O. Howard, *Op. cit.*)

The *Culex tæniatus* or *fasciatus* (Fig. 11) I have been unfortunate in my experiments with, as some mishap usually stopped my experiments, and I have not carried it from egg to imago. It is a very interesting variety for several reasons. It is the so-called yellow fever mosquito (of Finlay, Carroll, Lazear and Reed); it is our day mosquito, and is distinctly a house mosquito; seems to remain in houses, and I think breeds especially in our cisterns and does not object to lay eggs before you in a glass full of water. You can get specimens any morning from your pitcher, if you have carelessly left it uncovered. It is a jet black mosquito, with silvery white scales on the thorax and abdominal segments. It is really one of the prettiest things in "black and white" I ever saw in its line. Its legs are encircled with white bands. I have also heard it called the "calico mosquito" on account of its markings. I think I am the first to record it in the United States. It was supposed to exist only in the West Indies.

I think it should not only be thoroughly investigated but destroyed, as I think it can account for the infection of houses with certain contagious and infectious diseases. It flies and bites principally in the daytime; it is the one that will prevent a quiet nap in the day unless you are protected under a mosquito bar. This mosquito can be found in most any house, from the first of May until frost. If the house is kept warm, they will remain active the year round. It would be interesting for obvious reasons to know the highest altitude it is found.

*Breeding place of mosquitoes.* Our gutters are our great sources of supply of mosquitoes; next our drainage canals; next our water closets and our cisterns; very few, if any, from our river, lakes or navigation canals. From our swamp comes the *Anopheles*. Thank goodness! they are not so numerous in the city proper, and are only brought in by northerly, easterly, and westerly winds, as mosquitoes do not fly far from their breeding places from choice; they can, however, be carried miles by winds.

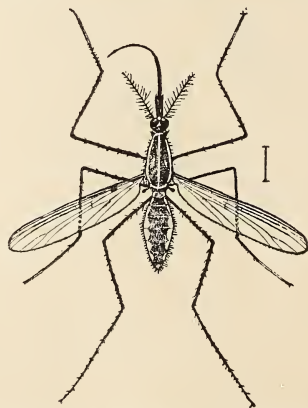


Fig. 15. *Megharhius rutilis*. Note its long and curved beak. Is a large, greenish colored mosquito. Has never been investigated. Inhabits Southern States. (Dr. L. O. Howard, *Op. cit.*)

Our gutters give us, I think, about 90 per cent. of the mosquitoes that bother us about our homes, especially the *Culex pungens*, which breeds by the hundreds of millions in our gutters and drainage canals. Our lakes and river do not seem to favor the mosquito; I think from the waves, winds, or depth of water, and from the myriads of fish. The Mississippi River is rich in sulphates, and I think the fine sand also handicaps the larvæ, and its waters contain no food for the larvæ unless it

becomes stagnant in ponds mixed with rain water; then they breed astonishingly in it, in ponds near its banks. After a windy night I have seen large numbers of dead mosquitoes in the water of ponds and gutters, evidently washed or blown over as they were coming out of the pupal state, the wind throwing them over before they were able to fly. If the water is too pure, or rather contains no organic matter, algæ or other living micro-organisms, mosquito larvæ will not thrive; such is the case with many of our cisterns, and especially of filtered Mississippi River water.

By the way, I would like to state that the typhoid bacillus, according to the observations of my friends, Drs. Pothier and P. E. Archinard, bacteriologists of this city, can not be cultivated in filtered Mississippi River water. In their laboratories they must use rain water. Gutters that contain soapy water from laundries, the refuse from tar, gas, oil or paint works contain no larvæ. The gutters on the opposite side of the street containing none of this refuse matter have been observed by me to be teeming with the eggs, larvæ and pupæ. The suburban wells and gutters approach in character to natural ponds, and in them we find *Anopheles* larvæ and a host of *Culex*.

*Haunts of Mature Mosquitoes.* The *Culex pungens* is found everywhere, night and day, ready to sting or bite, but usually enters the house about dusk. The *Culex teniatus* usually flies and bites in daytime; if a light is burning at night, you will find an occasional one. The *Culex pungens* is the one, however, that annoys us while reading or sitting on our front galleries, and follows in swarms when we take a promenade at night; we find them under our mosquito bars, and it is our greatest pest. The *Culex teniatus* is quite cunning in selecting the dark side of a person away from the light, and especially likes persons dressed in dark clothing; old people, as they usually sit quiet, are greatly annoyed in the daytime by them.

We preserve them and supply them with drinking water, by carelessly leaving receptacles of water in our rooms uncovered night and day. You can any morning see them coming from your water pitcher. If we were not so careless, they, of necessity, would go out to get water, which they must have or dry up.

The *Anopheles* start on their foraging expeditions about half-past eight or nine at night; are seldom found in habitations in

the daytime, unless in a manner trapped; nearly all my specimens were caught at night. I have caught them in my office, in my home, and saw one evidently lost or accidentally trapped in a jeweler's window on Canal street. Mrs. *Anopheles* was trying her best to get some of the first water from an elegant diamond, on which she was resting. I expect she thought it water.

They are most often found in the city proper after a northerly, easterly or westerly wind; southerly winds do not seem to bring them, for reasons which I have already given. You can find them in old barns, neglected rooms that contain cobwebs; they can light on cobwebs and get off without any trouble, and seem to live at peace with spiders. You can also find them in dark fence corners, behind boards, stone slabs, in fact, in nearly all quiet, dark places. A favorite place for mosquitoes is around and in the soiled clothes basket; the *Culex* is especially fond of such places. I have caught many of my specimens around the soiled clothing in the wash basket. This might account for the dissemination of various diseases by fomites.

The mosquitoes imbibe any moisture, or excreta that might be on the soiled clothing. I have (as I know others have) seen them imbibing the excreted, vomited and expectorated matter from patients. A baby's diaper will soon be the feeding place for flies and mosquitoes if left exposed. I have seen mosquitoes, male and female, imbibing blood which was vomited by patients. The male in this instance does not have to puncture to get the blood; he will suck up most any liquid. I know Drs. Finlay, Carroll, Reed and Agramonte, of Havana, will be interested in these observations.

The food for mosquito larvæ seems to be all sorts of small aquatic organisms, which they whorl into their mouths. They also require certain water plants, such as the green scum you see on stagnant pools, which has been identified for me by Mr. Albert F. Woods (Chief of the Division of Vegetable Pathology, Department of Agriculture) as *Spirogyra*. It is a fiber, containing many joints, looks under the microscope like a piece of green sugar cane, with its joints at regular intervals. Enemies and unfavorable conditions to mosquitoes are many; small fish of all kinds; our little minnows, and we owe much to them, as they are almost as numerous as mosquitoes, and where you find them, every other condition being favorable, you find none, or



few mosquitoes' larvæ, unless myriads of larva have been washed down on them, and it is only a question of time when the minnows get very fat and the larva much less numerous. The little friend has been identified for me by Dr. H. F. Moore, of the United States Fish Commission, as the "top-minnow," of *Gambusia affinis*. This little creature likes the eggs, especially the larvæ, and sometimes does not hesitate to swallow a female mosquito while she is ovipositing; eggs and all. He gets rid of about two or three hundred prospective mosquitoes at one swallow.

All small fish are fond of mosquitoes in their various stages of growth; our perch, gold fish, etc. Birds, such as sparrows, bats, etc., also various insects eat them, such as our *Ordonata*, or as our boys call them, "mosquito hawks." The larva of insects also eat the mosquito larvæ; the larva of the dragon-fly (mosquito-hawk) is one of their worst enemies, and other large larva, the names of which I am not familiar with. Storms, heavy rains, wash the larva into large bodies of water; the fish and waves kill large numbers of them; swiftly running water by preventing their feeding, or breathing, is unfavorable to the larva. Strong winds drive large numbers of adult mosquitoes out to sea, and they are lost. Sudden changes of weather, a fall of twenty degrees will numb them, and freezing weather will kill them, if they are not in protected places, where they hibernate. Large numbers are killed by the arc electric lights.

*Prevention and remedies.* Our efforts to get rid of mosquitoes should begin about the 1st of April, at latest. Then we would have only the hibernating ones to deal with, but the effort should continue throughout the year until frost at least.

In conducting large improvements where the soil is turned up, favors the formation of stagnant pools in the excavations, and by destroying the previously existing drainage, natural or otherwise; hence, in opening up new lands and making improvements in cities, it is of great importance to see that there is proper drainage and that no stagnant water accumulates, or use petroleum or chloride of lime.

We should keep our gutters in one of two conditions; either dry or with running water, as has been popular for many years, but for some reason, in the last few years, has been neglected! The water must be running, and the Mississippi River water is the best and cheapest. The female can not well light on running

water to oviposit, and for other reasons which I have already given. We should taboo our high, closed board back fences. Let the wind sweep through our yards. An old fence corner is a good place to catch specimens of most any variety. Make our fences open; let the wind sweep through and keep the mosquitoes on the move.

Our cisterns should be covered with fine galvanized iron wire gauze; this is better than oil, because it is quite permanent, and is not washed away by the overflow of the cistern, as oil is liable to be. This should be enforced by city ordinance, as was suggested to me by Mr. J. Zach. Spearing, the well-known lawyer of this city. Oil would be the quickest method, but I fear the citizens would object. Oils, such as oil of vaselin, cottonseed oil, can be used, but form large globules, and does not spread and form a film of oil which is essential to kill the larvæ, and this is what makes kerosene or petroleum the best larvacide there is, as has been proven by Dr. L. O. Howard.

I think the wire screen the best for cisterns or tightly closed tops with wire ventilators.

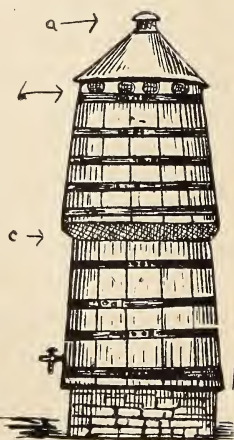


Fig. 16. Cistern properly protected. Using wire gauze 18 meshes to inch, inlet and overflow pipes also screened at ends with wire gauze. (a) Fine wire gauze. (b) Wire gauze over openings. (c) Wire gauze. (H. A. Veazie).

Our water closets should be treated at least once in a while, say, once a month, with an ounce or two of petroleum. It is very cheap, and each house-holder could do that much for his own comfort and that of his neighbors. All water vessels and receptacles kept covered. Look out for an old tin can in which rain water has accumulated!

Coal oil put in our gutters, several gallons to each gutter, the oil permitted to leak out gradually, run out of can at the head of each street near the river, and the same oil would gradually flow down the gutters, and eventually reach the large drainage canals, and, in many instances, the swamp back of the city and kill untold millions of larvæ in those places. Kerosene is the best larvacide, but the crude oil such as is now found near Beaumont is very cheap and acts quite as well. The streets sprinkled with this oil will accomplish two ends; lay the dust, and be washed by rains into the gutters and kill the mosquito larva. [NOTE: This has been done on Canal street. Before reaching Claiborne street, to-day, July 9, 1901, I observed that there were no larvæ in the gutters of squares that had been sprinkled, but on the other side of Claiborne street were large numbers of larvæ; as the gutters to the river side enter a new covered drainage canal, or sewer, and the *oiled water does not cross Claiborne street.*]

Let every citizen constitute himself a crusader, or committee of one, and spend a few cents per month around his own premises, and he and his neighbors will most certainly profit by it in more ways than one.

Fumes of various kinds, smoke from green grass, moss, feathers, tobacco, etc., will drive away mosquitoes; much used by farmers and cattlemen to keep mosquitoes from their stock; it acts quite well, but is very disagreeable.

The swamps back of the city should be cleared of trees, and the wind have full play, and the sun dry up the swamps which should also be drained, or filled.

I think it would be a good idea to tax the undrained swamp land, and exempt the drained swamp land for a period of years that would make it profitable to the owners to drain it. As it is, these lands pay no taxes, and by forcing drainage they would eventually become valuable and tax-paying lands; for the present, they could be utilized as truck farms if drained, and eventually will be a part of the populated city; and we will then be a city by the lake, as well as by the river. A few thousand dollars spent on swamps in drainage would profit millions to this city in more ways than one, commercial and otherwise. Get rid of all stagnant water, especially in and near the city, and we will get rid of many annoyances, mosquitoes included.

Water mosquitoes must have; without it, they soon die. In my experiments I have kept them alive by properly feeding and watering them, but all species I have tried have died within five days without water. The *Culex pungens* survived almost five days. This was in summer; in winter they hibernate, and can do without. So drainage and sewerage is the thing, and that we are doing as fast as we can. In the meantime, we must protect ourselves with mosquito nettings, our houses with screen doors, use kerosene in our closets and gutters, screen the top of cisterns, or use some innocent oil, and we will be happier and healthier.

There are various substances to anoint our hands and faces with to prevent the bites; oil of eucalyptus, lavender and other such aromatic oils properly diluted; even tallow or lard will help a little. Burning a little sulphur in a room or house will kill all mosquitoes, and if strong enough, will kill all vermin and living things.

After the discharge of the last patient from the New Orleans Yellow Fever Isolation Hospital, 1897, the hospital, or rather schoolhouse, was fumigated with sulphur, under the personal supervision of Dr. J. D. Bloom, House Surgeon, Charity Hospital; Dr. H. P. Jones, Resident Physician; Mr. John Ponder, the Charity Hospital engineer, and myself. The institution was fumigated from attic to basement with sulphur fumes, and after twelve hours we inspected the different rooms and found on the floor, near the windows, large numbers of dead mosquitoes, flies, spiders, etc. In the language of Pat, "every living thing was dead;" even the wasps' larvæ and spiders in the wasps' mud houses were black and crisp, as if baked. The school was opened in due time, and I know of no case of illness traceable to it. I made the statement, and gave the promise at the time, that I would treat any one who got fever from that institution free of charge, and also supply the medicines. I was not called upon to treat any case near that institution, or any of its pupils.

A little sulphur burned in a room or house will at least free it from the mosquitoes it contains. If the sulphur is used on a dry day, and polished, metallic and delicate things removed, it will do no harm, except to living things.

Mosquitoes are man's greatest enemy, as malaria depreciates the system and lays it liable to all sorts of diseases, as after

its ravages our organism has not the power to resist the invasion of various micro-organisms.

This city can most certainly get rid of mosquitoes by concerted action of her citizens and the outlay of a very little money, and then we can defy many diseases, yellow fever included, and with twentieth century methods eventually relieve ourselves of that relic of the fourteenth century, quarantine. We can have "the open door," and our city prosper as she should, without fear for ourselves or menace to our neighbors. Dr. Walter Wyman, Surgeon General of U. S. Marine Hospital Service, ahead of the times, has pointed the way. Let us follow!

This city, without malarial diseases, is the healthiest city in the world, and as it is now we compare more than favorably with other large American cities. Let us get together, one and all, and exterminate our enemy, the mosquito!

In conclusion, I wish to thank again Dr. L. O. Howard, of the Division of Entomology, U. S. Department of Agriculture, and all his assistants, especially Mr. C. L. Marlatt, Mr. D. W. Coquillett and Mr. F. H. Chittenden, for their kind attention and patience with me and my long and numerous letters of inquiry. I am grateful to Mr. Albert F. Woods, chief of the Division of Vegetable Pathology, and to Dr. H. F. Moor, of the Fish Commission, for their kindness to me. I thank the police of the tenth precinct suburban station for their kindness at all hours of the night and day, especially to Officer Hann and Clerk C. A. Renaud, for not locking me up as a perpetual nuisance.

*Addenda.*—Since the meeting of the Louisiana State Medical Society, in April, the genera of long beaked mosquitoes of the United States have been increased by four. *Culex fasciatus* is now a separate genus, *Stegomyia*. The species I found here is called *Stegomyia fasciata*.

I have lately, July and August, 1901, taken another of the new genera, *Conchyliaastes musicus*. I took them resting in the walls of water closets in the early morning. So far I have not taken any of the other two genera, *Toxorhynchites* and *Manotænia*. I would refer my readers especially, if physicians who are interested in this subject, to Dr. L. O. Howard's book on mosquitoes just from the press of McClure, Philadelphia, Pa., and New York, N. Y.

## Clinical Report.

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### INTRA-PERITONEAL ABSCESS OF THE ABDOMEN, CONTAINING PURE CULTURE OF BACILLUS TYPHOSUS—A SEQUELA OF TYPHOID FEVER—RECOVERY.\*

By L. G. LEBEUF, M. D., Visiting Physician to Charity Hospital and Consulting Physician to the Eye, Ear, Nose and Throat Hospital, New Orleans.

Dominick de L., a white adult, æt 24, came to my office March 14, suffering with a grippal attack, nose stopped up, severe pains in body, fever and cough. Temperature  $103\frac{3}{4}$ . I sent him to bed, and attended him for four or five days. On the third day of treatment, physical examination revealed sub-crepitant rales at base of right lung. A severe counter-irritation was applied, with other treatment, as indicated by influenza. On March 20, patient was apparently well of catarrhal condition. Still temperature kept on, a little lower in the morning, but much higher in the evening. His tongue, in spite of purgatives administered during beginning of his illness, was coated with a thick, grayish coating in the centre, and red and pointed at the edges; it was also dry as parchment. Bowels which had been primarily constipated began showing signs of looseness, stools offensive, frequent and of a pea soup appearance.

At the end of the first week there were also some *tâches rouges* on abdomen, and on the sides; pulse which had been fast lost its relation with the temperature. Though fever would be 105 or 104 degrees it never showed up above 80 to 92.

I quickly realized that I had to deal with a typical case of typhoid, which had merely been ushered in by catarrhal condition.

Cold sponging was resorted to, to reduce temperature, alternately with ice pack to head and abdomen. Intestinal antiseptics, consisting of calomel, gr.  $\frac{1}{10}$ ; menthol gr. i; sodium sulphocarbolate, gr. i, and menthol, gr. i, given in capsules, one every two hours, was used also from the first week.

About March 25 and 26, muttering delirium set in and patient's condition became much worse. On the evening of March 25, he had a severe epistaxis; this bleeding of the nose

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\*Read before the Orleans Parish Medical Society, July 13, 1901.

kept up at intervals for four or five days, and had to be checked by local packing before it was controlled. There was also bleeding at the gums twice.

His diet was very strict—chicken tea, barley water, milk with lime water, milk punches and freely of vichy.

After attack of epistaxis, I had to give him some tablets of strychnia, as well as a little normal tincture of digitalis. Whenever antiseptic treatment seemed to constipate him too much, I would stop it for a day and give him triturate tablets of calomel, gr.  $\frac{1}{10}$ , one every hour, until free catharsis would be produced. There never was any blood in stools, nor did he seem to suffer with overdistension or any gaseous tympanites.

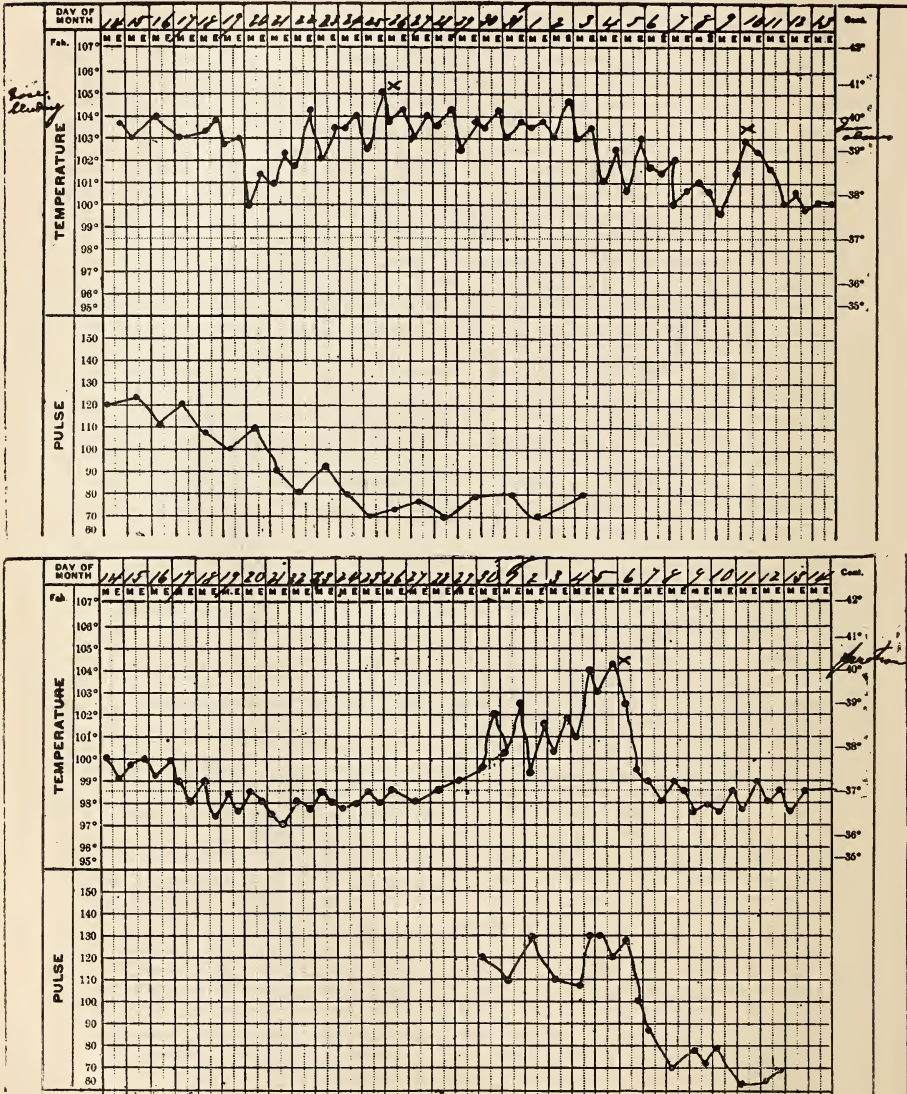
Pulse remained extremely slow, from 76 to 92 per minute. At the end of the third week of typhoid or fourth week of illness, though temperature has been gradually going down in a regular ladder-like fashion, it shot up again to 104 degrees. There was nothing to account for that, as he had been improving right along, there had not been any imprudence of diet or anything to cause this rise except two gingival abscesses, which gave him some trouble at that time, one especially, which had to be opened two or three times, finally curetted, and then packed before it ceased to secrete.

After the 12th of April he did wonderfully well, and by the 17th was entirely free of fever. On the 20th he was allowed to get up and sit in a rocking chair or lie on a lounge for a few hours at a time. About April 20, he called my attention to what he called a lump in his stomach. It was a hard, immovable tumor of the size of an ordinary turkey's egg in the median line, half way between the symphysis pubis and the umbilicus, in the hypogastric region. It could not be detected by the eye; it was painful only on rough handling, but painless otherwise.

When bladder was full it could easily be differentiated from any connection with it, as well as from McBurney's region. At that time there was no fluctuation, and as he was much emaciated, and abdomen very flat, it was also easy to exclude it from any vascular dilatation or sacculation.

At first aspect I suspected some incomplete fecal impaction, and though freely purged through his whole period of sickness, I gave him two or three high rectal enemas of glycerin, sweet oil and magnesia sulphate; still tumor remained the same size. In fact, it seemed to increase to an alarming extent.

By the 25th of April my patient was feeling so much better and stronger that he was able to walk about the house without any discomfort from tumor.



Charts Showing Pulse and Temperature in Dr. LeBeuf's Case.

Remembering the two gingival abscesses which I had opened about two weeks previously, I felt that I had to deal with something similar. Unfortunately I had not had a bacteriologic examination made of that pus.



On April 30, he began having fever, and in two or three days, though he did not go to bed with this, his chart showed typically a pus chart. My impression was then that I had to deal with a typhoid abscess, circumscribed happily by nature's own efforts and trying to seek an outlet. I thought it due to a pin-hole rupture of an ulcerated patch, or to a migration, as sometimes reported, of the colon bacillus.

The tumor was as large as a good-sized apple and began to show very distinctly when patient laid down. Some fluctuation could be felt also at this time.

On May 4 I called in as surgical consultant my friend, Dr. J. D. Bloom, who agreed to the diagnosis of the abscess. Patient rode in the car to the hospital for this consultation; he had very little discomfort. On May 6, at the N. O. Sanitarium, with the assistance of Dr. M. H. Maguire and myself, Dr. Bloom opened this abscess under Sleich's No. 2 cocain anesthesia.

We found the parietal layer of the peritoneum adherent to the wall of the abdominal cavity and the incision made in the median line right through the raphé between the sheath of the rectinuscles opened directly in the apex of the abscess wall.

I had some culture tubes ready, so when the abscess was incised I took some specimens from the centre of the pus contents. At the time of the opening the abscess was fully the size of an ordinary croquet ball; it was partly in the hypogastric region, partly in the umbilical, it seemed to dip down to the very floor of the pelvic cavity. It was absolutely disconnected from the bladder, the cecum, and did not even seem to be adherent to mesentery of intestine. There was no odor whatsoever to discharge, which appeared to consist of a thin, whitish pus, no sign of any fecal matter or of any gaseous decomposition.

When the cavity of the abscess was freely lavaged large flocculi of laminated bloody fibrin seemed to peel off from the bottom. The whole mass, seemed, though dipping several inches to the bottom of the pelvic fossa, entirely separate from the balance of the abdominal cavity.

Nature had worked a beautiful edifice of self-repair and by its own efforts circumscribed this frightful complication.

Dr. O. L. Pothier, Bacteriologist of the Charity Hospital, to whom we submitted the specimen, reported: "The specimen of

culture taken from pus of abdominal cavity has been examined and has been found to give bacillus typhosus in pure culture;" after a free lavage, cavity was packed with iodoform gauze. This was removed every other day, cavity washed out with a normal saline solution containing also a 1 to 4000 sol. of formalin and packed again for about three or four weeks, when it closed up entirely.

The incision made was two or three inches in length and it allowed me while dressing cavity every day to examine cavity walls of abscess most critically. When both sides of cut surface of wound were grasped between the fingers one could see that the body of the tumor seemed to be lying well above the great omentum. The vermiform motion of the intestines could be distinguished moving freely under a grayish white membrane as a floor to cavity of abscess. Instead of an abscess from pinhole perforation or from rupture of a mesenteric gland was it possible that I had to deal with a real peritoneal abscess from migration? There was no fecal matter, no gases, no odors, no other pyogenic bacteria, but a pure culture of bacillus typhosus three weeks after typhoid fever.

It is very much to be regretted that a culture was not made also in the previous gum boils, it is probable that they also would have given out the same results. My patient has been at work since the 15th of June, having entirely recovered.

*Notes on Perforations and Abscesses.*—This condition is one of great importance both to the physician and to the surgeon—to the physician because it is of vital necessity that an early recognition of the status be made, and to the surgeon because it opens up to him a new field of interference where an early operation will save so many valuable lives.

In my case though I believed at first I had to deal with a rupture, or pinhole ulceration of a Peyer's patch, I had to come to the conclusion after the operation that I had to deal with either a migration of the bacillus typhosus, which like the colon, is known to migrate, or that I had to deal with the rupture of a mesenteric gland.

Prof. Wm. W. Keen himself had a case of typhoid in which he first operated, believing that he had to deal with a hernia. Instead of a hernia, during the operation he found he had entered a large abscess cavity, and thought then that he had an

abscess of typhoid origin due to some suppurative process of the connective tissues between the iliacus internus muscle and the iliac fossa. To make assurance doubly sure he took a specimen of pus and some of the debris which he had curetted away from the granular tissues at the bottom of the cavity. To Dr. Keen's surprise the bacteriologist, Prof. Coplin, reported that scrapings of cavity showed presence of tubercle bacilli and that after four weeks' trial no culture took place in test to determine typhoid bacillus. Finally this case proved to be a dissecting sinus from a psoas abscess following a Pott's disease at the dorso-lumbar junction.

I have related the difficulties of this case to show how often it is possible to make mistakes in this condition.

Professor Keen, in his admirable book on the "Surgical Complications and Sequels of Typhoid Fevers," speaks of the wide diffusion of the typhoid germ in the body. He says: "Scarcely a tissue of the body escapes invasion by the typhoid bacilli."

He finds it in the blood, in the endocardium, in the tissue, in the walls of the arteries and veins, in the muscles, in the connective tissue, in the skin, in synovial sheaths of tendons, in joints, in bones, in the brain and spinal cord, in gland, in the orbit, in otitis media, in the lungs, in the heart-muscle, in the peritoneum, in the liver, in the gall bladder and in the bile, in the spleen, in the mesenteric glands, in the ovary, testicle, epididymis, placenta and fetus.

This bacillus has been found a few days after the disease as well as fifteen years afterwards.

Dungern reported a case of abscess of the gall bladder where typhoid bacilli were found fourteen and a half years after the fever. In the peritoneum there are only four cases on record. Whenever there appears to be a mixed infection of typhoid bacilli with the streptococci or the staphylococci, the condition is always much graver and the patient rarely survives. Of course, this belongs to the domain of the pathologist; still it is a fact admitted by them to-day, that the bacillus typhosus has real progenic property by itself and that the pure culture (as in my case) is found in abscesses resulting from it.

It is believed that the typhoid germ can be present in the human body and not create any serious trouble, it may be pres-

ent in the intestine and be perfectly innocuous, until some sudden shock to the nervous system or some more active inflammatory process, as the attack of grippal catarrh, in the case I have related, comes in, and depressing the powers of resistance or elimination allows the invasion of this most virulent poison.

The subject of perforation alone is certainly one of the greatest interest; still so much has been written about it in the last two or three years that any discussion of it in this short paper would be superfluous. I merely wish to call attention that in typhoid fever perforations happen in two ways, either as an appendical perforation, where the abscess or rupture generally is localized to the right in inguinal region by the presence of inflammatory adhesions, while on the other hand perforation of a moving coil of intestine generally always takes place in the ileum and the lower part of the abdominal cavity. The lines of demarcation are fairly well defined between the pre-perforative and post-perforative stages of rupture and the diagnostician with the least observing mind can generally come to a diagnosis.

It is difficult to attempt to tell *when* a diseased gut will perforate. I believe the only tangible sign is admitted to be the presence of *leucocytosis*, but it does not seem to be so difficult to tell the moment the perforation *has* taken place. When there are adhesions and nature itself is causing a circumscribed area of tissue breaking down to shut itself from other dangers, it is quite difficult to tell the exact time of that process; but when you have a perforation in a free coil of moving intestine, then we should be able to recognize the symptoms at once.

For instance when a typhoid case doing fairly well with no distension nor too great tenderness of the abdomen is suddenly taken with collapse, cold, clammy skin, rapid, feeble pulse, nausea, vomiting, distention of abdomen, muscular rigidity of abdominal muscles and absence of leucocytosis and great pain you may safely say you have to deal with a perforation.

In the *Medical Record* of this year, Dr. A. A. Berg, reports, on March 23, that he had two cases of recovery of pin hole ruptures where the operation was performed about 22 hours after rupture, though he found a sero-purulent peritonitis in both cases. Also in a large number of cases compiled by Prof. Keen, as well as in his own cases, but few recoveries took place if the perforation was performed over 24 hours after rupture. No recoveries after 48 hours.

The question of typhoid abscess of pure culture has more direct bearing on these notes than that of perforations. They have taken place nearly in every part of the body. Cases are on record where they have taken place in the abdominal muscles, in the anterior mediastinum, in the axilla, in the post-anal regions, in the thigh, in the neck, the supra-clavicular region, in the deltoid, in periostitis of the femur, in necrosis of the ulna, in fact almost everywhere. The typhlitic and peri-typhlitic abscesses of former days, following typhoid must have been due to the typhosus.

Naturally if there are gases or fecal matter in an abdominal abscess following typhoid we know that we have to deal with a genuine perforation, but when on the other hand we find by a bacteriological research that the culture of that pus is of pure bacilli typhosi then only a migration or a mesenteric gland suppuration can cause this.

Prof. Keen says: "Typhoid ulcers or caput coli may easily have produced such conditions, and even if no perforation takes place it is not impossible that the colon bacillus may pass through the intestinal wall during an attack of typhoid and produce an abscess, as has been frequently demonstrated in other conditions than typhoid." He does not think that any case has ever been reported when the typhoid bacillus has been found free in the peritoneal cavity except by perforation or rupture or abscesses of the liver, of the spleen, of the gall bladder or the rupture of a mesenteric gland.

In some cases of abscesses post-mortem examinations have proved that even if no Peyer's patches were perforated they were found inflamed and the ulceration extended up to the peritoneal coat of the walls of the bowel.

Fraenkel opened an abdominal abscess in which only typhoid bacilli were found four and a half months after the end of the fever, due to a mesenteric gland. Miechie also opened and drained an abscess from a gland in the fourth week of typhoid fever. It seems doubtful, after maturely weighing the opinion of all the modern writers of the new field of investigation, how to diagnose my case. Whether from the appearance of the abscess cavity and its location it was an intra-peritoneal infection or whether it was due to a suppurating mesenteric gland? Fortunately my case was one of recovery, so the pathologist can

not decide the question for us; still the subject will always remain of paramount importance, and it is by reporting such cases that finally our knowledge of the whole subject matter will broaden to the benefit and gain of humanity in general.

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## Miscellany.

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THE LOUISIANA STATE BOARD OF HEALTH held its regular quarterly meeting on August 10.

After the meeting the board adjourned to visit the river quarantine station for the regular inspection. Some petition was made to the board to lessen the present restrictions, but the action taken was decidedly against any change in the present regulations.

It transpired that all medical inspectors reported the general health of the State in excellent condition.

Dr. Nolte was appointed delegate to the Annual Conference of State and Provincial Boards of Health, to meet in Buffalo in September; Dr. Owen was appointed to represent the Board at the American Public Health Association, also to meet in Buffalo in September.

During the meeting Dr. Souchon, the president, submitted a report, in substance as follows:

The general health of the State was never better, notwithstanding the lingering of a few cases of small-pox in certain parishes where the health officers have not been able to induce the people to submit freely to vaccination. This fact is the more striking by contrast with the situation in certain other parishes where energetic health officers have enforced isolation, disinfection and general vaccination.

The city of New Orleans is entirely free of small-pox since July 21.

The presence of charbon in adjacent States has been a source of some anxiety to the Board and to local health officers in threatened portions of the State. However, the recent action of the State Board in sending out circulars of instruction as to measures of protection has borne good fruit, and thus far but little charbon has occurred in Louisiana.

# N. O. Medical and Surgical Journal.

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## Editorial Department.

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CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

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### NEW ORLEANS MOSQUITOES.

We are gratified at the presentation, in this number of the JOURNAL, of a clear definition of the mosquito so far as has been found in this city and vicinity. The original work exhibited and the importance of the study detailed can not be too highly commended.

From different viewpoints our Professor Beyer and our Dr. Veazie have with care related the finding and the laboratory study of several varieties, some hitherto unrecognized in this country.

The timely illustrations from the drawings made from Professor Beyer's own mounts must go a long way toward familiarizing our readers with the breeds of the insect in their ferocious and benignant types.

Since the first intimation of the importance of the mosquito in some diseases and the necessity for the destruction of the insect, New Orleans has not been slow to fall in line. As a matter of fact, before New York City had taken a practical position in the matter our City Board of Health had promulgated methods of obtaining relief.

The Orleans Parish Medical Society still has to be heard from, and their work is under weigh. Some time since a special committee was detailed to study the mosquito question here, and as it is composed of men in and out of the laboratory, the report, when complete, must prove interesting.

It is remarkable how quickly the note of scientific truth sounds all over the world. The work of Grassi, Nuttall and Manson had hardly been announced before the application of the mosquito theory of disease was made in Havana and proven by subse-

quent methods of practice in disinfection and in laboratory and bedside observation.

We are ready now to witness to any extraneous disease origin and in the light of recent years we may not be surprised at finding other curious hosts of diseases not yet clearly defined as to their causation.

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#### THE DEFINITION OF A CRIME.

Within the past few years, the daily press, of the South particularly, has been full of the horrors of the frequent lynching, mutilation and burning at the stake of negroes for the commission of acts of violence upon white females.

So accustomed to the detailed relation of such executions has the average citizen become that it seems to have quietly passed into unwritten law that the offence is duly expiated in such punishment.

This is a self-styled modern civilization, boasting of advancement in learning and wisdom; but are we really, however, studying this trend of things from the proper point of view?

Among the many instances of the commission of the unnamed act by negro brutes, that in Corsicana, Texas, last year stands out as a strong example of the unexplained occasion for such offences against the accepted social and moral law of the community. Here the negro, at the fearful end, in facing the inevitable death, called upon his God for forgiveness, and said, in so many words, "I did not know what I was doing." Kraft-Ebing instances the case of a man of the middle class, who, on his way to his home, suddenly assaults and incidentally murders a child, and a few moments afterwards is as ignorant of the crime as if he had experienced it all in his sleep.

If we are at that point of civilized progress at which only the pure and the absolutely normal are to survive, then there is no need of looking into the explanation of such acts.

The execution, even under such fantastically horrible conditions, of the offenders in crime, as yet has served no good purpose, and the number of such executions seems to have increased with the increase of the crime.



A little more light is needed in the world to meet the conditions of the future. The medical profession is all but ignorant of the conditions of sexual perversion, sexual insanity if you will; but, either way, a physical abnormality, due to animal characteristics made morbid rather than to criminal instinct.

No man with the spirit of the hearthstone fails to vibrate in a thrill of bitter, resentful passion at an act of violence against the most sacred of his ideal, and that this should find expression in the explosion of another instinct is quite natural, as the history of events has shown.

The savage instincts of the negro, not yet brought under the laws of civilized life, themselves in many ways more social than natural, together with the degenerate influence of the idle life of the average negro, often underfed and living little better than an animal, all tend to create conditions which are morbid, as morbid in degree as with other races or people placed under like conditions, and the evil state must carry to a point of expression.

That this should reach its final in an act of criminal degree is as natural in consequence as it is morbid.

If court records of crime were studied in all their phases, the catalog of offences would indicate a graded list of kindred acts, lacking only in degree of violence, depending upon the strain in the individual.

The habits of vice in the urban centres are incentive to the morbid trend in those physically or mentally too weak to fall in with the marching line, and the prohibition of natural habits brings about the unnatural. Again and again some oblique-minded person is sentenced for some small offence against the law which has been provoked purely through a pervert mind, itself conscious of the act and often morbidly remorseful for it. The punishment in its seeming injustice only makes the victim worse than before.

One has to read exotic literature to learn the phases of these types; our texts in medico-legal lore are barren of more than a suggestion of such. The learned chairs of both medical and law colleges either ignore the necessity for instruction in these fields, or else discourage the knowledge of it, by yielding to the popular protest against the circulation of scientific literature dealing with these subjects.

We do not believe that the teaching of the conditions kindred and a part of sexual instinct will all at once stop the assault upon women and the rape of children; but the knowledge of the degrees and kinds of these conditions, the symptoms and the outward evidences would tend in large measure to make both the professions and the public to look upon the excrescences of morbid nature in a different light and to study wider means of prevention.

Both our schools of medicine and of law should provide for adequate teaching upon this important field of jurisprudence. After all, it is only a broader need of special study for those who are held among the natural reformers and after whom the general public take both pattern and lesson.

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## Society Proceedings.

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### ORLEANS PARISH MEDICAL SOCIETY.

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MEETING OF JULY 13, 1901.

DR. GORDON KING read a paper on "*Report of Some Cases of Foreign Body in the Esophagus.*"

CASE I.—Oscar G., a white boy 3 years and 6 months of age, came under my care in January last through the kind interest of Dr. L. G. LeBeuf, who had been called in to see him at his home in Gretna. Four days previously the child was playing with a tin whistle, which he accidentally swallowed, and it became lodged in the esophagus. The whistle, as may be seen, is about the size of a silver quarter, and shaped like a double convex lens with a hole in the centre. The greatest difficulty in swallowing was in the passage of solid food, liquids passing into the stomach with comparative ease. The child complained of some pain in the throat, indicating with his hand the region of the thyroid body.

The little patient being too young to permit of the use of the esophagoscope, I decided to try the efficacy of the coin extractor.

In order to locate the body first, I introduced an esophageal sound, which appeared to meet a slight obstruction just below the mouth of the gullet, but passed on, nevertheless, as far down as the stomach. I then tried to grasp the body with a flexible forceps, without success. Fearing that I might force the whistle down into the stomach, I introduced the coin extractor very cautiously, and thought that I heard a slight metallic click as it passed the point where the body appeared to be lodged. It met with no further resistance, however, and I withdrew it, hoping to see the whistle come out nicely in the slot of the instrument. In this I was disappointed, for, in spite of my precautions, the body was pushed down into the stomach, and its presence could no longer be detected in the gullet. The patient was sent home, and under the direction of Dr. LeBeuf, was given a dose of castor oil. There was no further difficulty in swallowing, and the whistle was passed with the feces three days later.

CASE 2.—James W., colored, male, aged 2 years and 6 months. On Sunday evening, June 9, while playing with a five-cent piece in his mouth, attempted to swallow the coin. Becoming lodged in his throat it caused an attack of gagging and dyspnea, which, according to his mother, lasted about three minutes and was quite alarming for the moment. The mother promptly put her finger down his throat trying to dislodge it, and then pounded him vigorously on the back, but without avail. Later she forced the child to swallow a dose of castor oil, which had no other effect than to produce considerable respiratory distress for several minutes.

The child was brought to the clinic on the following Wednesday, having been unable to take any nourishment since the accident, and being consequently very much distressed. He was too fractious to admit of a laryngoscopic examination, so bromide of ethyl was administered, and a finger introduced into the mouth revealed the coin firmly lodged cross-wise in the mouth of the esophagus. Its upper edge only could be felt and this was grasped with a laryngeal forceps and the coin extracted. The little patient was relieved at once and was only too glad to be able to take some much needed nourishment. No bad after effects were reported.

CASE 3.—Laurina G., a colored female, 27 years of age, came under my observation June 19 of this year. Two days before,

while undressing to retire at night, she thoughtlessly put a pin in her mouth, and forgetting about it, a few moments later began to eat an apricot. Upon attempting to swallow she was soon reminded of its presence by a sharp sticking sensation in the throat and a sudden attack of choking which caused her great anxiety for a few minutes. The choking was relieved after that but the prick of the pin could still be felt and caused considerable pain upon efforts at swallowing. A physician was called, who made an examination of the throat, but could see nothing of the pin. The following day the difficulty in swallowing was accompanied by sore throat and tenderness of the neck on the left side externally. The symptoms steadily grew worse and prevented her taking any nourishment during that day. The next day when I saw her for the first time at the clinic she was suffering considerably with her throat and a slight swelling was noticeable in the neck on the left side at about the level of the cricoid cartilage. Examination of the lower pharynx and larynx with the laryngoscope revealed no sight of the pin, but considerable edema of the left arytenoid prominence and the glosso-epiglottic fold. The tone of the voice was not affected. The finger introduced into the pyramidal fossa failed to detect the pin in that situation, so I had about decided to investigate with the esophagoscope, when it occurred to me to try first the horse hair probang, which in my hands had hitherto always failed to be of any service. Upon the introduction and withdrawal of the instrument the patient complained severely of pain, but the pin did not come out with it. Examination of the throat immediately after, however, showed half of the pin lying plainly in view at the mouth of the esophagus, the point and about one-third its length imbedded in the base of the left arytenoid, below the mouth of the esophagus. The probang had displaced it and drawn it up into view. In this situation it was easy to grasp with a laryngeal forceps and to remove it.

A sedative gargle was prescribed for the patient, who complained bitterly of her inability to eat and the consequent weakness. The next day she returned to the hospital with an aggravation of the soreness in the throat and increase of the swelling in the neck. The edema about the arytenoid had not diminished but had extended even along the lateral pharyngeal wall. Continuation of the gargle and the application of hot poultices to

the neck were ordered and she returned to her home. The following day she sent word that she was unable to come to the clinic and was still suffering with the swelling in the neck and great pain upon swallowing. A day later she was seen at her residence by Dr. Dupuy, who discovered some pus oozing from the region of the swelling in the throat, low down near the esophageal entrance. A free incision brought out a flow of pus which continued for two or three days following, affording much relief to the patient. She has made a very slow recovery, however, and is only now beginning to swallow food naturally.

The infection of the cellular tissues of the lateral wall of the pharynx and neck, which occurred from the presence of the pin, seemed to continue progressively after its removal until free suppuration took place with the above result.

DISCUSSION.—DR. DUPAQUIER referred to mashed potatoes as useful food to facilitate the passage of swallowed objects which were not sharp.

DR. LEBEUF stated that such diet had been used in his case.

DR. VEAZIE advised the use of orange pulp and cabbage for this purpose. Had seen a swallowed fish-hook passed in a fecal mass of orange refuse. Had removed from the abdominal wall a needle swallowed one year before.

DR. THEARD reported the successful passage of a safety pin imbedded in a fecal mass forty-six hours after being swallowed. Potatoes, rice, etc., had been used as food. Pin was not even tarnished.

DR. STORCK had seen a patient who had swallowed a set of false teeth which had caused ulceration of the esophagus. Several teeth were passed per rectum, but no plate.

DR. HUHNER had seen three porcelain buttons passed on the fourth day with no refuse matter, although a vegetable diet had been used. Had also seen a lady who, after two months of vegetable diet, had passed a portion of a dental plate imbedded.

DR. KOHNKE had just ordered a diet of watermelon and vegetables for a child who had swallowed a cent.

DR. THEARD had once extracted a piece of crab shell about the size of a half dollar after the patient had been treated several days for hemorrhoids.

DR. KING in closing mentioned a case, possibly reported before, of a patient who had successfully passed a pin after having eaten a whole pineapple.

DR. LEBEUF read a paper on "*Intra Peritoneal Abscess of the Abdomen Containing Pure Culture of Bacillus Typhosus, a Sequella of Typhoid Fever Recovery.*" (See page 178 this JOURNAL).

DR. DUPAQUIER believed Dr. LeBeuf's case to be the fifth recorded case of an abscess containing a pure culture of bacillus typhosus.

DR. POTHIER said that such cases were rare. Some years ago Dr. Landfried and himself had endeavored to produce otitis media in about 6 dogs with the pure cultures of bacillus typhosus, but the attempts failed. However, it was an established fact that abscesses did occur containing pure cultures of bacillus typhosus. Cases had been recorded in which cystitis had occurred several weeks after recovery from typhoid. Pure cultures obtained from the urine showed that the bacilli had passed through the kidneys. Urotropin, 10 grains every 3 hours for 3 days had caused the disappearance of the bacilli in the urine, and there was no cystitis after the urine contained no bacilli. No local treatment had been used. The culture from Dr. LeBeuf's case had been completely tested, and gave Widal's reaction.

DR. GENELLA had had a case resembling typhoid. Patient died, and the embalmer found a large abdominal abscess. Had seen another case resembling typhoid in which pus was found at the autopsy.

DR. LEBEUF in closing stated that the case had been examined daily, but the lump had appeared after a week of sitting up, and was discovered during what was to have been the last visit.

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## Medical News Items.

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THE MEDICAL DEPARTMENT OF TULANE has issued its historical summary of the institution from 1834 to 1901. A catalogue of the Alumni is included.

The Medical College of Louisiana opened in January, 1835, with 11 students. The founders of the school were Drs. Thos. Hunt, Professor of Physiology and Anatomy; Jno. Harrison,

adjunct and Demonstrator of Anatomy; A. H. Cenas, Professor of Midwifery; Chas. A. Luzenberg, Professor of Surgery; T. R. Ingalls, Professor of Chemistry; and E. B. Smith, Professor of *Materia Medica*. Through resignation and death the above faculty were succeeded in the following years by Drs. E. H. Barton, Warren Stone, James Jones, Jno. L. Riddell, etc.

In 1845 this medical college became a part of the University of Louisiana.

In the 67 years of its existence, the Medical Department has graduated 3841 students; 3575 in medicine, 326 in pharmacy. 302 of the 351 physicians registered in New Orleans are graduates of this school.

The alumni catalogue is the fourth one published. The first one was issued in the May number, 1861, of the *NEW ORLEANS MEDICAL AND SURGICAL JOURNAL*.

An alphabetic list of all graduates to 1901 is given.

A list is also given of the lecturers, instructors and demonstrators with their terms of service.

A table of comparative attendance from 1835 to 1901 shows that the greatest number of students attended in the years 1900 (426), 1893 (420), 1892 (415), 1901 (414), 1891 (407), 1861 (404) and 1860 (402).

To Prof. Stanford E. Chaillé, M. D., the Dean, belongs the credit of the preparation and issuance of this valuable document.

AT THE MEETING OF THE N. O. CITY BOARD OF HEALTH, August 12, the matter of conducting a warfare on mosquitoes was taken up and acted upon. On recommendation of Dr. Kohnke, the board authorized the selection of a certain section of the city, bounded by Sixth, Delachaise, Carondelet and Camp, for experiments. This is thought the wisest plan, as each house in that section can be visited once a week and the cisterns or other places containing water can be oiled. This particular section was selected because it is one that embodies all the conditions which will have to be considered in the extermination of the pest. There are poor people and rich people in the section, good houses and bad houses, water in barrels and water in cisterns, hydrants, good drainage, bad drainage, cesspools and vaults.

The board will put that section in the hands of two or four inspectors, who will have charge of the work. They will oil all places containing water, using paraffin oil in the cisterns and crude petroleum in gutters and other places containing stagnant water.

In responding on the Mosquito Problem of the City, Dr. Kohnke, the President, said:

The experiments in the destruction of mosquitoes have been carried on during a longer period than was at first thought necessary. This was due partly to the absence of reliable data regarding the effect of petroleum on drinking water, as affecting its potableness. The destruction of larvæ has not hitherto been attempted in any large city whose chief drinking water supply is derived from cisterns, and it was deemed prudent to ascertain first, by experiment and analysis, the effect upon the water of a layer of oil placed upon its surface, before advising this measure, since with this advice must be given also the assurance that no harmful effect would follow the use of the oil.

While the chemist's experiments are not yet entirely complete, enough has been ascertained from them to enable us to proceed intelligently and with confident safety.

That the petroleum oils give off some of their substance to the water is shown by the fact that larvæ cannot live in the water, upon the surface of which the oil had been floating, although the surface of the water be free from oil.

Experiments prove that the relative proportion of organic matter in water is markedly affected by the crude oil, only slightly so by illuminating oil, and practically not at all by refined paraffin oil, which is, therefore, recommended as the best for cisterns, although illuminating oil affects the water so slightly as to be undiscernible except by chemical analysis.

What is known as straw oil, a paraffin oil, only partially refined, is to be avoided, as its coloring is imparted to the water.

Refined paraffin oil is recommended by the chemist, and its use in cisterns can be advised with the assurance that the water will not deteriorate.

Eight ounces will be required for an average cistern, while of kerosene two ounces is sufficient.

Experiments were not confined to the laboratory, but included considerable work in the field.



About eleven barrels of oil of various kinds were used inside premises and on streets, and from two to four men were constantly employed in this work during the greater part of the past month.

Some time was lost in the beginning because of the necessity of devising and manufacturing appliances for the rapid application of oil to cisterns, and the details of the work had to be smoothed down, but now everything is in readiness for rapid work.

I suggest that a small section of the city be selected and the measures carried out in this section, thoroughly and persistently, by the officers of the board delegated for this work, and that similar measures be recommended and urged in all parts of the city.

Circulars of explanation should precede the officers and should be published in every newspaper.

In this way a general attempt will be inaugurated to destroy mosquitoes, while in the circumscribed area within which the board will operate the assurance may be had that every detail of the work will be properly executed, and observations can be made as to the results obtained.

The results of our experiments so far have been a satisfactory demonstration that the wholesale destruction of mosquitoes is not only possible, but easily accomplished so far as the actual work is concerned; the chief difficulty to be encountered will be the indifference of some householders, the ignorance of others and the unwillingness of that class to be found in every community who do not believe in doing anything that their grandfathers did not do.

These are, fortunately, not many in number, but it is important in a crusade of this kind that every one help. The strength of a chain is that of its weakest link, and if there be in the center of a block one water surface unprotected, it matters not how thoroughly the others are oiled, the mosquito question for that neighborhood will remain unsolved.

I believe we may be assured of the hearty co-operation of the press without exception, and, with this powerful aid, there should be little doubt of gaining that intelligent co-operation of the householder which is so essential to success in an undertaking of this kind.

So far as I am aware, no similar attempt has yet been made in any large city, nor under military rule, and the experiment will be watched with interest.

I do not believe we should expect the mosquito to disappear rapidly, even if the preventive measures are perfectly carried out. The insect is not as ephemeral as many suppose, and the adult mosquitoes will remain alive and active in a house for a long time, unless destroyed by fumigation. Observations are not sufficiently extended to determine with exactness on this point, but it is believed that some mosquitoes live for months, though the great majority, perhaps, live for a few weeks only.

We should be satisfied, I believe, to put into practice the preventive measures during the remainder of the summer and until mosquitoes cease to breed without too great expectations of complete results, but as a demonstration rather of what can be done by a determined effort and united action next spring, before the first crop of adult insects are developed. By that time it is to be hoped that every householder will be perfectly familiar, through practice, with the methods to be employed and the reasons therefor, and the Board can devote its energies to that part of the work which can not be undertaken by individual citizens.

A large proportion of our citizens are already carrying out the practice of keeping water surfaces covered with oil, and it should be an easy matter to make this practice general throughout the inhabited portions of the city.

A proposed circular address to householders is submitted for adoption, and I further recommend that a short explanatory pamphlet be prepared and distributed, in which will be contained the essential facts and observations concisely stated upon which is based the war of humanity against the mosquito.

Mr. J. C. Mims, chemist of the Board of Health, submitted a special report showing the result of the experiments he had conducted in ascertaining the best oil to be used for drinking water, and gave the details of each experiment. He found paraffin oil to be the best. He arrived at that conclusion through a series of ten experiments. As a basis of comparison, the oxygen necessary for the destruction of the organic matter in 1,000,000 parts of water was determined in each experiment by the method ordinarily used in the examination of potable water.

The excess over and above the quantity required for the water before treatment with oil was considered as oxygen required for the destruction of the organic matter derived from the oil.

THE JOURNAL OF MENTAL PATHOLOGY has appeared for June and July with an array of practical and alienist studies from the pens of capable contributors most of whom are known in the study of psychic medicine. The list of collaborators includes some famous contributors for this field and if the *Journal* maintains the standard set it will prove an acquisition to the list of periodicals devoted to mental affections.

PERSONAL: Dr. C. P. Wertenbaker, of the Marine Hospital Service, located in New Orleans, was recently detailed to Camp Fontainebleau and adjacent coast towns for an inspection.

THE COLLEGE OF PHYSICIANS AND SURGEONS OF CHICAGO announce that the recent fire has in no wise affected the administration and that they are now better housed and equipped than ever before.

THE AMERICAN VETERINARY MEDICAL ASSOCIATION will meet in Atlantic City September 3 to 6, 1901. An elaborate program has been issued presenting many interesting papers.

THE NEW ORLEANS COLLEGE OF PHARMACY has issued a prospectus for its second session. The school will hereafter be located in Camp street on the site of the old Bible House. The building is being thoroughly repaired and renovated with an idea of increasing all facilities for teaching.

THE MEDICAL SOCIETY OF THE MISSOURI VALLEY will meet at St. Joseph, Missouri, September 19, and at Eureka Springs, September 20 and 21.

THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION will hold its eleventh annual convention in Buffalo, on September 24, 25 and 26, 1901. Its headquarters will be at Hotel Niagara, and its place of meeting at the Armory of the 74th Regiment.

THE KENTUCKY STATE BOARD OF HEALTH has issued a circular directed at the regulation and treatment of small-pox. The cir-

cular is quite clear and practical, besides presenting a number of most excellent illustrations of varieties and stages of the disease.

THE ANNUAL MEETING OF THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION bids fair to eclipse all previous ones in attendance as well as scientific merit, as the preliminary program would indicate.

Unusual railroad rates have been obtained for this meeting—a one-fare rate by way of Cleveland, which will enable those taking advantage of these rates to obtain an extension of tickets to October 8 for attendance upon the Buffalo Exposition. A one-and-a-third fare rate on the certificate plan will be in effect via Detroit, Sandusky and Toledo, with extension of return limit for only three days after the meeting.

Put-in-Bay, Ohio, is an ideal place of meeting, the Hotel Victory a magnificent meeting site.

The address in Medicine will be made by Dr. Frank Billings, of Chicago; the address in Surgery by Dr. Reginald Sayre, of New York City.

The annual banquet will be held on the evening of the first day, September 12; the second evening will be given up to the reading of several papers with stereopticon exhibits and demonstrations; the President's address and the annual orations being delivered on the three mornings of the meeting.

The profession is cordially invited to attend this meeting.

DR. W. A. BURLEIGH, of Monroe, La., died July 30, of typhoid fever. He was 25 years old, and a member of the State Medical Society.

DR. N. C. FISHER is located at the Barracks.

DR. I. M. CLINE, formerly of Galveston, has charge of the local weather bureau. For several years he has filled the chair of climatology in the medical department of the University of Texas. His papers bearing on climatology are many and valuable. Dr. Cline was in Galveston during the fearful cataclysm last September, which he had in some measure predicted.

THE NEW ORLEANS COLLEGE OF DENTISTRY was recently admitted to recognition by the National Association of Dentists and also by the National Association of Dental Examiners.

THE MARINE HOSPITAL SERVICE is now in charge of all the Florida Quarantine Stations.

ON VACATION: Among those absent on vacation in July and August were Drs. Paul Reiss, A. W. De Roaldes, Charles Chassaignac, E. P. Lowe, A. B. Gaudet, W. H. Watkins, E. D. Martin, J. M. Batchelor, M. J. Couret, E. D. Fenner, S. M. D. Clark, W. G. Armstrong.

THE CALCASIEU PARISH MEDICAL ASSOCIATION met at the office of Drs. Watkins & Martin, in Lake Charles, August 7. Dr. Miller read a paper. The next meeting will be held in September, and Dr. A. J. Perkins and M. C. Melanson will read papers on "*Malaria and Malarial Dysentery.*"

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## Book Reviews and Notices.

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*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

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*Photographic Atlas of Diseases of the Skin.* By GEORGE HENRY FOX, A. M., M. D. Part I. J. B. Lippincott & Co., Philadelphia and London. 1900.

No one in the United States has done as much as Prof. Fox to educate the general practitioner into a familiarity with diseases of the skin, through the means of photographic plates. His original atlas appeared at a time when such an education was most needed. The years of elaboration of photographic methods and the author's own art in selecting and developing the finer specimens of disease have made the photographic picture *par excellence* as the illustration of skin diseases. Most of the atlases with colored plates are overdrawn, or, in being reproduced, lose the tones and shades which are true in the photograph.

The present volume of Dr. Fox's atlas is made up of some perfect plates of acne, eczema, zoster, and rhus poisoning, while the text is devoted to general considerations in the study of skin diseases, chiefly reflecting the

author's own views regarding therapeutics and the importance of holding the patient as a more important element in treatment than the disease itself.

The scheme of this work is as excellent as it is simple. The plates are presented with a titular diagnosis and a short review of the individual case from which the photograph was taken. It must appeal to the practitioner who is looking for practical education on skin diseases as a desideratum realized, and we heartily commend the work to such.

DYER.

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*A Manual of Practical Hygiene*, for students and physicians and medical officers. By CHARLES HARRINGTON, M. D. Lea Bros. & Co., Philadelphia and New York, 1901.

This is but a manual on hygiene and pretends only to give information on common and recent knowledge on this most important subject. The writer does so to the point and pretty exhaustively. This book ought to be on the desk of every physician and consulted by him as often as, if not oftener than his latest handbook on materia medica.

E. M. DUPAQUIER.

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*International Clinics*. A quarterly of clinical lectures and specially prepared articles. Edited by HENRY W. CATTELL, A. M., M. D. J. B. Lippincott Co., Philadelphia, 1901.

In this the first volume of the eleventh series there are a greater number than usual of interesting articles. But, the feature of this volume is a careful review of the progress of medicine during the year 1900, including only those questions that are of the greatest importance. The illustrations in the article on Photomicrography are perfect. This publication is a great help, chiefly to those practitioners who are unfortunately not in touch with large hospitals and laboratories and it certainly deserves the cordial support of the profession.

E. M. DUPAQUIER.

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*A Handbook of Materia Medica and Therapeutics*. By SAMUEL O. L. POTTER, A. M., M. D., M. R. C. P. Eighth edition. Revised and enlarged. P. Blakiston's Son & Co., Philadelphia, 1901.

This is the eighth edition of Dr. Potter's Handbook, "an old and valued friend." It is a well-planned improvement on the previous editions, in many respects. It contains new material, viz.: Facts gathered recently from the writer's experience in active professional practice, in a tropical climate, the Philippine Islands, while he was serving as a surgeon of the United States army, during a period of nearly two years' duration, and the addition of fifty-one articles, of which thirty-eight on drugs in the section in *Materia Medica* and thirteen on the medical treatment of disease in the section on *Therapeutics*.

Of this new matter we note the discussion on the treatment of such dis-

eases as Dhobie Hitch, Hemaglobinuric Fever, Lymphadenoma, etc. The part on therapy is actually more extensive than in many books on the subject. Not only are the views of the writer given, but also those of the best authorities. It is a valuable compilation of safe advice.

Aside from the new matter we have mentioned, forty articles have been rewritten, and all that was obsolete has been done away with. For its new as well as for its original features which made it so popular from the start, we cordially recommend Dr. Potter's Handbook.

E. M. DUPAQUIER.

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#### PUBLICATIONS RECEIVED.

*Applied Anatomy*, by Sir Frederick Treves, F. R. C. S.—Lea Bros. & Co., Philadelphia, 1901.

*Transactions of the Southern Surgical and Gynecological Association*, 1900.

*A Manual of Surgical Treatment*, by W. Watson Cheyne, F. R. C. S., and F. F. Burghard, M. D., Volume V.—Lea Bros. & Co., Philadelphia and New York, 1901.

*Detroit College of Medicine*, 1901-02.

*Monroe City Public Schools*, 1901.

*Sixty-second Annual Catalogue of the Baltimore College of Dental Surgery*, 1901-02.

*Photographic Atlas of the Diseases of the Skin*, by Geo. Henry Fox, M. D.; Part 2 and Part 3.—J. B. Lippincott & Co., Philadelphia and London, 1901.

*The Diseases of the Respiratory Organs, Acute and Chronic*, by William F. Waugh, M. D.—G. P. Engelhard & Co., Chicago, 1901.

*Syphilis: Its Diagnosis and Treatment*, by William S. Gottheil, M. D.—G. P. Engelhard & Co., Chicago, 1901.

*International Clinics, Vol. II, Eleventh Series*, 1901.—J. B. Lippincott & Co., Philadelphia.

*New Orleans College of Pharmacy*, 1901-02.

*An Investigation of a Pathogenic Microbe Applied to the Destruction of Rats*, by M. J. Rosenau, Passed Assistant Surgeon; Bulletin No. 5, Hygienic Laboratory, Marine Hospital Service, Washington.

*Medico-Chirurgical College of Philadelphia*, Announcement, 1901-02.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR JULY, 1901.

CAUSE.	White.	Colored.	Total.
Fever, Malarial (unclassified) .....	10	5	15
“ “ Intermittent .....	...	...	...
“ “ Remittent .....	...	...	...
“ “ Congestive .....	...	...	...
“ “ Typho .....	...	...	...
“ Yellow .....	...	...	...
“ Typhoid or Enteric .....	15	4	19
Puerperal Diseases .....	...	...	...
Bronchitis .....	7	...	7
Diphtheria .....	1	...	1
Broncho-Pneumonia .....	...	...	...
Measles .....	...	...	...
Whooping Cough .....	...	3	3
Pneumonia .....	12	2	14
Cancer .....	18	7	25
Consumption .....	53	43	96
Diarrhea (Enteritis) .....	27	20	47
Dysentery .....	5	3	8
Small Pox .....	...	...	...
Hepatic Cirrhosis .....	5	...	5
Other Liver Diseases .....	...	...	...
Peritonitis .....	...	3	3
Debility, Senile .....	15	4	19
“ Infantile .....	4	7	11
Bright's Disease (Nephritis) .....	16	16	32
Sunstroke .....	...	...	...
Heart, Diseases of .....	30	17	47
Apoplexy .....	...	...	...
Congestion of Brain .....	12	4	16
Meningitis .....	8	3	11
Tetanus .....	5	3	8
Injuries .....	50	21	71
Suicide .....	1	...	1
All Other Causes .....	68	47	115
TOTAL .....	362	212	574

Still-born Children—White, 18; colored, 14; total, 32.

Population of City (estimated)—White, 220,000; colored, 80,000; total, 300,000.

Death Rate per 1000 per annum for Month—White, 19.74; colored, 31.80; total, 22.96.

## METEOROLOGIC SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure .....	29.98
Mean temperature .....	83.
Total precipitation .....	10.71 inches
Prevailing direction of wind, south-east.	



# 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.]

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### WIDAL'S REACTION IN TYPHOID FEVER.\*

BY O. L. POTHIER, M. D., PATHOLOGIST AND BACTERIOLOGIST TO CHARITY HOSPITAL, NEW ORLEANS.

The history of the sero-diagnosis of typhoid fever dates back to 1889, when Charrin and Roger observed agglutination of the bacillus pyocyaneus by the serum of immunized animals. Then Metchnikoff, in 1891, reported analogous reaction with vibrio Metchnikovi, and with the pneumococcus. In 1893 Mr. Isaëff confirmed the findings of Metchnikoff, and with Ivanoff found the reaction of the vibrio of Ivanoff. It is to be observed that all these studies were made with sera of immunized animals.

At this juncture, 1894, Pfeiffer produced his reaction with the cholera bacillus. I will state here the nature of this reaction, as it has been frequently confounded with that of Widal. Pfeiffer noticed that when a well immunized animal was injected with a virulent culture of the cholera bacillus, or when a healthy non-immunized animal was injected simultaneously with the cholera bacillus and preventive serum, that the motility of the bacillus was arrested, and that the organism underwent a granular degeneration. These phenomena were observed and took place within the body of a living animal, an easy matter, as the injections were made in the peritoneal cavity of the animal.

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\* Read before the Orleans Parish Medical Society, July 27, 1901.

These reactions were so characteristic that Pfeiffer employed them as a means of differentiating the cholera vibrio from other bacteria.

In 1896 Pfeiffer and Kolle repeated the same experiments with the bacillus typhosus of Eberth, using as immunizing agent small doses of serum obtained from convalescent typhoid cases. They obtained the same reactions, but the reactions were very irregular and not satisfactory. These reactions, though useful as a means of differentiating the organism, were not at this juncture of a practical value for diagnosis. Metchnikoff then demonstrated that the reaction could be obtained *in vitro* and gave a description of the phenomenon. In 1895 Mr. Bordet called special attention to the dilution of the serum used to guard against error which might occur when using the serum of a non-immunized animal. He demonstrated that if the serum of a non-immunized animal was used, and that the reaction took place, that by diluting the serum with normal salt solution the reaction would not take place.

Following Bordet, Gruber and Durham, Pfeiffer and Kolle made more extensive studies on this same subject. The idea of all these observers was to establish this reaction and to prove it to be one of immunization. At this point comes the differentiation between Pfeiffer's reaction and Widal's agglutinating reaction. Pfeiffer's reaction takes place in a living animal, and is in fact a true bacteriolysis which destroys the bacteria, while they are not previously agglutinated in the body of the animal. Salimbeni proved that the agglutination of the cholera bacillus does not take place when injected in a living vaccinated or immunized animal, but only when performed *in vitro*.

As seen above the reaction of Pfeiffer is a bacteriolytic reaction, and takes place only after immunization. While the reaction of Widal is present at the beginning of the disease, and extends through it, and in it the bacilli are so to speak paralyzed but not killed, since cultures have been made from agglutinated bacilli. Since the foregoing experiments of these different observers have been reported, the reaction of Widal has been established, as at first thought by its author, to be a reaction of infection, while that of Pfeiffer is one of immunization.

It was on the 26th of June, 1896, that Widal brought his reaction before the *Société Médicale des Hôpitaux* and, through Prof. Dieulafoy, before the French Academy of Medicine.

The early technic of Widal was to mix one drop of serum from a case of typhoid to 10 of bouillon which was then inoculated with bacillus typhosus and incubated for 24 hours, and to make a naked eye examination of the tube. In such a tube the culture will be found precipitated to the bottom and the remainder of the culture medium above will be found perfectly transparent and free from turbidity or any appearance of culture. This method, though very interesting and characteristic, can not be used as a routine practice. Widal then substituted a modification, using, however, the same dilution of 1 to 10, which consisted in the use of 1 drop of serum to 10 drops of a 24 hour culture, mixing them on a slide, covering with a cover glass, and making an immediate microscopic examination. As we have stated these reactions were made with dilutions of 1 to 10 and with fresh serum. There is, however, not as yet any specified time limit, though Widal mentions from 15 to 30 minutes as the proper interval of time to examine the specimen. Later he experimented with dry blood and dry serum and reported his results. But we owe it to Wyatt Johnson, of Montreal, for having popularized the dry blood method as a means of diagnosis. Johnson's method was to use blood dried on sized paper or glass slides, which was then dissolved with water and added to 24 hour bouillon culture of the bacillus typhosus in proportion of 1 to 10 with a time limit of 15 minutes. This method has been used extensively by the majority of Boards of Health laboratories throughout the United States and Canada. This last method, though reliable, is not as reliable as the fresh serum. We find in the *Annals of the Pasteur Institute*, May 25, 1897, *Etude sur le serodiagnostic*, by Widal and Sicard, that these observers say, after reviewing the work of Johnson, that no other method equals the fresh serum for the reaction. Wyatt Johnson admits that in  $\frac{1}{10}$  of the cases the reaction with the serum is more powerful, and Cabot says that in  $\frac{1}{8}$  of the cases the fresh serum is preferable.

The tendency for the last four years is to use high dilutions. Many observers now recommend a dilution of 1 to 20 and 1 to 40. The first reaction made at the Charity Hospital was on the 10th of December, 1896, with a culture obtained through Dr. Dupaquier, from the stock used by Widal, for his investigations on a case of suspected typhoid from ward 25. In this case the

blood for reaction was obtained by venous puncture with a hypodermic syringe. The reaction in this case proved positive and ran a course of typhoid fever. From this on to 1898 our technic had been exactly the same as that prescribed by Widal with the fresh serum, diluted 1 to 10, time limit fifteen minutes. Since 1898 I have changed the technic and employed high dilutions with the same time limit. I use a dilution of 1 to 50, that is 1 part of fresh serum and 50 parts of a 24 hour bouillon culture with a 15 minutes time limit. The 50 parts of bouillon are taken with a graduated pipette, from the middle portion of the bouillon culture, avoiding in this way the pseudo clumps from the bottom and from the surface of the culture. This is discharged on a clean slide and to this quantity of culture is added one loopful of serum slightly tinged with corpuscles. The loop used to add the blood is the same that has been used for making the pipette. The tinged serum is used because the red blood cells assist in focussing. If we now consider the reaction we will find that it must conform to three requirements. First, the bacilli must lose their motility; second, they must clump or agglutinate, and third, this arrest of motility and agglutination must take place within the time limit. This last is the *sine qua non* of the reaction when used for diagnostic purpose.

As to the method of collecting blood for the Widal reaction, I find that any small tube which will admit of collecting 8 to 10 drops will give sufficient serum for examination. It is preferable to sterilize these tubes, and have them stoppered with a good stopper, or preferably with a rubber stopper, especially when sending at some distance. If the examination is to be made in 2 to 6 hours it is not necessary to have them sterilized; though Widal extended the time to 48 hours and even to several days.

Though Widal and others recommend that the blood be taken from the finger, yet I find, as Cabot does, that the best place is from the lobule of the ear. The best instrument is a wide, flat needle, or the end of a small scalpel, the idea being to cut and make a free incision, though very small, so that the blood will flow easily without having to use much force in expressing it. An ordinary sewing or round needle will never give good results, or give a free flow of blood. As to the culture to be used a culture 24 hours old is advised and on bouillon. It is better

to use an old culture for making the reaction culture. The method used at the Charity Hospital is as follows: Our stock is renewed every day, but the culture made on a given day is not used to make the reaction culture until about a month has elapsed from the day it was made.

If now we consider the value of Widal's reaction we will find that at the beginning it was very much thought of, then suddenly a great deal of criticism originated from the failure of the reaction in what seemed typical cases of typhoid, or from the finding of positive reaction in cases which seemed to be non-typhoid cases. In my opinion these results were traceable more especially to faulty technic. I have used the term "seem" above, for this reason, that many of these cases were proved to be in their subsequent history, where the reaction failed, non-typhoid cases; and where it was found to be positive to be cases of typhoid.

For the last two years this reaction has become more in vogue, and I would say that more technic is observed than formerly in its use. Later statistics show that it is true in typhoid cases in 95 per cent. of cases. Other observers give as high as 98 per cent. during the course of the disease. On the other hand Cabot gives 97½ per cent. as the percentage for non-typhoid cases. From these figures it will be seen that there is not much source of error.

From my experience with the reaction at the Charity Hospital, and it must be remembered that in this institution, in the pathologic department, we make our examinations and reports without having seen the patient, I have never found Widal's reaction, when positive, at variance with the pathologic lesions at the autopsy. This implies, of course, good technic in the examination. When negative, I have found only two cases of typhoid at the autopsy. In these two cases the reaction had been made only once and the patients remained only twenty-four hours in the hospital. I say here that the reaction had been made only once and with reason. It is not enough to make only one reaction, and if negative, not to make another. This peculiar reaction generally appears about the end of the first week, though I have seen it occur about the fourth day of the disease. This is only a general rule. It occurs after that period at any time throughout the disease, and may be delayed

in very exceptional cases to the period of convalescence. It lasts as a rule a few weeks after convalescence, may be prolonged to a year after, and in one case I obtained it 45 years after the disease, in a subject that was perfectly well at the time of the reaction, and who gave a history of having had typhoid when a child. In some cases it may be positive one day and negative the next day, and it may never reappear, or it may occur again in a few days. I shall not attempt to explain this feature, but state it as a singularity and as a fact that it does occur.

Our results at the Charity Hospital have led us to consider the reaction, when used with proper technique, with a great deal of regard, when it is positive, notwithstanding the clinical appearance of the patient. I have kept several charts from patients which I have autopsied, and among them one is found where the highest temperature attained was 100.8 degrees, and yet this patient died of perforation of the intestine due to an ulcerated Peyer's patch. In this case Widal's reaction was positive; I think while the temperature was normal. This reaction was considered as a freak and the patient allowed to get up and to eat the usual full diet with the result that twenty-four hours after we were holding an autopsy on him and found the usual lesions of typhoid fever, with perforation and peritonitis.

The Widal reaction of typhoid is not only found with the blood and serum, but also with the fluid of blisters, the milk and colostrum of women, the pus of typhoid patients, the tears naturally secreted, and in the same fluids after death, even in putrefaction.

One point which we should not forget in making reactions with dried blood and serum, is the water we are using. It is advisable to test the reaction of the water on the bacilli. In the September, 1896, number of the *Annals of the Pasteur Institute*, M. Hankin calls special attention in his article to the bactericidal and clumping action of the waters of Jumna and of the Ganges on the cholera bacillus. He also notes the immunity from cholera of the people who use these waters for drinking and for bathing. This, though exceptional, may also be true of the bacillus typhosus, and some waters may be also bactericidal to them.

Before closing this paper I wish to call attention to a method of diagnosis, in difficult cases, and as a means of corroborating

Widal's reaction, which we have used quite frequently at the Charity Hospital. This method consists in making cultures from the urine of patients, which is collected in sterile tubes after careful aseptic washing of the parts, and, if necessary, by catheterization. Two or three loopfuls from this urine is planted on an agar culture tube, or in bouillon, the latter of which I prefer, and incubated for twenty-four hours. The resulting culture is tested with a known typhoid serum and established or not as a typhoid bacillus. As a rule these cultures are pure, if the proper precautions are taken to collect the urine. These cultures are preferably made during the second week and after.

In concluding, I would say that a positive Widal's reaction is always to be considered as indicating typhoid fever, while a negative result does not mean anything *per se*. While several negative results may strongly point to a non-typhoid case, yet in the rare cases of typhoid with a negative reaction the clinical course of the disease is a better criterion.

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#### SPINAL ANALGESIA.\*

BY SIDNEY P. DELAUP, B. S., M. D., VISITING SURGEON TO CHARITY HOSPITAL, ASSISTANT TO THE CHAIR OF GENITO-URINARY AND RECTAL DISEASES, NEW ORLEANS POLYCLINIC, NEW ORLEANS.

In view of<sup>6</sup> the general interest that is being manifested in spinal analgesia at the present time, I wish to report the following 22 cases in which analgesia was obtained by subarachnoid spinal cocainization. Since Tuffier reported his 130 cases to the International Medical Congress at Paris, in August, 1900, the new method of producing analgesia has been tried in every large clinic in this and other countries. The fact that it has been so readily adopted by so many surgeons is proof that there is a need for a safer anesthetic than either chloroform or ether.

CASE I.—Negro, aged 50 years; condition indicating spinal injection, nephritis; operation for internal hemorrhoids by clamp and cautery method; injected 12 minims of 2 per cent. cocain solution; analgesia complete in 9 minutes, lasted 35 min., and extended to nipples. After effects—headache, fever 101 deg. F., lasting 12 hours. Result excellent.

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\* Read before the Louisiana State Medical Society, New Orleans, April, 1901.

CASE II.—Negro, age 20; case of fistula in ano, no organic disease; injected 8 minims 2 per cent. cocain; analgesia in 7 min., lasted 60 min., extended to scalp; no after effects whatever. Result excellent.

CASE III.—Negro, age 45; had nephritis; tuberculous osteitis of tarsal bones, operation, excision and gouging; injected 8 minims of 2 per cent. cocain; no analgesia followed, second puncture twenty minutes later, using 15 minims. Partial analgesia 15 minutes afterward; aftereffects—slight headache, lasting ten hours. Result fair, partial analgesia only, but operation practically painless.

CASE IV.—Mulatto, age 35; fistula in ano with chronic nephritis; injected 14 minims of 2 per cent. cocain; analgesia in 7 min., lasted one hour and forty minutes, extended to mammary line; after effects, headache, nausea, vomiting, fever; duration of symptoms 12 hours. Result excellent.

CASE V.—Negro, age 36; urethral fistula and stricture with chronic cystitis and nephritis; operation, external urethrotomy; injected 10 minims of 2 per cent. cocain; analgesia in 6 min., lasted one hour and twenty minutes, extended to mammary line; after effects—slight headache, lasting ten hours. Result excellent. This case was subjected to a severe and prolonged operation, lasting over one hour. He stood the operation very well; at no time did he complain of pain, nor did he give any evidence of shock or depression. I consider this case as one of the most successful of my cases.

CASE VI.—Negro, age 25; external hemorrhoids and rectal polypus, relieved by actual cautery; had nephritis; injected 10 minims of 2 per cent. cocain; analgesia began in 10 minutes, lasted 40 minutes, and extended to mammary line. No after effects whatever. Result excellent.

CASE VII.—Negro, age 26; operation for fistula in ano; no organic lesion, weak and anemic; injected 10 minims of 2 per cent. cocain; analgesia commenced in 10 minutes; no after effects. Result excellent.

CASE VIII.—Negress, aged 35 years; hemorrhoids by cautery method; owing to nephritis used spinal anesthesia; injected 8 minims of 2 per cent. cocain; analgesia in 12 minutes, extending to mammary line and lasting one hour and fifteen minutes. The after effects in this case were the severest experienced by any



of my cases. Three minutes after the injection she was taken with nausea and vomiting, followed by a cold sweat and marked depression. The vomiting soon ceased, but was followed by a chill and fever, 101 deg. F., the latter lasting about 12 hours. Result good.

CASE IX.—Negro, aged 25 years; amputation for traumatic gangrene of big toe; has nephritis and endocarditis; injected 10 minims of 2 per cent. cocain; analgesia began in 10 minutes, lasted 45 minutes, and extended to mammary line; after effects—nausea, vomiting, headache two hours after operation, lasting twelve hours. Result excellent.

CASE X.—Negro, aged 45 years; fistula in ano; cavity at apex of right lung; 10 minims of 2 per cent. cocain solution was used; analgesia in about 10 minutes, lasted one hour and extended to mammary line; duration of operation, 15 minutes. The patient complained of slight nausea only. Result good.

CASE XI.—Negro, aged 30 years; rectal ulcer; dilatation of anal sphincter and cauterization; 10 minims of 2 per cent. cocain solution; patient complained of slight pain. On being removed from operating table he acknowledged that fear had actuated him in his complaint. Result excellent.

CASE XII.—Negro, aged 37 years, case of urethral stricture relieved by internal urethrotomy. The usual 10 minims of a 2 per cent. cocain solution were injected. No nausea or vomiting; pulse normal; respiration went to 25, but returned to normal after operation was completed. Result excellent.

CASE XIII.—Mulatto, 26 years of age, urethral stricture with chronic cystitis and nephritis. Pulse before injection 110, nervous and frightened. Made one puncture, abstracting 3 minims of cerebro-spinal fluid. Injected 5 minims of a 4 per cent. cocain solution. Analgesia in 5 min., lasting one hour and forty minutes, extending as high as the umbilicus. Nausea, vomiting 4 min. after injection; pulse slow and weak. Internal urethrotomy performed. Pulse after operation 96; slight headache, fever up to 101 deg. F. same day. Symptoms lasted 24 hours. No other unfavorable after effects. Results excellent.

CASE XIV.—Mulatto, aged 33 years; tuberculous ostitis of tarsal bones; had a perinephritic abscess 4 months ago which was incised, scar in right lumbar region. Five minims of a 4 per cent. cocain solution injected through the fourth lumbar inter-

vertebral space. Analgesia began in 6 min., complete relief in 10 min. Duration of operation 15 min. Analgesia lasted one hour and twenty minutes. No after effects. Result excellent.

CASE XV.—White woman, aged 36 years; fistula in ano. Weight of patient, 260 pounds; dilated superficial veins, capillary stasis. Injected 6 minims of 4 per cent. cocain by one puncture in third lumbar space. Pulse 86 after injection. Complained of pain in thigh when puncture was made. Two drops of spinal fluid were lost. Analgesia in 8 min., lasted one hour and thirty minutes, extended to umbilicus. After effects—nausea, headache. Operation lasted 12 min. Result excellent.

CASE XVI.—Negro, aged 47 years; has nephritis. Operation for urethral stricture and fistula. External urethrotomy was first done, then internal urethrotomy to cut band in penile urethra. Five minims of 4 per cent. cocain in the fourth lumbar space. Loss of spinal fluid 3 drops. Analgesia in 12 min., lasted one hour and forty minutes, extended to umbilicus. No after effects whatever. Patient recovered without any complications. Result excellent.

CASE XVII.—Mulatto, aged 21 years; has septicemia for 3 weeks, is weak and depressed; pulse 106, temp. 102 deg.; gunshot wound of leg, sinus leading to inner condyle of femur, bullet removed and drainage made 3 weeks previously; profuse suppuration through sinus, 3 more incisions made to drain peri-articular suppuration. Six minims of 4 per cent. cocain solution injected; made two punctures in Sims' position and through third lumbar space. Analgesia in 10 min. to umbilicus; lasted one and a half hours. Abstracted 2 minims of cerebro-spinal fluid. Duration of operation 20 minutes. No after effects. Result excellent.

CASE XVIII.—Negro, aged 35 years; fistulo in ano; 5 minims of 4 per cent. cocain; one puncture made and 4 minims of cerebro-spinal fluid withdrawn. Analgesia in 11 min., to umbilicus, lasted 50 min. Operation lasted 30 min.; pulse 92. No after effects. Result excellent.

CASE XIX.—Negro, aged 29 years; urethral stricture; internal urethrotomy performed; one puncture made and 3 minims of cerebro-spinal fluid withdrawn. Injected 5 minims of 4 per cent. cocain. Analgesia in 15 min. extended to umbilicus, and lasted one hour and 20 min. Pulse before injection 85, after

80. No nausea or vomiting, fever and headache for 24 hours. Result excellent.

CASE XX.—Mulatto, aged 29; ulcer of foot, good general condition. Injected 8 minims of 2 per cent. cocain solution; analgesia in 7 min. in foot; shaved ulcer, no pain; attempted to remove grafts from thigh and leg but had to desist on account of pain. Nausea and vomiting. Had to administer chloroform to finish operation. Analgesia in feet lasted 40 minutes, long after he had recovered from the chloroform. Partial analgesia only.

CASE XXI.—Negress, aged 29; general condition good; ulcer of rectum and internal hemorrhoids. Injected 5 minims of 4 per cent. cocain solution. Analgesia in 10 min., extended to mammary line, and lasted one hour and 15 min. Analgesia most complete. Seven minims of cerebro-spinal fluid withdrawn. Pulse after operation 84. Headache, chill and fever 101 deg. a few hours after operation. Result excellent.

CASE XXII.—Negro, aged 31 years; very weak, anemic; stricture of rectum with syphilitic condylomata about anus; injected 6 minims of 4 per cent. cocain solution. Analgesia complete in 8 minutes, extended to umbilicus, and lasted one hour and forty minutes. Operation—incision and dilation. No nausea or vomiting, no after effects whatever. Ideal case. Result excellent.

In more than half of these twenty-two cases I made the injections for Dr. Chassaignac, the others were my own. In all but two cases the analgesia was absolute and complete, lasting for a length of time ample for the purposes of the operation, and in one case only was it necessary to administer a general anesthetic to complete the operation. No symptoms of shock followed the operation and the patients returned more rapidly to the physiologic condition than after general anesthesia.

The technic of the lumbar puncture is not as simple as amphitheatre spectators would like to make it. Not only stout patients increase the difficulty to palpate the points of the spinous processes of the lumbar vertebræ, but nervous ones, by stiffening the muscles of the back, add to the difficulty of the operation.

The lumbar region having been thoroughly prepared with antiseptic care, the patient is seated in the erect sitting posture

on the edge of the operating table with his back to the operator. An imaginary line connecting the iliac crests is drawn; this line crosses the spine of the fourth lumbar vertebra. Either the space above or the one below this point may be utilized, the one above is usually the most available. The patient is now requested to bend well forward, the needle held in the right hand is inserted one-half inch to the right or left and one-half inch above or below the point just described and then pushed inward and upward toward the median line for about three inches, when a sensation of suddenly passing through a tense membrane and then a lessened resistance, as if entering a free cavity, is felt and cerebro-spinal fluid flows. I can always tell when in the space by diminished resistance to the needle; but the only true way is to see the cerebro-spinal fluid escape. A drop or two of the fluid are allowed to escape, the previously loaded syringe is screwed on and five or six minims of a sterile 2 per cent. cocain solution is slowly injected. The needle is allowed to remain in position for a few minutes, then it is gently withdrawn and a sterile collodion dressing is applied. To obviate the accident of occlusion of the lumen of the needle, Fowler recommends the use of a double needle. He also advises aspiration, either with the attached syringe or a special suction bulb to obtain the cerebro-spinal fluid promptly. I do not approve of these measures, nor do I make use of the specially made needle, which I have found to be too large and dangerous. I prefer to employ the long, slender needle of an aspirating syringe, with the point beveled off slightly. Such a needle can be inserted without causing any traumatism, and in case of occlusion can be withdrawn and reinserted without danger. Plunging here and there and sawing with the needle are to be avoided. It is better to withdraw the needle and begin anew than to risk tearing the membranes. If the patient is too weak to sit up he may be put in Sims' position. The great danger in spinal injections is sepsis. In case of such an accident the blame should not be addressed to the method, but to its faulty technic. The cocain solution should be freshly made with sterilized water and heated to the boiling point only for one or two minutes before using. At present, from 8 to 10 minims of a 2 per cent. solution of cocain seem to give satisfaction. In my first twelve

cases I injected 8 to 10 minims of a two per cent. cocain solution, but recently I have been using a 4 per cent. solution, injecting 5 minims only.

As to the action of cocain injection on the cord there has been observed an anesthesia of the sensory tracts of the cord, but no impairment of the motor function and tactile sense. We have yet to find any neurotic symptoms following its use in my cases, after the patient has recovered from the effects of the operation. With the sole exception of Lewandrowsky's observations that the cerebro-spinal fluid is a specific product of the brain and partakes of the nature of lymph, there has been a noteworthy absence of any attempt to explain the precise manner in which cocain acts upon the sensory nerve structures. His experiments showed that agents like strychnia and probably cocain when mingled with the cerebro-spinal fluid gain entrance into the nerve substance not through the intervention of the circulation, but through the lymph channels. This will explain, says Fowler, the extreme rapidity with which analgesia is effected in some cases, the extremely small doses required, and the absence of some of the characteristic toxic effects of the drug.

I have noticed no difference in the disagreeable symptoms whether 10 minims of a 2 per cent. or 5 minims of a 4 per cent. cocain solution were used. In other words, a concentrated solution of a definite quantity is no more likely to produce disagreeable symptoms than the same dose in a dilute solution. In like manner I have also observed that the amount of cerebro-spinal fluid allowed to escape bears no relation to the after effects.

Of the 22 cases here reported perfect analgesia was obtained in 20, or 90 per cent.; partial in 2, or 9 per cent. In 41 per cent. the analgesia proceeded without the slightest subjective or objective symptoms. In 36 per cent. nausea occurred. Whether this be due to increased tension of the cerebro-spinal fluid or not I am not ready to say. Tuffier maintains that when the fluid escapes like an ejaculation there is a minimum of incidents, but when the fluid trickles the analgesia will be as complete, though it is liable to be accompanied by some annoyance.

A general slight malaise is sometimes observed, commencing about five minutes after the injection and never lasting more than fifteen minutes. The brain is not affected and the muscles

are completely relaxed as in chloroform anesthesia. Analgesia usually begins in about five minutes and extends to the umbilicus in from ten to fifteen minutes. In the great majority of my cases it extended to the umbilicus, in a few to the mammary line and in one to the vertex. The duration of the analgesia was from thirty to sixty minutes. In some cases it lasted over one and a half hours. The average duration in my experience has been one hour. In no case did it subside in less than thirty minutes. In four cases, though no cerebro-spinal fluid had escaped, but having felt confident of being within the spinal canal, I injected the cocain solution with success, Fowler's statement to the contrary notwithstanding.

It is impossible at the present state of our knowledge of the method to determine beforehand either the extent of the analgesia or the length of time that it may be expected to last.

The disagreeable symptoms incidental to the method are nausea, vomiting, headache, chills, rise of temperature, increased pulsation, pallor, cold sweat, involuntary defecation and urination upon the operating table, general depression and shock.

It is hardly probable that all these symptoms are due to the drug itself, for Fowler reports a case in which, after the withdrawal of a drop or two of cerebro-spinal fluid, nearly all the symptoms above mentioned were present before any injection whatever had been made. Nor are these symptoms due, in my opinion, to the increased tension of the extra amount of fluid injected into the space, nor to the loss of a few drops of cerebro-spinal fluid.

Headache was the most common symptom noted in my cases; it occurred in eleven cases, or 50 per cent. Its duration was never more than twelve to twenty-four hours. The elevation of temperature was of short duration, and never reached above 102 deg. F. Pronounced nausea, chills, depression; in fact, shock was observed in only one case, that of the negress' case. Increased pulse rate is a very uncertain and unreliable symptom, as the nervousness of the patient is sufficient to account for it. If this symptom is due to feeble or irregular heart action, a small dose of strychnia or nitro-glycerin may be administered hypodermically. To guard against any cardiac weakness, it may be best to administer a preliminary subcutaneous injection of strychnia, to which a small dose of morphia may be added

to assist the analgesic agent. Involuntary defecation took place in one case only. With one or two exceptions, these cases are selected ones, and the method was used owing to cardiac or renal difficulty, or both.

I have had no experience with injections of other agents than cocain. It is as yet uncertain whether the disagreeable symptoms are the effects of the drug itself, or the result of the disturbance of the nerve centres by increase or decrease of the intraspinal pressure.

Besides the unpleasant after effects above mentioned, the method can never be used with a certain class of patients, namely, children and nervous women in whom the loss of consciousness of an operation going on is absolutely necessary.

In closing, I wish to state that my experience with spinal cocainization has been favorable and satisfactory, and that though it is not an ideal anesthetic, and can not by any means replace the general anesthetic, it has found a special sphere of usefulness not only in genito-urinary and rectal surgery, but also in the surgery of the lower extremity. When weighed in the balance, we shall find the disagreeable features of the method alarming at times, it is true, but as yet never fatal, outweighed by its many undoubted advantages. Of the many advantages of the method, a single statement, in conclusion, will be convincing: there are a large number of cases requiring operation in which pulmonary, cardiac or renal disease exist, and in which spinal analgesia would be far less dangerous than chloroform or ether anesthesia.

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#### VITAL STATISTICS IN LOUISIANA.\*

BY G. FARRAR PATTON, M. D., SECRETARY LA. STATE BOARD OF HEALTH; PROFESSOR ON CLINICAL MEDICINE IN THE NEW ORLEANS POLYCLINIC, NEW ORLEANS.

It has long been a source of regret to those connected with the Department of Public Health of this State that, except in the city of New Orleans, and more recently in Shreveport, and to some extent in Baton Rouge, it has been impossible to obtain in Louisiana any reports whatever of the number of births occurring, or of the number and causes of deaths.

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\*Read before the Louisiana State Medical Society, April 20, 1901.

This reproach to the State has been all the more keenly felt by those in positions where applications for such data have been received, because of the leading position Louisiana has attained as the pioneer State in scientific maritime quarantine and the distinction which her metropolis, the metropolis of the South, has so long enjoyed as a centre of medical education. It has been with a sense akin to humiliation that successive secretaries of the State Board of Health have been obliged to answer such applications with the statement that the collection of vital statistics for the State at large had never been attempted, and that there was no law providing for same.

Thanks to the last General Assembly, and especially to the Hon. R. D. Marble, of Morehouse parish, the author of Act 162 of 1900, this reproach is now removed. The necessary law is now on the statute book, and it rests mainly with the medical profession of the State to make that law a success.

The collection of vital statistics is as surely necessary to enlightened medical progress as book-keeping is to business.

If any argument as to the importance of compiling vital statistics were required, it might be said that if no other reason existed, the one consideration of life insurance, interesting to every physician in the State, to every head of a family, and to every dependent woman and child in Louisiana, furnishes a sufficient reason for the work.

Life insurance companies have hitherto regarded with suspicion the utter absence of vital statistics for the State at large.

The people of this State know of its healthfulness, as well as the fertility of its soil and its abundant resources, but in the estimation of our neighbors Louisiana has undeniably labored under the suspicion of being the home of fevers and of having a heavy death rate.

No amount of newspaper argument can dispel such suspicions. What people elsewhere, and insurance companies especially, want, are not arguments, but cold figures. Up to the present time it has not been possible to give such figures, but now the law is there to uphold the work, and by a persistent and undiscouraged effort, the medical men of this State, backed by that beneficent law, can go about the compilation of statistics, which will fully vindicate the healthfulness of Louisiana.

The word "undiscouraged" in the foregoing sentence has been deliberately chosen. The work *is* discouraging, and prog-



ress will necessarily be slow at first, but in good time the fruit of that work will surely be forthcoming.

Every health officer in the State and every individual physician as far as known has received the literature distributed from the office of the State Board of Health, therefore it is not within the province of this paper to go into details of the methods by which it is hoped to achieve the grand result.

There would seem to be a special fitness in the arrangement by which practicing physicians are the ones on whom devolves the necessary labor.

What is needed is patient and determined effort, and what class of men on the face of the earth are better schooled to patient effort than the unselfish, ill-requited doctors scattered throughout the land. Men who from the very beginning of their professional studies have had to struggle with every sort of difficulty and discouragement, men whose daily experience it is to wage a contest, often hopeless, with death himself; men, the most of whom are accustomed to work without prospect of reward, who never hope to do more than win a moderate livelihood.

Such are the rank and file of doctors; the foot soldiers who are to win the battle; the men on whom depends the successful execution of this great and necessary, but tedious and soulless work.

The writer of this paper believes that the individual physicians of Louisiana, accustomed as all physicians are to working under stimulus of duty, are men who can be relied upon to make this effort.

True, the work is not of a nature to inspire enthusiasm, and can never claim any pecuniary recompense or even the reward of public recognition for the individual; but the cause itself is the cause of light and truth, and as such is worthy of the most earnest efforts of medical men.

In that cause no man shall labor in vain, and having been committed to the medical men of Louisiana, those men, accustomed to meet and overcome difficulties, may confidently be depended upon to carry on this work and make a success of it despite of obstacles and discouragement.

BOARDS OF LUNACY, WITH ESPECIAL REFERENCE TO THE  
EXAMINATION OF PATIENTS FOR COMMITMENT IN THE  
INSANE ASYLUM.\*

BY C. D. SIMMONS, M. D. DUTCHTOWN, LA.

When I was honored by the Chair and selected as Chairman of the Section on Medical Jurisprudence I felt like taking an early spring vacation, commencing somewhat before the 18th day of April and lasting over into May.

I am here to plead guilty to the too hasty and careless examination of patients suspected of being insane.

From my experience with other medical men, I do not believe I am alone in this matter.

During the past six years I have been appointed by the judges of the parish, along with other physicians, seven times to examine six persons, suspected of being insane. Five of the six patients were recommended as suitable subjects for the insane asylum.

Of the five patients, one died after being in the asylum about eight months, cause of death not known, one still remains, without material improvement in her mental condition. The other three were sent home, as improved or cured, after being in the asylum from several months to one year. One of the patients, now at home, a girl about eighteen years old, is a petulant and humored idiot, needing more or less home correction, than hospital treatment.

The sixth patient, forming the basis of this brief paper, was examined and a certificate given, by two able physicians, for her commitment, about eighteen months prior to my first connection with the case.

I am told that the patient only remained in the asylum about one month, and during the entire time, did not show the slightest trace of disturbed mentality.

Dr. J. R. Fridge, formerly of Gonzales, La., and myself, were appointed by Judge Paul Lèche, of Donaldsonville, La., to inquire into the mental condition of the party under consideration.

At our first examination the following points of interest were elicited; patient fairly well nourished, vital organs

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\*Read before the Louisiana State Medical Society, April 20, 1901.

normal, expression mild and natural, and conversation well connected.

We found the patient alone, at her home, and after perhaps an hour's stay, we were undecided, but rather leaning to the opposite of insanity.

Our report was, that from our findings we did not feel justified in pronouncing the patient insane. As soon as our report became known to the husband, he showed his disappointment in many ways. He procured a long list of names, all his friends, and submitted them to the judge as evidence of her insanity.

All the parties on the list declared her to be insane, and very troublesome in the neighborhood.

One glaring mistake made by the husband was, that in making up his evidence he always avoided his wife's relations and friends.

This made me very suspicious, and I soon found out that for some unknown reason he was using every expedient to get his wife in the asylum. Dr. Fridge was also fully convinced that the husband was scheming against his wife.

After a month or more Judge Lèche reappointed Dr. Fridge and myself to re-examine the case. After a diligent and careful examination and the taking of evidence, from all sources for several weeks, we were again justified, in our opinion, in sending in a similar report to the first one.

At times during our last examination, we were in the role of detectives, in order to determine whether the words or deeds of the husband were true or not. One of his tricks was the placing of a small bucket of milk under a larger empty bucket, and then accusing his wife of having put it there. We asked him how long the milk had been under the bucket, he replied about twenty-fours.

It was in August and the day was very sultry and still; when the milk was examined it was found as sweet as manna, proving conclusively that the milk had been placed under the bucket only a few hours before.

The lady accused her husband of having placed the milk in hiding just a few hours before our arrival. I am satisfied of the truth of her story.

I have been informed recently that the husband made a third effort to have Judge Lèche appoint a new board; the judge re-

fused to do so. The husband, still full of tricks and resources, employed two physicians outside of the parish, paying them out of his own funds to examine his wife. I am told they adjudged her insane.

I feel sure that the pressure brought to bear will finally land this much abused woman, where incompatibility reigns supreme, in the insane asylum.

Mr. President, the prevailing way of railroading patients into the insane asylum is to be deprecated; such methods keep the asylum packed to its utmost capacity, in fact it does great harm to the institution by excluding some of the worst forms of insanity at the very time when treatment would be most effective.

I know of a case where a man wildly insane, in my parish, was confined in summer in the parish jail for more than a month after his commitment had been legally over.

The result was a severe spell of sickness, which I do not believe had any connection with his mental condition.

There are plenty of cases on record where criminals developed absolute and unfeigned insanity after being placed in jail. I am satisfied that the dark close rooms and general unsanitary surroundings were factors in these cases.

With these facts in view, I am not homeopathist enough to believe in the jail treatment of the insane.

Now, if my few scattering remarks will have the slightest tendency to bring about the better handling of these unfortunates I will feel fully repaid for my trouble.

#### SOME CORRESPONDENCE BEARING ON THE ABOVE.

JACKSON, LA., April 27, 1901.

*Dr. C. D. Simmons, Dutchtown P. O., La.:*

DEAR DOCTOR—Replying to your letter of the 24th, which reached the Asylum while I was in New Orleans, I wish to say that Mrs. E. J. C. is now an inmate of the Asylum for the second time. If there is truth in her belief that her husband and his family have turned against her, then there is nothing the matter with Mrs. C. mentally. When she was here first, she was admitted July 20, 1899; furloughed August 26, 1899, for thirty days; furlough extended to October 26, and, as she had not been returned to the Asylum after the final expiration of furlough, discharged January 30, 1900. She was again admitted April 16, 1901. During the period of her first stay here she gave no evidence of insanity to my mind, except what I thought was a delusion as regards her husband and his family. If that was no delusion, she was suffering from no form of insanity. After

her discharge application was made several times for her readmission, which I declined to entertain because I did not think her a fit subject for this institution. Among the papers accompanying her last commitment to the Asylum were the two certificates signed by yourself and Dr. Fridge in September and December, 1900, and a certificate signed by Dr. T. B. Odom and Dr. G. W. Jones, dated French Settlement, La., January 23, 1901. The two latter state they "find her mind in a state of lunacy and demented to a degree which causes her physical injury by self-exposure and deprivation" (whatever that may mean), and they recommend that she be removed to some institution where she can receive medical and general attention, and also that they "believe that the Insane Asylum at Jackson, La., a suitable place for her detention." Another certificate signed by P. R. Sibley, M. D., dated Near Port Vincent, La., October 23, 1900, certifies that he is personally acquainted with Mr. E. C. and has practiced in his family and has never seen any conduct on his part which would lead him (Sibley) to consider him (C.) anything other than a "kind and considerate husband and father." The Doctor says: "I do not believe him to be unkind to his wife, whom I fear is *non compos mentis*." The Deputy Sheriff who accompanied Mrs. C. said in the course of conversation that he thought Mr. C. should rather be in prison than his wife in the Insane Asylum. I note that you and Dr. Fridge both state in one of your certificates that you do not think Mrs. C. is far wrong in her suppositions regarding her husband, and the difficulty I experienced in getting her returned to her home after I wrote that I was prepared to discharge her as soon as she was sent for confirms me in the opinion that you two gentlemen were correct in the premises. I kept Mrs. C. here six months and ten days, because it not infrequently occurs that a patient will remain quite sane for a long period before giving any outside evidence of mental derangement. After that length of time, I had no hesitation in discharging her, and would have discharged her earlier could I have prevailed upon her husband to send for her before January 30, 1900. I do not expect to keep Mrs. C. here long on this occasion, because of the light thrown on this case recently, and if I experience the same delay on the part of Mr. C. I will discharge her, send her home in charge of an attendant and institute legal proceedings against him to recover the expense of the procedure.

I regret I did not meet you at the State Society meeting, where I could have discussed this case more fully. The deputy told me that Judge Lèche hesitated a long while before he yielded to the pressure brought and interdicted Mrs. C.

I hope that this letter will prove of service to you.

Yours very truly,

[Signed] GEO. A. B. HAYS, M. D.,  
Superintendent.

**FIRST HELP IN CASES OF CONTAGIOUS DISEASES.\***

DR. C. L. HORTON, SANITARY INSPECTOR LOUISIANA STATE BOARD OF HEALTH,  
NEW ORLEANS.

The prevalence of contagious diseases in Louisiana during the past few years has caused the Louisiana State Board of Health to establish a first help fund for the management of these cases. This fund has been appropriated by the State Legislature and is subject to the order of the State Board of Health. Prompt action in these cases, isolation and disinfection, is the only method to confine the disease to the room or house in which it originates.

A contagious disease improperly managed will of course soon infect an entire city or parish. Some of the parishes have no parish board of health, or if there are boards they have no means to manage the cases of contagious diseases which often make their appearance among the poor who are unable to have the proper medical attention. The State Board of Health is required by law to be provided with tents, formaldehyde generators, clothing, disinfectants, etc., all articles that are necessary in the management of contagious diseases. These articles are packed and ready for shipment to any point in the State.

We also keep a list of experienced sanitary officers who will take charge of a case at any hour of the day or night.

Our experience during the past two years has shown the establishment of this fund to be a wise act. We have several times stamped out what has threatened to be a serious epidemic.

So far, we have experience in applying the first help only in cases of small-pox, but the Board is prepared to act in any emergency.

Where the parish is able to take care of its own cases the State Board does not interfere, and it is only in cases where from inefficiency from whatever cause on the part of the local board that the State Board lends its assistance.

The following two instances are sufficient to illustrate very clearly what would undoubtedly have been serious outbreaks of variola had not prompt assistance been given.

About 18 months ago five cases of small-pox in a thickly set-

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\* Presented to Louisiana State Medical Society, April, 1901.

tled quarter were reported by a physician in one of the neighboring parishes.

The President of the State Board of Health informed me, the medical inspector, of the fact and requested me to communicate with the health officer of that parish. I did as I was requested, but the health officer was unable to properly manage the cases. The President then requested me to go and investigate the situation. I found the infected house located in the midst of a regular Louisiana negro settlement. There were four or five hundred negroes living in the settlement, the great majority of whom had never been vaccinated.

In the house were three well developed cases of variola. Two cases had recovered and had left the neighborhood and were never found. This situation required prompt and energetic action. Guards were stationed at the house and no one allowed to enter or depart from it except the attending physician. A sanitary officer disinfected the premises and also cleaned and disinfected the premises of every house in the settlement.

All the inhabitants of the neighborhood were at once vaccinated and revaccinated in ten days where the vaccination was not successful.

The suspects were sought out and watched for the development of any suspicious symptoms.

No other cases of small-pox occurred in this neighborhood. When the three cases recovered, they were given antiseptic baths, clean clothing and discharged. Their bedding was destroyed by fire, their clothing disinfected, the house and premises cleaned and disinfected.

Our last experience was in January of the present year. The President of the State Board of Health was informed by the Governor of the State of the existence of small-pox in a convict camp on Bayou Lafourche, in Assumption parish. This information was received about 6 o'clock in the evening, and I was requested to go by the early morning train to the camp and take with me sanitary officers, tents, disinfectants, etc. I arrived at the camp the next day and found a very distressing condition of affairs.

There were nineteen convicts sick with variola. They were in a very crowded condition in a small unsanitary hospital

building. There were in the hospital eight convicts sick with other diseases. In the general cell there were one hundred and thirty-nine convicts; only about thirty of them had been vaccinated within the past twelve months.

The disease first appeared in the general cell, which was undoubtedly infected.

The attending physician, Dr. Truxillo, had succumbed to the disease and subsequently died.

Dr. A. A. Landry, who was appointed to succeed Dr. Truxillo, had vaccinated a majority of the convicts before my arrival; the vaccination was continued until all were vaccinated, and revaccination was done in ten days on the unsuccessful cases.

Detention and isolation tents were put up at once and a temporary hospital building was built.

The sick in the hospital were isolated in tents separate from the cases of variola.

The entire camp was thoroughly cleaned and disinfected, and this cleaning and disinfecting was done every second day. Whenever a case of sickness of any kind occurred it was at once isolated and watched for developments. Whenever a patient died he was buried with all the antiseptic precautions and his bedding and effects were burnt. Only six new cases occurred in the camp after we took charge. In fifteen days after the last case of variola developed in the general cell the convicts were permitted to be removed from the camp to the convict farm. All the bedding was burnt and every convict given a suit of disinfected clothing before his departure. The entire camp was removed within two months after the first appearance of the disease and all the buildings and bedding were destroyed by fire. All articles that could be disinfected were immersed in bichloride of mercury solution for four or five hours. The mortality here was very great, due principally to the very crowded condition of the hospital and the disagreeable weather that prevailed, for which the buildings and tents were not prepared. The entire expense of the management of these two instances was paid out of the first help fund.



## Clinical Report.

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### A CLINICAL REPORT OF A CASE OF SPINA BIFIDA\*

BY T. E. SCHUMPERT, M. D., SHREVEPORT, LA.

By far the most common congenital anomaly of the spine is spina bifida. Deme records 57 cases in 36,148 births and Chansis 22 cases in 22,293 births. It is due to an arrest of development of the spinal column, the lamina or spinus processes failing to unite, an opening results through which more or less of the membranes of the cord may pass, the size of the tumor being proportionate with the size of the opening. In vastly a larger proportion of cases no treatment except palliative is admissible. No operation should be done under two or three months after birth; however, it has been successfully performed as early as five hours after birth.

There are but two methods to be considered for the radical cure, one by injection, the other by excision. The former being more conservative was the one employed in the case which I am now about to report. And especially since the operation of excision could as well be performed in the event the injection method failed. The case of spina bifida which I am now about to report through the courtesy of Dr. R. A. Gray of our city, into whose hands it had the good fortune to fall, has been of so much interest to me and the result so gratifying that I felt it might have a place in this society.

Dr. Gray attended the mother in her confinement and it was at this time it was observed that the child was malformed and the diagnosis of Spina Bifida made, but then was not deemed a suitable time for surgical interference, but that it had best be postponed a few weeks until this dainty little patient could grow stronger and better fortify himself against the effect of an operation.

So when the child was two months of age, which was on the 23d day of December last, it was decided that the operation should be performed, since now the tumor located in the lumbavertebra had grown to such a size and its coverings so attenua-

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\*Read before the Louisiana State Medical Society, April 20, 1901.

ted that it threatened to rupture. Its size about that of the half of a small orange, its base broad, its surface smooth and symmetrical and its contents a fluctuating mass which, when placed between one's eye and the ray of a lamp, presented a translucent and pink appearance.

The fontanelle was unusually wide and pressure of the spinal fluid caused bulging of its tissues; pressure on the tumor also caused a corresponding impulse in the fontanelle, but with this exception the child was active and well matured. The little one was prepared for operation in the usual way, with every precaution taken in sterilizing the instrument to be used. An aspirator needle was inserted in base of tumor, on the side in preference to median line, and about 2 $\bar{5}$  of fluid withdrawn; another escaped through the needle puncture, making a total of 3 $\bar{3}$  fluid removed. The fontanelle was observed to recede and become more compressible. Immediately one drachm of Morten's fluid, composed of iodine gr. x, iodide of potassium gr. xxx, to glycerin 5i was injected in tumor. The little patient collapsed and great fear entertained lest he might not rally. When he was seen the next morning it was noticed that almost complete paralysis of the lower extremities supervened; however, he had not lost control of the bladder or rectum, but each subsequent visit revealed a gradual improvement in this regard. The tumor grew gradually smaller, more consistent and shriveled, and at the expiration of four days the function of the limbs re-established, and on the tenth day the tumor was flat and the patient pronounced cured. The patient is now about six months old, has been seen several times since it was discharged, is enjoying good health, active, and tries to stand when supported.

[Since reporting this case I have operated on a child of Mrs. Shaw, of Jennings, La. The treatment was identically the same with equally as good result.]

# N. O. Medical and Surgical Journal.

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## Editorial Department.

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CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

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### THE HAVANA EPISODE.

We have to express our own regret at the unfortunate outcome of the mosquito experimentation in Havana, whereby two human lives were sacrificed to the confirmation of a theory in disease. This goes very far to determine the mosquito as a factor of prime issue in the causation of yellow fever and at the same time the fatal results must cause a halt for reflection on laboratory methods and experiment.

The newspaper accounts with customary vividness in description have served as a text for a most readable editorial from the pen of Dr. T. C. Minor in the Cincinnati *Lancet-Clinic* of August 31. In concluding a review of the matter the writer remarks:

As a matter of medical news it is proper that medical readers should have these *ex parte* statements made by newspaper scientists, set forth for their observation, eulogy or criticism. The mass of general practitioners read and think for themselves; they are bound down by no ties of specialism; will weigh and consider all things, and in the end will reach a proper conclusion. Does any one imagine, for a single instant, that the destruction of the whole mosquito tribe, that is beyond the realm of human possibility, would result in the disappearance of malaria and yellow fever? For ourselves, we see no science in these experiments, much less common sense. Let us add the experiments are even criminal, and Major Scott did wisely in ordering their discontinuance. As long as filth and weather exist and eternal decomposition goes on, as long as ordinary filth conditions are unremedied, so long will nature spread abroad the poisonous toxins that have existed since the world has been known, no matter whether they be carried by rats, cats, germs, flies or mosquitoes.

The enthusiasm of any newly evolved theory carries always a degree of accentuated belief that only time tempers to a standard of thought, and the above is a wise plea for conservatism in

the acceptance of the degree of value in the newly found truths. At each step of the progress of bacteriologic evolution, there have arisen pretensions to impossible achievements. Even Hahneman predicted, in the forties, a wholesale germ theory, and in the eighties most diseases were theorized on a possible germ basis. We do not go the whole way with Dr. Minor, but we are ready to confess to a desire and a hope that the future may find easier or less calamitous methods for demonstrating theories of disease.

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#### ON SUBSTITUTION.

Elsewhere in this issue we reproduce the text of an act, now a law, recently passed by the Tennessee State Legislature, making it a misdemeanor for any druggist to substitute for any ingredient named in the physician's prescription. That other States should follow this lead is quite evident from the wholesale discussion of the question in the several weekly and monthly medical journals of the country. Louisiana may be induced to legislative action if the medical profession were interested enough in the matter. We have on several occasions expressed forcible views on the same subject, but it seems as if the end were yet remote.

The whole subject is broad enough to permit several viewpoints, and perhaps persistent reference to the matter may after a while awaken some response in the rank and file of the profession. We are not consonant with the belief that the remedy rests solely upon the physician's effort. The manufacturers of drugs possessing merit and free of dishonest pretensions in them, owe it to themselves, to the public and to the medical profession, to see that the patient obtains their products when they are ordered. We know of one preparation which was not supplied in at least six instances by as many different drug stores. The dispensing druggist has no conscience in the question of substitution, and unless many examples are made there is small reason to believe that any sort of a moral or ethical responsibility can be awakened in those who find the easiest way is the best, and that it is hard to be found out. The courts have not been deaf to these conditions, and if a concerted effort were made by reputable manufacturers the evil might be abated by legal process.

We are ready to admit and to urge that it depends in great part upon the physician to see that his patient gets in his prescription what has been ordered, but we are not of the opinion that the physician should be taxed with the protection of the manufacturer. It has come to be the practice of a great many physicians to boycott any drugstore not filling his prescription properly, and here has been the only practical remedy, and in this the remedy must lie until the manufacturers have found a better way. Every drugstore shelf is full of proprietary preparations which stand side by side with flagrant patent medicines and some having slight claim to a better mention. The evidence of both kinds of stuff acts as an incentive to the druggist to keep his own preparations in stock with similar labels and with like pretensions. The next step is easy. Nor is this quite all. The large number of drugstores in every community, each striving for profit, compels a competition which murders the instinct of ethics. Patent medicines are sold for little or no profit; many proprietary medicines are expensive; cheaper products are more profitable than costlier ones; the patient does not know; oftentimes the doctor does not know and the story is done.

If every urban community were provided with drugstores limited to filling prescriptions and the sale only of plain drugs and toilet articles, where none but physicians' prescriptions were handled and where no prescriptions calling for other than standard preparations would be filled, then the way to preventing substitution and the way to protect the patient, the physician and the manufacturer would be easy.

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## Society Proceedings.

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ORLEANS PARISH MEDICAL SOCIETY, MEETING JULY 27, 1901.

DR. O. L. POTHIER read a paper on "*The Widal Reaction in Typhoid Fever*" (page 205), followed by a paper on

"*Widal's Reaction in Non Typhoid Cases*" by DR. I. I. LEMANN:

The value of such a test as Widal's, if reliable, is undoubted. By its aid we may be helped in the diagnosis of many an

obscure case; not only may assist in differentiating the continued fevers which in their clinical aspect so closely resemble one another, typhoid and remittent malaria, but it may serve to distinguish an incipient or atypical typhoid from a supposed appendicitis or even an abscess of the liver. Of such cases I have several well authenticated instances in mind.

But the value of such a test is, as I have implied in my opening sentence, dependent necessarily upon its reliability. If this reaction may be found in diseases other than the one of which it is supposed to be pathognomonic we must admit its usefulness is thereby impaired, perhaps entirely vitiated. Every once and a while I have heard some one in discussion speak disparagingly of Widal's test, saying that he had received a positive report in a case that proved finally to be distinctly other than typhoid, or on the other hand, that he had failed to get a positive reaction in such a typical typhoid case.

Such statements coming from those in whose judgment I had confidence naturally caused prejudice on my part, but after some three years' experience with febrile conditions in which the test gave practically uniformly reliable results I determined to investigate the matter at first hand. How far is the Widal test reliable? Is it possible or common to obtain it in non-typhoid cases?

Turning first to the literature of the subject, I have been able to collect and tabulate from the journals in the library of this Society some 14,719 cases of typhoid, suspected typhoid, and non-typhoid in which the Widal reaction was made. Of these 14,000 cases at least 3463 are known to have been non-typhoid, but as reporters merely give their results in percentages it is impossible to ascertain how many more were non-typhoid. Thus, A. C. Abbott (<sup>1</sup>) states that he has made reactions in 4154 cases with an error of 2.8 per cent; that is to say, the final clinical diagnosis or autopsy confirmed the result of the blood examination whether negative or positive in all but 2.8 per cent. of these 4154 cases. How many of these 4154 cases were non-typhoid he does not state. Again, Wyatt Johnson (<sup>2</sup>) states he made examinations in 600 cases, and of this series he failed to get a typical reaction in but one typhoid, and in not a single non-typhoid case was the reaction positive. He says more than half of this series were typhoid, but does not give exact figures.

However, to return to our 3463 cases known to be non-typhoid, I found that there had been 105 positive reactions in in this number; that is to say, in 3 per cent. This number, 3463, is perhaps subject to a correction inasmuch as it includes two previous collections from the literature, Widal's and Cabot's, which were made about the same time (1897) and may, therefore, duplicate one another. Discarding Widal's, therefore, as being embraced in Cabot's, which is the larger of the two, we have still 2413 cases with 69 positive reactions, or an error of 2.9 per cent., practically the same result as I have given above.

Such figures speak volumes and must necessarily give us confidence in this valuable test. We can not claim absolute impeccability for any clinical test or symptom or symptom group, and we do not claim it for this test. But when there is such a small percentage of error, when in 97 per cent. of negative cases the test's dictum is the correct one, we can not afford to turn a deaf ear to the advocates of this procedure.

Strong as this evidence is we have stronger and from excellent authority when we read in the second edition (1897) of Cabot's "Clinical Examination of the Blood," p. 369, that "out of over one thousand cases of various diseases not typhoid, but four have been proved to clump typhoid bacilli with proper technique"—an error of .4 per cent. And he goes on to say "it is quite possible that further improvements in technic may enable us to prevent even this very small error." (3)

It may be interesting to take up the reports of individuals separately in order to gauge the personal equation. I quote impartially from opponents as well as from advocates of the test. Thus, Professor W. Gilman Thompson (4) reports examinations of 503 patients, in which number there were 20 cases other than typhoid which gave a positive reaction. The diagnoses of some of these cases were carcinoma pylori, meningitis, nephritis, appendicitis, chronic endocarditis, endometritis, suppurative subdeltoid bursitis, acute bronchitis, pleurisy with effusion, diarrhea, acute endocarditis, malarial fever, acute articular rheumatism, general miliary tuberculosis. He concludes that "while the test is positive in the larger number of cases of enteric fever and negative in the greater number of other diseases, there is a margin of error of 11 to 12 per cent.

on each side of what might be called the normal line, between cases in which the test fails where it ought to succeed and succeeds where it ought to fail in order to make it of real clinical value. This total of 23 per cent. of possible error unfortunately includes first those cases in which there is the greater doubt upon the purely clinical side."

Again, Dr. A. V. Meigs, of the Pennsylvania Hospital (<sup>5</sup>), says: "I have concluded \* \* \* that as a diagnostic aid it is useless. This conclusion has been forced upon me by the fact that the test has often indicated the existence of typhoid fever in patients who manifestly did not have it, and on the other hand the test has failed to confirm clinical evidence of the presence of typhoid."

On the other hand, Prof. James Tyson (<sup>6</sup>) writes: "The result of our experience with this test has been to increase our confidence in its reliability. It occasionally fails; it may at times appear late, but if obtained by competent, accurate and conscientious observers, and is observed with continued fever, I accept it as sufficient evidence of the presence of typhoid fever." Professor William Welch, of Johns Hopkins (<sup>7</sup>), has said that "the blood of many hundreds of persons either healthy or affected with diseases other than typhoid has been tested for the specific typhoid reaction, and it can now be asserted that a serum reaction which an experienced observer using accurate methods would consider characteristic of typhoid fever is to be found only *most exceptionally* in those who have not had typhoid infection."

Cabot (<sup>8</sup>), whom I have already quoted, says that of 3475 cases collected from the literature by him in 98.8 per cent. the results of the serum test have been borne out by the court of ultimate appeal—the clinician.

So much for witnesses pro and con. I now invite your attention to a series of some 195 examinations made by me this spring. In this series the blood in 188 instances came from healthy persons, convalescents, or from patients sick with diseases other than typhoid. The diagnosis list of these latter cases includes fractures, dislocations, hemorrhoids, stricture urethræ, phthisis pulmonalis, rheumatic endo and peri-carditis, nephritis, malaria, endometritis, pernicious anemia, pregnancy, fistula in ano, puerperal septicemia, fibroid of uterus, grippe,



alcoholism, chorea, hydrocele, peri-rectal abscess, leg ulcer, rheumatism, acute articular, pneumonia, herniotomies, septicemia following injection of anti-tetanic serum, gunshot wounds of chest, of shoulder, pelvic abscess, appendicitis, laparotomies for fibroid of uterus and for salpingo-oophorectomy, diabetes mellitus, locomotor ataxia, chronic diarrhea, etc., etc. Of these 188 cases two gave positive reactions—an error of 1.06 per cent. One of these two unfortunately left the hospital before I could get a second specimen for examination. In the other case I made a second examination and found the test negative though there was a slight tendency to clumping. The first was a case of endometritis about to be curetted, the second patient was suffering from a subclavian aneurism; both were non-febrile cases. Both patients were negro women fairly intelligent. When questioned as to their previous history both denied ever having had typhoid fever. Therefore, even concluding that the error is one inherent in the test and not the fault of the technic nor due to an unintentional falsity of the history, we find that the test gives the correct answer to the question we put to it in nearly 99 per cent. of these non-typhoid cases.

I wish to call particular attention to those cases where the possibility of colonic infection existed, for the theory has been advanced (<sup>9</sup>) that the blood serum of such cases would cause the typical clumping of typhoid cultures. It has been said that such reaction was obtained in 5 out of 7 cases of suppurative appendicitis and in 3 out of these 5 a bacillus corresponding perfectly to the color type was isolated from pus obtained at operation (<sup>8</sup>). My series included 3 cases of appendicitis, 2 of pelvic abscess, 4 of fistula in ano, 1 of peri-rectal abscess, 1 of dysentery, 1 of auto-intoxication; in all of which the reaction was negative.

Besides the two positive reactions already mentioned, I obtained eight other positive reactions. In these eight cases the ultimate clinical diagnosis or autopsy confirmed the finding of the microscope. Taking, therefore, the 196 altogether, in which the test gave the wrong answer twice, we have a total error of about 1 per cent. I mention this only in passing, as this paper is intended to consider only the reaction in non-typhoid cases.

The technic used in these experiments is that employed in the routine of the bacteriologic laboratory of the Charity Hos-

pital. A drop or two of blood is collected from the ear in a small glass vial. By the time the blood reaches the laboratory a clot is formed, and in making the reaction this clot is pushed aside by the platinum loop, and a loopful of the subjacent serum is taken and mixed with fifty times its volume of twenty-four-hour-old bouillon culture of typhoid bacillus. There are some red blood cells present in the serum, but not enough to interfere with the reaction. Fifteen minutes after the mixture is made it is examined with a  $\frac{1}{6}$  objective and a No. 1 eyepiece. To have a typical reaction the bacilli must be immotile and clumped; both facts are essential.

If we are not careful in the technic we may be responsible for faulty results. Thus a red-hot platinum will kill the bacilli, and hence render them immotile. A piece of linen fibre accidentally under the cover glass may be responsible for a clumping and a pseudo reaction. Again, there may occur a pseudo reaction along the edges of the cover glass which we must not consider typical.

I do not intend to enter into a discussion of the many technics employed by workers in this field, but reverting to the consideration of the mass of statistics from the literature, I wish to insist on the fact that the showing made therein would be much improved were there an uniformity of technic. These many cases include all kinds of technic, good, bad and indifferent, and all varieties of procedure, the Wyatt Johnson dried blood method, the fluid serum quick method, the fluid serum macroscopic or slow method, the whole blood method, etc. When through growing experience we shall have found that one of these methods is superior to the others and when we shall have amassed a large number of cases tested by this one method we shall then be able to speak with more precision, for we shall then, as Cabot says,\* have so improved our technic as to have as error a very small negligible fraction of a per cent.

But not only have we to deal with all these varieties of procedure, but the dilutions have differed from 1 part of blood (or serum) in 10 parts culture to 1 part blood in 50 parts culture. The time limit, too, must be taken into consideration. It can not be too strongly insisted upon that this test is after all a

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\*Cabot, p. 375.

*quantitative* rather than a *qualitative* one; that is, the typhoid serum will clump typhoid culture in greater dilution and in shorter period of time than will the serum of any other disease. From my series of experiments and from the experience of Dr. Pothier (whom I have permission to quote), who says that never has he failed to find the typical lesions of typhoid at autopsy in the body of a patient whose blood gave a positive reaction, no matter how atypical or misleading may have been the clinical aspect of the case; from such evidence, I say we may justly conclude that when we find a positive reaction at a dilution of 1 to 50 after an interval of from fifteen to twenty minutes, we are dealing with the blood of a typhoid patient. The exceptions are sufficiently rare for us to consider the patient "guilty" of typhoid unless strong evidence be brought to the contrary.

Cases that illustrate the value of this test at the same time show the injustice of much of the adverse criticism. Not longer ago than a week such an instance was brought to my notice. A positive report was sent to one of the medical wards of the hospital. The disease was so atypical that the clinician looked askance at the report and was inclined to regard it as additional evidence of the valuelessness of the reaction. His patient died of perforation and at autopsy showed other lesions of typhoid.

Prof. Welch (<sup>10</sup>) has reported a case which clinically was not typhoid but in which Widal was positive and where Hexner isolated typhoid bacilli in large numbers from the gall bladder. Peck (<sup>11</sup>) has reported a case with marked reaction in which no typhoid lesion and no enlargement of spleen were found at autopsy though bacteriologic examination demonstrated the presence of typhoid bacilli. Again, Guignon and Meunier (11) have reported a case "in which during life there had been symptoms of typhoid fever and acute miliary tuberculosis combined. Serum reaction was positive. At autopsy the lesions appeared to be simply those of miliary tuberculosis. There were also small intestinal ulcers typically tuberculous in appearance. Typhoid bacilli, however, were cultivated from the spleen and other organs."

Such are some of the obscure cases that rise up to confound and confuse us.

And after all this testimony I ask, can we afford to discard a

guide that is mistaken but once in a hundred times and whose percentage of error, there is hope, may be still further reduced?

In conclusion I desire to thank Dr. O. L. Pothier for his instruction and assistance.

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WIDAL REACTIONS—FEBRUARY, MARCH, APRIL, 1901.

Case.	Age.	Sex.	Col.	Previous History.	Widal.	Remarks.
1.	26	M.	W.	Never had typhoid.	Ma- Neg	Healthy.
				larial attack of 2 or 3 days.		
2.	50	M.	W.	Yellow fever in 1853	Neg	Healthy.
				No other cont. fever.		
3.	23	M.	W.	No typhoid	Neg	Healthy.
4.		M.	W.	No typhoid. Has had æstivo-autumnal f.	Neg	Healthy.
5.	24	F.	C.	No previous illness	Neg	Necrosis of tibia.
6.	44	F.	C.	No continued fever	Neg	Old Pott's fract. with necrosis.
7.	19	F.	C.	No long illness of any sort.	Neg	Fistula in ano.
8.	18	F.	C.	Never been in bed with fe- ver.	Neg	Hemorrhoids.

Case.	Age.	Sex.	Col.	Previous History.	Widal.	Remarks.
9.		M.	W.		Pos.	Typical typhoid case, two pos. reports.
10.		M.	W.		Neg.	Auto-intoxication.
11.	20?	M.	W.	No continued fever.	Neg.	Healthy.
12.	43.	M.	C.	Some kind of fever in 1876.	Neg.	Stricture urethræ.
13.	28.	M.	C.	Swamp fever 3 years ago.	Neg.	Dislocation of shoulder.
14.	42.	M.	C.	No serious illness in life.	Neg.	Some rectal trouble.
15.	49.	M.	C.	No sickness hitherto to stop him from working.	Neg.	Fracture of leg.
16.	15.	F.	C.	No previous illness	Neg.	Rheumatic peri-and endocarditis.
17.	33.	F.	C.	Had "fever" last year.	Neg.	Convalescent from lobar pneumonia.
18.	22.	F.	C.	Has never had a continued fever.	Neg.	
19.	24.	F.	C.	Had "malarial fever" for 3 weeks, 3-4 years ago.	Neg.	Grippe (?). Nephritis.
20.	36.	F.	C.	Indefinite. Unreliable.	Neg.	Phthisis pulmonalis.
21.	28.	F.	C.	Always been sickly.	Neg.	Phthisis pulmonalis.
22.	14.	F.	C.	Sick for 17 days previous to admission. Delirious. Slight bronchitis. Never sick before.	Pos.	No cause illness other than typhoid apparent.
23.	21.	F.	C.	No previous illness.	Neg.	Phthisis pulmonalis, coxalgia.
24.	18.	F.	C.	Measles, only other illness.	Neg.	Phthisis pulmonalis.
25.		M.	W.		Neg.	Malaria. Plasmodia found.
26.	22.	F.	C.	No typhoid. Had measles, mumps and whooping cough.	Pos.	Endometritis (?). To be curetted.
27.	21.	F.	C.	No typhoid. Malaria when a child.	Neg.	Endometritis (?). To be curetted.
28.	32.	F.	C.	No previous illness.	Neg.	Laparotomy, convalescent.
29.	21.	F.	C.	Typhoid 10-12 years ago.	Neg.	Bladder trouble.
30.	38.	F.	C.	No typhoid nor any continued fever. Pneumonia last year.	Neg.	Pregnancy 9 months.
31.		M.	W.	Typhoid 6 years ago.	Neg.	Healthy.
32.	24.	M.	W.	No continued fever.	Neg.	Healthy.
33.		M.	W.	No continued fever.	Neg.	Healthy.
34.	22.	F.	W.	Constant pain in abdomen. Frequent stools. Remittent fever. Cough. Free purulent expectoration. Irregular chills. Rapid emaciation and anemia.	Neg.	R. M. showed pernicious anemia.
35.		M.	W.	Sick 1 week. No chills. Continued fever.	Neg.	Fever defervesced under quinin.
36.	36.	M.	W.	No continued fever.	Neg.	Fistula in ano.
37.	24.	M.	W.	No continued fever.	Neg.	Herniotomy; convalescent.
38.	32.	M.	W.	Chills and fever last June.	Neg.	Comp. fracture R. leg.
39.	21.	M.	W.	No continued fever. Int. fever a number of times.	Neg.	
40.		F.	W.	Temp. 98-106 deg.	Neg.	Puerperal septicemia following 3 months abortion.

Case.	Age.	Sex.	Col.	Previous History.	Widal.	Remarks.
41.	39	F	W	No typhoid. Malaria nearly every summer.	Neg	Laparotomy for fibroid.
42.	50	F	W	No continued fever.	Neg	Laparotomy for ovarian cyst and malignant growth.
43.	44	F	W	Yellow fever in '78.	No Neg	Laparotomy for fibroid typhoid.
44.		M	W	No typhoid.	Neg	Healthy.
45.	42	F	W	No typhoid nor malaria	Neg	Ventral fixation of uterus
46.	16	F	W	No continued fever.	Neg	Ulcer of leg.
47.	22	F	C	"Bilious" fever 1½ years ago.	Neg	
48.	37	F	C	"Swamp" fever 3 years ago.	Neg	
49.		F	C	"Bilious" fever for 1 week 3 weeks ago.	Neg	
50.	24	F	W	Typhoid 7-8 years ago.	Neg	Splenectomy.
51.	17	F	W	No continued fever.	Neg	
52.		M	W	Has never had typhoid. At present has a remittent fever.	Neg	Malaria subsided under quinin.
53.	45	F	W	No continued fever.	Neg	Convalescent from "grippe."
54.	45	F	W	Typhoid 40 years ago.	Neg	Acute alcoholism.
55.	52	F	W	No serious illness.	Neg	Chronic endocarditis.
56.	14	F	W	No typhoid.	Neg	Chorea.
47.	48	M	W	No typhoid.	Neg	Leg ulcer.
58.		M	W	No typhoid.	Neg	Hydrocele.
59.	59	M	W	Typhoid at 6 months	Neg	
60.	33	M	W	No continued fever	Neg	Perirectal abscess.
61.	24	M	W	No typhoid, chills and fever 6 weeks ago.	Neg	
62.	61	M	W	"Typhus congestive fever" in '78.	Neg	Malarial fever in 1890.
63.	39	M	W	Typhoid at 9 years of age.	Neg	No fever since.
64.	39	M	W	No typhoid.	Neg	
65.	19	M	W	No typhoid.	Neg	Acute articular rheumatism,
66.	57	M	W	Thinks he never had typhoid.	Neg	
67.	44	M	W	No typhoid. Malaria in 1900.	Neg	
68.	75	M	W	No typhoid nor any continued fever.	Neg	
69.	21	M	W	No typhoid nor any continued fever.	Neg	Convalescent from pneumonia.
70.	62	M	W	Typhoid at 18 years. Typho-malaria 22 years ago.	Neg	
71.	58	M	W	No typhoid.	Neg	Convalescent from malaria.
72.	45	M	W	No typhoid.	Neg	
73.	51	M	W	No typhoid.	Neg	Convalescent from malaria.
74.	40	M	W	No typhoid.	Neg	
75.	61	M	W	No typhoid.	Neg	Clumping at edge of cover glass, but none in center of preparation.
76.	51	M	W	No typhoid.	Neg	
77.	44	M	W	Typhoid 11 years ago.	Neg	
78.	42	M	W	No typhoid.	Neg	

Case	Age.	Sex.	Col.	Previous History.	Widal.	Remarks.
79.	46.	M.	W.	No typhoid.....	Neg.	
80.	29.	M.	W.	No typhoid.....	Neg.	
81.	53.	M.	W.	Typhoid at 9 years.....	Neg.	
82.	31.	M.	C.	No typhoid.....	Neg.	
83.	31.	M.	C.	No typhoid.....	Neg.	
84.	36.	M.	C.	Had a fever 8 years ago, which was cured.	Neg.	By quinin.
85.	34.	M.	C.	No typhoid.....	Neg.	
86.	24.	M.	C.	No typhoid.....	Neg.	
87.	28.	M.	C.	No typhoid.....	Neg.	
88.	27.	M.	C.	No typhoid.....	Neg.	Convalescent from ter- tian malaria.
89.	27.	M.	C.	No typhoid.....	Neg.	
90.	22.	M.	C.	No typhoid.....	Neg.	
91.	25.	M.	C.	No typhoid.....	Neg.	
92.	34.	M.	C.	Some kind of fever for 2-3 weeks 5 years ago.	Neg.	Stricture urethra.
93.	47.	M.	C.	No typhoid.....	Neg.	Fistula in ano.
94.	30.	M.	C.	No typhoid.....	Neg.	Stricture urethra.
95.	24.	M.	C.	No typhoid.....	Neg.	
96.	35.	M.	C.	No typhoid.....	Neg.	
97.	33.	M.	W.	No typhoid.....	Neg.	Fracture of leg.
98.	39.	M.	W.	No typhoid.....	Neg.	Healthy.
99.	52.	M.	W.	Typhoid pneumonia in '84.	Neg.	Herniotomy.
100.	38.	M.	W.	No typhoid.....	Neg.	Per. g. s. wound of chest.
101.	27.	M.	W.	No typhoid.....	Neg.	Fracture base of skull.
102.		M.	W.	? ?	Neg.	Septicemia following in- jection of anti-tetanic serum.
103.	37.	M.	C.	No typhoid.....	Neg.	
104.	28.	M.	C.	In childhood had contin- ued fever (chills and fever) for 2 months.	Neg.	Fistula in ano.
105.	26.	M.	C.	Typhoid pneumonia in 1890.	Neg.	Per. g. s. wound of chest.
106.	14.	M.	C.	Typhoid 8 years ago.	Neg.	G. s. wound of shoulder.
107.	38.	M.	C.	No typhoid.....	Neg.	
108.	32.	F.	C.	No typhoid.....	Neg.	
109.	29.	F.	C.	Severe fever for 6 weeks, accompanied by chills 2 years ago.	Neg.	
110.	18.	F.	C.	No typhoid.....	Neg.	
111.	24.	F.	C.	Typhoid 6 years ago.....	Neg.	
112.	30.	F.	C.	Continued fever for 2-3 weeks last year.	Neg.	Pelvic abscess.
113.	18.	M.	W.	No typhoid.....	Neg.	Convalescent from ap- pendicitis.
114.	34.	M.	W.	Had fever 16 days in 1898, which was said to be either "typho-malaria" or "icteroides."	Neg.	Herniotomy.
115.	24.	M.	W.	No typhoid.....	Neg.	G. s. wound of chest.
116.	72.	M.	W.	No typhoid.....	Neg.	Herniotomy.
117.	29.	M.	W.	No typhoid.....	Neg.	
118.		M.	C.		Pos.	Typical clinical typhoid
119.	44.	M.	C.	No typhoid.....	Neg.	
120.	23.	M.	C.	No typhoid.....	Neg.	
121.	22.	M.	C.	Had fever 8 years ago.....	Neg.	Phthisis pulmonalis.
122.	45.	M.	C.	No typhoid.....	Neg.	
123.	70.	M.	C.	No typhoid.....	Neg.	

Case.	Age.	Sex.	Col.	Previous History.	Widal.	Remarks.
124.	.....	M.	C	Sick 1 week. Cough. Pain in abdomen.	Pos	Typical typhoid.
125.	.....	M.	C	Sick 1 week. Illness preceded by period of malaria.	Pos	Typical typhoid.
126.	38.	M	W	No typhoid	Neg	Convalescent from pneumonia.
127.	50.	M	W	No previous fever. Sick 3 weeks. Irregular and intermittent fever with chills not yielding to quinin.	Neg.	
128.	32.	M	W	Typhoid 10 years ago.	Neg	Morphinism.
129.	51.	M	W	No typhoid	Neg	Phthisis pulmonalis.
130.	41.	M	W	Typhoid in 1894.	Neg	Traumatic neurosis. Chr. int. nephritis.
131.	Private patient of Dr. Couret.			No typhoid	Neg	Pneumonia.
132.	Child	M.	W	No typhoid	Neg.	Diabetes mellitus.
133.	30.	M	W	No typhoid	Neg	Aneurism of aorta.
134.	.....	M.	W	No typhoid	Neg	Healthy.
135.	37.	M	W	No typhoid	Neg	Locomotor ataxia.
136.	45.	M	W	No typhoid	Neg.	
137.	38	M	W	No typhoid. Typho-malaria 2½ years ago.	Neg.	
138.	39.	M	W	No typhoid	Neg	Chr. diarrhea for 6 mos.
139.	33.	M	W	No typhoid	Neg	Convalescent from appendicitis.
140.	50	M	W	No typhoid	Neg	Appendicitis. To be operated.
141.	44.	M	W	No typhoid	Neg	Herniotomy.
142.	47.	F	W	No typhoid	Neg	Laparotomy.
143.	27.	F	W	No typhoid	Neg	Healthy.
144.	29.	F	W	Typhoid at 10 years.	Neg.	
145.	25.	F	W	Typhoid 4-5 years ago	Neg.	
146.	32.	F	W	Typhoid 4 years ago	Neg.	
147.	.....	F	C	Came in semi-conscious condition. Pulse small and frequent. Temp. subnormal. Sordes on teeth. Gums spongy and bleeding. Great emaciation. History obtained from relatives: Sick for 3 weeks with fever. Patient became comatose and died in 3 days.	Pos	Body claimed. No autopsy allowed.
148.	.....	M	C		Neg.	
149.	.....	F	W	No typhoid	Neg	G. s. wound left hip.
150.	14.	F	W	No typhoid	Neg	Convalescent from empyemia.
151.	39.	F	W	"Typho-malaria" 3 years ago.	Neg	Pelvic abscess.
152.	64.	F	W	No typhoid	Neg	Cystitis.
153.	61.	F	W	Typhoid at 18 years.	Neg.	
154.	24.	M	W	Typhoid at 4½ years.	Neg.	
155.	22.	M	W	No typhoid	Neg.	
156.	54.	M	W	No typhoid	Neg.	
157.	47.	M	W	No typhoid	Neg.	



Case.	Age.	Sex.	Col.	Previous History.	Widal.	Remarks.
158.	22.	M.	W.	No typhoid.	Neg.	Epilepsy.
159.	25.	F.	W.	No typhoid.	Neg.	Convalescent from pneumonia.
160.	24.	F.	W.	No typhoid.	Neg.	"Slow fever" several years ago.
161.	33.	F.	W.	Typhoid 15 years ago.	Neg.	Chr. interstit nephritis.
162.	23.	F.	W.	No typhoid.	Neg.	Malaria last year.
163.	55.	F.	C.	No typhoid.	Neg.	Convalescent from pneumonia.
164.	48.	F.	C.	No continuous fever.	POSITIVE	after 20 min. Subclavian aneurism.
165.	Same as No. 164	repeated			Neg.	After 20 minutes. Some tendency to clumping.
166.	46.	F.	C.	No typhoid.	Neg.	Lobar pneumonia.
167.	40.	F.	C.	No typhoid.	Neg.	Innom. aneurism and old cerebral embolus.
168.	82.	F.	C.	No typhoid.	Neg.	Chr. interstit nephritis.
169.	77.	M.	W.	No typhoid.	Neg.	Chr. diarrhea.
170.	21.	M.	W.	No typhoid.	Neg.	Dysentery.
171.	59.	M.	W.	No typhoid.	Neg.	Bacilli immotile but not clumped.
171.	22.	M.	W.	No typhoid.	Neg.	
172.	15.	M.	W.	No typhoid.	Neg.	
173.	21.	M.	C.	No typhoid.	Neg.	Convalescent from pneumonia.
174.	55.	M.	C.	Typhoid 12 years ago.	Neg.	
175.	50.	M.	C.	No typhoid.	Neg.	
176.	26.	M.	C.	No typhoid.	Neg.	Pneumonia.
177.	89.	M.	C.	No typhoid.	Neg.	
178.	31.	M.	C.	No typhoid.	Neg.	
179.	27.	M.	C.	No typhoid.	Neg.	
180.	24.	M.	C.	Fever last July	Neg.	Tertiary syphilis.
181.	57.	M.	C.	No typhoid.	Neg.	Convalescent from intermittent malaria.
182.	39.	M.	C.	Fever last summer with chills	Neg.	
183.	28.	M.	C.	No typhoid.	Neg.	
184.	50.	M.	C.	No typhoid.	Neg.	
185.		F.	W.		Neg.	Plasmodia malariae found.
186.	26.	M.	C.	No typhoid.	Neg.	Tuberculous diarrhea(?).
187.	18.	M.	C.	Typhoid 5 years ago.	Neg.	Convalescent from intermittent malaria.
188.	22.	M.	C.	Typhoid last year	Neg.	Cirrhosis of liver.
189.	42.	M.	C.	No typhoid.	Neg.	Locomotor ataxia.
190.	22.	M.	C.	No typhoid	Neg.	Phthisis pulmonalis.
191.	16.	M.	C.	No typhoid.	Neg.	
192.	15.	F.	W.	No previous illness of any sort	Neg.	Convalescent from scarlet fever.
193.	15.	F.	W.	No typhoid.	Neg.	Measles.
194.	36.	F.	W.	No typhoid.	Neg.	Arthritis deformans.
195.		M.	C.	Continued fever	Neg.	Autopsy showed tertiary syphilis; chronic diffuse nephritis.
196.	28.	M.	C.	Admitted in exhausted condition; sick 3 weeks; semi-delirious.	Pos.	A u t o p s y s h o w e d typhoid.
197.	32.	M.	W.	Sick four days, diarrhea, nausea, vomiting, rose colored spots on chest, abdomen tender and distended, spleen large	Pos.	A typical typhoid chart indicates aborted type.

## TABULATION FROM LITERATURE.

REPORTER OR INVESTIGATOR.	Reference No.	Year.	Total cases.	Undoubted typhoid.	Non-typhoid.	Widal, negative in typhoid cases +.	Widal, positive in non-typhoid cases -	Per cent. error +.	Per cent. error -.	REMARKS.
Archinard and Woodson	1	1898	50	31	18	0	0	0	0	Wyatt Johnson, 1-10, 1 case of uncertain etiology.
Wilson and Westbrook	2	1897	1,400	817	76	6	8	4 %	12 %	Wyatt Johnson, 1-15 to 1-50.
W. G. Thompson	3	1897	503				20			Test negative, in 11 other cases probably typhoid.
Colville and Donnan	4	1897	132	105	20	9	1			This one case was doubtful as to diagnosis.
Widal	5	1897			87		1			
Widal (collective)	6	1897	2,554	1,504	1,050	46	36	2.6	4.6	1-10 dilution.
Kneass	7	1897	15		15		0		0	Wyatt Johnson, 1-10 to 1-20.
Cabot (collective)	8	1897	3,475	1,826	1,649	86	57	4.8	3.5	In 98.8 per cent. of these 3475 result was borne out.
Cabot (personal)	9	1897	402	101	301	5	1			1-10 dilution.
Stewart (reported by Gehrmann)	10	1898	1,000			28	3			
A. C. Abbott	11	1899	4,154							2.8 per cent. error.
Andrews and McFarland	12	1899	230	230		11		4.36		
Cabot and Lowell	13	1899	204		204		0		0	1-10. 15 minutes limit.
Wyatt Johnson	14	1899	600			1	0			Remarkable! !
Totals			14,719	4,614	3,463	183	128		3 %	

DISCUSSION—DR. GENELLA mentioned the case of a young girl who sustained an attack of typhoid fever seven years ago, and whose blood gave a positive reaction to the Widal test as late as March last.

DR. MAINEGRA had had recourse to this and other microscopic methods to clear doubtful clinical diagnoses upon frequent occasions past, and had generally found the results to conform to the clinical aspects of the cases.

DR. PARHAM wished to go on record as of the opinion that the Widal test is becoming of greater value the more it is used. He recently had a case which showed no plasmodium malarie, nor did it respond to the Widal reaction on first examination, but upon a second examination Widal's reaction proved positive, the diagnosis being in this way made clear. He wished to see further experiments with the test, and thought the value of such work would be enhanced if the experiments were conducted with the pathologist entirely ignorant of the clinical symptoms of the patient. In regard to appendicitis being often confounded with typhoid fever by the clinician, he thought it not improbable that the inflammation accompanying typhoid fever often caused appendicitis. He had recently seen an autopsy on an appendiceal case which had given a positive reaction with the Widal test.

DR. CHAVIGNY reported the case of a man 21 years of age, who had been sick two weeks previous to admission to hospital. He presented a tender mass in iliac region, and was regarded as a possible case of appendicitis. The Widal test was tried and found positive. The chart pursued a typical typhoid course subsequently, the tumor in iliac region finally disappeared and patient recovered. Here was a clear instance of the value of the Widal reaction.

DR. MCGEHEE wished to pay his respects to microscopic methods in general, as valuable means of diagnosing cases obscure from the clinical point of view; although he had recently had two cases which gave negative results with Widal's reaction, but which he was positive were typhoid. Would like to ask how soon the test is applicable in the course of the disease, and how long a specimen of blood may be preserved, as when it was necessary to send it some distance. He had recently had a hospital case which gave positive reaction with

the first examination, but responded negatively on two subsequent examinations. The case was finally cured with quinin.

DR. LAZARD had seen the first case mentioned by Dr. Chavigny, and had advised application of the Widal test and examination for leucocytosis. The result was absence of leucocytosis and positive Widal reaction.

DR. MCGEHEE mentioned the case of a woman who developed fever three days before delivery, from no apparent cause.

The fever did not respond to quinin. However, patient was delivered normally, lochia was not offensive, nor was there any other untoward symptom connected with the labor or lactation.

DR. PARHAM believed that puerperal fever sometimes developed before delivery. He had observed cases apparently of this nature while in Charity Hospital. Secretions from the uterus should be examined microscopically in these cases, and by the Widal method.

DR. POTHIER, in closing, referred to the remarks of Dr. Parham regarding the pathologist working in entire ignorance of the clinical symptoms of the patient. He stated that in all practical respects this was done at Charity Hospital. Although a space is reserved on the card requesting examination of specimens for the stating of the clinical symptoms in the case this is most often left blank, and besides the pathologist never sees the patient.

Answering Dr. McGehee, he stated that the blood for the Widal test should be taken, the parts having been previously cleansed, in a sterile glass tube and plugged with aseptic cotton, or preferably corked with some air-tight aseptic material. The best instrument for pricking to secure a flow of blood is a flat pointed needle. The specimen can be kept usually 72 hours.

In regard to Dr. Chavigny's statement as to a positive report being followed by two negatives, he was unable to explain such phenomena, but agreed that such instances did occur. The safest method is to make regular examinations every other day for at least 1 and  $\frac{1}{2}$  weeks.

DR. LEMANN stated that negative results did not have as much significance as positive. The reaction may and does play many inexplicable pranks, and a negative result may mean nothing. The test is essentially a quantitative one. The reaction must

take place with the proper dilution of the serum and within the given time. Under these conditions, and conducted with the proper technic, the test is invaluable as a means of diagnosis in typhoid fever.

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## Abstracts, Extracts and Miscellany.

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### Department of Obstetrics and Gynecology.

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In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER,

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THE REMOVAL OF THE FEMALE URINARY BLADDER FOR MALIGNANT DISEASES.—Dr. Matthew D. Mann has contributed an able article on this subject to *American Medicine*. He believes that the removal of the bladder has not received enough attention in this country, there being few cases on record. Cancer of the bladder is rare, but is the commonest form of growth found in the bladder. The diagnosis can be made by the symptoms, the use of the cystoscope, palpation, and the examination of the urine. Treatment by operation may be attempted through the urethra, the vaginal septum, or by suprapubic cystotomy.

The operations consist of the removal of the growth and its base, resection of part of the bladder, or cystectomy. Multiple growths are an indication for total removal; also return after removal; extensive involvement of the base and extension of cancer uteri into the bladder. The ureters need no attention at the time of operation, as by the removal of the portion of the anterior vaginal wall they will discharge into the vagina. If possible, the ureteric openings into the bladder should be kept intact. This will rarely be possible. He does not believe in uretero—intestinal anastomosis. The vagina can be used as a receptacle for urine, as first devised by Pawlik. If this is done, there will be little danger of infection traveling to the kidneys, as the newly made bladder can be kept clean. The operation should be done in the Trendelenburg position. The peritoneum over the bladder is first cut, and then the bladder is enucleated

by the fingers, and the base, with the anterior vaginal wall attached, is removed. The uterus is then removed, and the peritoneum closed over the pelvic floor.

Mann has had two such cases, both of which recovered from the operation, and has collected fourteen similar cases from the literature.

He concludes that total extirpation is a justifiable operation in certain malignant diseases of the bladder, offering no serious difficulties to an experienced surgeon, and giving the patient a chance for a comfortable continued existence.

THE INDICATIONS FOR THE MAJOR OBSTETRIC OPERATIONS.—Barton Cook Hirst, in his text-book of Obstetrics, has arranged the indications for these operations in a clear, succinct manner, which will be of great value to the physician.

He states that craniotomy may be indicated upon the dead or living child. In the former case the indications for the operation may be comparatively trivial. If the mother can be saved any additional risk or suffering by the rapid delivery of the mutilated child, craniotomy is not only justifiable but advisable. In case of prolapse of the umbilical cord, with a contracted pelvis, the commonest condition that calls for craniotomy upon the dead infant, it is far better to open the head and to deliver the child easily with a cranioclast, than to apply forceps to the head at the superior strait and to subject the mother to the delay, pain, and danger of prolonged forceps operation when nothing is to be gained by it. Craniotomy on the living child is only justifiable in exceptional circumstances. To condemn this operation, however, unreservedly, and without exception is a mistake. In cases of difficult labor, when the pelvis is contracted or the child overgrown, and the physician must make a choice between Cesarean section, symphysiotomy, or craniotomy, if he has no skill in surgical work and is unable to procure expert assistance, it is better, unquestionably, to sacrifice the child for the mother's sake, rather than to attempt a serious surgical operation, amid unfavorable surroundings, and performed by an unskillful operator whose mortality must be great. Every attempt must be made to avoid the destruction of the living child, of course; and if the operator feels himself possessed of sufficient skill to attempt the more serious operations

with fair prospect of success, or if he can summon to his aid an expert obstetric or abdominal surgeon, he should not think of performing craniotomy upon the living child. But under certain circumstances craniotomy upon the living child is a justifiable operation, and one not to be unreservedly condemned.

*Symphysiotomy.*—This operation should be the alternative of version in flat, contracted pelves, the woman with a conjugate diameter over seven centimeters should be allowed to remain in active labor twenty-four hours. If at the end of that time the head is not engaged, axis-traction forceps should be applied and an attempt made with the instrument to engage the head. If after some twenty minutes of intermittent traction with justifiable force the head is not engaged, a choice must be made between version and symphysiotomy. The former is almost always practicable with a conjugate vera of seven centimeters, but the mortality of the infants is about thirty-three per cent. The latter practically insures a living child but is distinctly dangerous to the mother, especially if the operation must be performed in a private house, and in an emergency. The case should be laid before the woman or her husband, who should certainly have some choice in the decision. The only situations in practice in which version need not be considered as an alternative of symphysiotomy are the firm impaction of the presenting part in the superior strait, and labors obstructed by a generally equally contracted pelvis or by a kyphotic pelvis.

*Cesarian Section.*—The indications for this operation are relative and absolute. By an absolute indication is meant some indication which admits of no other method of delivery. Examples are furnished in extreme degrees of pelvic contraction—in a flat pelvis for instance, in which the true conjugate is less than  $6\frac{1}{2}$  centimeters. The highest grades of kyphosis, osteomalacia, spondylolithisis, and Nægele's pelves also furnish absolute indications for Cesarian section, as do foreign growths obstructing the pelvis, cicatricial contraction of the vagina, and carcinoma of the cervix and of the rectum. By a relative indication is meant a condition that admits of some other method of delivery—say by symphysiotomy or by craniotomy—but in which the question arises whether Cesarean section will not give the best result for mother and child. In a case of this kind the decision is difficult, and should be left, in part at least, to the

woman or to her husband. Ordinarily, the physician will be instructed to select the form of operation least dangerous to the woman. Examples of a relative indication for Cesarean section are found in flat pelves with a true conjugate above seven centimeters.

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## Department of General Medicine.

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In charge of DR. E. M. DUPAQUIER, New Orleans.

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THE HEART IN TYPHOID FEVER.—The following is an abstract of the clinical portion of Dr. M. C. Bacaloglu's comprehensive thesis on the anatomic, clinical and experimental study of myocarditis, endocarditis, pericarditis and sudden death in typhoid fever.

*The Pulse*, which enlightens us on the action of the heart, is usually frequent in typhoid fever, even when fever has left. Typhoid fever is characterized (Andral) by a disproportion in the degree of fever to the number of pulse beats; more than 120 beats per minute (Murchison) are of ominous import, indicating a grave prognosis.

*Muffling of first sound.* By auscultating the heart, daily, the danger is elicited earlier; for this very frequent pulse is preceded by a muffled, faint and distant first sound. The rhythm remains normal. *i. e.* the interval between the first and second sounds and that between the second and first are still normal. The muffling of the first sound signifies that the myocardium's contraction is abnormal. When the first sound ceases to exist, it signifies that the combined vibrations of the auriculo-ventricular valves and of the muscular action during ventricular systole are imperceptible. It is of great importance to note that the faintness of the first sound is, at times, associated with a systolic murmur at the mitral valve. This murmur should not be construed as evidence of endocarditis, for mitral incompetency may be functional, being due to the altered condition of the muscular prominences (*columnæ carneæ*) in the left ventricle. These, as the other muscular tissue of the myocardium proper,



are liable to undergo changes, and, when this is the case, the initial *murmur* ceases to exist as soon as the first sound recovers its normal intensity. When the first sound is inaudible either at the apex or at the base, it signifies that the myocardium is extremely feeble, hence the prognosis is grave, yet not fatal.

*Embryocardia.* The fetal rhythm of the heart follows the muffling of the first sound, at times. The heart beats like that of the fetus, *i. e.*: the first and second sounds are both alike, short and sharp, the interval between them are of equal duration, the pulsations are frequent. Embryocardia is the result not only of myocarditis but also of decreased inhibition and of lowered arterial tension (Huchard). Embryocardia is produced gradually; arterial tension is lowered and, at the same time, the pulse becomes frequent and thready. Embryocardia may be transitory or complicated with collapse. In the latter case, recovery seldom takes place. Death is caused by asphyxia due not only to circulatory but also to nervous disturbances, the latter proving that there existed bulbar intoxication.

*Galloping or cantering rhythm* is sometimes met with in the myocarditis of typhoid fever, evincing the feebleness and dilatation of the left ventricle. It varies in degree of energy; it forms at times the predominating symptom. All the symptoms noted above signify myocarditis. Other symptoms may be present, of which some are doubtless attributable to nervous disturbances, for instance: vomiting, dyspnea without cause, slowing of the pulse as reported in one of Bacaloglu's cases. There are indeed pure cardiac types of typhoid fever; there are others where at the same time nervous symptoms are produced (Wuillaume). It is difficult to determine which symptom is referable to the myocardium and which to the nervous system, for, in the first place, the muscular fibres are inseparably associated with their apparatus of innervation. Next, even the finding and consideration of the slightest lesions of the muscular fibres, scattered here and there, have failed to explain the disturbances exhibited during life. Finally, the pathology of the nervous fibres in such cases is yet unknown, if one excepts the only statement by Bomberg that the small cells of the epineurium of the pericardial nerves were found to be infiltrated.

*Arterial tension* is lowered in typhoid fever. It is at the beginning of convalescence that it is the lowest.

*Arythmia* (irregular heart) is observed during that stage of unabated or rather practically stationary temperature, extending as a rule from the tenth to the thirtieth day. It is in Hayem's opinion a sign of threatening syncope and sudden death. Bacaloglu does not take such a dark view of arythmia at that stage. It seldom takes the form of embryocardia and often that of gallop, "RAT-TA-TAT." At the time of convalescence, arythmia is the rule, and it is then remarkably benign.

*Heart infarct* may be observed in exceptional cases when the larger branches of the coronary arteries are diseased.

*Heart thrombus* is even somewhat less liable to occur.

Prognosis in typhoid fever should be based more on the condition of the heart and pulse than on the degree of temperature; but one must not depend on a single sign only. The outlook in cases of heart complications of typhoid fever should never be hopeless. It usually happens, Mollard's opinion to the contrary, that heart disturbances cease completely to exist, though Landouzy has clearly demonstrated the existence of heart sequels of typhoid fever.

Doubtless typhoid fever in individual cases is the determinative cause of cardiac and arterial sclerosis.

*Sudden death.* It comes on chiefly in the course of the third and fourth weeks, preceded or not by fainting spells. It is due to intestinal reflex (Dieulafoy), gastric reflex (Tamboureau), cerebral anemia (Laveran and Broussard), cardiac changes and cerebral anemia combined (Huchard), pulmonary embolus, cardiac thrombus and chiefly myocarditis (Hayem). It is a fact that myocarditis is many a time and oft found in cases of sudden death. One may adopt Barié's views. He thinks that the starting point of the process may be differently placed, but its course always leads to and ends in the central nervous system, which is the only acting factor in the closing clinical scene of sudden death.

*Pericarditis.* It may exist alone, but there is oftener some endo-cardial involvement (endo-pericarditis). The pathognomic friction sound is best heard over the middle and basal parts of the heart. Of course, diagnosis is difficult in cases of effusion. Percussion is the main guide, eliciting the extension of the area of dulness. A case reported by Cadet de Garsicourt died exhibiting cyanosis and asphyxia.

*Endocarditis* comes on about the second week. Its seat is ordinarily at the mitral or at the tricuspid, rarely at the aortic or at the pulmonary orifices. It causes severe constitutional symptoms and murmurs. Regarding the pain, which Peter says is of frequent occurrence, it seems on the contrary that it is rather rare. As to the murmurs, they vary of course according to the location of the endocardial process. But care must be taken not to confuse them either with the extra-cardiac murmurs or with the mitral murmur heard at times in myocarditis. The prognosis of endocarditis is most often fatal, the more so that it is ordinarily associated with myocarditis. When the patient survives, there always remains an indelible organic lesion.

When a person suffering from heart disease is taken sick with an attack of typhoid fever, collapse and syncope are to be feared. Here again all the physician's attention should be concentrated upon the myocardium.

—*Gazette des Hôpitaux*, The French *Lancet*, July 9, 1901.

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## Department of Therapeutics.

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In charge of DR. J. A. STORCK, New Orleans.

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TUBERCULIN IN THE TREATMENT OF TUBERCULOSIS.—In a recent number of *American Medicine* mention was made of the report of the results attained by Dr. Goetsch, of Slawentzitz in Silesia, by the use of Koch's tuberculin, results seeming to justify the claims made originally by Koch, which have been denied by almost every other investigator. For the past ten years Goetsch has developed an original method of using tuberculin. The two important points of this method are, first, fever-free patients are most suitable subjects; second, the dose should be so small that no reaction results. He claimed that permanent cures followed a few months' treatment, and recently exhibited a series of his cases to a company of physicians, among whom was Koch. Following Koch's advice, Goetsch in a recent number of the *Deutsche Medicinische Wochenschrift* has published his

results, that his method may be used and his results confirmed by others. This report is accompanied by a communication from Koch, which reads about as follows:

“Most physicians are of the opinion that the treatment of pulmonary tuberculosis by means of specific remedies, especially with tuberculin, is useless, and, moreover, dangerous. This erroneous opinion has arisen since tuberculin has frequently been used in cases which were no longer cases of pure tuberculosis, but in which purulent processes were present as complications. In such cases the specific action of tuberculin can by no means manifest itself. All physicians who have had great experience with tuberculin treatment and have published the same, as Spengler, Turban Petruschty, Krause, Thorner, Heron, Rembold and Bandelier have expressed the opinion that if only pure, not too far advanced; that is, perfectly fever-free cases of pulmonary tuberculosis, are treated with tuberculin they are without exception benefited. The consensus of opinion has also been, and as a result of my experience I agree with it, that it is best to avoid a marked reaction. Dr. Goetsch has developed this point much further. He has avoided the reaction as completely as possible, but has, however, been able to give finally very large doses. Following this method he has attained remarkably good results, of the truth of which, a short time ago, at the hospital at Slawentzitz, I convinced myself.”

It is desirable that the work of Goetsch should be at once repeated and the value of this method determined.

MUSIC AS A THERAPEUTIC AND REFORMATORY AGENT is advocated by Mr. F. P. Fitzgerald, superintendent of the Industrial School for Girls at Mitchellville, Iowa. In the *Bulletin of Iowa State Institutions* for April he discusses the general question of the use of music in public institutions. He received replies to his questions from twenty-five penitentiaries and reformatories showing that all advocate its use. An eminent physician of St. Petersburg is quoted as saying that music as a medicine is of the greatest value. Nerve disorders, especially epileptics, can be soothed, he says, with proper use. The system can be tuned like a musical instrument. He expresses the conviction that the time will come when music in the hands of scientifically trained physicians will be an agent

of great power for the relief of suffering. Experiments have shown that two principal cases are benefited by music.

1. Melancholic and depressed cases, dyspeptics, hypochondriacs, liver cases, parturient women, men suffering from business reverses, or family affliction. These require the tonic form of treatment.

2. Irritable, nervous patients, alcoholic subjects, threatened with delirium tremens; overworked business men, in hysteria, or in the mania of pubescence, pregnancy, parturition, in the climacteric and in chronic insanity. These require music of a soothing nature. The music should be well chosen, well rendered, and scrupulously considered in relation to individual cases, or it will be of no value therapeutically. But if of therapeutic use, Mr. Fitzgerald rightly contends that the music must be good. Trashy and bad music ("rag-time, skirt-dance and coon-song" stuff) is as pernicious as the best music is healing and healthful. He also stated that of fifty boys who became good musicians in the institution, afterward leaving it, not one has drifted to a penal institution of any kind.—*American Medicine*.

TRIFERRIN—A NEW ORGANIC IRON PREPARATION.—Prof. G. Klemperer, of Berlin, says that in view of the large number of available iron preparations, there must have been some special circumstances to induce him to institute trials with a new iron compound. The special inducement was the fact that the compound triferrin was prepared and recommended to him by the eminent chemist, Prof. E. Salkowski. Chemically, it is a combination of iron with the phosphorus containing paranucleinic acid, obtained from the casein of cow's milk. It contains about 2.5 per cent. of organically united phosphorus, 9 per cent. of nitrogen and 22 per cent. of iron. It is readily and clearly soluble in a dilute solution of sodium carbonate, but insoluble in a dilute hydrochloric acid, of a strength of 0.2 per cent. (as it exists in the human gastric juice). Dr. Klemperer administered the preparation to twenty-one patients suffering with anemia and chlorosis in doses of 5 grn. three times a day. The results were excellent. The percentage of hemoglobin increased in all instances and the subjective symptoms improved. It was taken readily, and in no case did it cause any gastric disturbance or other disagreeable effects.

—*Merck's Archives*.

EUGUFORM.—This is a new substance, prepared by the action of formaldehyde on creosote or guaiacol and precipitation with glacial acetic acid. Chemically it is acetyl-methylene-diguaiacol. It is a very fine grayish-white powder, practically odorless, and insoluble in water. Dr. Ciesielski tried it in Joseph's Polyclinic in a number of dermatologic conditions, and also in wounds, chancroids, bubo, etc. He used it either in the form of powder or a 2.5 to 10 per cent. ointment. It appears to be a fair vulnerary, acts well on chancroids and bubo, but not on chancre or ulcerating gummata.—*Merck's Archives*.

CALCIUM PEROXIDE.—Dr. M. Roshkovsky employed calcium peroxide ( $\text{CaO}_2$ ) in a large number of gastro-intestinal diseases of infants and children with good results. The dose ranged from 3 to 5 grains several times a day. Its action was especially good in acid dyspepsia, while in enteritis it acted as a positive antiseptic. Its antiseptic action was easily demonstrated by the rapid diminution of the indican, and the ethereal sulpho-acids in the urine.—*Ibid*.

CUPRARGOL—This new remedy is not a combination of copper and silver, as the name might lead one to believe. It is a combination of copper and albumin, a compound analogous to protargol. It is a grayish-green powder, soluble in three parts of water. The solution is stable. The only report comes from Dr. E. Emmers (*Therap. Monatsh*, June, 1901), who used it in 1-to-5 per cent. solution in conjunctivitis, with satisfactory results. The solution when dropped into the eye causes burning, like zinc or copper sulphate, but it is claimed to be less severe and more transient.—*Ibid*.

TREATMENT OF SCIATICA BY COCAINIZATION OF THE SPINAL CORD.—Manega (*La Semaine Médicale*, 12 An., No. 9) has published a case of hemiplegia associated with agonizing pain of the paralyzed leg which was cured, and permanently, by one subarachnoid injection of cocain. Encouraged by the success attending this case, Pulle treated in a similar way a case of sciatic neuralgia which had failed to yield to the ordinary medicaments—0.75 cubic centimeter of a two per cent. cocain solution was injected. Pain disappeared at once and finally.

—*The Therapeutic Gazette*.

RHUS GLABRA IN ENURESIS.—Cassidy (quoted in *New York Medical Journal and Therapeutic Gazette*) reports three cases of nocturnal enuresis in boys of from twelve to fourteen years of age, in which other treatment had proved unavailing, successfully treated as follows:

Citrate of iron, 160 grains.

Syrup of lactophosphate of lime.

Aromatic syrup of cascara, of each 2 ounces.

M. A teaspoonful after dinner (noon).

Fluid extract of rhus glabra, 320 minims.

Syrup, to 2 ounces.

M. A teaspoonful at bed time.

This treatment was continued for four months. The incontinence disappeared and did not recur. The author declares that rhus glabra produced more than a temporary effect.

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## Department of the Ear, Nose and Throat.

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IN charge of DR. A. W. DEROLDES and DR. GORDON KING,  
New Orleans.

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PNEUMATOCELE OF THE AUDITORY CANAL.—This rare and peculiar condition is described by Lannois, of Lyons, in the report of a case before the French Otological and Rhinological Society. It is allied to that affection described by Sonnenberg in 1889 as "Supra-mastoid Pneumatocele," of which he recorded twenty-two cases. In these cases the pneumatocele formed behind or above the ear over the mastoid bone, while in Lannois' case the tumor formed within the auditory canal and gave rise to temporary deafness. The patient was a cornetist and was suddenly affected with deafness in one ear during the night following a day in which he had been using his wind instrument for several consecutive hours. Examination six days later revealed a soft tumor mass filling the auditor canal, which collapsed and disappeared upon puncture with a needle. He suffered seven similar attacks before the condition was finally relieved permanently by incision of the air tumor and the appli-

cation of alcohol to promote inflammatory obliteration of the air channel. The author is of the opinion that the occurrence of the tumor was due to a congenital defect in the closure of the petro-squamous suture, by which some of the mastoid cells had no other external wall than the periosteum. This giving way under the pressure of air from the tympanic cavity and the Eustachian tube formed the pneumatocele which appeared in the ear canal.—*Bulletin de la Société d'Otologie et de Rhinologie*, 1900.

TONSILLOTOMY RASH.—Wyatt Wingrave, of London, in a paper read by title at the last meeting of the American Laryngological Association, calls attention to a form of skin eruption that he had observed in a number of cases recently operated for the removal of the faucial tonsils. He reports twenty-six cases in which the rash appeared from the first to the sixth day after operation. Two of these cases proved to be scarlet fever and one diphtheria. The others were non-specific—that is, no other cause could be assigned for its appearance than the effect of the surgical operation. It is a true surgical rash, such as is observed not rarely following a general surgical operation. The eruption is either papular, roseolar or erythematous, most frequently observed on the neck, chest and abdomen, sometimes on the face and extremities. It lasts two or three days without producing any general disturbance, but is sometimes accompanied by severe itching. There is no after desquamation. The author notes the fact that his patients were all taking at the time salicylate of soda and bromide of potassium, but does not consider this as a cause of the eruption.—*Laryngoscope*, July, 1901.

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## Department of Ophthalmology.

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In Charge of DRs. BRUNS and ROBIN, New Orleans.

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BULBAR PARALYSIS (ASTHENIC).—In the *Recueil d'Ophtalmologie. Juin, 1901*, Dr. Strzeminski, of Wilna, gives the history of a case of this rare affection occurring in his practice. Two



or three weeks after an attack of the grip the patient noticed that after the slightest fatigue the upper eyelids began to droop. At first this only happened after the patient had been up and about for some hours of the day and could be readily relieved by a few minutes of absolute rest, but gradually the ptosis became more and more permanent. Now too, double vision of the same transitory character commenced to complicate the first symptom. Paresis of the levator palp. sup. and of all the extrinsic muscles of the eyeballs was the readily determined cause of the phenomena. Little by little and successively the patient's voice began to fail, swallowing became difficult, she could no longer whistle or blow out a candle, the tongue executed with difficulty its wonted movements, the muscles of the face and of mastication were affected, dyspepsia, weakness of the extremities and difficulty in walking appeared, the head drooped upon the chest, pain in head radiated down the neck, and finally there was loss of taste, dullness of hearing, together with loss of appetite. All these symptoms presented the same characteristic of first appearing after some fatigue about the middle of the day, and being greatly relieved by rest in bed and sleep, but gradually becoming more and more permanent. The disease dragged its slow length along from January till June, with occasional temporary ameliorations, but gradual general aggravations of all symptoms, when, without apparent cause, slow oscillating improvement set in and proceeded in the course of three months more to complete recovery. During the height of the disease the patient's condition was miserable in the extreme; confined to bed, scarce able to move hand or foot or lift her head, taking but little food and that slowly and with great difficulty, the saliva dribbling from her mouth, unable to completely close her eyes or mouth, suffering with pain in the head and neck, and subject to the most alarming attacks of extreme dyspnea and weakness of the heart, her life was often despaired of. During the whole course of the attack the fundus of the eyes presented nothing abnormal though vesical acuity was slightly lowered and the fields of vision somewhat restricted, both symptoms like all others, being aggravated by fatigue; perception of colors was intact, the tendon reflexes remained normal, the nerve trunks were not sensitive upon pressure, neither fibrillary contractions nor

atrophy of the muscles were present and the internal organs showed no changes. The faradic current, like their use, brought about after a time exhaustion of the muscles, a condition not produced by the galvanic current. Treatment consisted in strengthening nourishment, iodide of potassium and the galvanic current, the positive pole being placed upon the nape of the neck and the negative moved along either side of the thyroid cartilage. The symptoms disappeared in the order in which they had appeared, the eyesymptoms persisting longest. The patient was a healthy, non-hysterical, married woman of 28 years of age, free from any family history of syphilis, rheumatism or nervous disease.

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## Louisiana State Medical Society.

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LOUISIANA STATE MEDICAL SOCIETY NOTES.—*Officers:* Dr. T. E. Schumpert, President, Shreveport. Vice Presidents: Drs. F. A. Larue, First Congressional District, New Orleans; E. D. Martin, Second Congressional District, New Orleans; G. W. Remage, Third Congressional District, Jennings; J. M. Callaway, Fourth Congressional District, Shreveport; J. M. Barrier, Fifth Congressional District, Delhi; A. F. Barrow, Sixth Congressional District, St. Francisville. Recording Secretary—Dr. Hermann B. Gessner, 124 Baronne street, New Orleans; Corresponding Secretary—Dr. A. G. Friedrichs, 641 St. Charles street, New Orleans; Treasurer—Dr. H. S. Cocram, 124 Baronne street, New Orleans. Next meeting at Shreveport, June 3, 4, 5, 1902.

Under date of July 6, the President of the Society has issued a circular letter of appeal and invitation to the members of the Society to attend the next meeting, to be held in Shreveport. Especial moment is attached to the request that members this far ahead think of the scientific work, so as not to fall short at the last days.

### LIST OF SECTIONS AND CHAIRMEN.

*General Medicine*—Dr. W. G. Owen, Whitecastle. To open discussion—Dr. F. M. Thornhill, Arcadia; Dr. J. M. Barrier, Delhi.

*Surgery*—Dr. J. D. Bloom, New Orleans. To open discussion—Dr. Rudolph Matas, New Orleans; Dr. F. W. Parham, New Orleans.

*Neurology, Including Mental Diseases*—Dr. G. A. B. Hays, Jackson. To open discussion—Dr. P. E. Archinard, New Orleans.

*Materia Medica and Therapeutics*—Dr. H. C. Coty, Shreveport; To open discussion—Dr. W. L. Dickson, Shreveport.

*Diseases of Children*—Dr. J. F. Oechsner, New Orleans. To open discussion—Dr. John Callan, New Orleans; Dr. G. Farrar Patton, New Orleans.

*Obstetrics and Gynecology*—Dr. R. A. Gray, Shreveport. To open discussion—Dr. I. M. Callaway, Shreveport; Dr. R. F. Harrell, Ruston.

*Ophthalmology*—Dr. H. D. Bruns, New Orleans. To open discussion—Dr. E. W. Jones, New Orleans; Dr. P. L. Reiss, New Orleans.

*Otology, Laryngology and Rhinology*—Dr. W. Scheppegrell, New Orleans. To open discussion—Dr. Gordon King, New Orleans; Dr. C. J. Landfried, New Orleans.

*Medical Jurisprudence*—Dr. A. L. Metz, New Orleans. To open discussion—Dr. S. L. Théard, New Orleans; Dr. F. J. Kearney, Plaquemine.

*Dermatology*—Dr. Isadore Dyer, New Orleans. To open discussion—Dr. J. N. Roussel, New Orleans.

*Quarantine*—Dr. J. C. Egan, Shreveport. To open discussion—Dr. A. Nolte, New Orleans; Dr. J. S. Stephens, Jr., Natchitoches.

*Bacteriology*—Dr. O. L. Pothier, New Orleans. To open discussion—Dr. John J. Archinard, New Orleans.

*Anatomy and Physiology*—Dr. T. G. Ford, Shreveport. To open discussion—Dr. N. M. Hébert, Covington; Dr. W. E. Barker, Plaquemine.

*Genito-Urinary Surgery*—Dr. Charles Chassaignac, New Orleans. To open discussion—Dr. W. K. Sutherlin, Shreveport; Dr. R. Hunt, Shreveport.

*Sanitary Science*—Dr. Edmond Souchon, New Orleans.

*Oral Surgery*—Dr. A. G. Friedrichs, New Orleans. To open discussion—Dr. Geo. J. Friedrichs, New Orleans.

*Hygiene*—Dr. F. J. Mayer, Opelousas. To open discussion—Dr. W. A. Holloway, Plaquemine.

## Communications.

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**BLOOD SPECIMENS WANTED.**—We have received the following letter from Dr. Nuttall, which is self-explanatory and which deserves the attention it begs:

GENTLEMEN—I shall be greatly indebted to you if you will kindly aid me, directly or indirectly, in furthering certain researches upon the blood in which I am at present engaged. I am collecting all the *vertebra* bloods I can for a systematic study of their reactions when treated with various specific antisera, as described in my paper in the July number of the *Journal of Hygiene*. The results obtained upon an extended series of bloods, have given such striking reactions, that the study requires to be taken up on a large scale. To accomplish this, I have to call upon all my scientific and other friends in various parts of the world, to aid me in the collection of bloods. I shall naturally fully acknowledge any aid which they may give me, and, in due course, send them a copy of the publication, which will deal with the results of the investigation.

The results obtained by myself and others have been briefly as follows: When an animal, say a rabbit, is injected with human blood, certain antagonistic substances, called specific “antibodies” for want of a better name, are formed within the rabbit as the result of continued treatment. These antibodies produce a precipitation when the blood-serum of the treated rabbit is added to dilutions of human serum, even, as I have found, when the human serum is mixed with five or six different bloods.

Out of eighty bloods tested to date, with the antiserum for human blood, only human blood gave a full and marked reaction, although the blood of nine species of monkeys gave a similar, though less marked reaction. The object of my research is to gradually produce various antisera than those described in the paper above referred to, and by means of them to study the reactions which take place with the bloods of various groups of animals. It seems certain that interesting results from the point of view of *zoological classification* will thus be brought to light. Apart from this, owing to the importance of the reaction from a *medico-legal* standpoint, the test should be applied to as large a number of bloods as possible, whether the bloods be those of vertebrates (Mammals, Birds, Reptiles, Amphibia, Fish) or Invertebrates (Crustacea, Mollusca, etc.).

The method of collecting bloods for the purpose above-mentioned, is exceedingly simple, and is as follows:

*Method of Collecting Blood.*—Blood may be collected from dead or living animals. It does not matter which, nor does it have any effect on the test if animals have been dead as long as 24 hours, except in tropical countries. The method is so simple that *sportsmen* can readily collect samples whilst out shooting. The method consists in soaking up the blood (avoiding clots) upon strips of pure filter-paper about 3 inches wide by five long.

One end of the strip is left *clean*, so that the *name* of the animal (both

common and scientific), the *date*, *place* (of collection or natural habitat) and name of the *collector* can be noted thereon in *lead-pencil*. The notes should be written clearly, this being facilitated by resting the paper upon a hard surface. The strips of paper dry rapidly when suspended in the air (sunlight can be used for hastening the drying), by being pinned against the edge of a table, shelf, or upon the branch of a tree. *Strips of paper saturated with different bloods should not be brought in contact with one another in a moist state.* If the collector is unable to wait for the strips to dry, he can place them between sheets of impervious *paraffined paper*. The whole outfit can be carried in an ordinary envelope. When the strips have dried thoroughly, they may be folded and placed together in an envelope for transmission, at the collector's convenience, as an ordinary letter through the mails. *It does not matter if the dried strips have been preserved for a month or two before being sent.*

One strip of paper saturated with each kind of blood will suffice for the purposes of the investigation. Please address the samples to me as below.

If it is desired to collect bloods from *living* animals, this can be readily accomplished by pricking the skin with a needle and soaking up a few drops on different parts of the filter-paper.

I shall be much indebted if you will kindly send me the addresses of any other persons who might be willing to aid me in this investigation.

Yours very truly,

GEORGE H. F. NUTTALL, M. D., etc.,

*University Lecturer in Bacteriology and Preventive Medicine,*

3 Cranmer Road, Cambridge, England.

## COLLECTIVE INVESTIGATION OF THE SILVER NITRATE INJECTIONS ON PHTHISIS.

*To the Members of the Medical Profession:* In 1892 the undersigned began a collective investigation of the action of cold in the treatment of acute pneumonia, and there is reason for believing that this procedure which resulted in gathering four hundred cases of this disease thus treated, with a death rate not quite five per cent., was an important factor in calling attention to the utility of that treatment, and in introducing it to the profession of this country. That research was based on the conviction that no remedy can be called truly successful until it has passed the exacting crucible of clinical experience, and it is now proposed to apply the same ordeal to the silver-injection treatment of phthisis, which, in a large hospital, dispensary and private practice, reaching over a period of three years, and during which many thousand injections were administered, has given me greater satisfaction than any other method that I have ever employed. In keeping with the above expressed feeling a cordial invitation is herewith extended to those members of the profession who have the inclination and opportunity to investigate this method of treating phthisis and to whom a reprint on the subject with full information and blanks to report cases, will be cheerfully sent on application.

THOMAS J. MAYS, M. D.

1829 Spruce street, Philadelphia, Pa.

## Medical News Items.

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TENNESSEE LEGISLATES AGAINST SUBSTITUTION in the following act which seems quite adequate in its provisions:

SECTION 1. Be it enacted by the General Assembly of the State of Tennessee, That it shall be unlawful for any corporation, firm or person, or any combination or association of corporations, firms or persons engaged in the business of buying, compounding and selling drugs and medicines to substitute any drug or medicine in lieu or instead of that given to the patient by the physician on the face of his prescription.

SEC. 2. Be it further enacted, That it shall be unlawful for any agent or employe of such person, firm or corporation or association or combination of persons, firm or corporations engaged in the business of buying and selling drugs in this State to substitute any medicine for the specific medicine mentioned in the physician's prescription.

SEC. 3. Be it further enacted, That any person, firm or corporation violating the provisions of this act, or aiding or abetting the violations of the same shall be guilty of a misdemeanor, and upon conviction shall be fined not less than \$25 nor more than \$100 for each and every offense.

SEC. 4. Be it further enacted, That this act take effect from and after its passage, the public welfare requiring it.

THE NEXT MEETING OF THE TRI-STATE MEDICAL SOCIETY OF ALABAMA, GEORGIA AND TENNESSEE will be held at the Tulane, Nashville, Tenn., Tuesday, Wednesday and Thursday, October 8, 9 and 10, 1901.

An interesting feature of the meeting will be a series of papers on sociologic questions. All physicians are invited. Among the many interesting papers the following is a partial list:

"A Symposium on Anesthesia," including a paper by Dr. H. Berlin on "Studies of the Blood and Urine in Anesthesia."

A series of sociologic papers, as follows:

"Report of Committee on Sociology."—R. R. Kime, Chairman.

(a) "Hereditary and Acquired Characteristics as a Social Question."—R. R. Kime, Atlanta, Ga.

(b) "Legislation and its Limitation in Prevention of Crime and Disease."—Hon. John Bell Keeble, Nashville, Tenn.

(c) "Marriage and Heredity in Relation to Insanity."—T. O. Powell, Milledgeville, Ga.

(d) "Suppression of Consumption."—R. C. Bangston, Birmingham, Ala.

(e) "Tuberculosis, Its Prevalence and Prevention."—J. D. Cromer, Atlanta, Ga.

(f) "Syphilis and its Prevention as a Social Question."—Childs & Champion, Atlanta, Ga.

(g) "Syphilis and its Relation to Eye Disease."—A. W. Sterling, Atlanta, Ga.

(h) "The Prevalence of Gonorrhoea in the Male as a social Question."—W. Frank Glenn, Nashville.

(i) "Gonorrhoea in the Female with Suggestions as to Means of Prevention."—W. G. Bogart, Chattanooga, Tenn.

(j) "The Development and Control of the Sexual instinct."—J. W. Maquillan, Chattanooga, Tenn.

#### MISCELLANEOUS PAPERS.

"Softening of the Brain."—Micheal Campbell, Knoxville, Tenn.

"Migraine."—Curran Pope, Louisville, Ky.

"Diagnosis and Treatment of Typhoid Fever."—J. C. LeGrand, Birmingham, Ala.

"A Plea for the Better Teaching of Physical Diagnosis in Southern Colleges."—Hazle Padgett, Columbia.

"Infant Feeding."—C. S. Durand, Chattanooga, Tenn.

"Scarlatina and Complications."—H. B. Wilson, St. Elmo, Tenn.

"Brain Surgery; Report of Cases."—Edwin B. Anderson, Chattanooga, Tenn.

"Rheumatism; Cause or Effect in Affections of the Throat."—W. Cheatham, Louisville, Ky.

"The Work of the Laryngologist in its Relation to that of the General Practitioner."—Richmond McKinney, Memphis, Tenn.

"Superficial Foreign Bodies in the Eye."—A. C. Corr, East St. Louis, Ill.

"The Future of the Negro from the Standpoint of the Southern Physician."—Seale Harris, Union Springs, Ala.

"The Sanitation of Havana."—Chas. M. Blackford, Washington, D. C.

"Night Sweats or Phthisis."—L. P. Barbour, Boulder, Colo.

"Gonorrhoea in Relation to Diseases of the Eyes."—C. E. Peete, Macon, Ga.

"A Case of Chorea."—F. B. Sloan, Cowan, Tenn.

"Pain and Its Pathology."—J. E. Clark, Chattanooga.

"Traumatic Injury of the Eye."—J. T. Herron, Jackson, Tenn.

"Spinal Cocainization."—R. E. Fort, Nashville, Tenn.

As reduced rates have been made by the railroads a fine attendance is anticipated.

UNDER THE AUSPICES OF THE CHICAGO MEDICAL SOCIETY A BANQUET AND CELEBRATION has been organized in honor of Dr. Nathan Smith Davis, M. D., LL. D., who is the oldest living president of the society and widely known and honored among the profession by his long connection with the American Medical and other associations. The banquet will take place at the Auditorium Hotel, Chicago, Saturday evening, October 5, 1901.

THE TRI-STATE MEDICAL ASSOCIATION OF MISSISSIPPI, ARKANSAS AND TENNESSEE will meet in Memphis on November 19, 20 and 21 next. The sessions of the association will be held in Germania Hall, where ample facilities have been provided for the association and for the large number of exhibitors who usually have chemical and instrument displays at this meeting.

The exceptionally large attendance that is characteristic of the meetings of this association and the excellent work that is done by this body have won for it not merely local but likewise general interest. At its meetings between 400 and 500 representative practitioners from the territory contiguous to Memphis are usually in attendance, and the number of high class papers that are contributed is so extensive that the program is rarely finished.

The meeting this year will be held under the presidency of Dr. I. A. McSwain, of Paris, Tenn., and titles of papers, as well as letters of inquiry, should be addressed to the secretary, Dr. Richmond McKinney, Lyceum Building, Memphis.

EXAMINATIONS FOR ARMY MEDICAL DEPARTMENT.—The examination of applicants for appointment as Assistant Surgeon in the army has been resumed in Washington and San Francisco; the Army Medical Boards convened in those cities will remain in session so long as there are candidates to be examined. Seventy-six vacancies in the Medical Department still



remain to be filled, and as it is desired by the military authorities that the Department be filled up to its full legal limit as early as practicable, all eligible applicants will be afforded opportunity for examination; those found qualified will be commissioned at an early date. Full information as to eligibility, nature and scope of examination, etc., may be obtained upon application to the Surgeon General, U. S. Army, Washington, D. C.

DR. RALPH HOPKINS, of New Orleans, is now the visiting physician to the Louisiana Leper Home.

NEW ORLEANS NOW HAS A PROGRESSIVE PHARMACEUTICAL HOUSE IN THE NICKELLS-STONE COMPANY.—The outset of the enterprise argues a responsible and reputable concern, organized for the manufacturing of stock pharmaceutic products and combinations. It is interesting to note that the recent addition of Prof. G. B. Nagelvoort to the laboratory will add to its prestige and material strength to the operative force.

Professor Nagelvoort will be remembered as Professor of Applied Chemistry of the Northwestern University of Chicago a few years ago, which position he left to accept a similar one in his native country—namely, at the University of Leden, Holland.

NORTHWESTERN UNIVERSITY MEDICAL SCHOOL—Dr. A. P. Ohlmacher has been appointed Professor of Pathology in the Northwestern University Medical School (Chicago Medical College). Dr. Ohlmacher has been connected with the pathological laboratory of the Ohio Hospital for Epileptics at Gallipolis, Ohio, and will for the time being continue the direction of that laboratory.

THE LINCOLN PARISH BOARD OF HEALTH will vaccinate all school children in accordance with the State Law promulgated by the State Board of Health.

DIED: Dr. R. L. Luckett died at Alexandria, suddenly, August 29, aged 37 years. He was a graduate of Tulane of the class of 1890. He was coroner of Rapides parish for eight years and stood high in his profession.

Dr. J. B. Massie, City Health Officer of Houston, Texas, died August 25.

MARRIED: Dr. Chas. W. Vance, of Baton Rouge, was married, August 31, to Miss Effie J. Goodrich.

DR. R. MCG. CARRUTH, of New Roads, La., was married September 14, to Miss Celeste Claiborne.

DR. GEORGE S. BEL, of New Orleans, was married September 11, to Miss Edna Michel, also of New Orleans.

THE POLICE JURY of ASCENSION PARISH have increased the salary of the President of their Board of Health to \$150 per year, and will allow \$50 per month in times of epidemic.

DR. JOHN C. MCKOWEN, of Clinton, was shot and killed by Senator R. E. Thompson, of East Feliciana. The trouble is reported as the result of a controversy over a wire fence. The readers of the JOURNAL, especially in New Orleans, are too familiar with the name of the deceased for further comment.

THE NEW ORLEANS CITY BOARD OF HEALTH held an important meeting September 17. Among the items of the report of the chairman, Dr. Quitman Kohnke, we note that the August mortality was the lowest of any month this year. For the eight months the mortality among infants had decreased. Milk inspection is being strictly enforced. Mild scarlatina and diphtheria have prevailed, 35 cases of the former, and 1 death; 15 of the latter, with 2 deaths. The inspector of schools was urged to prevent the spread of these two diseases. Only one case of smallpox in August, that at the Charity Hospital, in a negro from another parish. He was removed to small-pox hospital, was discharged cured and there is now no small-pox in the city. 425 premises have been treated for mosquitoes. So much objection was encountered on the part of householders that now only the street gutters are being covered with crude petroleum; more than 3200 gallons have so far been used.

A circular regarding typhoid fever was adopted by the board and is to be distributed to physicians and householders. Some of the important features follow:

Typhoid fever is a germ disease. The disease spreads through the absorption of the germs derived from the evacuations and the urine of the patients. These are carried through infected

foods or drinks, dust, contaminated water, milk, ice, oysters from beds infected by sewerage, vegetables from soil likewise infected.

By resolution of August 21, cases of typhoid fever must be reported to the Board of Health. It is suggested that because of close resemblance, "continued fever" might also be reported and that with such cases and those of "typho-malarial," etc., the sanitary precautions should be the same. In detail the care of the patient is outlined and the precautions to be taken with food and utensils, the room of patient and the method of disposing of the excretions.

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## Book Reviews and Notices.

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*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

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*Applied Anatomy.* By SIR FREDERIC TREVES, F. R. C. S. & ARTHUR KEITH, M. D., R. R. C. S., London. Lea Brothers & Co., Philadelphia, 1901.

This manual for students of medicine is written in the same clear style which marks all of Treves' works.

The classification of the contents is quite methodical. Although terse and condensed, this little book is complete. It is for medical students especially of an advanced grade, who wish to brush up for examinations. There is but one criticism, some of the engravings should have been colored, which would certainly have rendered the cuts more comprehensive.

LARUE.

*Practical First Principles.* By A. H. P. LEUF, M. D.—*The Medical Council*, Philadelphia, 1901.

We have never read a more comprehensive, exactly graphic and explicit text than this. It purports to present principles in normal functions and tissues and then to show the morbid changes. All of this is done with a directness which is admirable and with a simpleness which is distinctive. Not only will this little book prove of value to students but to the teacher of histology and principles of pathology as well. The illustrations are plentiful, original and pertinent.

DYER.

*Syphilis; Its Diagnosis and Treatment.* By WILLIAM S. GOTTHEIL, M. D.  
G. P. Engelhard & Company, Chicago, 1901.

In 216 pages of his text Dr. Gottheil has presented the subject of syphilis in a sensible, practical manner. The work is written so plainly and clearly that it will meet the need of every one of those men in general practice who are looking for a guide to the treatment of syphilis. The illustrations are good, well selected and present the types of syphilis commonly met with. The price charged for the book, \$1.00, should make it accessible to all.

DYER.

*Atlas and Epitome of Ophthalmoscopy and Ophthalmoscopic Diagnosis.* By PROF. DR. O. HAAB. Authorized Translation from the Third Revised and Enlarged German Edition. Edited by G. E. DE SCHWEINITZ, A. M., M. D. W. B. Saunders & Co., Philadelphia and London, 1901.

This is an excellent and truly useful book. The colored pictures of the *fundus oculi* in health and disease are admirable while the brief explanations and comments accompanying each illustration are written with masterly acumen and discrimination. Haab's atlas should prove invaluable to the student who is striving to master the use of the ophthalmoscope as an ever present and ever willing teacher, making clear to him what he may expect to see, what he sees and having seen what he should particularly observe and remember. The writer has been glad to recommend it as a reliable aid to his own students, and feels confident that other teachers will find it of great assistance.

BRUNS.

*Retinoscopy.* By JAMES THORINGTON, M. D. P. Blakiston's Son & Co. Philadelphia, 1901.

We have received a copy of this fourth edition revised and enlarged. We have already reviewed the earlier edition of this little work which presents the fullest and clearest exposition of this method of examination yet published in our language.

BRUNS.

*Photographic Atlas of the Diseases of the Skin.* By GEORGE HENRY FOX, A. M., M. D. Parts II and III. J. Lippincott & Co., Philadelphia and London, 1901.

The author and publishers of this work have conceived an excellent method of meeting the need of the physician. There is absolutely no indication of the text-book in these studies of skin diseases. Each photograph is discussed on its merits, and the author is as free in personal views as if the text were a lecture room dissertation.

The plates are of the best we have seen, they are true to nature, as photographs must be. There are enough prescriptions instanced to indicate treatment to the intelligent reader. The diseases discussed in these two parts are Acne, Pediculosis, Psoriasis, Pityriasis, Variola, Lupus, Vitiligo, Lichen Planus, etc.

DYER.

## PUBLICATIONS RECEIVED.

*Report of Vital Statistics of the Cities of Havana, Guanabacoa, Regla and Marianao*, July, 1901.

*Official List of the Officers, etc., United States Marine Hospital Service*, July, 1901.

*The Ready Reference Hand-Book of Skin Diseases*, by George Thomas Jackson, M. D. New (4th) Edition. Lea Bros. & Co., Philadelphia and New York, 1901.

*Exhibition of Orthopedic Cases*, by E. Noble Smith, F. R. C. S., Edinburg-London, 1901.

*Practical First Principles*, by A. H. P. Leuf, M. D. *The Medical Council*, Philadelphia, 1901.

*Operative and Inoperative Tumors of the Urinary Bladder*, by E. Harry Fenwick, F. R. C. S. J. A. Churchill, London, 1901.

## REPRINTS.

*Some Thoughts on the Ethics of Medical Journalism—The American Medical Editors' Association*, by Burnside Foster, M. D.

*Report of a Case of Malignant Disease of the Tonsil*, by Hal. Foster, M. D.

*Viability of the Bacillus Pestus*, by M. J. Rosenau.

*The Etiology and Importance of Iritis—Headache: Does the Physician Place Sufficient Importance upon the Eye Strain as a Cause? The Treatment of Ophthalmia of the New Born—Relation Existing Between Diseases of the Conjunctiva, Nose and Throat—Some Suggestions on Iritis*, by Herman H. Brown, M. D.

*Hydrophobia: Its Prevalence and Prevention*, by Henry R. Slack, M. D.

*The Evolution of the Ophthalmoscope and What It Has Done for Medicine*, by Samuel Theobald, M. D.

*Sanatoria for Consumptives in the United States and the Canadas*, by Charles Bell, Esq., LL. D. New York.

*Foreign Bodies in the Rectum with Report of a Case*, by Lewis H. Adler, Jr., M. D. Philadelphia.

*Pruritus Ani with Especial Reference to its Local Treatment*, by Lewis H. Adler, Jr., M. D.

*The Story of the Papaw*, by F. B. Kilmer.

*The Bucco-Antral Route in Neurectomy for the Relief of Tic Douloureux*, by Gordon King, M. D.

*Stimulants in Forensic Medicine—A Review of Drug Consumption in Vermont*, by Dr. A. P. Grinnell.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR AUGUST, 1901.

CAUSE.	White.	Colored.	Total.
Fever, Malarial (unclassified) .....	....	....	....
“ “ Intermittent.....	9	6	15
“ “ Remittent .....	....	....	....
“ “ Congestive .....	....	....	....
“ “ Typho .....	....	....	....
“ Yellow .....	....	....	....
“ Typhoid or Enteric.....	12	3	15
Puerperal Diseases .....	3	....	3
Bronchitis .....	5	8	13
Diphtheria .....	2	....	2
Broncho-Pneumonia.....	....	....	....
Measles .....	....	....	....
Whooping Cough.....	1	1	1
Pneumonia.....	5	6	11
Cancer.....	10	4	14
Consumption.....	29	30	59
Diarrhea (Enteritis).....	24	7	31
Dysentery.....	2	....	2
Small Pox.....	....	....	....
Hepatic Cirrhosis .....	7	....	7
Other Liver Diseases.....	....	....	....
Peritonitis.....	....	....	....
Debility, Senile .....	14	7	21
“ Infantile.....	3	....	3
Bright's Disease (Nephritis) .....	14	19	33
Sunstroke .....	....	....	....
Heart, Diseases of.....	31	20	51
Apoplexy .....	....	....	....
Congestion of Brain } .....	12	6	18
Meningitis .....	6	4	10
Trismus Nascentium.....	6	5	11
Injuries .....	19	13	32
Suicide .....	1	....	1
All Other Causes .....	70	33	103
<b>TOTAL .....</b>	<b>285</b>	<b>172</b>	<b>457</b>

Still-born Children—White, 26; colored, 19; total, 45.

Population of City (estimated)—White, 220,000; colored, 80,000; total, 300,000.

Death Rate per 1000 per annum for Month—White, 15.54; colored, 25.80; total, 18.28.

## METEOROLOGIC SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure ..... 29.94  
Mean temperature..... 82.  
Total precipitation ..... 5.80 inches  
Prevailing direction of wind, southwest.

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## Original Articles.

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### THE RELATIVE DIAGNOSTIC VALUE OF THE SYMPTOMS OF EXTRA-UTERINE PREGNANCY\*

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The prompt recognition and surgical relief of extra-uterine pregnancy, either before or after rupture, affords a source of proud satisfaction not surpassed by any other triumph in surgery. Particularly is this true if the condition is recognized and relieved before rupture occurs, thus saving the woman from all the perils of hemorrhage, shock or sepsis which almost inevitably follow. Even though surgical intervention is not practiced until after rupture, if done promptly, it means the saving of 78 per cent. of the patients, instead of 68 per cent. of deaths, as was the case before surgery became the established method of treatment.

Extra-uterine pregnancy is pre-eminently a surgical affection and should be dealt with as promptly and radically as malignant disease. Exception to this rule is made by some surgeons when the child has continued to develop and has reached the

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\*Read before the Louisiana State Medical Society, April, 1901.

seventh month of its life, but delay even then, is a matter for serious consideration for the majority of such children are either deformed, or do not survive their birth for any length of time. So in the light of the present knowledge of the affection and the achievements of modern technic in its relief, it becomes the duty of every practitioner to so thoroughly consider every phase of the affection that it may be recognized in its various manifestations at the earliest possible period. It is especially incumbent upon the general practitioner to be constantly on his guard, for it is to him that the first symptoms of discomfort are usually related. Now that it has become possible to make a positive diagnosis before rupture in a large number of cases, it is necessary to know the relative value of the many diagnostic features. Such a study is made necessary by the various opinions expressed by authors in favor of one or the other symptoms; some relying more upon pain, others the menstrual irregularities, while others find the physical changes of greater importance. A study of the history of a number of cases will disclose a remarkable similarity of symptoms in a general way, and yet every case will present features found in no other; simply a variance of the cardinal signs as influenced by anatomic factors. It must be borne clearly in mind that in extra as in intra-uterine pregnancy every diagnostic sign increases in value as gestation advances.

The subjective signs are especially modified as pregnancy advances and as they are depended upon before rupture to give warning of the existence of misplaced pregnancy, each one should receive proper consideration. Unfortunately, however, in the majority of cases of early rupture (4 to 6 weeks) there is rarely any evidence pointing to pregnancy to be obtained from some of the sources most usually sought for information, such as the breast changes, vaginal discoloration, etc. Reliance on their diagnostic value at such a juncture will increase doubt at a time when certainty and action are of the greatest value.

The subjective signs accompanying extra-uterine pregnancy differ very little from those of normal gestation. Some authorities claim they are nearly always less marked in early cases than in normal pregnancy. Skene, however, believes differently. In his experience pelvic discomfort and the subjective symptoms are usually more marked.



My experience coincides with that of Skene. In the majority of cases that could give a clear history, special stress was laid upon the general lassitude and pelvic discomfort present.

This diversity of opinion regarding the absence or presence of subjective signs can no doubt in many instances be explained by anatomic features.

An ovum developing in the middle third of the Fallopian tube (which, it may be remarked, is the most frequent form), unhampered by the few muscular fibres in the tubal wall, would hardly give rise to the early disturbance that would follow its situation in the inner third, near the uterus, where the muscular walls are dense and offer greater resistance.

Cervical softening, a sign of great value when taken in conjunction with other symptoms, can hardly be relied upon with any degree of certainty. In normal pregnancy appreciable softening is seldom present before the end of the second month. In early cases before rupture one could hardly expect softening to have occurred, and after rupture other signs are of infinitely more value.

Cervical softening is usually present after metrorrhagia resulting from fibroids and other conditions which excite pressure in the pelvis and as misplaced pregnancy is also occasionally attended by prolonged uterine discharges it can readily be understood how such a sign could be misleading.

Breast changes except in cases advanced beyond two months are usually so indefinite as to be of little value.

The menstrual history is an all important factor in diagnosis and if the woman has no motive for concealing her condition, no symptom is of more value. If, however, one is to dismiss the subject, as many do, by simply alluding to the symptom "cessation of menses" its real value will be lost. Irregularity of menses is a term much more appropriate and the use of such a phrase would suggest to the inexperienced that other phenomena than simple amenorrhea should be looked for. Kelly states the condition precisely when he says: Menstruation, which has been regular, has suddenly ceased for one or more months, when it returns in an irregular way at intervals of two or three weeks, often lasting from ten to fifteen days or more.

Barton Cooke Hirst, an authority of unusual experience, found that in 27 per cent. of his series of cases there had been

no cessation of the normal flow, and in other cases simply a delay of a few days. Prolonged hemorrhage from the uterus is *always present at some time* during the course of extra-uterine pregnancy.

This may not occur until after tubal rupture but sooner or later it makes its appearance and is a strong diagnostic factor. Its real value can be appreciated in recognizing those cases that come to the surgeon weeks or months after rupture has occurred and nothing is present to suggest the cause of a mass of purulent collection found in the pelvis. The woman can usually remember having had such an unusual flow following a delayed period when she might forget to mention having spent a week quite uncomfortably, not able to attend to household duties but not sick enough to be confined to bed. The history of such a flow combined with other symptoms to be mentioned should always excite suspicion when one is confronted with pelvic hemocele, abscesses, and ill defined masses, that cannot be clearly attributed to other causes. This flow may commence at the time for the regular menstrual period and even mislead the woman, and if the hemorrhage has not been profuse she may state she was normally unwell when at the very time the tube is showing signs of rupture.

If the flow is not the normal menses it signifies that the ovum is becoming embarrassed and rupture is imminent. It is then that shreds or complete casts of decidua may be detected in the vaginal discharges.

Hemorrhage into the cavity of the tube, around the fetus, may occur some time before the tube ruptures, and the blood may be forced out through the fimbriated extremity into the peritoneal cavity, giving rise to peritonitis and severe cramps, which may simulate rupture. Taylor, in his Engleby Lectures, has admirably described this phenomenon and associates it particularly with cases of tubal mole. He also states hemorrhage may take place directly into the uterine cavity when the ovum is situated in the inner third of the tube. It may be safely stated that in quite a large number of cases a sanguinolent vaginal discharge precedes rupture from a few hours to several days.

Cullingworth, according to Taylor, has accurately described the character of the vaginal discharge accompanying extra-uterine pregnancy. He states that the blood is almost invaria-

bly dark in color, moderate in amount, thick in consistency and steady in its rate of flow. Gushes of bright red blood occasionally occur, but are quite exceptional. If it is added that the flow is very persistent, that it may contain shreds, or portions of decidual membrane and accompanied by occasional cramp-like pains, nothing else is to be added. The detection of shreds of decidual membrane and placental tissue in the vaginal discharge, especially if their nature is decided by the microscope, is now recognized of the greatest diagnostic value. Routh, of London, according to Kelly, states that a positive diagnosis may be made if a decidua is cast off from the uterus in the presence of a growing pelvic tumor. Kelly believes that it affords the one positive criterion by which the nature of the case is determined beyond a doubt.

Pain is a very valuable symptom. It is characteristic in nature and manner of occurrence, and is nearly always present at some time, though, of course, it may vary in intensity. Hirst states that of the three cardinal symptoms, viz.: pain, irregularity of menses and the physical changes, pain has been the most helpful to him in making a diagnosis.

It is sharp, colicky in character, distinctly localized in one or the other groin, though it may be described as a pain throughout the pelvis, and often the patient complains of the pain shooting down the corresponding thigh. It is nearly always attended by nausea, nearly as often by vomiting, and if the rupture has been extensive and attended by hemorrhage all the signs of profound shock, viz.: cold sweats, chills, ashen hue of skin, passive countenance and, at first, a slow pulse, which increases as the hemorrhage continues. A feature of this pain is its paroxysmal nature. There may be long or short intervals of entire relief, during which the woman may feel perfectly well, and even resume her duties. This is a feature of those cases where, possibly, blood is dribbling from the tubal ostium, the rupture partial, or the tube has ruptured into the folds of the broad ligament and the hemorrhage is being held in check by the surrounding tissue. This pain is peculiarly agonizing in character.

Hirst believes that the symptoms of pronounced shock are due often to the intolerable agony, rather than to rupture of the sac and internal hemorrhage. In the majority of his

cases he has not found enough blood to account for the symptoms; in fact, he often finds no bleeding at all until the vascular adhesions are disturbed in removing the sac.

While pain is a valuable symptom it is only pathognomonic when other symptoms are present. H. C. Coe has recently cited a number of cases where the pain associated with other conditions was very misleading and various authorities have recorded instances where little or no pain attended the rupture. It is with pain as has been stated of the menstrual history; it may vary from the slightest degree to the most alarming; still if studied properly it seldom fails to be instructive. We would expect all signs to be meagre in cases rupturing when only five or six week old; in fact, there may be entire absence of every symptom usually attending pregnancy. Severe rectal and vesical tenesmus is often complained of within a few hours after hemorrhage, especially if the patient rallies from the initial shock. This is due to the pressure on the rectum and bladder and the beginning peritonitis.

*The physical signs* are of utmost importance. Other symptoms may arouse suspicions of misplaced pregnancy but few diagnoses can be positively confirmed unless the physical examination is entirely satisfactory. Unfortunately there are pelvic conditions that must be differentiated and many present changes remarkably similar to those of ectopic gestation. There may not be any appreciable changes present in some of the worst cases. Particularly is this true of those cases of early rupture (about 5 to 6 weeks) which Taylor, of Birmingham, England, has so thoroughly described and shown to be due to a faulty, ill developed or atrophic tube with thin coverings which ruptures under very slight pressure and gives rise to the most alarming hemorrhage.

The tendency of the uterus to topple backwards in early pregnancy often makes a diagnosis very difficult, owing to the situation of the ovum in the rear and under the fundus uteri. This is an important feature in recognizing cases before rupture and should be constantly borne in mind. Diagnosis before rupture is more difficult owing to the absence of several signs that become prominent after rupture occurs.

Bimanual examination reveals an enlarged uterus about the size of a two months pregnancy (Kelly) which has the con-

sistency and feel of the subinvolted uterus following delivery or abortion. The uterus will be displaced to one or the other side according to the size and situation of the ovum, the cervix will be found patulous and the uterine cavity empty. If metrorrhagia exists one need not hesitate to resort to the uterine sound which is indispensable in some cases for ascertaining whether the tumor is in the tube or connected with the uterus. The blood vessels of the corresponding side can be felt pulsating, a very important sign generally, though it often accompanies acute salpingitis, intraligamentous growths and cancer. The increased vascularity is more general, however, in pregnancy. Contraction of the uterus also occurs after the decidua is expelled. Rhythmic contractions may be occasionally felt in the extra-uterine tumor and ballottement is sometimes possible after the third month. Before rupture the tumor in the tube has an ovoid shape, a doughy feeling, is distinctly circumscribed in its early stage, though later it assumes a sausage shape, especially after hemorrhage in the tube commences. Authorities differ as to whether the tumor is painful or not. Kelly, Skene, Hirst and others state that it is quite painful on pressure, while Taylor, a most eminent authority, contends that pain on palpation is seldom present, until the ovum is beginning to be embarrassed and some hemorrhage about the fruit sac occurs and inflammation commences. It seems reasonable to believe that the tumor which is a physiologic process (excepting its location) should develop without being sensitive until pathologic changes are commencing, so it must be borne in mind that pain may or may not be present.

After rupture takes place the physical signs are changed considerably, depending upon the route by which the fetus escapes from the tube and the length of time that elapses after rupture before the examination is made. It might occur to the inexperienced that diagnosis would be easier after rupture owing to the larger mass, its location and the other symptoms present. This is not true, however. One can fully appreciate the difficulties who has attempted to outline and differentiate a pelvic mass due to ruptured pregnancy when the abdominal walls are extremely sensitive and board-like, the vaginal vault so sensitive that it almost causes collapse to attempt digital exploration, and the woman so depressed that she can not give a satisfactory history.

If rupture takes place into the abdominal cavity and the blood is still fluid and free it may not be possible to feel the fetus, but usually a mass is to be found in the cul-de-sac or to one side of the uterus. The slowly changing line of dullness in the flanks when the patient's position is changed (a sign described by Mayo Robson), owing to the blood seeking a level, is sometimes of great advantage. When a succession of hemorrhages occur at intervals of a few hours or even weeks apart, each one is marked by a repetition of all the above described symptoms. The pelvic mass grows larger after each attack, and after some days the coagula become walled off, giving a mass that may not be confined to any part of the pelvis, but fill all the lower abdomen. These repetitions are frequently met with in cases of tubal abortion and intra-ligamentous pregnancies, and are due in the first instance to dribbling from the tubal ostium with a consequent peritonitis. When rupture between the broad ligament folds has occurred a diagnosis is more difficult; in fact, often impossible. These symptoms have been so clearly simulated by rupture of varicosed veins in the broad ligament, rupture of ovarian cysts, twisted pedicles and especially inflamed broad ligament growths, that one can seldom be quite sure of the condition unless other symptoms are prominent. After the pregnancy has advanced it is not so difficult to recognize it as to differentiate it from normal intra-uterine pregnancy. Kelly states that error is far more apt to rise from mistaking a normal for an extra-uterine pregnancy. He advises putting the patient under chloroform, grasping the cervix with forceps and carefully drawing down the uterus towards the vaginal outlet while palpating its outlines through the rectum. If the entire uterus can be distinctly outlined in this way the ovum is clearly extra-uterine.

Taylor dwells at length upon the cases of undue thinning of the uterine wall in normal pregnancy which may be mistaken. One special point in palpating over an abdomen containing a developing extra-uterine fruit sac is the peculiar distinctness of the outlines of the child, so it can be easily understood how a thin uterine wall contracting feebly could give the impression of the child being without the uterus. Then, too, it must never be overlooked that intra and extra-uterine pregnancy may exist at the same time. In a case that I reported recently such a

condition was not suspected until it was revealed by postmortem examination. In differentiating normal from extra-uterine pregnancy, pregnancy in a bicornate uterus, interstitial or apical pregnancy and pregnancy in an antiflexed uterus with elongated cervix, the chief aim is to *outline the body of the uterus*. Fewer mistakes will be made if this is always borne in mind.

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#### MALARIAL HEMOGLOBINURIA.

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The following paper has been prepared at the request of members of my Polyclinic classes, physicians practicing in districts of the South where this disease prevails.

In speaking of malarial hemoglobinuria it must be first remembered that the hemoglobinuria (hemoglobin in the urine) is but a prominent symptom of one of the various forms of malaria and that blood and hemoglobin may be found in the urine of the patients in quite a large number of diseases. Whenever we have a hematuria (blood in the urine) we have as a matter of course hemoglobin also. In some cases, however, it appears independent of the former.

Blood is found in the urine in diseases of the kidneys and urinary passages: Acute Bright's disease, congestion of the kidney, calculus, malignant growth, tuberculosis, inflammation of the ureters, bladder and urethra, after injuries; it may be found in hemorrhages of the womb and during menstruation, in the acute infectious diseases and after the administration of certain drugs, as chlorate of potash, turpentin, cantharides and others having a similar irritating effect. Sometimes it appears vicariously during suppression of the menses. Diseases like

scurvy, purpura and others must be remembered. A hemoglobinuria has been especially observed in the severe types of the infectious fevers—scarlet fever, acute articular rheumatism, pneumonia, small-pox and yellow fever.

In some “predisposed” persons exposure, over-exertion or a simple cold bath may provoke an attack, and the disease is then termed paroxysmal hemoglobinuria, and is accompanied by fever and other clinical symptoms.

If we remember that all these various diseases may be complicated by malaria, and some at least resemble it at the onset, and often during several days, we can readily see that it is not always an easy matter to make a correct diagnosis. In countries where yellow fever prevails, this is no doubt of great importance. The exclusion of the paroxysmal hemoglobinuria, acute hemorrhagic nephritis and some of the infectious diseases may cause some difficulty of differentiation. In Louisiana a hemoglobinuria associated with malaria was observed as early as 1843, by Glidden Young, of Greenwood. This observer describes a bloody urine appearing with each paroxysm, the urine clearing up entirely during the intermissions of the fever. The case was preceded several months by an attack of the common form of malaria from which the patient had never recovered. In all its features this case, quoted by Joseph Jones in his Medical and Surgical Memoirs, in which he gives an excellent description of the disease, is identical with some cases of malarial hemoglobinuria, observed by Dr. Odom and myself in Livingston parish, of this State. Quite a number of names have been applied to his form of malaria, the chief symptom of which is an emission of “bloody urine;” that is, urine containing albumin and hemoglobin in varying quantity.

Names in common use are malarial hematuria, hemoglobinuria, *Schwarzwasser* fever, *fièvre bilieuse mélanurique*, and in certain districts of Louisiana “Creole yellow fever.”

Hematuria means blood in the urine, and this term is therefore incorrect in a large number of cases in which blood corpuscles can not be detected. Congestion and inflammation of the kidneys, which is always present in this disease, may, however, cause hemorrhages. Hemoglobinuria is the more appropriate name, that is, the coloring matter of the urine is due to hemoglobinuria. Malarial hemoglobinuria occurs most fre-



quently in the tropics, though it has been encountered in all countries where the grave forms of malaria prevail. In the United States it is only found in the Southern states. The etiology of the disease is not fully understood, and cases may occur under the most varying conditions. There is one etiologic fact, however, which is firmly established, and that is of the greatest importance: *Malarial infection has in all cases preceded the hemoglobinuria.* If we bear this fact in mind it will assist us to understand the great variety of conditions under which the disease occurs; cases with parasites in the blood and others without them; cases that are cured by quinin, and cases in which each dose of quinin causes a new attack. Furthermore, this fact, well remembered, will be our safe guide in the treatment of the disease, no matter what the variety we may happen to encounter.

As far as present researches go, hemoglobinuria has been found only in individuals infected with the estivo-autumnal parasite, and appears, as a rule, only in those who have passed through repeated attacks of malarial fevers.

In all cases of malaria, and especially in this severe form, a destruction of red cells continuously takes place, due, of course, to the life of the parasite in the corpuscle.

As soon as the plasmodia have entered, they appear shrunken and of brassy color. The hemoglobin set free is carried with the blood to the liver and to some extent is transformed into bile pigment, giving rise to biliary diarrhea so frequently met with. The liver, however, becomes unable to take care of all the pigment that is brought to it and a large amount will remain in the blood and cause that form of jaundice which was formerly termed a hematogenous icterus, more correctly the icterus with polycholea, identical with the icterus of yellow fever and all severe infectious diseases which cause a wholesale destruction of the red blood corpuscles.

Ponfick, quoted by Thayer, has shown that up to one-sixth of all the red blood corpuscles of the blood may be destroyed, and yet the hemoglobin may be disposed of without appearing as such in the urine and in the more severe types of the estivo-autumnal fever he found that more than one-third of all the red blood corpuscles have been destroyed during one paroxysm lasting twenty-four hours without hemoglobin appearing in the

urine. This proves conclusively that the destruction of the red cells must be enormous to cause a hemoglobinuria, and that the malarial parasites never can cause it alone, not even those of the estivo-autumnal type; though, as mentioned according to present observations, this type is the *only primary, necessary, remote cause*. But further, repeated attacks of malarial fever have, at least in the vast majority of cases, preceded the hemoglobinuria, and this at once calls our attention to the changes that have been produced by them in every organ of the body. Glidden Young, in 1843, says: "Malarial fever preceded the attack from which my patient never recovered," and this statement might be made in almost all cases of malarial hemoglobinuria. First of all the fundamental changes in the blood are to be remembered.

This most important fluid is entirely changed. The red blood corpuscles are enormously decreased in numbers and the cells themselves are intrinsically altered; the plasma has changed in composition and is loaded with pigment particles, with dying and dead parasites and their debris, with toxins derived from the parasites and from a faulty metabolism. The liver, working against tremendous odds, suffers and is increased in volume and is congested, saturated with bile; necrosis can be observed commencing and advanced throughout the organ and a sclerosis is frequently the final result. Of course its functions are deeply altered. It is unable to protect the organism from the toxins that are brought to it in enormous quantities and all other functions secretory and excretory have suffered in similar degree.

These alterations are no doubt the cause of the intense polycholeia observed, and help to produce the changes that take place in the kidneys. These organs are congested and inflamed and it is thought that the integrity of their functions must have suffered before they allow hemoglobin to pass.

Joseph Jones (*op. cit.*) states that he has observed Bright's disease to follow malarial infection. Recently Thayer and others have found it to be the cause of a large proportion of cases. These observations I have confirmed in my hospital and private practice. The spleen is always seriously altered and increased in size, generally so much so, that the organ can readily be palpated during life, and cases are on record in which these ague cakes have reached the enormous weight of twenty

pounds. The marrow of the bone is altered and the functions of the heart, the nervous system and digestive apparatus are seriously interfered with, due to changes going on in their fundamental structures, to immediate malnutrition and to their interdependence on the other organs of the body, all of which are more or less seriously damaged.

If we bear in mind these vital changes that are produced by continuous infection of malaria, and further that practically in every case of hemoglobinuria, a series of malarial infection has preceded the attack, we may justly conclude that the alteration of the viscera is a necessary and additional factor in the production of malarial hemoglobinuria.

Climatic influences are supposed to contribute to the production of hemoglobinuria of which Marchiafava and Bignami say that they can not be explained in the present state of our knowledge. These authors believe, however, "that the same species of parasites may present in certain places special varieties distinguishable from each other by the pathogenic action which they exert upon man, and not by any fundamental biologic characters, and that the malarial affection in the course of which hemoglobinuria frequently occurs, represents one of these varieties of the plasmodia. These observers are led to the above conclusion from the fact, that not in all places in which the "estivo" and "autumnal" fevers prevail is hemoglobinuria found with equal frequency.

This explanation is certainly an improvement upon the assumption that certain climates invest the estivo-autumnal organisms with peculiar properties that enable them to cause hemoglobinuria.

No doubt climate is a factor and one of the greatest importance in the etiology of the disease; just as we have certain regions in which the milder fevers are current so we have others in which those of the severer type prevail and those in which cases of hemoglobinuria are encountered. I do not believe, however, that either of the above explanations offered explains satisfactorily the important climatic influences.

We know that the estivo-autumnal type is the primary and fundamental condition of every case of malarial hemoglobinuria and that no other variety will produce an attack. It seems more plausible to assume that the climate in which the mosquito

the second host of this particular parasite can live, is the one in which we will find this disease. The mosquito's life depends on climatic conditions, and it is easy enough to understand that certain varieties should only be able to live under certain climatic conditions, whereas it is difficult to comprehend that climate may invest plasmodia with certain properties to enable them to produce hemoglobinuria or that the same species of the parasite influenced by climate should show varieties distinguished by the pathogenic action they exert upon man and not by any fundamental biologic character.

Dr. Geo. E. Beyer tells me that in his opinion the *Anopheles crucians* is the only variety of mosquitoes which acts as host for the estivo-autumnal type. We are now engaged in work to substantiate the above proposition which explains satisfactorily the influence of climate on the various forms of malaria as well as the mixed infection.

If we remember that this organism, the estivo-autumnal parasite, is but one, though the primary and necessary cause of every attack of hemoglobinuria, we will understand why under certain conditions we will find the hemoglobinuria more frequent than under others. The country in which I have observed the disease is swampy and wooded with cypress, the whole island, with the exception of one-third, is subject to overflows during time of continuous rains and high tides and the larger part of this last third is submerged during occasional crevasses (breakage of the Mississippi river levees).

Maurepas Island constitutes a part of the cypress swamps of the State. Felling and preparing timber for market is the sole occupation of its inhabitants. This occupation is called "swamping" and the men are termed "swampers."

Out of seven cases I had an opportunity to observe during several months I did not see a single one occurring in women, nor have I seen such severe malarial infections in them as I had to treat in the men. It is not necessary to dwell upon the reasons for this; the difference of exposure to infection, repeated malarial attacks poorly treated, the hard life and work of a "swamper" will explain this sufficiently. Finally, it must be mentioned that all these conditions are not sufficient to produce an attack of hemoglobinuria in every individual, but something that has been termed an idiosyncrasy must be present, a predis-

position, a ready soil in the individual attacked. *What this unknown factor consists of we do not know.* (Marchiafava and Bignami). I believe nothing more than a number of additional weakening causes, inherited or acquired, such as hard work and exposure, no work and luxury, changes produced by former diseases, faulty habits and inherited tendencies.

This predisposition plays an important part in every infectious disease, and it would be strange if we should not find it of importance in hemoglobinuria.

During the last epidemic of yellow fever, of the three hundred thousand inhabitants of New Orleans, a large number was likely more or less exposed to the infectious agent, and yet not more than 2000 contracted the disease and a very small number succumbed. Tuberculosis, *habitus paralyticus*, rheumatism, etc., all show well that this unknown factor, *varying with each individual and with each disease*, must be present. The cases mentioned from Maurepas Island certainly show what this idiosyncrasy consists of which predisposes men more to be attacked than women in that particular region.

I believe that this factor is sufficient to explain satisfactorily why in all places in which the estivo-autumnal fevers prevail *hemoglobinuria is not equally frequent* and why in *certain regions only certain individuals* are attacked. It is a symptom on a par with the hemoglobinuria of other infectious diseases for which a special or modified micro-organism was never claimed.

If these conditions are present, viz. : the particular parasite, "estivo autumnal type," the climatic conditions favoring its existence, better than that of his secondary host, the mosquito, an individual that has suffered from repeated malarial attacks, with viscera seriously damaged, especially the bloodmaking and excretory organs, the blood saturated with toxins produced by the parasites, a faulty metabolism and an idiosyncrasy as explained, we can readily understand that then, and then only, the phenomenon of hemoglobinuria may be provoked by a number of direct causes that under other conditions would appear to be trivial.

Sporulation of parasites, an additional production of toxins, any cause that may weaken the organism, and administration of quinin under certain conditions—if under such conditions, sporulation and a new invasion of the red corpuscles causes

hemoglobinuria, the attack will consist in malarial paroxysms, accompanied by this phenomenon; it will be intermittent, subcontinuous or continuous, corresponding to the fever and depending on the infection with one or various groups of the parasite.

In some cases the attack will appear with the sporulation; the parasites disappear spontaneously during the paroxysm, but the hemoglobinuria lasts for some time, showing that something else causes the continuation of the paroxysm provoked in these cases by the sporulation of the plasmodia, probably toxins coursing in the blood.

In another variety, "post malarial," hemoglobinuria may appear, following shortly after repeated malarial infections, but all the parasites have disappeared from the blood, and at other times, it appears more or less remote from such infections. Again, toxins provoke in these cases the hemoglobinuria, likely similar to those that cause its continuation in the former variety, "retained by a faulty metabolism."

Finally, we have to consider the "quinin hemoglobinuria," that form which follows each dose of quinin administered to the patient, no matter whether the dose is small or large, whether the drug is given during the paroxysm or after. It has been observed only in patients that have suffered from repeated attacks of estivo-autumnal fever. In this, as well as in all others, the life of the estivo-autumnal parasite in the patient is the necessary primary cause creating the predisposition. Quinin acts as the provoking agent.

The most prominent observers have recorded cases, Murri, Berthier, Plehn, Koch and many others; the last saw none but hemoglobinuria caused by quinin.

The cases I have observed all yielded to quinin, with the exception of one, "continuous" and post malarial.

Very often the attack commences with a severe and protracted chill, and soon after the characteristic urine, containing albumin and hemoglobin, hyalin and granular casts and epithelial cells coming from the kidneys, is voided. The cachectic color of the patient changes into a more or less deep jaundice depending on the severity of the attack, and he now presents a complex of symptoms found in all the severe infectious diseases, due to an intense intoxication, excruciating headache and backache, severe pain in the epigastrium and in the extremities, flushed face

and injected conjunctivæ, copious vomiting of a greenish dark liquid which sometimes may continue throughout the attack, and become black, great mental anxiety, profuse, cold, clammy perspiration and biliary diarrhœa. The temperature is high, the pulse small and frequent, and the patient may now fall into a comatose condition, the urine diminish in quantity and entire suppression may follow. Such a picture suggests yellow fever, and we can understand why this disease has received the name "Creole yellow fever" in certain districts of Louisiana. The attacks vary, and a light form, a form of medium intensity and a severe form have been spoken of.

The mortality varies from 10 to 50 per cent. This may be largely due to the gravity of the disease, as it is found in certain districts and individuals.

Recovery may take place in the most desperate cases with and without medication. In fact, a spontaneous recovery has been so often recorded that it suggests the production of an antitoxin by the organism.

After reviewing this subject it seems strange that prominent clinicians who have studied the disease should be divided on the question of treatment. Some suggest quinin in large doses, and others condemn its use altogether. If we remember that the plasmodium malarix is the primary cause of it all, that without its destructive work no malarial hematuria is possible, and furthermore, that sporulation and a new invasion of the red cells alone under certain condition is sufficient to provoke an attack, it must be the aim of every physician who is called upon to treat the disease, to remove this cause; that is, to kill the plasmodia.

Quinin is the only drug that will do this effectually, and quinin must be given in all cases in which malaria is still active; that is, in all cases in which plasmodia are found in the blood. There is no substitute for quinin. Methylen blue and others have been repeatedly tried with but little success.

Confronted with a case of malarial hemoglobinuria, the first question to settle is whether the hemoglobinuric paroxysm represents merely a symptom of active malaria, or whether it is of post malarial origin.

With the microscope this is an easy matter and a blood examination will soon answer this question promptly. If there is no

microscope on hand, the physician must rely on clinical symptoms and on the history he will be able to obtain in most cases. If the attacks are intermittent in character, accompanying febrile paroxysms, there can be but little doubt that the plasmodium is still alive, and quinin ought to be administered, best hypodermically. If an error is to be made it ought to be on the safe side, remembering that as long as the parasites are active, blood corpuscles are destroyed almost as fast as they are made, toxins set free and organs degenerated and that there can be no hope of recovery until these pests have been destroyed either by quinin or by the organism.

If therefore this question is settled, quinin must be given whenever parasites are in the blood and its administration repeated if they reappear, or so long as clinical symptoms warrant this belief, no matter whether the drug causes hemoglobinuria or not. The damage done can be but slight compared with the destructive changes continuously wrought by the parasites which alone make the hemoglobinuria possible.

Good judgment is necessary, especially in these last cases. In all countries in which malarial fevers of the severer type prevail, the people are familiar with the use of quinin and frequently the drug has become an article of diet with many a family in the fever season, being distributed at the breakfast table. Upon the question: "Whose chill day is to-day?" hands, big and small, reach out for a dose with the coffee. Every ailment is treated with quinin, and when not yielding to treatment, the physician is called. In such a case it might be well for him to hesitate and to consider before giving an additional dose.

*It must be borne in mind that quinin has no curative influence on the hemoglobinuria and that it must not be given with such an erroneous idea in view; all it does is to destroy the plasmodia and it does this thoroughly. If, therefore, the drug has been taken in sufficient doses to obtain this object, we aggravate the case by adding only one more toxic substance to those already present.*

Continuous administration of quinin is injurious; a fever that does not yield to a proper administration of this drug in a few days is not due to plasmodia but is postmalarial, toxic or inflammatory, or both in character with a few exceptions. According to Celli when the gymnosporidia or the gametes are



in the blood that insure the sexual cycle. In these cases, however the drug seems to prevent their formation when given early; once formed it seems to act when given in intervals of 6 or 7 days. Of course this does not refer to the use of quinin as a tonic. The immediate cause provoking a postmalarial hemoglobinuria is manifold and very little is known of it, though to think that it is similar to that producing the hemoglobinuria in the acute infectious diseases that it is due to toxins and various weakening causes seems rational and the treatment must be the same; that is entirely symptomatic and eliminative.

Rest, *absolute rest*, is of paramount importance, and it is necessary to impress this upon patient and nurse. We know that every organ in the body is affected, the heart included, and great damage may be done and death may be caused if rest is not absolutely observed, especially during the intermission of the fever when the patient feels better.

Fresh air is the next indication, and it is necessary that the physician sees that his patient is well supplied with it, in other words, that the sick room is well ventilated and free from superfluous furniture, rugs and carpets. The primary lesion is an intense anemia; the red blood corpuscles are enormously decreased in number; their chemical composition is changed and they are especially deficient in hemoglobin.

Consequently little oxygen can be carried to the tissues and if internal respiration is seriously interfered with suffocation and degeneration follows. It is, therefore, the duty of the physician to see that every blood corpuscle that is intact or able to carry oxygen has a chance to grasp it as soon as it enters the lungs. Pure oxygen has been recommended for inhalation. If we consider that oxygen is conveyed to the tissues as oxyhemoglobin, a definite chemical compound, it seems that the oxygen carrying capacity depends entirely on the amount of hemoglobin present and it would seem that plenty of pure air is best adapted to supply the demand. Clinical reports, however, speak favorably of its administration in various diseases and remembering the apnea it causes in healthy individuals it seems that an over-saturated solution in serum may take place.

If oxygen is handy it deserves a trial, especially in cases where dyspnea is present.

Next of importance is the cleaning of the emunctory channels, all of which are choked with effete matter. The deep jaundice,

the profuse icteric perspiration, the biliary diarrhea, the vomit, and hemoglobinuria represent nature's supreme effort to rid the system by way of skin, bowels and kidneys of an enormous quantity of obnoxious matter and the physician must be on the alert and assist and *judiciously* facilitate this process; any measure designated to interfere will be injurious.

The skin is attended to by bathing, tepid bath and friction, especially if it is cold and clammy and the temperature high; sponging, with pure water, to which alcohol or vinegar has been added, may be found sufficient in some cases. The bowels ought to be cleansed with large watery enemas or saline laxatives every day and purging is best controlled by bismuth and morphin, hypodermically. Frequent drinks of pure water, hot or cold as indicated will wash the stomach, raise vascular tension and act as a diuretic. Before using any of the stronger diuretics we must remember that the kidneys are inflamed, the tubules choked and the cells swollen and partly degenerated. For vomiting and pain hypodermic injections of morphin and for delirium morphin and chloral.

Collapse has to be treated as in other cases with alcohol, strychnia, atropin, subcutaneous injections of normal salt solution or large warm enemata of the same.

The anemia must be treated with iron and arsenic preparations. Arsenic is valuable in all anemias, especially in the severe types, and it has almost acquired the name of a specific in that form which follows repeated malarial infections.

This as well as turpentin, ergot, phosphate of soda, and many others too numerous to mention, have been claimed to cure hemoglobinuria, the patient getting well often in spite of the treatment.

If we consider that the disease varies in gravity in different individuals and within certain districts; that in many cases quinin in large doses has been administered before the physician is called, and that in the majority of cases the doctor adds an additional dose or doses of this drug, sufficient to kill all plasmodia, before he changes his treatment, and further, if we recollect that spontaneous recovery is frequent (Kohlstock, Plehn, Marchiafava, Bignami and others), we can understand why one man should believe in the curative action of quinin and another not, and why one man may recommend a certain drug

as a specific and another an agent with entirely different therapeutic properties, and why success should differ so much.

To wait for nature to destroy the plasmodia when we have a ready means to do so seems almost criminal. The cases treated by Dr. Odom and myself on the foregoing plan have all promptly recovered.

Last and not least, the diet must be well selected, but as this does not differ from that given in the infectious fevers it is unnecessary to dwell upon it here.

The indications for proper general treatment are many, and in this as in many other diseases, the often quoted "good physician is the best medicine" is of the greatest importance.

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#### THE ULTIMATE OR PREDISPOSING CAUSE OF DERMATO-NEUROSES. AN HYPOTHESIS.

BY J. N. ROUSSEL, M. D., VISITING DERMATOLOGIST TO TOURO INFIRMARY,  
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I desire to say, as a preface to this paper, that the subject being such a huge one, it was necessary, to encompass it in a paper of this length, to treat of it in a very general way.

I believe that most subjects of this nature are first treated thus, and the more important points taken up in a more specific way later.

In a general way, I believe the statements contained herein to be true, but at the same time, I fully appreciate the fact that its shortcomings are many and while I feel that it will meet with considerable adverse criticism, because of its nature, I shall be satisfied to have it accomplish the very simple mission of setting someone to thinking—thinking along this line. Because, owing to the temptation, or the seeming inclination of people, as a class, to accept, as still sufficient, any time-honored scientific dogma having respectable sponsors, it becomes possible and extremely probable that serious errors are, as they certainly have been, propagated by very intelligent, but misguided men. They have little, if any, doubt of the truth and perfectness of current and scientific doctrines. They do not exercise their powers of thought and of reason sufficient in their investi-

gations. Their minds are quite satisfied with the evidences adduced, and the magnificent talents displayed by their propounders overwhelm them completely.

Their respect and reverence for these splendid talents is so very profound, that it invests the doctrines, and protects them from criticism, as the armor of the great men-of-war protects the inner and more destructible parts of the ship.

In more subordinate matters, their acumen is great and wonderfully complete in their investigation, but, the matters of prime importance are as if preserved under lock and key from the dangerous prying of reason and investigation.

But in science nothing should be held so sacred as to be above the strictest scrutiny with the light of reason—not once for all, but quite frequently, for that light becomes ever brighter, and more searching, as our knowledge increases with our increasing years.

As the learned Huxley has well said: "Men of science do not pledge themselves to creeds: They are bound by articles of no sort. There is not a belief, that it is not a bounded duty, to hold with a light hand, and to part with it cheerfully, the moment it is proved to be contrary to any fact, great or small." But, while they must be "freed from the grated cells of a creed," they must also be intellectually hospitable. They must admit the right of every human being to see for himself; "to hear with his own ears, see with his own eyes, and to think with his own brains," as Ingersol was wont to say, and at the same time give due consideration to the results, whether they be right or wrong.

A review of the history of neurology shows it to have been one of successive illusions; each held tenaciously for a time, and given up only with the greatest reluctance.

This has also been the case with all investigations into the realm of the great "Unknown," and for obvious reasons it could not well have been otherwise.

The most chimeric ideas of the nervous apparatus, its workings, and its ultimate nature, have generally prevailed until now, and even now, it is very questionable whether anything like true ideas of its mechanism exist. Not only is it remarkable that the number of men who hold intelligent ideas of the ultimate nature of the nervous apparatus and its mechanism, is

small, as compared with those who entertain very primitive ideas or who entertain no ideas at all regarding the subject; but even these intelligent ideas are only recently derived from their fallacious predecessors, and being thus recently born of error, it is very improbable that they should be wholly devoid of error.

However, since there is a "soul of goodness in things evil, there is also, most probably, a soul of truth in things erroneous." "And while many admit the abstract probability that a falsity has usually a nucleus of reality, few bear this abstract probability in mind when passing judgment on the opinions of others."

A belief that is finally proved to be at variance with facts, is cast aside with indignation or contempt, and, in the heat of antagonism, scarcely anyone inquires into what there was in this or that belief which commended it to men's minds. Yet as Mr. Spencer says: "there must have been something. And there is reason to suspect that this something was its correspondence with certain of their experiences—an extremely limited or vague correspondence perhaps, but still a correspondence. Even the absurdest report may in nearly every instance be traced to an actual occurrence, and had there been no such actual occurrence, this preposterous misrepresentation of it would never have existed."

And thus it is with human beliefs in general. Entirely wrong as they may appear, the implication is that they germinated out of actual experiences. But having no tutor, the human mind has to make its own investigations, solve its own problems, and correct its own mistakes, which, in all probability, accounts for the uncertainty and confusion of ideas regarding the ultimate nature of the nervous apparatus and its mechanism.

That nervous matter, specifically speaking, is an example of the homogeneous in nature, we have reason to believe, and, accordingly, we are forced to recognize its instability.

Speaking generally, of course, we are not warranted in assuming that the material portion of the nervous apparatus is in a state of homogeneity, for the reason that it is a highly specialized and highly differentiated tissue which is of necessity heterogeneous and stable. But it is the *nervous matter* as contradistinguished from the *nerve matter* to which the homogeneity belongs.

To illustrate what I mean by *nervous matter* in contradistinction to *nerve matter*, the old method of comparing the nervous apparatus to a charged storage battery will amply serve the purpose. Supposing, then, the nervous apparatus to be the storage battery; the battery and its component parts would constitute the nerve matter, and the current the nervous matter, which many facts conspire to prove is of the homogeneous and unstable.

This proposition may be best dealt with under the more specific shape, that the condition of homogeneity is a condition of unstable equilibrium.

The phrase "unstable equilibrium" is one that is used in mechanics to express a balance of forces, of such kind, that the interference of any further force, however minute, will destroy the arrangement previously subsisting and thus bringing about a totally different arrangement.

The disturbance of the equilibrium of the unstable in Nature is a continuous process, and from the very nature of things, it could not well be otherwise, because no two bodies are alike in form, in function or in force; from which it follows that their molecules are likewise unlike, and as a natural consequence, it is impossible to maintain them in a state of equilibrium for obvious reasons. In reality, then, the proposition is, that the state of homogeneity is one that can not be maintained, for the reason that the several parts of any homogenous aggregation are necessarily exposed to varying forces—forces differing in kind and amount, and being thus exposed to these varying forces, they are of necessity differently modified, which difference once commenced, must tend to become ever more marked, which condition is among the most remarkable features of nearly all diseases depending upon disturbances in the nervous apparatus.

Of course reference is here made particularly to the functional disturbances for obvious reasons, and among these the hysteric conditions are the most prominent, because of their frequent occurrence. We all know how disappointingly persistent are these conditions, and the fact that they are most certain to become aggravated by the help of time, is one of the most solemn factors in their prognosis.

But investigations into the physiology of functions in general have disclosed the fact that all functions are presided over by

certain specific sections or centres in the nervous apparatus, in which is locked up a quantity of the "unstable nervous-matter," placed most favorably for being acted upon. And other things being equal every excitation of a nerve centre reduces for a time this quantity of looked-up nervous matter, and leaves not only a diminished quantity, but a quantity that is less favorably placed for being acted upon, leaves, therefore, a decreased readiness to undergo changes when disturbed, as well as a decreased stock of molecular motion to be liberated. These acts being reproduced over and over again, imply the activity of a physiologic mechanism inherent in the organism, and that the proper development of these specific centres is an absolute necessity for the correct execution of said functions is a deduction that must necessarily follow the consideration of these facts.

Whether function originates structure, or structure originates function, is a question that does not concern us here, but that function is dependent upon structure, we have many reasons to believe, because, in the absence of structural arrangement the forces evolved can not be so directed and combined as to secure that correspondence between inner and outer actions which constitute life in the abstract.

A cut nerve, a broken bone, or a severed artery are alone sufficient to convince the average mind of the absolute necessity for the proper structural arrangement of organic substances for the perfect execution of their functions.

Hence, many facts conspire to prove that the arrangement of organic substances in particular forms are the ultimate cause of all vital changes, depending upon the properties of such substances. It follows, then, from this proposition that the perfect execution of the functions of any particular organ or set of organs depends ultimately upon the perfect development of their governing centers in the brain, which, as a matter of fact, we know to be true from actual observation in the cases of the congenital mental deficient.

The *nerve matter*, also, as well as the nervous matter being in the beginning homogeneous and unstable, must of necessity in the process of development undergo a change to heterogeneity or stability to properly govern the more unstable *nervous matter*, and according as the development of these specific portions of *nerve matter* is or is not perfect; according to their degree of

change from the homogeneous to the heterogenous, so will the function over which they preside be normal or otherwise.

*And the proposition follows that in that condition of unstable equilibrium which these centers obtain from lack of development lies the ultimate or predisposing cause of all the affections of the skin and other organs depending upon derangements in the nervous apparatus, and their cure lies in our ability to restore their equilibrium when disturbed.*

I say predisposing cause, because the nervous matter being locked up in undeveloped nerve centers, its several parts are more exposed to the varying forces, and being thus exposed, is more liable to modifications of a more or less serious nature, which tend to become ever more marked according as the forces increase or diminish in intensity. Hence, I believe that as we find different forces or agents causing an elevation of temperature by a disturbance of the heat-regulating center, so also will several and entirely different agents produce the several affections of the skin, which are ascribed to disturbances in the nervous system, and to seek for their cause in any single agent, I am firmly convinced is a useless waste of very valuable time, and an expenditure of funds which would serve an infinitely better purpose if applied to something else. However, as the politicians are wont to say, "these are my sentiments, but if they don't suit, they can be changed," by which I mean to convey, that if they are not in accordance with facts, I am willing to be convinced.

In the matter of determining the specific nature or the cause or causes which give rise to the various so-called functional diseases—diseases supposedly depending upon disturbances in the nervous apparatus, as, for instance, such affections as lichen planus, pemphigus, dermatitis herpetiformis, and a number of others too numerous to mention, what have the usual methods of investigation revealed? As far as I am able to learn that chapter of the pathology of the dermato-neuroses, which treats of their etiology is not materially more complete to-day than it was fifteen or twenty years ago, in spite of the continuous efforts of the profession in that direction during this time. And from the very nature of things, we could not reasonably expect any other condition of affairs to exist, for the very palpable reason that there is no fixed standard of health in any collection of



organisms, and among the self-adjustments of living bodies to the wide range of circumstances controlling their existence, it is, most probably, impracticable to mark a line separating those which may reasonably be called healthy, from those which may as reasonably be called diseased. At that time these affections were simply said to be of nervous origin, and to-day the same is said of them, with absolutely no attempt to explain, even on hypothetic grounds, in what manner the nervous system produces them, and why some get well in such a short time, why others linger, and why should apparently hopeless cases emerge, as it were, in one night, without even the grave-clothes on them.

H. C. Wood says, in a remarkably well written article, "that we can scarcely conceive the nature of a lesion, which, after having for years held the nerve centers in an iron grip, suddenly lets go its hold. For its demonstration, the microscope is useless. Our best instruments show us in the human spermatozoa nothing but irregular, transparent specks of protoplasm, not to be distinguished one from the other. Yet the records of past generations are written in the little formless particles, in which, also, are enfolded the potentialities of future successions of men."

Structure and function seem so widely independent, that it is almost hopeless to expect that we shall ever understand the infinitely delicate changes which take place in the complex protoplasm of the brain, and to be able to say why waves of emotional and mental paralysis sweep over the individual. I believe that the changes are physical, but I believe that it is not within human power to recognize their nature. The microscope is a coarse, blundering tool, powerless to reveal the ultimate changes of nervous protoplasm gone mad." And, in my humble opinion, this fact has done more to impede progress along these lines than anything else, for the simple reason, that investigators of our times have resorted to the expedient of seeking by direct experiment to reach the desired goal. But this method has clearly fallen short of the solution of the difficult problem, and, there remains, without ignoring the valuable assistance supplied by this method, and the treasures it has yielded, recourse to the employment of analogy along the lines of physiologic psychology, which latter method is practically untried, and while making no promise of certainty, gives at least, some hope of helpfulness.

## SOME IDEALS FOR THE PHARMACIST.\*

BY ISADORE DYER, PH. B., M. D., NEW ORLEANS.

The demands for education have at all times created the means, and whether in ordinary or in special fields, the success can only be measured by the purpose and by the result.

The pioneer has always found the way hard, but difficulties and the accomplished task make the end so much the more sweet. As ages roll along in the history of time, the names of great discoverers, the achievements of the silent workers and the glory of the patient masters in each and every field of mechanics, art and science grow more and more effulgent in the light of example and in the broad spirit of aspiration.

No success was ever reached by idle lookers on; the work of the minute and the hour must preface and must punctuate the day with effort and endeavor for a result to be worth while.

Pharmacy does not differ, in its demands upon the man, in any quality from other fields of applied science. Just because the spirit of commercialism which rules the civilized world dictates obligations of submission to certain of its demands is no reason why the sense of right should be lowered. The revolution against the present condition of things is on the way; the prostitution of the drug store to all sorts of uses, while pharmacy is its excuse for being, must find its remedy.

The alchemists of old were blessed in the sanctity of their calling and they were true to their ends. Even though they sought ideals impossible of consummation, it is in evidence to-day that the very high purpose of the early chemist has impressed upon each field of subsequent development a need of attention and close analysis.

Pharmacy is an evolution; and an evolution that grows closer to as it is separated from its prototypes. Whether in the field of organic nature, or in the laboratory of the synthetic compounds, the broader field of chemistry is adverted to at each step of pharmaceutic progress. The physiologic action of a drug dictates its usefulness in medicine; the laboratory is the crucible.

It is no longer adequate for education that a bottlemasher shall step into his master's shoes. Even if to-day the most of

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\* Address before the New Orleans College of Pharmacy, Graduating Exercises, May, 1901.

drug stores permit the dispensing of prescriptions by incompetent underlings, there are yet men of the proper mold left to be honest withal.

The very enactment of laws creating examining boards for would-be pharmacists is an evolution aiming at the proper training in his education.

Time was when the priest and doctor were alike or were one or the same person. Time also was when the priest was both doctor and pharmacist as well. As races have grown out of primitive living in organized society these things have changed from crude knowledge into systematic, tangible facts, correlated and duly arranged. The Rosicrucians' search for the art of making gold and the futile explorations for the philosopher's stone and the elixir of life have only made experiment the more exact.

All sciences meet on common ground and each is bound to the other. If in the epochs of the history of science, some have grown apart, it is just an example of the differentiation of species, the division of families, each progenitor setting up new kinds, but all kindred.

Are pharmacy and medicine still maintaining that family relation and tradition? In the scientific sense most assuredly, for as a matter of fact, recent records show that it has been at the hands of the physician chemist that the newer *materia medica* has developed.

In the army of the nations, however, in the divisions which make up the rank and file, the doctor and the druggist are daily working at different purposes. The basic principles which many of each class seem to serve are 1st, making money, and 2d, using the public to that end.

The cry of the druggist every now and then, that the doctor is given to prescribing ready-made medicine, and that pharmacy is becoming a lost art is a curious paradox. He first crowds his shelves with patent and proprietary medicines; floods the physician's office with notices and samples of these; begs him to help the sale, and then complains that the legitimate business of his occupation is being destroyed.

It is not the intention here to discuss this point at further length, for it rests with those who teach and those who practice pharmacy to recognize the evils which such parasitic conditions

provoke. Pharmacists in the pure practice of their profession must for their protection see to it that the future rids the counters of patent medicines, whose merit is in the label, and they must destroy the tendency of the times expressed in the daily newspaper advertising, a more potent enemy to honest pharmacy than any other.

The law has already begun in some States, and it must gradually develop in others. The future of the pharmacist should, then, be bright in prospect and achievement.

Precept and example are kindred exponents of the better education. Francis Bacon analyzes the purposes of learning into power and wisdom, and is free in putting the former first. Herbert Spencer, in a more modern thought, considers the technical education as only corollary to a general acquisition of knowledge and acquirements. Montaigne considered character and action as higher educators than literature. Rabelais exemplified his ideas of education in his own practice and method. Born into the priesthood, he was learned in the philosophies and the languages—living and dead. As much a doctor as a priest, and more a man than either, he has served as a rock of thought development for many of the greater minds since his time.

The essentials of a technical education are hardly to be measured, then, by a curriculum. This serves but to stimulate the study of a broader scope. The rapid strides of the modern civilization leave less time for study than formerly, and science and literature grow faster than the mind of man runneth. The proof of time, however, demonstrates that the man who takes the time to gather knowledge reaps both the wisdom and the power.

Since the world began, crystallization of energy has gone on, and from time to time its potency is evident in some expression, mild or great in degree.

Long before the evolution of the human race Nature voiced its purposes in the explosion of force, creating geographic boundaries. In the confines of each have arisen, in epochal waves, the beauties of the exemplified law of nature in conserving forces. The germination of a seed, the mighty waves of an angry sea, the chemical thunderbolts of a sodden sky, the rumbling of an earthquake and the silent progress of a subterranean river, all voice the constant action of the force of Nature finding vent in power.

The evolution of species as time has marked its onward way, with each era of advance, has peopled every land with a more varied kind, until, as history makes us believe, the humankind became the master of it all. In spite of the variant aspect of the picture, as it has changed with generations of men; in spite of customs, or race or color, land or laws, the force of Nature ever rules the disposition of the kind.

The growth of material wealth, based upon the expression of industrial force, creating supply for a demand, which grows as peoples multiply, the increase of the peoples themselves and their ever-growing demand for satisfied ideals, morbid or pure, have together placed a higher value on the grosser things, and, as always follows, the dross must develop with the fine.

In the relation of energy to force, of motive to execution, of thought to action, of design to expression and of planning to achievement, there is always the consumption of supply and the accumulation of waste. Whether this apply to finer or to grosser things, the deduction follows that the expenditure of force results in the achievement of some purpose, with the waste of energy necessary, or perverted to useless or unintended ends.

As the world's ideals have grown broader; as they have developed into the appreciation of the higher accomplishments expressed in the examples of genius in every land where civilization has gathered force, the peoples have gradually reached after a knowledge of the higher things.

Ignorance is truly the stepping stone to knowledge, and the law of energy applies in the evolution of intellect from intelligence. Francis Bacon built his work on the Advancement of Learning upon the " manifold ignorance " of the human understanding, while confessing that the mind does " imbibe and treasure up the first notices of things."

If our argument be true, the evolution of energy from the various types of its physical expression, chemical, organic, has reached a higher phase in human endeavor in the psychic world. Here we find mankind at work delving into the explanation of the laws themselves which govern life—transmuting ether into flame and force; harnessing invisible atmospheres to do the bidding of a physical or mechanical contrivance.

The laboratory is to-day producing the germ plasm which promises the solution of the problem of life itself. The soul

of man is being analyzed and dissected from the physical point of view until the chimeric, metaphysic, superstitious and even the religious basis are being weighed in the balance.

Yet these are practical pursuits aimed at individual enlightenment, but borrowing knowledge from the stores of Nature's glorious supply to place them sooner or later before the curious and speculative world.

And while these higher or more difficult problems are finding their way to solution, are there are no ideals left in the more practical world?

Again, in all wisdom Bacon argues that the "greatest error of all is, mistaking the ultimate end of knowledge; for some men covet knowledge out of a natural curiosity and inquisitive temper; some to entertain the mind with variety and delight; some for ornament and reputation; some for victory and contention; many for lucre and livelihood; and but few for employing the divine gift of reason to the use and benefit of mankind." \* \* \* "If men were themselves, and not carried away with the tempest of ambition, they would be so far from studying these wicked arts as to rather view them, not only in that general map of the world which shows all to be vanity and vexation of spirit, but also in that more particular one which represents a life separated from good actions as a curse; that the more eminent this life, the greater the curse; that the noblest reward of virtue is virtue itself, and the extremest punishment of vice is vice itself; and that as Virgil excellently observes, good actions are rewarded, as bad ones are punished, by the consciousness that attends them."

The Hippocratic oath, even though no longer administered in its dignity to the graduated physician, is accepted by him as a guide to the law which governs his practice of his profession. In all time, the same humanitarian principles have governed medical practice, even if history does mark, and mar, its pages with the record of doctors villain to their cause.

To-day the chaff and dross which shadow genius, and which are as empty as the reflected image of a sunlit sky upon a stagnant pool find evidence, as in all time, in the flagrant pretenders in dishonest cause, who flaunt their vices in the faces of us all.

Education must go on, and while its purity must survive as the gold escapes in the crucible from the baser metals, the effort of all true-minded professional men should save some of that energy by removing the baser influences in advance.

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## Clinical Report.

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### THIRTY CASES OF ACUTE LOBAR PNEUMONIA WITH TWENTY-NINE RECOVERIES.\*

BY DR. E. D. NEWELL, ST. JOSEPH, LA.

This series of thirty consecutive cases of lobar pneumonia, extended from April, 1898, to December 15, 1899. I make these specific dates not to include an unusually favorable termination of a special number of cases, and thereby falsify statistics, but I do so to represent the beginning of a special method of treatment, and the full time this treatment was used in a stated locality. This locality is King, Madison parish, my former field of practice. I would further emphasize why I have so specifically called attention to the time during which these thirty cases were treated, and where they were treated, because in the same territory and under exactly the same conditions of season, race, poverty and ignorant attention from December 7, 1897, to April, 1898, I treated fifteen cases of lobar pneumonia with a mortality of  $33\frac{1}{3}$  per cent., but the medical treatment was entirely different.

It is usually conceded that pneumonia is more fatal during the winter and early spring than during the late spring, summer and fall months, and as my thirty cases extended through the spring and summer months, and the series of fifteen cases only extended through the winter months, it may be said that the season influenced the favorable results. However, 75 per cent. of the series of thirty cases occurred during the winter months. There are factors which are vastly more

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\*Read before the Louisiana State Medical Society, April, 1901.

important in affecting the death rate than season, and these are age and sex. In the series of fifteen cases there are ten males and five females, of the males the ages were from fifteen to forty, of the females there were two children, one old woman and two young women. In the series of thirty cases there were ten females and twenty males, the ages of both sexes ranged from ten to forty-five years. This age under every method of treatment should give a more favorable death rate than the usual indiscriminate statistics. The average mortality of ten of the large American hospitals is 26 per cent., the mortality in private practice under favorable conditions is much less, and in military hospitals, where the patients are all young or robust, the mortality is less than in any other practice. Andrew Smyth, of New York, claims that it is about  $5\frac{1}{2}$  per cent. In this series of thirty cases the mortality was  $3\frac{1}{3}$  per cent., under the most adverse conditions of race, poverty and ignorance. However, this very poverty may have favorably influenced the mortality, as all these patients lived in the well-known open negro cabin which permits the very freest circulation of air. Three-fourths of these patients I only saw twice during the attack, and none of them over one-half dozen times, although I would be consulted every day or two through the medium of friend or relative.

The treatment used in the first series of cases that had a mortality of  $33\frac{1}{3}$  per cent. was as follows: First day 5 to 8 grains of calomel, followed by saline cathartic, hypodermic injection of one-fourth grain morphin to relieve pain, and mustard jacket over consolidated area. If pulse was not over 120 per minute, 5 to 10 grains ammonium carbonate, combined with the usual cough remedies, were given every four hours. The nourishment, strictly liquid, was given every two hours regularly. Whisky was given every two hours during the day and several times at night, two teaspoonsful at first, and as pulse increased in frequency, the dose was increased. As soon as pulse increased to 120 or more per minute, I began with 10 minims of tincture of digitalis every four hours, day and night, and increased to 15 minims as the pulse grew faster and weaker. Temperature when 104 deg. or above was reduced by cold sponging, otherwise no treatment was used to reduce temperature.

The treatment in the second series of cases that had mortality of  $3\frac{1}{3}$  per cent. was very similar to the first series with the ex-



ception that strychnin was substituted for digitalis—no digitalis was given at all. The hypodermic of morphin and atropin was given to relieve pain, a large mustard plaster over consolidated area, which was allowed to remain on long enough to thoroughly redden the skin, but never long enough to blister. Five to ten grains calomel at one dose, followed by magnesium sulphate if bowels did not move freely. When temperature was not above 104 deg. nothing was done to reduce it, but when it was above 104 deg. the hands and face were bathed in cold water and three grains of acetanilid combined with strychnin and citrate of caffein were given, if patient was still very restless and had much fever. A strictly liquid diet was enforced on all the patients; this diet consisted almost entirely of milk, and patients were rigidly fed every two hours day and night during the latter stage of the disease when the pulse goes to or above 130; but during the first few days if the pulse did not go to 130 and was full and strong the patients were fed every two hours while they were awake, and only two or three times at night. In most of these cases on third or fourth day a second dose of calomel was given, and all during the attack the bowels were made to move once or twice a day with sulphate of magnesia. The strychnin sulphate (1-40 gr.) was begun on *first day in every case*; it was given every fourth hour *day and night*, this I insisted upon and told the attendants that if they forgot all other instructions and patient refused all other medicine he must be made to take the strychnin every four hours regularly. When pulse was 135 or above and was weak 1-30 strychnin sulphate was given every four hours, when above 145, 1-30 grain strychnin every three hours, and when 160 and scarcely perceptible at wrist and patient cold, clammy, dimly conscious, and panting for air, then *1-20 grain strychnin every three hours was given, and one ounce of best whisky every two hours.*

I recall vividly a patient of this kind; his respiration was 80 per minute, pulse 160 and above, just a faint movement to be felt at all at wrist, cold perspiration saturating his clothes, the poor man panting terribly for breath; as he expressed it: "Doctor, I feel like I was running a long race." This was a muscular, robust negro of 25, and the only portion of his lungs not completely consolidated was the upper anterior portion of right lung. This patient made a good recovery. The one case

that died was complicated with typhoid fever and I did not see her until the ninth day of illness. The following is a short history of her case: October 18, 1898—Clarence Washington, colored, female, aged 14, well developed, previous health good, has been in bed nine days, and *gradually growing worse*; has had fever continually, temperature 104 2-5 deg., pulse 110, resp. 36, tongue very dry and hard; bowels have not acted for two days, some few subcrepitant râles over both lungs posteriorly; physical signs did not indicate any consolidation, but patient was so weak I could not examine thoroughly for physical signs, no pain in chest or side, but some cough and rusty-colored sputum. On the 19th, temp. 105 2-5 deg., delirious; pulse 120, tongue somewhat better. October 20, temp. 100 deg., pulse weak and fast. October 21, pulse 130 and very weak, temp. 102 4-5 deg. October 22, A. M., temp. 103 deg., very weak and delirious; P. M., 103 2-5 deg.; died that night. As is usual with these cases, patient did not show marked signs of either disease, but the rapid respiration, rusty-colored sputum and sudden drop of temperature was sufficient to diagnose pneumonia; the other symptoms readily indicated typhoid.

Two of the cases I will call special attention to, as the treatment I used was entirely different from the treatment I used in the other twenty cases. In these two cases I used sodium salicylate and salol; this treatment was used with the hope and expectation that the sodium salicylate would abort the pneumonia by destroying the pneumococcus.

CASE I.—Robust negro, aged 30, chill night of November 15, was playing cards in an open shed at the time, the chill was preceded by severe pain in the side and has had it ever since. Pulse 90 and not strong, resp. 36, temp. 102, râles over lower lobe right lung, some râles on inspiration over lower lobe right lung, some râles on inspiration over lower portion left lung anteriorly. Complains of pain all over, but more on left side; rusty colored sputum very marked, considerable cough. Gave 10 grs. calomel; salol 5 grs. every four hours. Hypodermic of morphin was given at once for pain. November 16—Has rested beautifully since I left; is free from fever; resp. normal, pulse 72, but weak; sub-crepitant râles, all under left axillary space; rusty colored sputum markedly present. November 17—Temp. 105 $\frac{2}{3}$ , pain in left side severe, dry hacking

cough; he had a slight chill during the night; salol was continued, morphin hypodermically for pain. I began here with strychnin and whisky, as the pulse was weakened; also gave quinin, thinking that the patient might have malaria, also. The next morning he was free from fever, respiration normal, and he made a rapid recovery without any further rise of temperature. I have never fully decided whether the second chill was due to malaria or relapse of the pneumonia that had been aborted; but I am rather inclined to attribute the second chill to relapse, as others have had the same relapses to occur where it could not be attributed to malaria.

CASE II.—On November 16, 1898, I was called early one morning to see Thomas Lee, colored, aged 25, healthy, robust laborer. During the night he had a severe chill; this morning he had severe pains in left side, marked consolidation upper portion of left lung anteriorly and posteriorly. Has been suffering for two days with pains in stomach and abdomen, caused from eating partially cooked liver. Temp.  $103\frac{1}{2}$  deg., resp. labored, rusty colored sputum; mustard to side; hypod. morphin, 10 grs. calomel. and three doses sodium salicylate in one drachm doses to be given six hours apart. On 17th, pulse was 110 and fair, temp. 100 deg., resp. 36, perspiring very profusely all over. Bowels acted well during night. Complains of but little pain, coughs very little; no bloody expectoration. Slept very little, but rested well. Continued sodium salicylate. On the evening of the 17th I saw him again, and he was perspiring so very profusely from the effects of the sodium salicylate, that I had to discontinue it. November 18, temp.  $98\frac{2}{3}$  deg., pulse 86, very good, resp. 15, no pain whatever, sibilant and sonorous râles over consolidated area. Dullness was present, but not so marked as at first. When I discontinued the sodium salicylate I gave 5 grs. salol every four hours. November 19, temp.  $99\frac{1}{3}$  deg., pulse 72 and strong, resp. normal. A second dose of calomel was given. Throughout this attack he took whisky, but no strychnin was given. The distinctive feature of this case was that within thirty-six hours from the time he had the pneumonia chill all the severe symptoms had passed, and in sixty hours or less there were no symptoms whatever of the pneumonia, but the râles and slight dullness.

I did not use this treatment in any more of my cases, as it caused so much discomfort from the very profuse perspiration,

the ringing in the ears and the decided weakened appearance of the patient. While he was under the influence of the sodium salicylate, of salol, the perspiration was so profuse that the patient's clothing had to be changed several times each day.

There were a few points of interest in these cases that I will call attention to, and the most notable one was that the pain was as often referred to the abdomen as to the side, and this is especially noted in my colored patients. The diagnoses of the cases was not at all difficult, the majority of these cases were diagnosed as soon as you saw patient, and in many cases you could easily tell the lung involved as they almost invariably lie on the side affected. Every one of these cases showed rusty colored sputum, but in some cases you had to examine sputum very carefully to detect the blood. Every one of these cases were examined thoroughly to detect the physical signs of consolidation and to confirm the diagnosis made from appearance and history. Some of these cases had one entire lung involved in the consolidation and a large portion of the other one consolidated, and yet would not show symptoms of much distress, and you could not have made a diagnosis of pneumonia without the physical signs of consolidation. These cases invariably did well. There were cases in this series that showed profound invasion of the germs, you saw a patient with distressed, anxious and imploring countenance, eyes that would watch your every moment and follow you restlessly around the room, nostrils widely distended, cold, clammy perspiration over face, hands and body, breathing fast, shallow and painful temperature often not above  $102\frac{1}{2}$  degrees, but pulse very weak and rapid. In these cases you would find usually but slight consolidation, one case in a convict camp only the lower portion of right lung was involved. These were the cases that were watched most carefully and where the strychnin and whisky were used to the fullest extent.

# N. O. Medical and Surgical Journal.

## Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

### THE HEALTHFULNESS OF NEW ORLEANS.

The September number of the *Medical Review of Reviews* abstracts from the mortality statistics of the Census Bureau, and among other data quoted there appears a table of comparative mortality for the year 1900 in cities of over 100,000. In this table New Orleans is shown with a death rate of 28.9 per 1000 and with the highest quoted rate. Memphis follows with a mortality of 25.1 per 1000. Then in succession are given the following cities with respective mortality rates: Washington, 22.8; Fall River, 22.4; Philadelphia, 21.2; Baltimore, 21.0; Jersey City and Scranton, Pa., each, 20.1; New York, 20.4, etc., while St. Joseph, Mo., has a death rate of only 9.1 per 1000.

We feel that without correction this showing is far from the state of affairs to be desired in our city, and in the light of the importance of such figures there should be some explanation.

According to the official figures as published monthly by us, shown in the table given below, the rate for New Orleans should be 24.66 instead of 28.9.

New Orleans is perhaps alone in the numerical importance of its negro population, and the mortality records as presented by the local board of health show a very high death rate among the blacks.

As corollary to the above representation of facts we would like to submit the following table taken from the monthly reports of the New Orleans City Board of Health, and we believe that the apparent unhealthfulness of the Crescent City will be explained without much further argument.

Population of New Orleans, January, 1900 (estimated), 300,000; white, 210,000; colored, 90,000.

Death rate per 1,000 per annum for each month :

	White	Colored	Total
January .....	28.28	44.80	33.24
February .....	24.00	41.86	29.36
March .....	22.57	39.60	27.71
April .....	18.40	42.70	25.72
May .....	21.25	38.88	26.72
June .....	23.71	32.73	27.92
July .....	18.46	37.73	22.44
August .....	14.17	24.93	17.40
September .....	16.63	27.78	19.64
October.....	18.40	27.46	21.12
November .....	19.52	26.53	21.64
December .....	21.08	31.06	24.08
Mean.....	20.53	34.62	24.66

It will be seen from this table that the white mortality is barely 60 per cent. of the colored, and that with half as many more deaths per thousand in the negro population the conditions of the healthfulness of the major part of the population appears to be much more affected than is actually the case. The habits of life and the exposure to conditions of climate and of disease so well known among the colored will readily explain the high death rate. For the ten years from 1886 to 1896 nearly 30 per cent. of all deaths was due to consumption and this is a common cause of death with the negro. The diseases fatally prevalent elsewhere are seldom found in severe types in New Orleans. The diseases occasioning death are those of provincial rather than urban habit; consumption, pneumonia, heart disease, debility, nephritis, enteritis, with typhoid much lower in the list of factors than is the case with other large cities.

During the extremely hot weather of the past summer New Orleans experienced little discomfort excepting for a very few days. The winters are open and seldom severe. The improved conditions in sanitation have added much to general comfort, and we feel that more and more the features of New Orleans as a resort for health and pleasure must become known as visitors make their ways to this cosmopolis of the Gulf.

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#### MODERN INTERNE SERVICE AT TOURO INFIRMARY.

The Touro Infirmary of New Orleans has decided in future to do away with interne students as resident members of the hospital staff. Hereafter these positions will be filled by physicians.

The system as followed in New Orleans has become obsolete elsewhere, and as it has existed both at the Touro and the Char-

ity Hospital the status is anomalous under the present laws of the State. At Charity Hospital the resident students act as physicians in prescribing and in treating patients, although under the guidance of the visiting or the resident staff.

The evolution of conditions has demonstrated, now some twenty years, in New York especially, that the undergraduates system of interne service is wrong. Formerly Bellevue Hospital and the old Charity (now City) Hospital, in New York, were so conducted. To-day it is different. The same positions are much sought after by graduated physicians who undergo quite rigid examinations to obtain the appointments. In some of the institutions the appointments are for the most part confined to the graduates of the New York medical schools, but in all of the New York hospitals there are one or more vacancies open to applicants from any section.

The result is evident in the system in vogue. There is more dignity attached to the position of interne, and the visiting staff is proportionately elevated in professional and public estimation.

The importance of New Orleans as a medical centre can not be doubted, and while this may not impress itself on all as it should, it is only a matter of time when the knowledge of this fact will prevail.

The Touro Infirmary has deserved our commendatory notice because this proposed step is current with the spirit of advance of the century. It demonstrates the appreciation of the fact that the elevation of the standard of service in the institution must add to the dignity and prestige of both the Touro itself and all connected with its medical entourage.

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## Society Proceedings.

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### ORLEANS PARISH MEDICAL SOCIETY.

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MEETING OF AUGUST 10, 1901 (NO SCIENTIFIC PROCEEDINGS).

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MEETING OF AUGUST 24, 1901.

DR. MARTIN reported a case upon which he had operated for a fractured patella by the method suggested by him one year ago.

It was a case of refracture, the original fracture occurring four weeks previously. Edges of bone were freshened and held in apposition with large volsellum forceps. An effort was made to introduce staples, but the lower fragment was too small and staples would not hold. A double silver suture was passed through the tendon above and the patellar ligament below and carried over the top of the patella and drawn tightly. The sutures held the bones firmly in apposition. The skin incision was closed and leg encased in a plaster of Paris bandage, and set at an angle of about 105 deg. or a flexion of about 15 deg. The cast was removed at end of three weeks, passive motion begun by extending the leg which gave it a swing in a radius of 15 degrees without bringing any strain on the patella. Nothing further was done for patient. She was instructed to use the leg carefully; walking first on crutches and later to use a stick. Six weeks after the operation she had perfect use of the leg and could flex it at right angles to the thigh.

DR. E. W. JONES reported the *case of an infant* one month old, which had recently come under his observation, presenting a rather remarkable *congenital anomaly of the eyes*. The pupils were not in the middle of the iris, but to one side. Sight was good, the pupils reacting normally to the ordinary stimuli; and in fact all the functions of the eyes were good.

DR. E. J. HUHNER mentioned the *case of a man* 29 years old, who two weeks ago had suffered an attack *simulating intestinal occlusion*. The temperature being at one time 101.5 deg. Cathartics were administered, and patient had gradually recovered, being presently well. He reported the case because of the obscurity of the symptoms.

DR. MARTIN asked if the patient had ever had gonorrhoea. DR. Huhner answered no. Dr. Huhner said that he at one time suspected an abscess of the genito-urinary tract. Dr. Martin asked if there was any pain at beginning. Dr. Huhner said there was. Dr. Martin stated that from the symptoms mentioned he was inclined to believe the patient had a peri-prostatic abscess.

DR. GESSNER reported *two cases of sloughing following the injection of cocain in 2 per cent. solution*. Both were cases of circumcision. In the first case about 25 or 30 minims were injected, and 2 sloughs about the size of a quarter resulted.



The latter case was similar, but the slough was slightly more extensive. Dr. Gessner asked if any one else present had had a similar experience or heard of such cases.

DR. MARTIN asked if extensive infiltration was used. Dr. Gessner answered that there was not.

DR. E. W. JONES had seen cocain used in eye work in 4 per cent. solution without evil results.

DR. MARTIN illustrated an improved method of circumcision which he had recently employed. The foreskin is first slit longitudinally along the dorsum. When the proper point has been reached with the incision, the cutting instrument, preferably scissors, is turned, and by a circular incision the prepuce is amputated. One of the essential features of the operation is to follow the incision with the line of suture; never allowing any considerable length intervene between the cutting instrument and the last suture. In this way hemorrhage is admirably controlled.

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#### MEETING OF SEPTEMBER 14, 1901.

DR. E. H. WALET read the *Report of A Case of Fracture of the Base of the Skull*:

On the 21st of last July, at about 3 P. M., I was summoned to the bedside of this young man, 23 years of age, who about three-quarters of an hour before sustained a very serious accident in the following manner: While riding on the step of a crowded electric car on St. Charles avenue he swung aside to let a passenger out, and in doing so his head struck a tree. The impact was over the right temporo-parietal region. He fell to the ground senseless, bled from the nose, right ear and (as subsequently discovered) from the pharynx. He was conveyed to his home by the ambulance, a distance of a few squares only.

I found him in a state of unconsciousness from which he had not rallied since the accident; still bleeding rather markedly from the ear, restless and tossing, especially if touched at all. Examination revealed no depression of the skull, but contusion of the scalp in the area described and particularly above the mastoid region. Pulse was 70, full and regular, respiration slightly accelerated and irregular, both as to type and fre-

quency. There was no evidence of any paralysis; jaws were firmly contracted so that no oral examination was possible. Owing to his great irritability no thorough examination of ear and eyes could be made; however, there seemed to be photophobia, and when the lids of the right eye were separated a slight hyperemia of the conjunctiva was detected; pupil seemed a little dilated at first, but later on appeared normal.

The nature of the injury made me suspect the possibility of hemorrhage from rupture of the meningeal, as a complication of the fracture at the base.

However, I temporized on account of the absence of any symptoms of paralysis, and owing to the fact that he was doing well under the circumstances.

Treatment, instituted at once, consisted: 1st. In trying to asepticeise the external auditory canal and filling it with absorbent cotton. 2d. Making him as comfortable as possible, with the head slightly elevated and the ice bag applied to the injured spot. 3d. In ordering the surroundings as quiet as possible, and no handling of the patient.

Realizing the necessity of skillful nursing during the first few days, a trained nurse was secured for the night, but she proved totally inadequate to the task. In the evening patient's bowels moved involuntarily and retention of urine occurred, which necessitated forcible catheterization early next morning. This I kept up until the third day.

On the 22nd, efforts at feeding were made, but proved futile until the afternoon, when he swallowed a few drops of water. The pulse being slow and strong and patient in a state of coma when indicated, I deemed it unnecessary to use any hypodermic medication.

On the 23rd, deglutition improved, and small quantities of milk and Ducro's elixir were administered successfully. Citrate of magnesia was prescribed *ad libitum* to effect thorough movement of the bowels, deplete circulatory system and relieve presural symptoms with a view of minimizing the dangers of inflammatory process.

After consuming about two bottles of the magnesia, most of which he took, the bowels acted copiously, encouraged by the administration of a large enema.

Retention of urine now yielded to involuntary passage of

both urine and feces, and this state of affairs lasted for one week, when he was able to control himself in that respect.

Off and on, at this stage, bromide of sodium and ergot were administered to control undue restlessness and to diminish reflex irritability. Iodide of potash was begun on the 30th, 5 grs. *t. i. d.*, and a few days after 10 grs. *t. i. d.*; kept up for about two weeks. Temperature and pulse ranged as follows:

On the day of accident, at 11 p. m., temp. was 100.8 deg., pulse 62, respiration 28; on the 22d, temp. 100½ deg., pulse 62; on the 23d, temp. 100½ deg., pulse 54; on the 24th, temp. 100½ deg., pulse 50; on the 25th, temp. 99½ deg., pulse 50; on the 26th, temp. 99½, deg., pulse 60; on the 27th, temp. 98½ deg., pulse 50; on the 28th, temp. 99 deg., pulse 76.

Respiration was very much accelerated, but at the onset somewhat stertorous, and, later on, bordered on the Cheyne-Stokes type.

The first evidences of returning consciousness appeared on the 26th, but the condition of aphasia lasted until the 30th, when he could say a few words such as "no," "yes," and "mamma."

About the end of the first week a very distinct papular eruption appeared over the extensor surface of the left thigh—formed into pustules and then disappeared under ordinary treatment.

At this time, too, the serosanguineous discharge from the ear ceased to flow; but an inflammatory process developed in the parotid region with slight edema over the mastoid. Tenderness was so acute that any effort to cleanse the ear caused the patient to cry and become very irritable.

Temperature ranged between 99 and 99½ deg.

A moderate purulent discharge now manifested itself and continued for about two weeks, when syringing with antiseptic solution controlled it permanently.

During the second week there was a gradual clearing up of the faculties; aphasia merged into inco-ordinate speech which became practically normal at the end of the fourth week.

The first subjective symptom elicited from the patient was that of pain in the head—at the vault and on the injured side. Memory was very deficient during the third week; improved during the fourth and seemed normal about the end of the fifth.

It may be of interest to note here that, about this time, patient was able to recall what had occurred just prior to the acci-

dent; but the following two weeks remained a perfect blank to him.

The point of special interest to me, in this case, is the prolonged period of unconsciousness followed by complete restoration to the normal without surgical intervention.

DISCUSSION: DR. GESSNER thought that Dr. Walet and the patient are to be congratulated on the recovery. The fact that a patient has hemorrhage from the ear, nose and pharynx is not positive indication that the skull is fractured. The continuousness of the hemorrhage is the diagnostic point. The sero-sanguinous fluid by its escape from the ear shows that the drum head has been ruptured. The absence of paralysis in the case is of interest. Reported a case in a negro who was struck on the head; paralysis of facial nerve alone appeared on the same side. The case had bleeding from the ear which was packed. After this there was no hemorrhage. Subsequently the hemorrhage was found to be due to external violence. The blood from the ear was on the side opposite the violence. Reported another case which was struck by a tree. The pulse was slow, mind dull, no paralysis; pulse 35, respiration 13, pupils fixed. Hemorrhage from the middle meningeal artery was diagnosed. Case was operated upon, a depression of bone was elevated and bleeding point from posterior branch of middle meningeal artery was secured with catgut ligature. Improvement was gradual and it took a week for the pulse to reach the normal.

DR. LAZARD related a case which showed the value of a guarded prognosis in all cases of fracture of the skull even when the primary symptoms are apparently trivial. A German sailor was brought to the Charity Hospital about 2 A. M., after having been struck by a companion. In falling his head struck the sidewalk; he was only dazed, but had a slight trickle of blood from the ear. He was brought in only because he had hemorrhage from the ear. By 8 A. M. the hemorrhage had ceased and he asked to go out. This was denied. About 3 A. M. the next day while sitting up in bed, without any premonitory signs, he fell over dead. At no time were there symptoms of paralysis. His idea of fracture of skull is that little can be done excepting the details which offers more hope than one could suppose.

DR. KOHNKE could not see the value of ergot in hemorrhage from bone.

DR. WALET, in closing, said he did not think the hemorrhage in this case could have been caused by rupture of the drum alone. The external injury was only slight. The hemorrhage was copious and lasted several days. He could not definitely locate the seat of the fracture. Could not see the value of ergot in hemorrhage from bone. Believes, after Dr. Miles, it does good in capillary oozing.

Report (preliminary) of the mosquito commission was read and accepted. No discussion.

DR. PARKER, U. S. M. H. S., by invitation, related a case of *obscure peritoneal inflammation resembling appendicitis*. Incision about 3 inches long over McBurney's point. Appendix was normal. Belly flushed with saline solution and closed. Case died. Post-mortem showed a duodenal ulcer. There was no vomiting, no localized tenderness of the region of the duodenum.

DR. LAZARD called Dr. Parker's attention to the case of duodenal ulcer presenting many interesting features reported by Dr. Matas and fully reported in our transactions.

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#### MEETING OF SEPTEMBER 28, 1901.

DR. LEBEUF reported a case of *suppression of urine in a case of scarlet fever*. Culture was taken from the throat and found not to contain Klebs-Löffler bacilli, but an abundance of streptococci. In 54 hours patient was able to pass only a few drops of urine. There was present a great deal of depression, nausea, vomiting, weak pulse, temperature. Treatment consisted of saline diuretics, dieting, saline rectal injections, potash chlorate and warm clothing.

DR. DABNEY thought that the alkaline mineral waters are not to be despised, but the saline enema has a wonderful effect, and is especially commendable.

DR. THÉARD asked how much chlorate of potash was given.

DR. LEBEUF said, in reply, that two grains of the chlorate,

and 4 minims of the tincture of chloride of iron was the medication in his case, and added that at no time were there casts or albumin present in the case.

DR. MAINEGRA thought the potash chlorate when judiciously given could not do any harm. Has used the drug and the chlorin mixture in this disease with excellent results.

DR. MARTIN thought the saline injections were the sheet anchor in the treatment.

DR. MAINEGRA reported *a case of difficult labor*. He was called in the morning and found the os dilated to the size of a dollar. He ordered an enema and said he would return in the evening, unless sent for before. He returned in the evening and found that some slight progress had been made. He continued to visit the patient thrice daily until the 8th day, when he was called by phone to deliver his patient.

DR. GESSNER had a similar experience to Dr. Mainegra's.

DR. LEBEUF thought the condition simulated hysteria.

DR. MARTIN related *a case of premature delivery in malarial fever* arrested by quinin. Plasmodia were found.

DR. GRANER related *a case of calcareous degeneration of the placenta*. After some difficulty he was able to deliver the child, the placenta following. The placenta in the uterus felt like a piece of rock. The child was puny and showed no signs of circulatory disturbance. The placenta was not preserved.

DR. MARTIN spoke of *a case of typhoid fever*, in which he by accident found that thymol in 5 grain doses instead of thermol had a pronounced salutary effect. The temperature was decidedly influenced. The patient made an uneventful recovery and the convalescence seemed to be shortened.

DR. DABNEY said that thymol in 20 to 40 grain doses was given in the tropics for intestinal parasites. He thought that Dr. Woodbridge was right in saying that a case of pure typhoid should last about twelve days if properly treated from the first day. He used guaiacol and thymol in typhoid; thymol was easier to take than guaiacol. He said there was a time when for fevers ushered in by a chill he gave quinin at the first visit. He now considered the possibility of typhoid malarial fever being a sunlight disease and its chill rarely came before 8 A. M. or after 6 P. M.

DR. GESSNER saw two cases of typhoid fever that had broad

and flabby tongues with indentations. He did not think that drug treatment for temperature in typhoid is the proper one. He considered tubbing the method. The absence of the leathery tongue in typhoid patients when tubbed, instead of drugged, was pronounced. His attention was directed to this by Tyson's Practice. He also called attention to the diazo-reaction.

DR. LEDBETTER did not agree with Dr. Dabney in the treatment of fevers. He always gave quinin in any fever for diagnostic purposes. He does not use the coal tar preparations; has no confidence in intestinal antiseptics. He thought small doses of calomel (gr.  $\frac{1}{20}$ ) better than intestinal antiseptics.

DR. E. J. HUHNER stated that the diazo-reaction is present from the fifth day to the end of the second week.

DR. MARTIN stated that the antiseptics acted indirectly on the temperature by removing the cause. Thymol was the only antiseptic used in his case. Has not been able to diagnose positively typhoid fever earlier than one week, except in malignant cases. He believes all tests should be used, diazo, Widal, etc.

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## Abstracts, Extracts and Miscellany.

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### Department of General Surgery.

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In charge of DR. F. W. PARHAM, assisted by DR. LARUE, New Orleans.

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SOME EXPERIMENTAL DATA ON THE SIGNIFICANCE OF CONCENTRATION AND OF MULTIPLICITY OF AREA IN HYPODERMIC INJECTIONS.—Any data calculated to enhance our knowledge of the effects of antitoxins or other remedies administered by the subcutaneous method are of value. Meltzer, in the October issue of the *Journal of Experimental Medicine* has made an interesting contribution to this subject. He refers to a recent communication of V. Czyhlarz and Donath, in which they assert that the animal tissue is capable of neutralizing or fixing the poisons of strychnin and venom. In a series of experiments by Langmann and Meltzer they showed "that this failure is not due to any

capacity of the tissue to neutralize poisons, but to the impairment of the capacity of absorption of the constricted leg." Instead of injecting the minimum effective dose into *one* leg, they divided the dose into three parts injected into *three* extremities which had been constricted prior to the injections. Here, certainly, the amount of tissue proportionate to the poison being greater than in the case where the *one* extremity received it all, the fixation effect of the tissue should have been more pronounced. However, when the constrictions were released, violent strychnin convulsions ensued. The explanation seemed to be that there were in the *three* extremities more paths of absorption open. These observations led him to make further experiments to show the effects of pressure in assisting absorption. Theoretically, it might be argued, that the larger the quantity injected into one place, the greater the pressure and, therefore, the more rapid the absorption, thus offsetting apparently the effect of greater distribution, as when the same quantity is injected into more than one place. Experiments, however, did not bear out these theoretic deductions, but established the untenable nature of the filtration argument. Thus, a quantity of poison would prove more effective in a concentrated solution than a significantly larger quantity in attenuated dilution, and further the rapidity of absorption, and by consequence, the poisonous effect, was *much* enhanced by injecting a certain dose in a given quantity of vehicle into several places rather than putting it all into *one*.

These experiments show conclusively that bulk is nothing and concentration everything; the doses being equal, the more concentrated the injected poison the stronger the effect. Osmosis, in other words, is more effective than mere physical pressure.

COMMENT.—The results of these experiments are just what common sense would teach, especially as to the effects of dilution and concentration, but also as to multiple distribution, for, if a concentrated solution would be more rapidly absorbed in one place than a dilution, then it would naturally follow that it would be more quickly absorbed if put into *several* places.

Nevertheless, the formal statement of the propositions is of value, as giving the data scientific foundation, just as the mathematician considers it necessary to demonstrate that a



straight line is the shortest distance between two points. We know it must be so, but it is better to prove it once for all by actual demonstration.

Might not the concentrated anti-toxins in this explanation be more powerful in its antagonizing effects than the weaker, and the injection into several localities still further augment their power? In the treatment of tetanus these facts might with advantage, perhaps, be held in view.

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## Department of Obstetrics and Gynecology.

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In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER,  
New Orleans, La.

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STREPTOCOCCUS PYOGENES IN GYNECOLOGIC DISEASES—The work that has been done by G. Brown Miller, in his attempt to establish the clinical features of the different forms of pelvic infection, is noteworthy, and just such work has been needed ever since the radical methods have been suggested in the treatment of pelvic disease. It is well to know the infecting agent in making a prognosis, or even suggesting treatment, and gradually the field is clearing until we now know that mixed infection is not so common as once believed, and that the pathogenesis can be read clinically.

Miller (*Journal of the American Medical Association*) has studied the streptococcus pyogenes infection and calls attention to the necessity of distinguishing it from that of the gonococcus because of its much higher mortality. In making a diagnosis the history is very important, the great majority of cases being due to infection in labor or miscarriage. The lesion is generally a parametritis and most investigators have failed to find the gonococcus in the latter.

The situation of the mass is also characteristic. It lies in the connective tissue surrounding the uterus and vagina and beneath the peritoneum. The tendency of the infection is to follow the layers of connective tissue and fascia and not invade adjacent

layers. When the peritoneal cavity is approached it is protected by adhesion of omentum, tubes, ovaries, and intestines. The mass is always asymmetric. This is in marked contrast to gonorrhœal infection, which is also more superficial.

The consistency is of bone-like hardness as a rule, and there is an intimate connection between the uterus and pelvic wall. The streptococcus is very long lived, and the same precautions must be taken in old as in recent infections to protect the peritoneal cavity. *Early operation before suppuration* is advised. The incision should be extraperitoneal and the mass thoroughly broken up by blunt dissection, so as to evacuate any abscess cavities, and drainage established.

ACUTE LEAD POISONING IN WOMEN RESULTING FROM THE USE OF DIACHYLON AS AN ABORTIFACIENT.—W. Wraugham contributes to the *British Medical Journal* (July 12), five instances of the above-named condition which he has met with. It seems that the consumption of diachylon pills for illegal purposes is prevalent in several districts in England, and during the last eight years many cases of poisoning have been reported. After relating complete histories, he remarks that in all these cases the effect of the poison was manifested chiefly in the nervous system, although gastro-intestinal trouble and abdominal pain were present. Ocular symptoms were particularly noticeable, no fewer than four of the patients presenting optic neuritis and ocular paralysis. The former condition, when present, is rightly regarded as indicative of danger, and in all cases exhibiting it, mental disturbance was present, although only convulsions in two cases, proving rapidly fatal in one instance. A fact well brought out was the length of incubation period of lead (if one may use the term), for although large quantities of lead were ingested, it was some weeks before serious symptoms appeared. These, again, persisted, or even grew worse after the patients had ceased taking the pills.

THE RELATIVE MERITS OF BIPOLAR VERSION WITH SLOW EXTRACTION AND ACCOUCHEMENT FORCÉ IN THE TREATMENT OF PLACENTA PREVIA.—Dr. Henry Frye (*New York Medical Journal*, August 17), gives the brief histories of fourteen cases of placenta previa, nine of which were treated by bipolar version

and slow extraction. He points out the advantages of bipolar version, chief of which is the ability to successfully perform it with very little dilatation and, consequently, less loss of blood. When a large number of cases treated by this method were gathered, the results were astonishing, when compared with the mortality by the old method. Seventeen years have elapsed since Lomer, Behm and Hofmeier published the results of their studies and results, and yet their methods have not been popularized.

Suppose the bipolar method is theoretically compared with accouchement forcé to see if there exists any reason why the former may be considered safer in the hands of the inexperienced operator.

Death in placenta previa is usually due to hemorrhage or sepsis. The hemorrhage is unavoidable and incident to dilatation of the os. Consequently, the method requiring the least degree of dilatation necessary to perform version will naturally be expected to give the least hemorrhage. After dilatation is obtained in sufficient degree to insert several fingers, further continuance of the process by manual means is likely to endanger the integrity of the soft parts. In other words, the artificial dilatation sufficient to perform bipolar version is comparatively safe, while that necessary for the insertion of the hand and internal version is dangerous. The rapid delivery of the infant in accouchement forcé adds additional risk of rupture. There is one serious objection to bipolar version and slow extraction. The infantile mortality is greater. When interference is necessary before viability or when the fetus is dead, slow delivery is certainly indicated. If the life of the child be endangered during slow extraction, the obstetricians must decide between it and more rapid delivery with its increased maternal risk.

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### Department of General Medicine.

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In charge of DR. E. M. DUPAQUIER, New Orleans.

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HOW CAN WE TELL WHETHER A PLEURISY IS TUBERCULOUS OR NOT?—Given a case of acute pleurisy, can we possibly fail

whether the patient will be free from or subject to tuberculosis ultimately? Positively so, in those who have personal or hereditary taints, for they are certainly prone to tuberculosis. As regards those who have no taints, who are apparently in a most favorable condition, we can tell by tests, which are to be here considered. But, in the first place, let it be asserted that such is the case, namely, in spite of the most favorable appearances, acute pleurisy with effusion from a cold, *a frigore*, may be of tuberculous nature. In proof of this, we recall the common occurrence of a young and previously healthy man, without any personal or hereditary taint, recovering in all likelihood from a case of acute pleurisy due to cold, and seemingly primary, after 25 or 28 days, the effusion having been aspirated or resolved according to circumstances. Yet, should this patient be kept under observation, it also occurs quite often that after two or three years, sometimes later, sometimes earlier, his health changes and he is found to be attacked by tuberculosis, which runs a more or less rapid course. Again, we recall the large number of autopsies of cases of acute pleurisy, seemingly primary, in which it was found that tuberculosis existed, and we give as examples, the following brief reports:

In 1884 a man aged 34 years, in good health up to that time, no tainted previous history, is taken sick with acute pleurisy, *a frigore*, and dies suddenly. Post mortem: 2200 *c.cm.* of good fluid, apex of one lung presents chalky tuberculous mass.

In 1887, a man aged 50 years, robust, in good health up to the time of admission into the hospital, is found to have a large effusion in pleura, necessitating immediate aspiration. He does well for a time, then dies suddenly. Post mortem: 2300 *c.cm.* of good fluid; apex of one lung presents tuberculous mass in the stage of repair, containing bacilli; tubercles of recent formation in pleura.

But, while it can thus be said that in the great majority of cases of acute pleurisy with effusion there is a latent tuberculosis and that acute pleurisy *a frigore* is not primary but actually secondary to tuberculosis, yet, it must also be asserted as a clinical truism, chiefly in the country where cases can be more easily kept under observation, that there are a number of cases of acute pleurisy with effusion that do get entirely well. For instance, Corivaud states that out of 27 cases in his own practice,

only four died in a period of twenty years. So, on the one hand we have cases of acute pleurisy due to latent tuberculosis, on the other, cases independent of it. How, then, can we differentiate? Clinical investigation is obviously inadequate, since auscultation gives very variable and very uncertain results. We therefore have to depend on laboratory tests. Of these, (a) inoculation of animals with the pleural fluid is not entirely reliable, since 40 per cent. of tests in evident cases of tuberculosis give no positive results; (b) injection of tuberculin is dangerous; (c) agglutination as in typhoid fever lacks precision; (d) cultures though made on the best gelose-blood are too delicate to be used in a general way; (e) Finally, the *cytodiagnosis* introduced by Widal and Ravant is by far the most accurate. The following is the information we gather from the procedure, based on the *histologic examination* of the pleural fluid.

When we examine the fluid of a pleurisy in Bright's disease, we find endothelial cells in sheets, and should there be in the history the occurrence of hemoptysis, the latter is accounted for by the circulatory disturbances of Bright's disease.

When we examine the fluid of a pleurisy consequent upon pneumonia, typhoid fever or other infections, we find large mono or polynuclear leucocytes.

When we examine the fluid of a pleurisy of *a frigore*, we find on the one hand red blood cells, on the other small white cells, lymphocytes.

Summing up we have the following formulas in cito-diagnosis:

(a) Endothelial sheets in mechanical pleurisy due to circulatory disturbances.

(b) Large mono or polynuclear leucocytes in pleurisy of infectious origin, not tuberculous.

(c) Red blood-cells associated with lymphocytes in tuberculous pleurisy.

As these results in cysto-diagnosis have been confirmed by the culture, inoculation and agglutination procedures, it is therefore certain that the presence of erythrocytes and lymphocytes in the same field shows that the fluid examined is of tuberculous nature.—*Journal de Médecine et de Chirurgie pratiques*, August 10, 1901.

## Department of Therapeutics.

In charge of DR. J. A. STORCK, New Orleans.

A CASE OF FORMALDEHYDE POISONING.—Dr. James Wellborn reports a case in which a woman of fifty took a dram of formaldehyde in about half an ounce of water. The writer saw the patient fifteen minutes after, the symptoms being as follows: Anxious and distressed expression, marked dyspnea and excruciating pain in epigastrium. The radial pulse was not perceptible. The stomach was at once washed thoroughly. The pulse did not improve, even after  $\frac{1}{40}$  grn. doses of strychnin, and the author then gave digitalin,  $\frac{1}{100}$  grn., and nitroglycerin,  $\frac{1}{100}$  grn., with good results. Aromatic spirits of ammonia and whisky were also given, and seemed to benefit the respiration. The patient remained comatose for about two hours; at times she was restless, trying to get out of bed. In a few hours the symptoms subsided, and in three to four days the patient was perfectly well. (The rationale of the antidotal action of ammonia in formaldehyde poisoning was fully explained in the March issue of the *Archives*, page 108.)—*Merck's Archives*.

PLEURISY WITH EFFUSION IN CHILDREN.—Widerhofer, in Yeo's Manual of Therapeutics, recommends the following:

℞ Potassii acetatis .....	(gr. xx-xl)	1	33-2.66
Syrup simplicis.....	(℥ iii)	12	
Infusi digitalis q. s. ad .....	(℥ iii)	96	

One teaspoonful every two hours.

Or,

℞ Potassii acetatis .....	(gr. xx-lx)	1	33-4
Syr. aurantii .....	(℥ iii)	12	
Decoct. cinchonae q. s. ad.....	(℥ iii)	96	

One teaspoonful every two hours.

As external application he recommends the following:

℞ Iodi.....	(gr. iss)	09	
Potassii iodid.....	(℥ iiss)		10
Glycerini .....	(℥ iss)		48

*M. Ft. linimentum. Sig.*—For external application, once or twice daily.

—*Journal American Medical Association*.

SEBORRHEIC ECZEMA.—Dr. Brown states that resorcin and sulphur are the most valuable agents in treatment of seborrheic eczema. He recommends the following:

℞ Hydrarg. chloridi corros .....	(gr. 1)		06
Resorcin.....	( $\frac{3}{8}$ i)	4	
Chloraris hydratis.....	( $\frac{3}{8}$ i)	4	
Ol ricini .....	(gr. x)		66
Spts. vini .....	( $\frac{3}{8}$ iv)	128	

Apply to the scalp once or twice daily.

In more severe grades, with redness and infiltration of the scalp, a pomade, such as the following, serves the purpose:

℞ Acidi salicylici .....	(gr. xv.)	1	
Resorcin .....	(gr. xxv.)	1	
Sulphuris sublim .....	( $\frac{3}{8}$ i)	4	
Ung. aquae rosae .....	( $\frac{3}{8}$ i)	32	

Apply locally.

—*Journal American Medical Association.*

TREATMENT OF PANCREATITIS.—In closing an editorial on pancreatitis in the *Medical News* of May 25, 1901, the following views are expressed:

“ Whatever may be the status of our ignorance in diagnosing pancreatitis, there is now no longer any question as to the treatment. It is both medical and surgical. Contrary to the too usual state of affairs, we know what to give, how much to give, and why to give calcium chloride. The degenerating fat in the body splits into glycerin and fatty acids—these acids unite with the calcium of the blood, which destroys, or limits, its power of coagulating. Hence calcium chloride in heroic doses is indicated especially in the hemorrhagic form. This term Mr. Mayo-Robson feels has been used too promiscuously. Inflammatory conditions of the pancreas are to be classified like those of any other organ, into chronic, sub-acute and acute. The hemorrhagic form is now to be considered a variety of the acute. The surgical treatment is immediate operation with the establishment of drainage. The position and direction of this varies with the chronicity or activity of the case. If it is of long standing, it is best accomplished indirectly by way of the marsupialized gall-bladder; if acute, it is through a retroabdominal incision leading to the fat of the left perinephritic region.”—*Therapeutic Gazette.*

## Department of the Ear, Nose and Throat.

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IN charge of DR. A. W. DEROALDES and DR. GORDON KING,  
New Orleans.

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REFLEX AURAL SYMPTOMS DEPENDENT UPON DENTAL CARIES.—  
Dr. E. B. Dench in a lecture before the New York Odontological Society, November, 1900, called attention to some of the reflex disturbances produced in the body by the presence of dental caries, notably those referred to the ear. One of the commonest forms is that of otalgia, which may exist independent of any inflammatory affection of the ear itself.

Patients frequently come to the ear clinics complaining of ear-ache, when upon examination of the ear it is found to be normal in appearance. In many of these cases examination of the mouth reveals the presence of one or more carious teeth. In children the first molar is often the seat of the caries, and in adults usually one of the wisdom teeth is at fault. Extraction of the diseased teeth in these cases will give immediate and permanent relief to the pain in the ear.

In adults it is not unusual for a carious tooth to give rise also to other sensations of discomfort in the ear besides pain. The patients may complain of a feeling of stuffiness or oppression in the ear, only relieved by extraction of a troublesome molar..

The author is of the opinion that dental caries may affect the ear still more seriously by giving rise to trophic changes within the tympanum, which in turn lead to sclerosis and deafness or to tinnitus aurium, a perversion of the sense of hearing, and to vertigo.

The explanation of these reflex phenomena in the ear is found in the fact that the ear and the teeth both receive their nerve supply from the fifth pair.

ABORTIVE TREATMENT OF ACUTE FOLLICULAR AND PERITONSILLITIS.—Joseph Meyer, M. D., in the October edition of the *Brooklyn Medical Journal*, describes a treatment for acute follicular tonsillitis which he claims is very effective in aborting the attacks of this painful affection.



When the patient is seen in the initial stage, he advises rest in bed and a process of sweating by means of hot beverages, this to be followed by a brisk rubbing down with a towel. In the more advanced stage, when the exudate appears on the tonsil, the tonsillar crypts are syringed out with a 1-1000 solution of Bichloride of mercury. Each crypt is thus thoroughly cleansed out and disinfected and the result is a rapid subsidence of the inflammation. The author prefers this to cutting out the tonsillar crypts.

CHANCRE OF THE TONSIL.—S. G. Dabney, of Louisville, reports three cases of tonsillar ulcerations, two of which were presumably the primary lesions of syphilis. Chancre of the tonsil is not so rare as is supposed, the infectious element entering the mouth and finding lodgement in the crypts of the gland to give rise to the initial lesion. The infection may occur through the use of drinking vessels or pipes, by kissing or less often by unnatural sexual indulgences. The ulcer usually involves the entire tonsil, and the symptoms are more severe than from chancre of the genital organs. It is grayish in color and covered with inspissated mucus. The cervical glands show marked enlargement, there is pain on swallowing and febrile reaction.

Two of the cases recorded by the author were to all appearances true chancres and responded to treatment based on that diagnosis, while the third case, which gave rise to some difference of opinion, was considered to be an unusual form of tuberculous ulceration. From the fact that the ulcer healed under simple local treatment and gave rise to no constitutional evidence of syphilis, we are inclined to look upon it as one of simple ulcer of the tonsil as described by Moure.

SUBMUCOUS INJECTIONS OF CHLORIDE OF ZINC IN HYPERTROPHIC RHINITIS.—A method for the reduction of the hypertrophied mucous membrane in cases of chronic rhinitis, has been devised by Dr. Hamm, of Braunschweig, and consists in the injection into the enlarged turbinates of a 10 per cent. solution of chloride of zinc.

Cocain is first applied or injected, and then a Pravaz syringe used to inject a small quantity of the solution under the mucous membrane. Some inflammatory reaction occurs for a day or

two, and when this subsides, the turbinated retracts and assumes its normal size, permitting free access of air into the fossa. Dr. P. Viollet describes his experience with the method as very encouraging in the advantages it offers over the present methods of galvano-cauterization, turbinotomy, chromic acid applications, etc. This procedure, according to this author, is especially applicable to those cases of hypertrophy of the turbinates not associated with polypoid degeneration of the membrane.—*Archives Internationales de Laryngologie, etc.*

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## Miscellaneous.

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HEROIN IN CIRCULATORY DISTURBANCES.—Pawinski and Adelt relate the results of experiments with heroin, in *Die Heilkunde* for January, 1901. Heroin hydrochlorid in various forms was employed in doses varying from  $\frac{1}{12}$  to  $\frac{1}{6}$  of a grain.

The conclusions arrived at are embodied in the following statements of the effects produced:

1. The general sedative action.

2. The influence upon the blood pressure and vascular system is inconsiderable; it does not produce indirectly an increase of blood pressure. For this reason heroin is indicated in circulatory disturbances with high blood pressure (atheroma, retital nephritis.)

3. No specific action on the pneumogastric nerve was determined, but favorable effect on the cardiac innervation through the sedative action on the central nervous system, evidenced in the diminution of pulse frequency, and in disappearance of arrhythmia in tumultuous heart action with persons neurasthenic or hysterical.

4. Increased diuresis was noticed in some instances.

5. The respiration was reduced in frequency and deepened, as Dreser observed with animals, only not so marked as he claims.

6. Heroin does not affect digestion, nor reduce the appetite.

7. Concomitant effects of undesirable nature were not observed.

The indications for heroin are summed up as follows: cough, dyspepsia, pains, feelings of anxiety, cardiac palpitation, paresthesia, and insomnia accompanying various circulatory disturbances.

After observation on fifty cases in hospital and private practice the authors state that in valvular diseases, due to rheumatism and atheroma, the best results are had; in diseases of the lesser circulation, heroin is of little service.

In arteriosclerosis, and in cardiac asthma associated, heroin proved of much benefit, the action being enhanced when given with iodine compounds.

In false angina pectoris, heroin acted well; in true angina, heroin was of little effect, except in relieving pain in various places.

In exophthalmic goitre, laryngitis, bronchitis, tuberculosis, heroin proved of service, especially in its sedative action. In several cases of gastric hyperesthesia, also, heroin proved efficacious in relieving the unpleasant symptoms, such as vomiting, pain and inability to take food; here heroin substitutes morphin, without the same danger of habituation.

CANCER LABORATORY IN BUFFALO.—Dr. J. A. Storek tells us that during a recent visit to Buffalo he had the pleasure of renewing acquaintance with Dr. Roswell Park, who kindly showed him over the General Hospital of which he is in charge, and also over the new research laboratory, which is to be devoted exclusively to the study of cancer. The latter building is spacious, and situated directly opposite the General Hospital. It contains many rooms, among which may be named the pathologic and chemie laboratories, and a well-lighted room for photographic purposes. The building is well-appointed in every particular, and Dr. Park stated that it is the only exclusive cancer laboratory in the world. The entire supervision will be under the immediate direction of Dr. Park, assisted by Dr. Gaylord. The United States is fortunate in having a laboratory of this kind, from which we may expect some enlightenment on the subject of cancer in the near future.

## Medical News Items.

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THE HABIT OF MEDICAL JOURNALS IN APPROPRIATING ARTICLES published by other periodicals and in abstracting from these without properly accrediting the original publication has been a source of frequent commentary for years.

The *Indian Lancet*, of Calcutta, of September 16, 1901, presents three leading articles taken bodily from the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL for June, without even a suggestion of the said journal and so mutilates the papers that they appear as if they were original contributions. These three articles, on *the Blood in Syphilis*, by Dr. Warner, on *Scarlet Fever*, by Dr. Owen, and on *the Uses of Strychnin*, by Dr. Barrier, were read before the Louisiana State Medical Society, in April, 1901, and were published exclusively by us, in this, the official organ of that Society. Each article in the JOURNAL carries a foot note which reads, "read before the Louisiana State Medical Society, April, 1901." In the *Indian Lancet* the foot note reads: "Read before the State Medical Society and sent for publication in the *Indian Lancet*."—*Sic!!*

We are glad to know that our contributors have afforded reading matter of such merit in so far away land as to justify the above abuse of both medical morals and medical ethics. In America, in these United States, such use of medical contributions is called by harsh names. We are, however, only calling attention to the practice in India and have purposely related the incident as news matter, so as not to unduly dignify it editorially. [Exchanges might please copy].

TYPHOID FEVER TO BE REPORTED TO THE BOARD OF HEALTH.—Among recent reforms already noted in the JOURNAL, the following circular is of moment as bearing upon the recent promulgated order requiring the reporting of contagious diseases, typhoid particularly:

OFFICE OF BOARD OF HEALTH OF THE }  
CITY OF NEW ORLEANS. }

*Circular of Advice Regarding Typhoid Fever.*

In explanation and support of the measures recommended below, we submit the following:

Typhoid fever is a germ disease.

While not, strictly speaking, contagious, it is communicable under certain conditions and preventable by certain proper precautions, hence deserves the attention of the health authorities.

The nature of the disease does not demand that the patient be isolated or prohibitive restrictions placed on the well members of the household. Houses, therefore, need not, and will not, be placarded; nor will well children be prevented from attending school.

The typhoid germ is contained mainly in the evacuations of the patient, and the urine. Only exceptionally is it found in other secretions.

However repulsive the thought may be to our esthetic nature, typhoid fever is never contracted except through the absorption in one's system, directly or indirectly, of the typhoid discharges from another patient,

The germs usually enter the system through infected foods or drinks. Occasionally, however, they may be inhaled dried in dust, and some physicians in this way explain the bronchitis sometimes present at the outset of typhoid, as well as the greater prevalence of the disease in the late summer and fall, and after protracted droughts.

The most common source of infection is contaminated water. This contamination is possible in many ways, of which the crudest example is a well draining an adjacent infected vault or cesspool.

Infection may also be conveyed by milk which has had polluted water added to it in the dairy, or has been kept or delivered in vessels washed with such water, or which has been contaminated by flies or other insects recently in contact with typhoid stools.

Ice manufactured from polluted water can also convey the disease.

Also oysters from infected water beds and vegetables from soils fertilized with human manure, if eaten raw.

The latter, of course, are uncommon causes.

Because of their tendency to deteriorate the general health, bad sanitary surroundings probably favor the spread of the disease, which has been classed accordingly as a "filth disease."

In this as in other diseases there are grades of susceptibility, and one person may readily break down under a single dose of the poison, while others may require larger and repeated doses. This explains how only one person in the household may be affected, though all have partaken of the same infectious material.

By resolution promulgated August 21, cases of typhoid fever must be reported to the Board of Health.

In many respects continued fever closely resembles typhoid (sufficiently to have suggested that it may be "atypical" ty-

phoid); it certainly seems to be of intestinal origin and for all practical sanitary purposes had better be treated like typhoid.

Typho-malarial and other indefinite types of fever (gastric and the like) also demand, in the care and handling of the sick, similar if not identical precautions.

With ordinary care those in attendance upon the sick do not contract the disease.

*Necessary Precautions.*—The patient need not be isolated from the rest of the family. He should be treated, however, in a part of the house where quiet can be obtained.

The water supply being the most common source of infection, the other members of the household should, for the time being, drink that water only boiled, or provide themselves with some other water known to be pure.

For fear that the ice supply may have been at fault, the water should be cooled, not by the addition of ice, but by placing it in the ice chest, or otherwise similarly treating it from the outside of the vessel.

Milk should be taken only boiled.

The following methods of disinfection should be closely followed throughout the disease:

The glasses, cup and spoon of the patient should be scalded thoroughly with boiling water after being used.

The passages and urine should be disinfected by pouring in the vessel whenever used a pint of the following solution: Chloride of lime of good quality (containing not less than 25 per cent. of available chlorin) four ounces; water, one gallon.

Rags, paper and other valueless articles which have come in contact with the excreta should be burned at once in a strong fire.

All body and bed clothing, towels, napkins, etc., when soiled, should be removed at once to a vessel containing a 3 per cent. solution of carbolic acid, and be left there to soak about two hours before laundering. This removes all stains. (Unless stains be first removed they will be made permanent by the action of heat in the ordinary process of laundering.)

The hands of the nurse should be washed as often as they become soiled and always before meals, rinsing them first carefully in a 3 per cent. solution of carbolic acid and then scrubbing them thoroughly with soap, water and nail brush. (To make a 3 per cent. solution, add a tablespoonful of the acid—half an ounce—to the pint of water.)

The water closet, urinal, sink, cesspool, etc., should be disinfected liberally with crude carbolic acid in water in the proportion of one pint to two and a half gallons (equivalent to a 5 per cent. solution).

Disinfection of the sick room after completion of the case will be effected by the Board of Health. Formaldehyde will be used from a "Kuhn" generator.

Typhoid fever is oftenest a long disease and the patient must

be willing to get well slowly. During convalescence he should be extremely careful of what he eats, as solid substances may cause perforation of the intestinal walls, with peritonitis, and at times almost instant death.

Certain disinfectants frequently used in other diseases and desirable because of their cheapness and the fact that they are odorless, have proved inefficient in the case of typhoid fever; for instance, bichloride of mercury, which forms with the stools an albuminate and does not render them inert.

**MEDICAL SOCIETY OF THE MISSOURI VALLEY.**—The fourteenth annual session of this society convened in St. Joseph on Thursday, September 19, President Treynor in the chair. After passing resolutions on the death of the President, the society adjourned to allow its members to attend the McKinley memorial services. On Thursday evening the society boarded a special train of Pullman sleepers for Eureka Springs, Ark., where the annual outing occurred, and the regular program carried over from St. Joseph was presented: Address of Welcome, Hon. W. M. Brown, Mayor of Eureka Springs; Address on behalf of Local Profession, Dr. J. B. Bolton; Response on Behalf of the M. S. M. V., Dr. V. L. Treynor, President; Dr. Palmer Findley, Chicago, "An Exhibition of Specimens, Illustrating the Cause of Uterine Hemorrhage;" Dr. E. S. Pettyjohn, Chicago, "The Unreliability of Children's Testimony;" Dr. S. Grover Burnett, Kansas City, "Effects of 190 deg. F. Temperature on Man; the cell lesion; a case;" Dr. H. D. Jerowitz, Kansas City, "Scarlet Fever;" Dr. Charles E. Davis, Eureka Springs, "Some Twentieth Century Thoughts in Medicine;" Dr. Wm. Jepson, Soux City, "It is Rational to Operate upon Every Case of Appendicitis as soon as Recognized;" Dr. Le Roy Crummer, Omaha, "The Use of Gartner's Tonometer, with Demonstration of the Instrument;" Dr. Charles Geiger, St. Joseph, "Syphilis;" Dr. P. I. Leonard, St. Joseph, "Some Aspects of Syphilis." On Friday evening a reception and ball was tendered the visitors by the local profession and citizens of Eureka Springs, and Saturday was devoted to sight-seeing in the mountains, several tallyho coaches and sixty saddle horses being provided for the purpose. After a sumptuous dinner on Saturday evening the members left for the return trip, arriving in St. Joseph on Sunday morning. Following is a list of officers elected for the year: President, R. E. Moore, Omaha; First Vice President, A. D. Wilkinson, Lincoln; Second Vice Presi-

dent, M. F. Weymann, St. Joseph; Treasurer, Donald Macrae, Council Bluffs; Secretary, Charles Wood Fassett, St. Joseph. Semi-annual meeting will be held in Lincoln, in March, 1902.

NEW HEALTH OFFICER FOR TEXAS.—Dr. W. F. Blunt, State Health Officer of Texas, has resigned and the governor has appointed Dr. G. R. Tabor, of Bryan, Texas, to the office.

DR. S. R. OLLIPHANT has returned from an extended stay in the medical centres of Europe.

VICKSBURG PHYSICIANS WANT A CHARITY HOSPITAL.—A number of physicians in Vicksburg, Miss., have addressed a letter to the Board of Trustees of the hospital there, saying that if the board will place it on the same basis as the Charity Hospital of New Orleans, they will organize a visiting staff. The fact that the hospital paid out nearly one-fourth of the appropriation in salaries called forth the above proposition.

DR. W. F. HAGAMAN has moved from Lindsey to Norwood, La., to practice.

WOMEN MEDICOS.—The first woman graduate of medicine was in 1849. There are now 6000 practicing in America.

THE TRI-STATE MEDICAL SOCIETY OF ALABAMA, GEORGIA AND TENNESSEE met in Nashville, October 8, 9 and 10. The papers on sociologic questions were of especial interest and gave rise to a series of resolutions aimed at securing legislation regulating marriage, divorce, prevention of crime, etc.

THE TULANE PHAGOCYTE, published last year during the college session by the undergraduates of the Medical Department of Tulane, is to appear hereafter as a periodical of twelve months' issue, edited under the management of an alumnus, assisted by undergraduate collaborators.

Dr. Hermann B. Gessner is the editor announced, and the first issue under the new management is to appear in November.

NICHOLAS SENN PRIZE MEDAL.—1. A gold medal of suitable design is to be conferred upon the member of the American Medical Association who shall present the best essay upon some surgical subject.

2. This medal will be known as the Nicholas Senn Prize Medal.



3. The award will be made under the following conditions:

*a.* The name of the author of each competing essay shall be enclosed in a sealed envelope bearing a suitable motto or device, the essay itself bearing the same motto or device. The title of the successful essay and the motto or device is to be read at the meeting at which the award is made, and the corresponding envelope to be then and there opened and the name of the successful author announced. *b.* All successful essays become the property of the Association. *c.* The medal shall be conferred and honorable mention made of the two other essays considered worthy of this distinction, at a general meeting of the Association. *d.* The competition is to be confined to those who at the time of entering the competition, as well as at the time of conferring the medal, shall be members of the American Medical Association. *e.* The competition for the medal will be closed three months before the next annual meeting of the AMERICAN MEDICAL ASSOCIATION, and no essays will be received after March 1, 1902.

Communications may be addressed to any member of the committee, consisting of the following: Dr. Herbert L. Burrell, 22 Newbury street, Boston, Mass.; Dr. Edward Martin, 415 S. 15th Street, Philadelphia, Pa; Dr. Charles H. Mayo, Rochester, Minn.

GEORGIA PASTEUR INSTITUTE.—The first annual meeting of the fellows and members of the Georgia Pasteur Institute was held in Atlanta, October 4. The President, Dr. Henry R. Slack, read a highly satisfactory address.

Twenty-two cases had been treated, fifteen proved to have been bitten by rabid dogs, by inoculation and death of other animals. All the cases improved under treatment and are now well. The Institute is well established and free from debt. The following board of governors and officers were elected: President, Dr. Henry R. Slack, LaGrange; vice president, Dr. J. H. McDuffie, Columbus; treasurer, Dr. C. D. Hurt; secretary and pathologist, Dr. Claud. A. Smith; physician, Dr. Jas. M. Brawner, Atlanta; members, Dr. E. P. Ham, Gainsville; Dr. M. M. Holland, Statesboro; Mr. Benj. W. Hunt, Eatonton, and Mr. Geo. C. Waters, Atlanta.

DR. S. A. AYO, of Thibodaux, La., was married, September 27, to Miss Annette Coulon, of the same place.

DR. W. D. HARPER, of Minden, La., died suddenly, September 22, age 50 years. He was well and favorably known in north Louisiana.

DR. D. L. WATSON and Miss Maud E. White were married in Lafayette, La., October 9.

DR. PHILLIP J. DANSEREAU, of Labadieville, and Miss Olive J. Cointment, of Thibodaux, were married October 24.

DR. HERMANN OECHSNER, of New Orleans, and Miss Edith Appel, of Cincinnati, were married October 23.

THE TOURO INFIRMARY TRAINING SCHOOL FOR NURSES graduated nine young ladies on October 1. There were interesting addresses by Rabbi I. L. Leucht, and Drs. Matas and McGehee. The diplomas and medals were presented by Dr. F. Loeber.

THE NEW ORLEANS POLYCLINIC will open November 4.

THE MEDICAL DEPARTMENT OF TULANE UNIVERSITY will begin its session November 4.

THE TWENTY-SEVENTH ANNUAL MEETING OF THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION adjourned at Put-in-Bay, after a most successful session, on the morning of October 14, out of respect to our martyred President. The following officers were elected for the ensuing year: President, S. P. Collings, M. D., Hot Springs, Ark.; 1st vice president, J. C. Culbertson, M. D., Cincinnati, O.; 2d vice president, Paul Paquin, M. D., Asheville, N. C.; secretary, Henry Enos Tuley, M. D., Louisville, Ky.; treasurer, Thomas Hunt Stucky, M. D., Louisville, Ky.; chairman committee of arrangements, A. H. Cordier, M. D., Kansas City, Mo. Twenty-eighth annual meeting, Kansas City, Mo., October, 1902.

INTERNATIONAL MEDICAL CONGRESS.—The General Secretary informs the members of the XIII International Congress of Medicine that the printing and forwarding of the general volume and of the 17 records of the sections is now finished.

Any member not having received the volumes to which he is entitled is hereby requested to address the editors of the Congress, Messrs. Masson & Co., 120 Boulevard Saint Germain, Paris.

After December 31, 1901, no claim will be considered.

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION announces its program for the next meeting in Richmond, Virginia, November 12, 13, 14, 1901, under the arrangement of Dr. Geo. Ben Johnson, chairman.

Among the many titles of papers on the list we note the following:

"Laceration of the Cervix, and its Consequences," Dr. E. S. Lewis, New Orleans, La.; "A Unique Case of Extra-Uterine Pregnancy, with Presentation of Specimen," Dr. H. Tuholske, St. Louis, Mo.; "Surgical Treatment of the Dysmenorrhea in Unmarried Women and Girls," Dr. J. T. Wilson, Sherman, Tex.; "Cancer of the Female Urethra, with Report of Cases," Dr. C. Jeff. Miller, New Orleans, La.; "Some of the Avoidable Causes for Disaster in Appendicitis Work," Dr. Robert T. Morris, New York, N. Y.; "Penetrating Wounds of the Abdomen, with Histories of Six Successful Laparotomies and Statistical Tables of 152 Abdominal Sections Done at Charity Hospital, in New Orleans," Dr. E. D. Fenner, New Orleans, La.; Paper by Dr. Felix A. Larue, New Orleans, La.; "Report of a Case of Gangrene of the Gall-Bladder," Dr. Geo. Ben Johnson, Richmond, Va.; "Esophagotomy, with Report of Nine Successful Operations on an Infant Forty-six Days Old, with Illustrations," Dr. Jno. W. Long, Salisbury, N. C.; "Two Cases of Nephro-Ureterectomy, with Remarks," Dr. J. Wesley Bovee, Washington, D. C.; "Clinical Report of Two Cases of Osteo-Sarcoma of the Maxilla, Treated by Excision, with Statement of Condition of Patient after One Year," Dr. Hermann B. Gessner, New Orleans; "Hepatic Drainage," Dr. John B. Deaver, Philadelphia, Pa.; "Surgery of the Pancreas," Dr. W. D. Haggard, Jr., Nashville, Tenn.

One and one-third rates on certificate plan have been arranged.

THE LOUISIANA STATE BOARD OF MEDICAL EXAMINERS met in New Orleans in October, and examined thirty-one applicants for license; of these seventeen passed. In the list of applicants there were three negroes, of whom one, Dr. E. L. Hamilton, passed.

The regular physicians successful before the board were Drs. E. L. Watson, A. H. Biscoe, E. W. Hunter, S. D. Yongue, W. L. Hoagland, H. D. Wolff, A. T. Barbin, F. C. Bennett, D. A.

Berwick, E. A. Lee, G. J. Tusson, J. L. Woodal, D. C. Isles, E. H. Tyson, S. A. Pennington.

THE MISSISSIPPI STATE BOARD OF HEALTH examined thirty-six applicants for the license to practice medicine and passed twenty.

FEVER INSITUTE.—Drs. F. Formento, H. A. Veazie, L. F. Salomon and Prof. Geo. E. Beyer, of New Orleans, have been appointed members of the Yellow Fever Institute, created under the conditions of an act of Congress passed in March. The object of the commission is to investigate the history, semeiology and all weighty questions pertaining to the disease from the standpoint of the public, the patient and the physician.

The gentlemen selected are all well and favorably known in New Orleans.

Professor Beyer has recently investigated the habits of the mosquito in relation to several diseases; Dr. Veazie has had much experience in the practical care of yellow fever; Dr. Salomon as former secretary of the Board of Health and as a long time expert has ready qualification; Dr. Formento needs only to be introduced as a well-known sanitarian, prominent in national associations for improvement in the fields of preventive medicine and hygiene.

## Obituary.

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DR. LOEBER.



DR. FREDERICK LOEBER died, in this city, on October 18, in the afternoon, much regretted by his confrères, his large clientèle and the institutions with which he was connected.

Dr. Loeber was born in Geissen, South Germany, on January 2, 1839. His father, the Lutheran minister at Geissen, was the fourth of successive generations of Loebers to fill the pulpit.

At eighteen years of age he graduated at college at Geissen. He came to New Orleans and engaged in the drug business, subsequently taking up the study of medicine and receiving his diploma in 1865. He went to Europe, studying a year in Germany under Dr. Virchow and in Vienna under Dr. Billoth, returning to New Orleans in 1868 to practice.

He was shortly after elected professor of anatomy and clinical surgery of the New Orleans School of Medicine, filling the chair until the disestablishment of the college.

Almost immediately upon his return, Dr. Loeber was elected house surgeon of the Touro Infirmary. He became its guiding spirit, and remained so until his death.

He was at one time on the visiting staff of the Charity Hospital and was a member of the Board of Administrators of that institution when he died. He also served a term on the State Board of Health.

He leaves a wife and eight children, to whom the JOURNAL tenders its sincere condolence.

#### DR. TOUATRE.

DR. JUST TOUATRE, a former well-known practitioner of New Orleans, died in France, his native country, on September 21, 1901. We shall at a later date revert to the doctor's history.

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## Book Reviews and Notices.

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*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

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*The Diseases of the Respiratory Organs, Acute and Chronic.* Arranged in two parts. By WILLIAM F. WAUGH, A. M., M. D. G. P. Engelhard & Co., Chicago, 1901.

This is one of the standard monographs to which we have most favorably referred in a previous issue of the JOURNAL. The practical value of

the book before us is readily appreciated. Treatment is modern and progressive, based on experience, showing that the drugs acting on the vasomotor nerves are prominent in the treatment of acute inflammations. The isolated active principles of the materia medica are chiefly depended on for that purpose. The subject is divided in two parts into acute and chronic diseases. The conciseness of the text is not the least of the practical features of this valuable monograph. E. M. DUPAQUIER.

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*Progressive Medicine*, A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., assisted by H. R. M. LANDIS, M. D. Vol. II. June. Lea Brothers & Co., Philadelphia and New York. 1901.

This volume contains four important articles. The first one, on the Surgery of the Abdomen, including Hernia, by William B. Coley, M. D., contains 178 pages. The author reviews the radical cure of large umbilical hernia, of inguinal hernia and the surgery of the intestines, stomach, liver, pancreas, spleen, appendix. In closing, he considers the ligation of the abdominal aorta. The illustrations relating to intestinal surgery are beautiful. The second article, on Gynecology, with illustrations by John G. Clark, M. D., contains 117 pages. The author reviews twenty-seven subjects, among which, the parasitic origin of malignant growths, cancer of the uterus, foreign bodies left in the peritoneal cavity, etc. The third article, on Diseases of the Blood and Ductless Glands, the Hemorrhagic Diseases, Metabolic Diseases, by Alfred Stengel, is very opportune, as interest is growing in the study of the blood. It contains 81 pages. The fourth article, on Ophthalmology, with illustrations by Edward Jackson, M. D., is equally rich in facts gathered from contemporaneous literature relating to the subject. There is an index.

The high character of this quarterly is maintained by the publishers, who really deserve commendation. E. M. DUPAQUIER.

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*The Ready Reference Handbook of Diseases of the Skin*. By GEORGE THOMAS JACKSON, M. D. Lea Brothers & Co., New York and Philadelphia, 1901.

Considerable addition has been made in the way of therapeutic suggestion and expansion of the text in this edition of Dr. Jackson's book. Several new diseases are found and evidence of revision is frequent throughout the work. The alphabetic arrangement of diseases is followed as in previous editions. The chapters on therapeutics and "Dermatologic Dents" have lost nothing by repetition. The present edition shows the same illustrations as the last with few additions, all of value to the text.

DYER.

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*Diseases of Children*. By Drs. TAYLOR and WELLS Second edition. Illustrated. P. Blakiston's Son & Co. Philadelphia, 1901.

It was our pleasing duty, after carefully reviewing the first edition of this manual of the Diseases of Children in 1898, to recommend it, sin-

cerely to students and practitioners. We certainly have no reason to change one iota in our opinion as regards the second edition, on the contrary, the latter shows a remarkable development in the size and value of the work. It is on a very extensive subject, a succinct cause of didactic lectures, giving the most salient points on the physiology, pathology and treatment of children, including the most capital subjects of feeding and general hygiene. Having referred to it quite recently on different occasions, we can vouch for its usefulness, since the information sought was to the point and most helpful each time. The mechanical part of the book is excellent. The number of illustrations is increased nearly two-fold, from 25 to 42, all being of superior quality. E. M. DUPAQUIER.

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*The American Year Book of Medicine and Surgery.* Edited by Geo. M. Gould, A. M., M. D. W. B. Saunders & Co., Philadelphia, 1901.

The editor and publishers have exercised great care and thoroughness in the preparation of this work which must prove valuable as a reference for every practitioner. The scheme of dividing the work into two sections, one in surgery and one in medicine, has been followed in the present edition.

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#### PUBLICATIONS RECEIVED.

*Annual Report of the Department for the Insane of the Pennsylvania Hospital,* Philadelphia, 1901.

*Report of Vital Statistics of the Cities of Havana, Guanabacoa, Regla and Marianao,* August, 1901.

*Dose-Book and Manual of Prescription-Writing,* by E. Q. Thornton, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*Pathological Technique,* by Frank P. Mallory, M. D., and James H. Wright, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*A Manual of the Practice of Medicine,* by George Roe Lockwood, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*A Text-Book of the Practice of Medicine,* by James M. Anders, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*Atlas and Epitome of Special Pathologic Histology,* by Dr. Hermann Durek, Edited by Ludvig Hektoen, M. D., Vol. II.—W. B. Saunders & Co., Philadelphia and London, 1901.

*A Laboratory Course in Bacteriology,* by Frederic P. Gorham, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.



*The American Illustrated Medical Dictionary*, by W. A. Newman Dorland, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*The Pathology and Treatment of Sexual Impotence*, by Victor G. Vecki, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*A Text-Book of Diseases of Women*, by Charles B. Penrose, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*Human Physiology*, by Joseph Howard Raymond, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*The Principles of Hygiene*, by D. H. Bergey, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*A Practical Treatise on Diseases of the Skin*, by John V. Shoemaker, M. D.—D. Appleton & Co., New York, 1901.

*A Text-Book of Obstetrics*, by Barton Cooke Hirst, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*Modern Obstetrics: General and Operative*, by W. A. Newman Dorland, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*Nervous and Mental Diseases*, by Archibald Church, M. D., and Frederick Peterson, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*A Catalogue of the Publications of the University of Chicago Press*, Chicago, 1901-1902.

*A Manual of Bacteriology*, by Herbert U. Williams, M. D.—P. Blakiston's Son & Co., Philadelphia, 1901.

*Materia Medica, Pharmacy, Pharmacology and Therapeutics*, by W. Hale White, M. D.—P. Blakiston's Son & Co., Philadelphia, 1901.

*Abstract of the Eleventh Census: 1890*, Washington.

#### REPRINTS.

*Some Points in the Administration of Chloroform*, by T. M. McIntosh, M. D.

*May a Hospital Steal Cases?* by Dr. A. L. Benedict.

*The Indeterminate Sentence in New York*, by Clark Bell, Esq., LL. D.

*Law and Medicine from a Legal Standpoint*, by Hon. Abram H. Dailey.

*Endo-Cardiopathies: With Critical Notes and New Figures—Acute Endocarditis: Benign and Malignant, With Illustrative Cases*, by Thomas E. Satterthwaite, M. D.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)  
FOR SEPTEMBER, 1901.

CAUSE.	White.	Colored.	Total.
Fever, Malarial (unclassified) .....	....	....	....
“ “ Intermittent.....	6	4	10
“ “ Remittent .....	....	....	....
“ “ Scarlet .....	1	1	2
“ “ Typho .....	....	....	....
“ Yellow .....	....	....	....
“ Typhoid or Enteric.....	8	8	16
Puerperal Diseases .....	....	....	....
Bronchitis .....	7	3	10
Diphtheria .....	2	....	2
Broncho-Pneumonia .....	....	....	....
Measles .....	....	....	....
Whooping Cough.....	1	....	1
Pneumonia .....	8	9	17
Cancer.....	7	3	10
Consumption.....	36	34	70
Diarrhea (Enteritis).....	19	11	30
Dysentery.....	5	3	8
Small Pox .....	....	....	....
Hepatic Cirrhosis .....	4	1	5
Other Liver Disease.....	6	2	8
Peritonitis.....	2	....	2
Debility, Senile .....	11	8	19
“ Infantile.....	11	1	12
Bright's Disease (Nephritis) .....	20	9	29
Sun-stroke .....	....	....	....
Heart, Diseases of .....	26	22	48
Apoplexy .....	8	8	16
Congestion of Brain } .....	8	8	16
Meningitis .....	4	6	10
Trismus Nascentium.....	1	7	8
Injuries .....	12	5	17
Suicide .....	1	1	2
All Other Causes .....	43	27	70
TOTAL .....	249	173	422

Still-born Children—White, 19; colored, 18; total, 37.

Population of City (estimated)—White, 220,000; colored, 80,000; total, 300,000.

Death Rate per 1000 per annum for Month—White, 13.58; colored, 25.95; total, 16.88.

## METEOROLOGIC SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure ..... 29.98  
 Mean temperature ..... 78.  
 Total precipitation ..... 3.30 inches  
 Prevailing direction of wind, northeast.

# NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

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VOL. LIV.

DECEMBER, 1901.

No. 6.

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## Original Articles.

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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.]

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### THE EFFECT OF ALCOHOL ON DIGESTION.\*

By J. A. STORCK, M. D., PROFESSOR OF DISEASES OF THE DIGESTIVE APPARATUS, NEW ORLEANS POLYCLINIC; PROFESSOR OF MATERIA MEDICA AND PHYSIOLOGY, NEW ORLEANS COLLEGE OF PHARMACY; VISITING PHYSICIAN TO CHARITY HOSPITAL AND TOURO INFIRMARY, NEW ORLEANS.

Standing on the threshold of the Twentieth Century, we are confronted with one of the most momentous social and economic questions that has ever agitated the mind of man; namely, the abuse of alcoholics. Some of the greatest talent of the world has devoted its best effort to the solving of this sphinx-like problem, but it is fair to assume that we are no nearer to its solution than were our grandfathers.

On the one side, contending against this monstrous evil, are ranged the large body of earnest, serious-minded men and women; on the other, fighting for it, stand the wealthy distillers and saloon keepers, with many other misguided individuals. I have cast my lot with the side in opposition to the indiscriminate use of alcoholics, feeling as I do that this over-indulgence is responsible for more misery, poverty and crime than all other causes combined.

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\*Read before the Louisiana State Medical Society, April, 1901.

However, much as I deprecate the abuse of alcoholic stimulants, I can not allow the misleading statements made by over-zealous temperance reformers to pass unnoticed. In this connection, I may refer to an article by Professor Atwater in *Harper's Magazine* of November, 1900. In writing on Alcoholic Physiology and Temperance Reform, he uses several quotations from authorized text-books on physiology to show that the subject of alcohol is treated from a prejudiced and unscientific standpoint.

I think, in justice to the careful and conscientious investigators who have engaged in the study of this question, that these "half truths," as Professor Atwater calls certain not wholly false doctrines, should be eliminated from books designed to go into the hands of our boys and girls; for, to my mind, the teaching of truth is of more importance than even the great question of alcohol.

I believe devoutly that the evil effects of over-indulgence should be impressed thoroughly upon the youth of our land, but I refuse to subscribe to a principle of education which includes in its teachings a scintilla of untruth.

Before opening my paper proper, I will state that I have approached this subject in a scientific spirit, with a mind neither in favor of, nor against, any particular result; I shall not sacrifice the truth as I see it, whatever my personal feelings in the matter may be. If my humble services could avail anything toward the suppression of this evil, a drunken man would be a greater curiosity than a white elephant. I am sure that however widely some of us may differ on the question of the value of alcohol as a food, and its effects on the digestive system, etc., we all agree in strongly denouncing its persistent and excessive use. After these introductory remarks, let us come to the subject proper.

As digestion begins in the mouth, I thought it best in presenting this subject to commence by considering the action of alcohol on salivary digestion.

In studying these results, it must be borne in mind that the conversion of starchy food into soluble dextrins and maltose by means of the saliva in the mouth is a rapid process. It is also true that this transformation of soluble starch into dextrins and maltose continues in the stomach for some minutes after its reception into that organ.

In testing the effects of alcohol on starch digestion, I

followed the method of diastasiometry described in the classic work of Roberts.

I used a standard starch mucilage which contained exactly 1 per cent. of dry starch. Ten cubic centimeters of this standard starch mucilage were diluted with ninety cubic centimeters of water. To this mixture was added one cubic centimeter of filtered saliva, and the time of the addition was exactly noted.

The completed mixture was thus composed of about one hundred cubic centimeters, which was placed in a suitable water bath at 38 deg. to 40 deg. C. In order to measure the rate of digestion, a drop of fluid was withdrawn at intervals, placed on a white porcelain surface and tested with a drop of dilute iodine solution. The color obtained with iodine under these conditions is dependent upon the extent of amyolytic action. Thus the presence of soluble starch, the first product formed, is indicated by a blue color. As digestion proceeds, the blue color gives place to a reddish color with iodine, owing to the presence of erythro-dextrin, while the final products of amyolytic action, achroo-dextrin and maltose give no color whatever with iodine. The time when this so-called achromic point is reached is carefully noted, and the number of minutes required for the appearance of the achromic point serves as a measure for the rate of amyolytic action. (It is of course understood that in the parallel experiments that saliva from one source was used.) In the experiments with alcohol, whisky, etc, the quantities stated in the tables were added to the above mixture.

TABLE I.

Showing the effects of alcohol, whisky and brandy on salivary digestion.

Proportion of alcohol, whisky or brandy in the digesting mixtures.	Appearance of the achromic point (normal), 6 minutes.		
	Alcohol.	Whisky 50 per cent.	Brandy 40 per cent.
0.5 per cent.	6 min.	6 min.	6 min.
2.0 "	6 "	6 "	6 "
1.0 "	6 "	6 "	8 "
2.0 "	6 "	7 "	20 "
10.0 "	7 "	60 "	No action.
20.0 "	9 "	No action.	"
40.0 "	12 "	"	"

From these results, we notice that absolute alcohol, even when present to the extent of 40 per cent., has very little retarding influence on the starch digesting power of saliva.

But why the great discrepancy between whisky and brandy when compared to alcohol? From the experiments of Chittenden and Mendel, we may conclude that the presence of volatile acid-reacting bodies and tannin in whisky and brandy are responsible for the retarding action on salivary digestion. This retarding action is out of all proportion to the alcohol contained in them; the experiments proved that, when the whisky or brandy was neutralized, the retarding action was in great part overcome. This was particularly true of brandy, which, on neutralization, showed little or no retardation, even when present to the extent of 10 per cent. We must conclude, therefore, that this retarding action is due to the acidity.

The examination of the whisky and brandy residue led Chittenden and Mendel to the following conclusions: "The non-volatile matter present in whisky and brandy is not responsible for the retardation of amololytic action, but has by itself a stimulating effect on amylosis." The same investigators have observed that amyl—isobutyl—and propyl-alcohol, if present in whisky or brandy in any ordinary amount, would not be prejudicial to salivary digestion; and further, that methyl-alcohol, in the quantities which are found to retard salivary digestion, is never present in ordinary whisky or brandy. From the results of these experiments, we may conclude that the purer the whisky or brandy, the less will be its retarding action on salivary digestion.

In regard to the action of the stronger and lighter wines, they showed marked inhibitory properties on salivary digestion, even when present in so small an amount as one-half per cent. The same is also true of malt liquors, porter, beer and ale, the inhibitory action being proportionate to their degree of acidity. It has been found, in the case of beer, that when neutralized, it tends to increase very decidedly the rate of amylolytic action, and it is even possible that beer possesses amylolytic properties.

A second series of experiments, making use of the human subject, were conducted as follows:

1. Attempts were made to ascertain the amount of saliva that would be secreted in 4, 6 and 8 minutes, a smooth marble being

introduced into the mouth to promote the flow of saliva. The quantities collected varied to such an extent that it was impossible to draw any accurate conclusions. It was also ascertained that the introduction of an alcoholic in the mouth increased the flow of saliva. The following plan was adopted to study the effects of alcoholics on starchy digestion in contact with saliva in the mouth: Ten cubic centimetres of starch mucilage, together with a smooth marble, were introduced into the mouth and allowed to remain 4, 6 and 8 minutes respectively. At the end of these periods, the mixture was collected and tested to see to what extent transformation from soluble starch to dextrins and maltose had taken place. These were used as control tests.

In the experiments proper, measured quantities of alcohol, whisky and brandy were taken into the mouth together with the starch mucilage. After 4, 6 and 8 minutes, when the contents were collected and tested, it was found that small quantities of alcohol, approximately from 2 to 5 per cent., increased the rate of transformation, and promoted the flow of saliva, the rate of transformation being quickened proportionately to the increased flow of saliva. When the quantity of alcohol reached approximately 15 per cent., the transformation was much delayed.

We now come to the consideration of the effect of alcoholic fluids on gastric digestion (peptic digestion). Meat fibre was used in these experiments, prepared by the method of Roberts, which is as follows: Lean meat was minced and carefully freed from fat and boiled for fifteen minutes in two successive waters. The dry and hard looking residual fibre, after copious washing with cold water and pressing with a cloth, was then pounded in a mortar and spread out to dry at 100 deg. C. When thoroughly dry, it was reduced to a powder and passed through a fine wire sieve. In this way a dry powder is obtained of very uniform character. Experiments were also conducted with egg albumin; but I concluded to give only those concerned with beef fibre.

The digesting mixture, consisting of 0.03 gram of pepsin, 0.2 per cent. hydrochloric acid and enough water to make 100 c. c., together with 2 grams of beef fibre, was introduced into suitable flasks. As digestion proceeded, the flasks were frequently and equally agitated. The temperature of the mixture was maintained between 38 and 40 deg. C., and the digestive process was allowed to continue for several hours.

TABLE II.

In these experiments the pepsin employed was one proved to be capable of digesting 3500 times its own weight of egg albumin.

Proportion of alcohol, gin, whisky or brandy in the digesting mixture.	Time in which digestion is completed. (Normal 80 minutes.)			
	Alcohol, 99 S., 100 per cent.	Gin.	Whisky, 50 per cent.	Brandy, 48 per cent.
0.5 per cent.	80 min.	80 min.	80 min.	80 min.
1.0 “	80 “	80 “	80 “	81 “
5.0 “	80 “	82 “	80 “	84 “
10.0 “	100 “	100 “	100 “	102 “
20.0 “	112 “	113 “	112 “	124 “
30.0 “	160 “	162 “	162 “	180 “

From the table above, I believe, as do Roberts, Chittenden and Mendel, that, taking into account the quantity of gin, whisky or brandy commonly used dietetically with meals, the amount consumed is not sufficient to appreciably retard the speed of gastric digestion.

Experiments have proved that so-called fusel oils have no deleterious action on gastric digestion; in fact, the presence of traces of these alcoholics tends to increase, rather than to decrease, the rate of digestive action.

Chittenden and Mendel claim that the so-called whisky and brandy residues show that they have very little retarding action on peptic digestion.

TABLE III.

Showing the effects of sherry, port, claret, white wine and champagne on peptic digestion.

Proportion of sherry, port, claret, white wine and champagne contained in the digesting mixture.	Time in which digestion was completed. (Normal 80 minutes.)				
	Sherry.	Port.	Claret.	White wine.	Champagne.
2 per cent.	100	85	91	76	71
5 “	110	89	96	81	78
10 “	118	102	103	86	82
15 “	125	112	120	100	94
20 “	200	160	145	116	108
30 “	306	220	160	140	124



The percentages of alcohol contained in the above wines were not determined, but in every instance they were of well known brands.

Sherry has a marked retarding effect on gastric digestion, and this effect increases with the weakness of the gastric juice. The inhibitory action is out of all proportion to the contained alcohol. Büchner found that the light white and red French wines retard digestion far more than corresponding quantities of alcohol. He attributed these results to the presence of the "*bouquet stoffe*."

Experiments with malt liquors show that their retarding effect is out of proportion to the alcohol contained in them (4 to 6 per cent). When taken in small quantities, fresh beer favors digestion; flat beer, not so much so. When taken freely, this class of beverages retards digestion.

It is to be remembered that in digestive experiments performed in test tubes and the like, the retarding effect of alcohol on the digestive process is much more marked than in the animal stomach. Beaumont's experiments proved that small quantities of alcohol increased the vascularity of the stomach, and stimulated the flow of gastric secretions. My own experiments carried out on human subjects and on dogs, have conclusively proved to me that small quantities of alcohol, gin, whisky, or brandy cause an increased secretion of hydrochloric acid, and thereby a quickening of the digestive process; but, that when taken in large quantities (over 35 per cent.) appetite is lost, nausea appears, and the digestive process is suspended.

As is well known, the long continued use of alcoholics in large quantities results in gastritis. Dr. Parkes, in the Ashantee campaign, found that the fatigue of marching in the tropics is borne better without the aid of a spirit ration. Owing to the diminution of muscular and nervous energy, due to the physiologic action of this agent, the capacity for work is reduced. The only advantage derived from its use was to take away the feelings of fatigue after the men had come into camp, and thus enable them to eat. It has also been the experience of different polar explorers that the rigor of the frigid zone is borne better when the men abstain from alcohol.

In the experiments on pancreatic digestion, pure pancreatin, which was proven very active, sodium carbonate and water were

used. The results in the main were unsatisfactory, but agree in some particulars with the work of others who have used the fresh pancreas in their experiments.

It was found that alcohol when present to the extent of 5 per cent. retarded digestion in this mixture, as did also whisky and brandy. Judging by my own experiments, wines have a marked inhibitory action on pancreatic digestion.

I believe with Roberts that, considering how rapidly alcohol is absorbed from the stomach, it is almost impossible, as used dietically, that the chyme in the duodenum should ever contain anything like 5 per cent. of alcohol.

In conclusion I will say:—

1. That laboratory experiments on digestion bear a more or less close resemblance to each other. The experiments conducted outside of the human body were closely patterned after the work of Roberts, Chittenden, Mendel and Hare; the experiments on the human subject were carried out on what I considered practical lines.

2. Small quantities of alcohol favor salivary and gastric digestion; large quantities inhibit salivary, gastric and pancreatic digestion.

3. Alcohol, whisky, gin and brandy are less harmful to the digestive processes than are malt liquors and wines.

4. The continuous use of alcohol, even in small amounts, is liable to prove detrimental to the digestive process.

5. In persons of weak digestion, alcohol as a rule is harmful, unless given well diluted.

6. Strong alcoholics should never be given when the stomach is free of food.

7. Alcohol is a valuable food in disease; requiring no primary assimilation, it yields force rapidly to an exhausted system, and, in small quantities, it promotes appetite.

8. It is well to bear in mind that the purer the whisky or the brandy, the less liable it is to produce digestive disturbances. According to Dujardin-Beaumetz, the toxic effects of the alcohols increase with the sum of their atomic weights, with the exception of the highest and the lowest.

9. Finally, it is true as Wood says that: "Science in no way contradicts the experience of every *bon vivant* that the small

doses of alcohol increase, and larger amounts interfere, with the activity of digestion.”

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#### A PARASITE OF THE COMMON NIGHT-MOSQUITO (*CULEX PUNGENS*).

BY HENRY B. ORR, PH. D., M. D., NEW ORLEANS.

The discovery of the nature and life-history of the organism which produces malaria, has lent a new interest to the organisms of this order of the *coccidiidea*, of which nearly all are intracellular parasites. Whether or not it shall prove true that other members of this order are causes of human disease, as has been suggested of cancer, yet their life-histories are of interest in that they may throw additional light on the transformations and migrations of the *Plasmodia malarie*, and an especial interest attaches to those related parasites which inhabit the mosquito.

These considerations have led me to describe a parasite which exists in the common "night mosquito" of New Orleans (*Culex pungens*). In the past two years, in the months of June, July, September and October, I have examined microscopically about one hundred of these mosquitoes, all taken in a house in the centre of the residence district of the city. In each of the months mentioned, I found the parasite on an average in one out of every three or four of the mosquitoes examined. In the few males examined it was absent; also in the few "day-mosquitoes" examined (*Culex teniatus*) I failed to find it. It may be of interest to mention that among considerably over a hundred mosquitoes caught at random I found only one *Anopheles* with no parasites.

The form of the parasite most easily detected and most frequently found, is shown in figures 1 *a, b, c, d*. It is found to the number of hundreds in clusters and patches on the epithelium lining the intestine. The arrangement of individuals in these groups strongly suggests a reproduction by simple division. The single individual pulled loose from its attachment is shown in fig. 1 *d*. It is somewhat pear-shaped, having a glassy greenish body filled with fine granules and a nucleus; and also having a stem-like clear hyalin pseudopod, about one and a half times the length of the body. Apparently the pseudopod has been buried deep in the epithelial cells of the intestine; and when separated is capable of producing gradually a slow locomotion of the organism in the direction of the pseudopod.

A second form found so constantly associated with the first that I am led to regard it as a different life-stage of the same parasite, is shown in fig. 2 *a*.

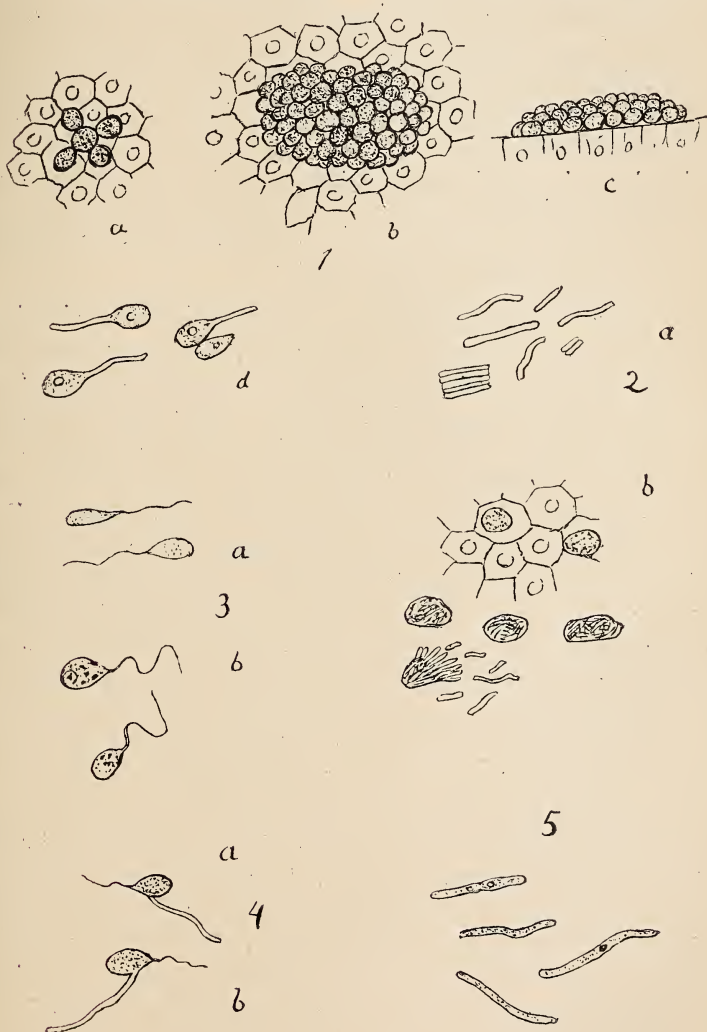
It is a bacillus-like form having only in some of the larger detached individuals a slow undulating motion. These have nearly the length of the pseudopod of the first form. The great majority of these very numerous bacillus-like individuals remain attached by one end to the internal surface of the intestine. Except for their size and their immobility they might at times be mistaken for cilia: but I have never seen any ciliary motion in the digestive tract of the mosquito, though I frequently examined it under a  $\frac{1}{12}$  oil immersion lens before muscular twitching had ceased.

A third form (fig. 3, *a*), is a small elongated body, resembling the first form, but instead of the pseudopod it has at the anterior pointed end of the body one fine rapidly moving cilium, enabling it to swim swiftly through the intestinal fluids. This form is rarely found, and then in small numbers.

A fourth form (fig. 4, *a*), resembles the third, except that in addition to the fine anterior cilium, it has a thick hyalin tentacle three times as long as the body, springing from the under side of the body. This tentacle is not used in the progression of the parasite forward, but drags motionless behind; only now and then by a quick spiral contraction it jerks the body of the parasite backward, thus giving a peculiar character to the movement of the parasite. This form is very active. It was found in only one individual mosquito, and then only to the number of five or six.

The bodies of the first, third and fourth forms are slightly smaller in optic area than the human red blood corpuscle.

Buried in the intestinal walls of a few of the mosquitoes examined, there appeared a number of dense gray bodies of



various sizes scattered here and there. All of these were smaller than a cell of the containing tissue: Some of these gray bodies seemed to be made up of compact masses of the second form described. Although too few of these were found, to give positive assurance, yet one specimen (fig. 2, b) showing one of these

detached gray masses, suggests the idea that these are the source of the bacillus-like form. Whether these gray masses originate from either of the other forms described, I am unable to say; but judging from analogy, it seems probable.

Round bodies with symmetrically arranged spore-like granules were found inside the cells of the alimentary canal and of the salivary gland. These were rare and few in number in the few mosquitoes in which they were found. Whether they have any significance I can not say.

Lying loose in the intestine of one specimen I found a few very small motile bodies that seemed to be an intermediate stage of growth between the second form and the first, as though the second form developed into the first.

In order to determine whether these organisms could exist in water outside of the body of the mosquito, I took a small glass tube in which many mosquitoes had been imprisoned at different times and in which they had deposited many small specks of fecal matter. Except for these specks the tube was clean and had never contained water. This tube was then half-filled with cistern water and allowed to stand twenty-four hours. Upon examination at the end of this period the water was slightly cloudy and filled with large bacillus-like bodies having a length of two or three times the diameter of a red-blood corpuscle. These organisms swarm rapidly with a slight spiral motion, and many had fine granules or nuclei in them (fig. 5). Many of them attached themselves by one end to the cover-slip, the other end waving slowly in the water. Examining the same water again twenty-four hours later I found in addition to the last, a great many motile bodies like the third form described above, except that they seemed a trifle larger—being, when at rest, just the size in area of a red-blood corpuscle. The cilium was more developed and worked in front of the swimming organism like a rapidly revolving corkscrew. In the body of each was a number of well-marked granules (fig. 3, *b*). A drop of water containing both these forms was put on a slide with a drop of human blood, and in this mixture both forms continued to live and swim about for twenty-four hours. At the end of four days all these organisms had disappeared from the water in the tube, only what seemed to be minute bacilli remaining.

In another perfectly clean glass tube, the bodies of several

freshly-killed mosquitoes were placed in water. On the fourth day a large number of organisms like the fourth form, but a little larger, were found in the water of this tube (fig. 4, b).

It will be noticed that three of these organisms—two in the intestine and one in water—have the same peculiar method of attaching themselves by one end to the walls of the containing cavity. My observations have led me to the opinion that all of these organisms described are different forms of the same parasite, but upon this point the evidence is not absolutely conclusive. Whether the organism passes a cycle of its life in any host other than the mosquito is also uncertain, but seems probable.

Comparing these forms with the malarial parasite, it seems likely that the bacillus-like forms under some conditions develop into the first (pear-shaped) form; this form may be capable of producing granular spores, from which occasionally the motile third and fourth (these two being probably sexual forms) may arise, the nature of the metamorphosis being dependent on the nature of the surrounding medium.

It is a very suggestive fact that in this parasite we have an organism which is capable of living and flourishing for a short time at least, in digestive juices, in blood and in rain water. Whether the malarial parasite can live in water as well as in the blood or digestive juices I have not seen stated. The absence of any description of experiment on this point in the accounts I have read of the malarial parasite seems to leave the question open, and one may suppose that the parasite of *Anopheles* like this parasite of *Culex* is capable of living in the water. Should this prove to be the case the old belief prevailing here that the malarial contagion is water-borne as well as air-borne (or mosquito-borne) would still be tenable. Rapid change of form, a brief existence in water and inability to thrive in the ordinary culture media would explain why the malarial parasite has not been found in water ordinarily.

The extreme prevalence of *Culex pungens* and its parasite among so large a number of healthy people renders it altogether unlikely that this parasite should be the cause of any recognized human disease. The data are too scant and indefinite to permit a theory of its connection with the atypical fevers of this region.

Each heavy rain after a period of drouth must repeat on a large scale in our cisterns the described experiment of the dead mosquitos and fecal droppings in the two tubes; and we can imagine that organisms in drinking water, which are capable of living in a digestive fluid, might be a cause of the intestinal derangement which so frequently follows the first heavy rains after dry periods in summer.

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#### OTITIS MEDIA NEONATORUM.\*

BY O. JOACHIM, M. D., VISITING AURIST AND LARYNGOLOGIST TO CHARITY HOSPITAL, NEW ORLEANS.

In asking your consideration for a disease affecting the ear of young infants, of which every one of you can recall cases from his own practice; and in giving you the views held thereon by those devoting themselves to the special branch of otology, I hope to be in line of bringing the specialist and general practitioner to a fuller recognition of their mutual dependence in the relief of human suffering. It is certainly a source of pleasure to record that the most appreciated recent publications lay special stress, or devote themselves entirely to the interdependence of the diseases of the special organs and those of the entire economy. Surely no one will gainsay the greater and surer results achieved by the specialist in his branch, but on the other hand, failures of the specialist which the wise family physician, by recognition of the constitutional disorder, has been able to relieve, without local treatment, come at times under our notice. In the domain of childrens' diseases it is especially noteworthy that a train of intense constitutional symptoms is frequently evoked without severe or easily observable local manifestations by the condition known as otitis media neonatorum. When I state that the ears of 30 to 80 per cent. of all children up to six months of age are abnormal, I will probably express a fact not generally appreciated in its full import, and in a way indicative of the frequency of this trouble. Let me append the result of some investigators.

Troeltsch found the ears of fifteen out of twenty-four infants diseased; mostly purulent accumulations in the middle ear.

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\*Read before the Louisiana State Medical Society, New Orleans, April, 1901.



Wreden found in fifty organs of hearing only fourteen healthy and thirty-six times purulent middle ears. Hoffman found in fifteen children seven times pus in the middle ear. Kutsharving in Moscow, examined 230 children, and found only thirty normal ears. Light middle ear catarrh existed in twenty infants of eleven days to four months old. Intense catarrh with inflammation of the mucus membrane of the middle ear in thirty infants up to two months of age. Of those remaining, 150 infants from six days to four months of age, forty had purulent affections of the ears in various forms. Hartman found over 75 per cent. of middle ears of infants diseased, and comes to the following conclusions from an examination of forty-seven cases of young infants admitted to the infectious hospital:

“The observation at autopsies of infants, of middle ear inflammation in 75 per cent., is confirmed by examination of living infants. The middle ear inflammation may be detected, almost without exception, by otoscopic inspection.” In the light of such enormous percentage of a disease of the ears in infants, it is of importance and interest to inquire how this condition comes about. The reasons may be stated as follows: The anatomic and physiologic peculiarities of the ear and its appendages in early life prepare a favorable condition for its existence.

1. It is important to bear in mind that the eustachian tube is, in the newborn, very short, and not only relatively but actually wider than in the adult.

2. The cavity of the tympanum, the membrane and ossicles are fully developed and of adult size at birth, and the tympanic cavity contains, before and after birth, essentially different media. In the fourth and fifth months of intrauterine life the cavity of the middle ear is not yet distinguishable. By the eighth month of fetal life, the cavity exists and is filled up before birth with a cushion of mucous membrane, and after birth with air. If breathing occurs before delivery anniotic fluid may enter the middle ear; if breathing occurs after birth, air enters. The presence of air causes resorption of the hyperæmic cushion of mucous membrane.

3. The cast off products of this process remain in the ear for a variable length of time.

4. We must bear further in mind that the secretory organs of

the upper air passages, in this period of life, are extremely well developed, and that,

5. The nearly permanent recumbent position of the infant is essentially favorable to aspiration and infection of an extremely favorable soil for the development of microorganisms of all kinds in the gelatinous elements of retrogressive metamorphosis in the ear of the newborn.

We have thus enumerated some of the essential physiologic and anatomic elements which bring about such a high percentage of diseased ears. It is perhaps not out of place to mention some of the existing causes which could well be avoided. The forcible injection of fluids into the nose of infants for the relief of cold by spray, or douche, or during bathing is often the means of conveying the inflammation producing agent. This occurs even easier in the infant than in the adult on account of the patency of the tube. A probably not inconsiderable proportion of cases is due to the acquisition of nasal blennorrhœa by the infant during parturition analogous to the ophthalmic blennorrhœa. In this condition, the symptoms are frequently violent and may lead to fatal issue in about three weeks, with meningeal symptoms, refusal of food, diarrhea, and fever. The presence of gonococci has been established by the observation of different investigators.

Microscopic examination by Russell of the contents of the middle ear of living and dead infants showed the presence of streptococci, staphylococci and Pfeiffer's pseudo-influenza bacillus. Gradenig and Puego regard the histologic products as post-mortem decompositions. Troeltsch regards them as inflammatory.

*Diagnosis.*—I may, I hope, without impropriety, ask why this condition is not oftener recognized. Again we must mention an anatomic condition, which is responsible and explains the difficulty, and which is especially potent in masking the development of the most evident symptom. It is the extreme thickness of the epidermic layer of the drum membrane in the young infant, which prevents an early or easy rupture of the drum, and the appearance of aural discharge. Further than this, I need only mention the fact that we are treating an infant and are therefore deprived of any help to guide us to the point where the pain exists. The greater horizontal position of

the drum in the infant and the apparently lessened objective symptoms of inflammation on account of the greater density of the epidermic layer should and do not usually form any serious difficulty to the recognition of process. Reflected bright daylight or reflected good artificial light most always permit a positive diagnosis. The most essential symptoms which should lead us to suspect ear inflammation in infancy are restlessness, increased temperature and loss of weight. An involuntary, persistent throwing about of the head from side to side, or throwing of the head backward; a continual whining and whimpering of the child, with occasional loud cries of pain, probably often taken for colic; the refusal of food due to pain caused by deglutition; the consequent loss of weight and the often observable reaching for the ear by the infant, or the loud outburst of cries when the ear is touched, should direct our attention and investigation to the probable existence of acute middle ear inflammation. The temperature is also a valuable indication in the absence of other symptoms, and it may reach considerable height. Diarrhea, uncontrollable by properly regulated diet and treatment, meningeal symptoms and convulsions are often in the train of symptoms of acute infantile middle ear disease.

During the course of the acute exanthemata the ear is unquestionably a seat of predilection for complications, and an unexpected rise of temperature during their course should always cause the ear to be investigated. Especially frequent and severe is this ear inflammation during broncho-pneumonia of infants and the severity of this complex of symptoms caused it to be called cerebral pneumonia. The manifestations we encounter often stimulate a meningeal attack with delirium, convulsions and cyanosis. The lustre of the eye, dilation of pupils, involuntary muscular contractions and anxious facial expressions and finally cessation of the convulsions and head movement, with nasal hemorrhage, are the symptoms which usually precede a fatal issue. If the child's head during the prevalence of these alarming symptoms is suddenly lowered, it will usually give a pronounced cry and reach for the ear. This symptom can be elicited in more than one-half of the cases at where the ear inflammation is the cause of the cerebral symptoms, and is always indicative of this complication. The temperature during this period is usually high. Death occurs

in these cases either from progressive atrophy or the micro-organisms pass into the cranial cavity and cause meningitis. The communication of the infection is in the infant on account of the incomplete ossification and the still open fissures and on account of dehiscences by far likelier to occur than in the adult. Death may result from the resorption of micro-organisms in the blood and consequently cause septicaemia.

*Treatment.*—There is perhaps no procedure in the whole domain of surgery excepting heniotomy which may give such exquisite and complete relief as a timely paracentesis of the drum in this condition. With the release of the pent up secretion, the distressing symptoms which threaten and often destroy the child's life seem to subside as if by magic with a gratifying and early return to more hopeful status. Such alleviation of symptoms also occur after a spontaneous rupture which is, however, rendered difficult by the resistance of the drum and of which we are never assured. The evacuation of the secretion by the way of the eustachian tube also occurs and affords prompt relief, but it can not be depended upon, and a paracentesis should always be made, even if the ear complication should only be suspected. It can do no harm if no accumulation be present, but its omission may cost the child's life. The course of the middle ear condition afterward is that of the common middle ear abscess after perforation. No time should be lost when the symptoms are evident and urgent. When the existence of some one or more symptoms has caused us to only suspect the existence of middle ear disease in what way should we proceed? The usual topical applications of green oil, laudanum and cocain solutions may at once be discarded as useless if we remember the great thickness of the epyidermic layer of the M. T. It is impossible that the application of heat controls in a measure the symptom of pain. The course of the attacks in children is, however, in most cases so evanescent that the subsidence is in all probability coincident with the application and the occasional discharge of the accumulation through the eustachian tube must not be lost sight of. Many of the attacks last but during the night, and are forgotten with their subsidence. If no fever or loss of weight occurs, no active interference is according to Hartman's advice necessary. Pain alone may be controlled with glycerin and carbolic acid solution, instilled

warm. Should, however, the pain continue, the sooner a paracentesis on one or both ears is made, the better for the patient; and if the symptoms are urgent, the opening may be exceptionally made under guidance of light with a probe by a short, quick pressure. Usually, the incision should be made sufficiently ample for free drainage, and if the healing process should too quickly agglutinate the edges and interfere with drainage, it should be repeated. If the discharge is free and drainage good, the progress of the disease tends usually to early subsidence of the symptoms and cessation of the discharge. The usual cleansing solutions, or dry treatment as may be used as preferred. The discharge can be dislodged into the throat by using the Politzer bag gently on the canal of the outer ear. Bezold's method of boric acid inflations are of service when a free perforation and a mucous discharge persists. These points and the technique of paracentesis of the drum will be brought out in detail on the subject for general discussion and need no special reference, but I can not close without appealing to you, as I have frequently done heretofore, for a more general use of the reflector by the profession. It is in this, as well as many other diseases of the orifices that we literally throw light on the subject and render apparently observe conditions amenable to relief by simple and easily available measures.

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## Clinical Lecture.

[Specially reported for the JOURNAL.]

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### BRIEFS ON THE SURGERY OF THE GENITO-URINARY ORGANS.

BY G. FRANK LYDSTON, M. D., CHICAGO, PROFESSOR OF GENITO-URINARY SURGERY AND SYPHILOLOGY IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF ILLINOIS; PROFESSOR OF SURGERY, CHICAGO CLINICAL SCHOOL.

#### VASECTOMY AND ITS LIMITATIONS.

Vasectomy as a substitute for the more severe and radical operations for the relief of prostatic disease, and particularly as a substitute for castration, has not thus far sustained itself to the extent that was at first hoped. Premature reports are

responsible for quite a proportion of cases of alleged cure of prostatic disease accomplished by vasectomy. After sifting the evidence carefully, however, and after considerable experience with the operation, I still believe that it has a limited range of usefulness. Its usefulness, however, is by no means limited to prostatic hypertrophy, although this is the condition in which it is most frequently indicated. It is an unfortunate fact that the case of prostatic hypertrophy in which vasectomy is most likely to be consented to, have nearly all passed the period at which the operation is most likely to achieve success. The operation is most effective in cases in which the prostate is soft and not as yet firmly organized by either interstitial fibroid changes, circumscribed fibro-myomatous development, or more or less distinct fibro-adenomatous changes. This implies of necessity that it is likely to be most useful in relatively young subjects who, with reason, may be expected to be unalterably opposed to any mutilation of the sexual organs. In patients not far past middle age, in whom the prostate is still soft and succulent, vasectomy is a valuable procedure. This operation, as a rule, not only checks the progress of a condition which would otherwise inevitably result in classic senile hypertrophy, but produces a distinct reduction in the size of the organ, and a diminution of vesical irritability, with associated improvement of the function of micturition.

Whenever, in old subjects, there is associated with distinct fibroid change a greater or less degree of congestion, with a soft, boggy condition in that portion of the prostate surrounding the typic overgrowth, vasectomy is likely to prove beneficial in direct proportion to the extent to which vascular changes enter into the composition of the prostatic mass. In many instances in which vasectomy does not in any sense bring about a cure, great benefit results from the consequent relief of irritation of the vesical neck, and the freeing of the prostatic urethra from obstruction to a sufficient extent to enable catheterism to be readily performed. Cases in which catheterism was performed with difficulty prior to the operation, or was followed by aggravation of the vesical symptoms, or profuse bleeding, are often so far relieved that the catheter is quite as effectual in the way of palliation as could be desired. Complete relief of the prostatic and vesical symptoms, with ability to void the urine and empty the bladder completely without the aid of the catheter occurs

very rarely. It is not to be expected that vasectomy or any other operation will restore a bladder, the walls of which have been seriously impaired as a consequence of prostatic obstruction, to the normal condition. I am aware that this result is quite universally demanded of all operative procedures designed to relieve or cure prostatic hypertrophy. We should not, however, be called upon to work miracles. The same secondary conditions that defeat the object of all other operative measures for the relief of prostatic hypertrophy operate with even greater force against the success of simple vasectomy.

This statement is made with due regard for the claims of some of the over-enthusiastic advocates of the Bottini operation, who would have us believe that this method of operation, unlike any other radical measure for the relief of obstruction at the vesical neck, is ideal and usually followed by restoration of the normal structure and function of the bladder itself in cases of prolonged prostatic disease. The serious changes in the bladder wall, to say nothing of the structure of the kidney, incidental to long standing prostatic obstruction in old men will ever be a stumbling block in the way of radical operations upon the prostate, and constitute an imperative demand for early operation in such cases.

Cases of prostatic infection in which recurrent inflammation of the epididymis and spermatic cord occur often demand vasectomy. Vasectomy once performed, the gateway of testicular infection is permanently closed. In certain cases of gonorrhoeal infection of the prostate frequent attacks of epididymitis, on one or both sides, may occur in spite of the best of treatment, and make the patient absolutely miserable, to say nothing of the loss of valuable time necessitated by the rest which he is compelled to take during acute or subacute exacerbations of inflammation of the testicle. Under such circumstances, with a clear understanding upon the part of the patient as to the inevitable sterility of the organ involved following the operation, vasectomy may often be performed with great benefit. In a number of instances patients have urged me to perform this operation, the idea of its performance having suggested itself to them merely from a knowledge of the *rationale* of infection of the testicle. This knowledge our patients must necessarily obtain from time to time, if they are of an inquiring mind and prone to ask for explanations of their various ailments.

Vasectomy, in connection with conservative operations for tuberculosis of the testicle, does not concern us here. The operation of vasectomy forms a valuable resource in the treatment of masturbatory lunacy, and should be more often performed than has been the custom. It is an operation which, in my opinion, is warrantable in certain cases in which the male is desirous of assuming marital relations, yet dreads the consequences of impregnating his wife, on account of some disease in himself which would impart serious results to the offspring. Men who suffer from known hereditary disease of one kind or another which will almost inevitably be transmitted to their offspring should be encouraged to submit to vasectomy. Vasectomy having been performed, in the case of many individuals who would otherwise be deterred from matrimony by conscientious scruples regarding the possible effects upon their offspring, matrimony could not reasonably be interdicted. The sociologic importance of this application of vasectomy can not be overestimated.

It is possible that the dissemination of knowledge of this operation among the female portion of the community might restrict the practice of abortion to an enormous extent. Women who are perpetually going through the abortion process as the penalty of yielding to conjugal demands might, in many instances, be impelled to impose conditions upon the male which would render him far more considerate than he is upon the average. In certain cases of intractable spermatorrhea vasectomy is likely to produce excellent results. It benefits in three ways: 1. By preventing a serious drain upon the system incidental to the seminal loss *per se*; 2. by the moral effect of the cessation of the escape of semen from the patient; 3. it benefits the chronic prostatic and seminal vesiculitis with which the spermatorrhea is likely to be associated.

In intractable cases of spermatorrhea I can see no positive objection to the operation of vasectomy. The question of the relative potency of the individual hardly enters into consideration, because in these cases the patient is already impotent, and there is a possible chance for virility to be restored after the cessation of the seminal loss and the correction of the prostatic disease with which it is associated. Where varicocele exists it can be operated upon simultaneously with vasectomy.



# N. O. Medical and Surgical Journal.

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## Editorial Department.

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CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

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### DR. HAYS ACQUITTED.

It is a source of general congratulation that the Jackson Asylum incident has been closed with the acquittal of Dr. Hays of the charge of manslaughter. The story of the case has been thoroughly ventilated in the press and from all sides: In the strict line of disciplinary treatment, practiced in the Asylum, an insane negress was ducked under water and died during the process. At the autopsy the evidence of drowning was not sufficient to urge its importance until afterwards when the charges were brought against the Superintendent, Dr. Hays.

It has been said that the whole process of the law was provoked for political purposes as the immediately neighboring population were adverse to the incumbent medical officer of the Asylum. Be this as it may, the whole episode points to the need of a serious consideration of the importance of the Jackson institution and especially to its delivery from purely political ambition.

The result of the trial and the evidence adduced show the satisfactory management under the present administration. The JOURNAL can only add its own knowledge of Dr. Hays' eminence as a prominent member of the profession of the State, a Charity Hospital alumnus, Tulane graduate, and ex-president of the Louisiana State Medical Society—in itself no mean distinction.

In every community, as the needs for alienist acuity arises, as insanity increases in volume, there must be a commensurate appreciation of the needs for research in mental affections and the means to such end should be forthcoming. It has required so striking an incident as the one above related, to let many

citizens of the State know that there is an insane asylum. Dr. Hays has repeatedly called attention to the needs of the institution, and he has asked only too little for its amplification.

No classes of disease offer to the scientific medical mind a greater field of unexplored possibilities than those of mental origin. Texts have grown and specialists have multiplied only to stand baffled ever and anon at some new phase suddenly developed. Often, even the post mortem analysis of a brain unbalanced, will disclose no evidence of the *causa vera* of the tangled cells.

We are moving onward and with rapid strides in so many lines of medical science, that it seems as if the pace should be kept by these as well.

This shock of awakening should be turned to good account and the public, now alive to the existence of an insane asylum in the State, should see to it, that it has all that it needs, to make it an asylum in deed and fact as well.

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#### DIPHtheria ANTIToxIN AND TETANUS.

The death of a number of children from lockjaw, in St. Louis, following closely upon the injection of diphtheria antitoxin, has very properly given rise to a great deal of comment both in the medical and lay press. A study of these occurrences showed that all the little patients had been injected with serum derived from the same horse, said serum having been manufactured by the St. Louis Board of Health, and said horse having been kept in the stable attached to the Poor House. It was conclusively shown that tetanus was conveyed by means of the anti-diphtheritic serum.

There can be no excuse for similar accidents, as it is well within the bounds of possibility to guard most absolutely against them. It is to be regretted that many laymen and prejudiced physicians will use the incident as an argument against diphtheria antitoxin. With the ignorant, the argument may carry weight. With reasoning and intelligent people—lay and professional—it can count only against the methods used by the St. Louis Board of Health, and serve as a warning against placing the lives of our children in jeopardy by the use of any

agents manufactured, we might say, under political control, for that is, unfortunately, the truth in this country to-day concerning anything under municipal management.

We can not be surprised that the commercial manufacturers are using this deplorable incident for all it is worth in opposing the manufacture of such products by municipalities; nor that they should expatiate upon the greater safety of their respective serums and antitoxins.

While there is no reason why a municipal laboratory, properly conducted, should not produce just as safe and effective agents, the fact remains that to-day the majority of practitioners will no doubt prefer resorting to those manufactured by first-class and responsible private houses.

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## Society Proceedings.

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### ORLEANS PARISH MEDICAL SOCIETY.

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MEETING OF OCTOBER 12, 1901.

DR. MARTIN read a paper on "*How shall we treat the Negro Fiend?*"

I have no apology to offer you, gentlemen, for the introduction of a subject which deals with other than medicine. Has not the time come when we should endeavor to do something to stay the negro fiend in his mad career; suggest at least such methods as will tend to make him think twice before carrying into effect his diabolic crime. My views on this subject are probably radical and will be met by strong opposition, even from you; but, knowing the negro as I do, I can view him from but one standpoint. First, let me say I am dealing not with the educated or more enlightened negro, but the negro who is, as a rule, absolutely ignorant of law, morality, or honor. I will preface my remarks by saying that in a long experience I have never met one of this class who could be trusted. The old slave was faithful to his master; was it not through fear rather than love? That same slave freed was not always trust-

worthy. This I believe comes from want of the proper appreciation of the sense of right. This negro is endowed with instinct, not intellect. That you may, after years of constant application, teach him to become law abiding is possible. To make him law abiding from a patriotic motive is impossible. It is known that the hardest masters always accomplish the most with negroes. If you hire him to do a day's work you must be constantly present or he will do just as little as possible; he never hesitates to lie about any matter that is to his interest; he will steal food and more whenever the opportunity presents itself, if he thinks he can escape the penalty. What right have we then to expect him to reach the high, we will call it high, moral standard of the enlightened white man? He is in this state but an animal endowed with the power of speech, but in every other essential no better than the quadruped, until he has been properly trained. Instinct teaches him that he must eat, sleep and satisfy all passions that his nature craves. He has no thought of to-morrow, he lives only for the day, for the moment. Is it surprising then that this creature should be willing to go to any extreme to accomplish his purpose? I ask you do you believe that any man endowed with a soul, with sympathy or sentiment, could possibly work himself up to the point of actually committing rape upon a beautiful young woman, writhing in his powerful grasp, or worse probably, already a corpse? Such I believe to be the negro fiend—a fiend only when under the spell of lust, a harmless brute when calm—who has been causing so much trouble throughout the length and breadth of our country. If your neighbor's rams invaded your flock, do you believe that by killing one the rest would be made to remain away? Hardly. The lynching of one negro has little effect upon others, and the reasons are simple. In the first place, few witness the lynchings and the lynching itself is such a crime, that it makes a martyr of the subject. Negroes do not read the newspapers; news circulates slowly among them; they learn not by reading as we do, but by object lessons and the lesson must be constantly impressed. Those who take part in the lynchings are careful not to talk about the subject, and the negroes are silent through fear. It is not circulated around and is soon forgotten. My idea of dealing with this subject is to send missionaries among these

people, missionaries who are firmly converted to the belief that to commit such a crime is an error and an error never to be forgotten. Judging from the number of lynchings that occur annually we would soon have a number of zealous workers in the field.

In conclusion I would suggest that any man, be he white or black, who deliberately commits rape should be castrated, his penis amputated and his ears so marked that it may be known that he has committed crime, that crime for which there is no forgiveness. I believe that the novelty of the punishment in itself would have the tendency to stop lynching. I am sure that if such a law could be passed that any man after five minutes deliberate contemplation will use every effort at his command to sustain the law, believing a living death preferable for the offender to a few moments torture at the stake. And this is not all. I am thoroughly convinced, and no doubt some of you are also, that many a negro has been burned at the stake who was innocent of the crime. If the law is passed it must provide that the operation be performed by one thoroughly competent and in a painless manner; the suffering will come after. Turn a negro loose among his fellows, showing the earmarks of the law, let him tell his friends what it all means and I firmly believe it will teach a greater and more impressive lesson than any sermon ever preached to a colored congregation.

If I have appeared a little severe in the picture I have drawn of the negro, it is because I have stated the facts. Born and raised in a community where there were fifty negroes to every white, dealing with them in every possible way, I learned to know them only too well. You can never make him more than the Almighty intended; it was never ordained that he should have the finer feelings of the white man. He can only imitate, and his ability in this respect is marvelous. But unless you get white blood in his veins and a large proportion of it you can never make him the responsible being that the white man is.

#### DISCUSSION.

DR. LEBEUF thought castration sufficient, with perhaps a small earmark.

DR. NELKEN thought that such men as Booker T. Washington proved that the negro race was capable of elevation. To turn

loose on a community a rapist who had been castrated and ear marked would be dangerous, as such a brute would be made still more insane by such public degradation, and would stop at no crime to revenge himself on those who had punished him.

DR. MAINEGRA believed that such negro fiends generally came from the brutal, uneducated classes.

DR. CHASSAIGNAC held that the crime of rape should be considered independently of the race question. These criminals were generally sexual perverts, and probably derived sexual gratification from brutal acts rather than from normal sexual intercourse. Such men could be deterred by no form of punishment, and should be permanently removed from society. In spite of theoretic discussion the results would probably continue to be much the same when the brute was caught soon after the crime had been committed. Torture was useless, as it did not deter other such brutes. The only sure mode of prevention was by educating the masses and raising their moral standard.

DR. DABNEY mentioned a rapist in Franklin, La., who had been sentenced to life imprisonment and afterwards pardoned by the Governor. He urged that uniformity in executing the law was essential.

DR. CHASSAIGNAC stated that the laws of Louisiana provided a death penalty for rape.

DR. SEXTON had been very much impressed with the subject matter of Dr. Martin's paper, and as a citizen living in the South, had often desired to see some remedy applied that would stop forever the unmentionable crime of negro men ravishing white women, but viewed from any standpoint, it is a hard matter to deal with. In the first place, every negro ravisher has the deluded idea that his sins will not find him out or, as they put it, "you can't catch this nigger." They do not read the newspapers except to a limited extent, and very few of them know the fate that is meted out invariably for such crimes, except the object lesson which they are taught in an immediate vicinity by an actual hanging, either judicial or otherwise. We all concede that in any given case it would be best to let the law take its course and as good citizens we prefer that the courts shall be upheld, but the leaders of mob violence or lynch advocates will answer this argument by saying (if by chance the victim of the

rapist be left alive after the fiendish purpose has been accomplished) would you be willing for your daughter, mother, or sister or wife to face a court, a jury, and perhaps a thousand idle spectators hanging around the court room, to submit her to the awful humiliation of sitting on the witness stand and reciting all the horrible details of her awful shame and point out the criminal at the bar as the man who had subjected her to this humiliation worse than death? This argument always leads to the end of a rope without any court intervention. But, to get at the source of the evil and to prevent the possibilities of such tragedies happening is really the gist of what we desire to accomplish. I would make one observation, and it is this, that these crimes are almost invariably committed by the criminal drunken, idle, loafing negroes that infest local communities and that no hardworking, responsible darkey employed at any profitable business, either as brickmason, farmer, carpenter, or artisan, is the one who does this fiendish work. This being the case, local communities should enforce vagrancy laws, forever expelling all such characters, and as soon as such person comes into a community he should be made to know that his room was better than his company, and should be very promptly ordered to leave, and to the average coon this warning by the proper authorities, would be promptly acted upon, and if the time limit was only an hour, he would have at least a half hour of it to his credit.

I believe that the encouragement of industrial education among darkies will raise them above this low medium and will instil in them more respect, not only for white women but for their own race as well. Who ever heard of a brickmason, longshoreman, or cotton screw man, whose wages average from three to eight dollars per day, ravishing anybody? Any other solution of the question, which may not however seem very charitable towards our brethren of the North, is the encouragement of emigration from the South to the North where the great preponderance of whites over colored people would render them afraid to commit these awful deeds. In some of the black belts in the South there are a thousand negroes to one white person. Now if this unequal proportion of population could be changed by sending excursions of transport loads of colored people, say to Boston, or any other Northern city that desired their help and

labor, large colonies of colored people could be moved, but would be intimidated by the preponderance of white people in the North and afraid to commit these barbarities which seem to be so common whenever they find an isolated and unprotected female in the South. The negro naturally is a very amorous being, deficiency in education, and refinement, develops all their brutal propensities. I do not speak it as a slander upon the race, but quite a large number of young colored women, as well as men, are, to say the least, sexually very ardent. Now this natural instinct is perhaps harder for them to curb than in a race of more refined and cultured people mentally. But the real point is: What shall we do with the fiend who has already ravished his victim? Perhaps if the action of courts were more expeditious, and a judge could be called and jury impaneled immediately and the testimony of the woman, if living, taken in private office of the judge, she being screened from all publicity, and the actual guilt of the accused be established beyond all reasonable doubt, the law of the State being that such crimes should be punishable by death; then a public hanging, to which all the colored people could be invited and witness the end of such a demon, it might be an object lesson, and, at least, an upholding of the majesty of the law which we all desire so much; but as long as Southern blood runs hot, as long as the courts are so slow in their trials, as long as the awful passion for revenge in man's breast is so prominent, it is next to an impossibility to curb the tendency to lynch law, thus relieving the courts and counties and parishes of the expense of trial by some of the hotheaded people who lead in these movements. Castration and earmarks have been suggested as a remedy—the objection to which is, the eunuch would be left to pillage, murder, and burn the property and person of his former victim. I do not doubt but the fear of castration would dampen the ardor of many negroes, but the same question arises that none of them ever expect to be caught or overtaken in their sin. It has always occurred to me that we should be exceedingly sure of our man whenever such cases come up before any hanging, either legal or otherwise, shall take place. Many of us know of instances where the innocent have been made to suffer and the guilty left to escape. What must be the feeling of the poor fellow who has been lynched, mobbed, or



burned at the stake for a crime which he never committed. One of the many objections to lynching is that it makes outlaws of the persons engaged in it. Taking a human life under any circumstances is most unfortunate, but to trample justice under our feet, set aside the prerogatives of the courts, and practically commit murder without a judicial trial is, to put it mildly, very unfortunate for those engaged in the lynching. Again, it has proven no cure; with every rapist lynched who has been caught, the crime has been apparently more frequently committed during the last year than at any former period—that is, if we are to accept the reports we see in the newspapers. That the parties who commit these crimes are sexual perverts, even if this can be proven, should not mitigate the punishment, which should be death in cases where the guilt is unquestionable—be the rapist white or black. The evidence should be overwhelming in cases where the previous moral character of the woman can be questioned. It should not be left in the power of any designing immoral woman to be able to swear away the life of a man with whom she has been living and is finally caught in the act.

DR. MCGEHEE thought that the negro race had improved very rapidly, though not so much in morals as in intelligence. Education was the surest preventive, and death the proper punishment for the crime.

DR. LEBEUF knew of a negro fiend who had been castrated and who promptly disappeared from the community. This did not support the theory that such punishment would serve as a constant object lesson to a neighborhood.

DR. GESSNER held that some women were naturally vicious, and, therefore, the private trials advocated by Dr. Sexton would afford opportunity for the persecution of innocent men. He also thought that competent surgeons would object to acting as public executioners, and would decline to perform the castrations. The negro race needed education, but not higher education.

DR. MARTIN closed the discussion as follows: I thank you, gentlemen, for discussing this question. My object in writing the paper was to get the consensus of opinion from the profession. It is at best a difficult, and a mean subject to handle. It occurs to me that such a punishment might have

some weight with lynchers and the result of the plan would give the accused a chance for a trial. I believe it would be better to let ten guilty men escape than to hang one innocent one. Some years ago a negro walked into a room where a white woman was in bed. She immediately conceived the idea that he intended to take advantage of her and set up a cry. Knowing that if caught in the room it meant burning at the stake, he murdered her and escaped. It was proven at the trial that the man had no such intention. There are many such cases. It means simply that a negro found in the room of a white woman is going to be lynched. I can not agree that this crime is premeditated.

Possibly, as suggested by Dr. Chassaingnac, it is only the sexual pervert who commits it; but certainly such a man who could deliberately plan such a crime would have reason enough to calculate the consequence, and I believe the knowledge of certain death would deter him. I believe it is momentary and suggested by the opportunity. The question is, can we suggest a mode of punishment which would be popular and would secure for the accused a legal trial?

DR. GESSNER reported the following interesting case: *Adult white female was cut the previous day on finger by lamp chimney, and used a dirty handkerchief as an emergency dressing. That day, about 24 hours later, temperature 99.1, pulse 76; emphysema was present over finger and dorsum of hand. That night the temperature was 99, the pulse and the emphysematous area had not increased.*

DR. MILLER had seen reported from the Johns Hopkins Hospital cases of emphysema of the abdominal walls following laparotomy. Welch had found the bacillus *aërogenes capsulatus* in these cases, all of which recovered.

DR. PERKINS had seen emphysema in a leg crushed below the knee. The crackling had rapidly extended as far as the abdominal wall in about 36 hours; the patient showing signs of sepsis and dying. Believed that Dr. Gessner should watch case closely and amputate if any indication of spread.

DR. GESSNER was observing his case every 10 or 12 hours, and hesitated to amputate too soon.

DR. WALET had seen crepitation in leg 48 hours after a number of bird shot had been fired into it. Thought that muscular contractions might have aspirated air through skin opening.

DR. BARNETT remembered the case mentioned by Dr. Perkins. The stump was normal in appearance; the pulse rapid and the temperature not high. There was great depression.

DR. MARTIN had seen emphysema in a case of puerperal septicemia, with multiple abscesses. Subcutaneous necrosis existed in this case. He advised incisions in Dr. Gessner's case.

DR. GESSNER in closing said he was watching the case closely and if the condition did not take a favorable turn in reasonable time intended calling a consultant.

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MEETING OF OCTOBER 26, 1901.

DR. GORDON KING read a paper on "*A Case of Gangrenous Mastoiditis.*"

On July 24, 1900, I was called in consultation with Dr. W. F. Pettit, of this city, to see a case of acute mastoiditis. The patient was a young man, 22 years of age, and a laborer. The father, also a laborer, was of feeble constitution, and at that time suffering with malarial toxemia. The mother was a strong and vigorous woman. The patient's previous record of health was fairly good, although he did not show a robust frame, and had been suffering with a discharge from the right ear for some time past. The surroundings were very mean and unsanitary. About ten days prior to my seeing him he had begun to feel a dull pain over the mastoid region, accompanied by fever, which at first was attributed to malaria. Redness, swelling, and edema behind the ear soon appeared, however, with increased suffering and higher rise of temperature. Dr. Pettit saw the case at this stage, and ordered the ear to be kept cleansed with antiseptic solution and hot poultices applied to the mastoid. In spite of this the mastoid inflammation grew steadily worse and showed a tendency to extend downward into the neck. Upon examining the case with Dr. Pettit, I found the following condition: The patient was very nervous and restless, at times delirious, and with a pronounced typhoid appearance, as shown by his emaciation, dry coated tongue, and teeth beginning to be covered with sordes. A penetrating foul odor emanated from the patient and the bed clothing. The odor was readily traced to a sero-purulent discharge from the right ear. He complained incessantly of pain in that side of

the head and suffered intensely when pressure was made over the mastoid.

The mastoid region was inflamed and swollen, the swelling extending downward along the course of the sterno-cleido-mastoid muscle. Palpation of the part elicited not only a sensation of fluctuation, but also of distinct gaseous crepitation. The gravity of the condition being impressed upon me by these symptoms, I advised that the patient be transferred to the hospital at once where surgical measures could be resorted to without further delay. The family only consented to an operation, however, when the critical state of the man was made clear to them. Upon reaching the hospital three hours later another examination was made, and the temperature showed an elevation of 104 2-5, with a weakening pulse of 120. Stimulants were administered and preparation made for immediate operation.

Incision of the soft parts over the mastoid was followed by a flow of fetid sero-pus of the same character as the discharge from the ear canal. The entire mastoid process was gangrenous, as shown by its blackened appearance and infiltration with the gangrenous pus. This pus had formed a pocket under the fascia covering the sterno-mastoid in the neck, so that a counter opening for drainage was made below, and the parts freely irrigated with strong bichloride and hydrogen peroxide solutions. A complete mastoidectomy was required to remove all the gangrenous bone and slough. The bone covering the lateral sinus was apparently healthy and exploration of the sinus was not considered necessary. After thorough cleansing of the wound iodoform powder and gauze were freely used in the dressing. Hypodermic stimulation with strychnia and the administration of strong milk punch was ordered. There was some delirium at times during the night and occasional nausea. He slept only about forty-five minutes in the night, but seemed stronger and rested more quietly the morning following. The temperature had fallen to 102, with a pulse of 124 and respiration 36. Sponging with cold water was ordered to reduce the temperature, which was brought down by this means to 101 1-5 and the pulse to 96. The patient passed a very restless day, however, seeming to be very much alarmed about himself. He took nourishment and stimulation regularly and voided urine and feces normally. The evening temperature rose 102 1-5, pulse 120. Night passed in wakefulness and intermittent light delirium.

The next day, July 26, temperature 100, pulse 110, and very compressible. Examination of wound showed extension of redness along the sterno-mastoid in the neck, with steady advance of the crepitus and fluctuation towards the clavicle. Incision was made at the lowest point, and the wound from the mastoid down thoroughly irrigated with bichloride and hydrogen peroxide. A rubber drainage tube was inserted under the fascia connecting the two wounds. The fever in the evening had fallen to 99, with, however, no change in the pulse, which remained at 110. The patient showed evidence of gradual weakening and the typhoid state increased apace. Stimulation with digitalis, strychnia and whisky freely given. The stomach then began to show considerable irritability and nourishment was poorly retained. This was soon followed during the night by constant vomiting and involuntary urination.

July 27. The pus found to have burrowed down below the last incision to the supra-clavicular space, and a button-hole incision had to be made at that point to permit free drainage and irrigation. Shreds of gangrenous tissue were removed through the incisions made above, and pus that was watery and offensive flowed freely. Temperature  $99\frac{4}{5}$ , pulse 112. At 7 P. M. a severe chill, with rise of temperature to  $103\frac{4}{5}$ , pulse 136; wound irrigated and sponge bath given, with ice bag applied to head. A period of active delirium was followed by sound sleep of an hour and a half. Pulse at times irregular and fugitive twitchings of the facial muscles were noticeable during sleep.

July 28. Morning temperature  $100\frac{1}{5}$ , pulse 124, respiration 22, constant desire to urinate, the urine being highly colored and scanty. Examination showed a further extension of the gangrenous process beneath the fascia of the infra-clavicular region on to the chest wall. The lowest point was promptly incised and the entire tract irrigated. The temperature declined during the day, but the pulse increased to 146 and steadily weakened, being momentarily dicrotic and fluttering. The nervous twitchings became general and the pupils dilated; urination involuntary.

July 29. The conditions of the day before showed no improvement; temperature  $100\frac{1}{5}$  in the axilla, pulse 140, respiration 34. In spite of active stimulation the patient gradually sank during the day and died at 3:45 P. M.

The special interest attached to this unfortunate case can be readily recognized in the peculiar character of the mastoid infection and its rapidly fatal termination from septic infection.

In a wide review of the extensive literature relating to mastoiditis and to acute gangrene, I can find no mention of these diseases being associated in this manner. After a further research, however, into the special pathology of the latter disease, I am inclined to classify the condition as that of acute emphysematous gangrene, of that form attributed to infection by the *bacillus aërogenes capsulatus*. I regret to say that, although I followed the clinical phases of the case very closely, I failed to have a bacteriological examination of the pus made, and hence lack the most important fact for the confirmation of my opinion. A few words in review of the history and some of the pathological characteristics of this virulent infection will, I feel sure, lend some credence to my belief.

The *bacillus aërogenes capsulatus* was discovered by Welch, and described by him and Nutall in 1892 in the report of a case of rupture of a thoracic aneurism in a man 38 years of age, and from whose blood they succeeded in cultivating the germ. In this case the bacillus was supposed to have gained entrance into the blood through the chest wall where the rupture of the aneurismal sac had occurred forty-eight hours before the patient died. Welch has since energetically pursued his study of the bacillus, and in 1900 had collected forty-six cases of emphysematous gangrene, in which the presence of the germ was demonstrated. Of these, only five were not of traumatic origin, the bacillus being presumably in the blood. In one of these, a case reported by Durham, in which a swelling under the jaw occurred from a carious tooth, an incision was made and emphysema spread downward to the chest. Of the forty-six cases reported by Welch, 59 per cent. were fatal. In 1893, E. Fraenkel demonstrated, independently of Welch and Nuttall, the relation of this bacillus to emphysematous gangrene. According to these latter authors, the germ may exist in the blood during health and not give rise to gangrene until some traumatism or a disease focus offers a good culture medium for its propagation. The French authors who have written considerably of late concerning emphysematous gangrene, under the name of "*gangrène foudroyante*," usually attribute the condition to the action of

the bacillus of malignant edema, the organism that Pasteur discovered and named "*vibrion septique*." This germ is widely distributed in nature and is often found in dead bodies undergoing gaseous putrefaction; but, according to Welch, no case of emphysematous gangrene in the living has been proven to be caused by the bacillus of malignant edema, a fact which is substantially confirmed.

If, as I suspect, the bacillus *aërogenes capsulatus* was present in my case as the cause of the gangrenous process and the gas formation, it must have either gained entrance into the mastoid cells through the external auditory canal or existed in the blood of the patient at the time the mastoid bone became the seat of inflammation.

Aside from the bacteriologic significance of the case, which, in the absence of essential facts, can not be freely discussed, the clinical character of the case was such, however, as to induce me to record it as a decidedly unusual form of mastoid inflammation and well worthy of special note.

#### DISCUSSION.

DR. E. W. JONES asked whether the patient had been hurt in any way.

DR. GESSNER, referring to the case of emphysema of the hand reported by him at the last meeting, said that his patient had developed the emphysema about 24 hours after the injury, but had been discharged in about four days. Temperature had ranged between 99 deg. and 100 deg., and the emphysema had evidently been due to some simple infection.

DR. MILLER inquired whether Dr. King had found any literature bearing on the differentiation of malignant edema and emphysematous gangrene.

DR. KING, in closing, said that there had been no history of traumatism in his case. He had found in the *Boston Med. and Surg. Journal*, for 1900, vol. 143, page 73, an article by Welch, discussing very fully the clinical and bacteriologic differentiation of malignant edema and emphysematous gangrene. Dr. King had seen a negro man whose foot had been amputated for railroad injury develop emphysematous gangrene. In 48 hours the disease had extended up as far as the abdomen, the tissues

were tympanitic, and the patient died. No bacteriologic examination had been made.

DR. PERKINS mentioned a similar case.

DR. KOHNKE, under the head of "*Medical News*," desired to correct some current misapprehensions as to the methods of the City Board of Health. He explained that no medical inspector was ever instructed to question the diagnosis of any attending physician, but that attending physicians often requested the Board of Health to assume the responsibility of making a diagnosis, especially in small-pox. He asked that complaints be made to the board immediately whenever any physician felt aggrieved by the actions of its representatives, and suggested that such grievances be discussed at the meetings of this Society. He insisted that the board desired to work in perfect harmony with the practicing physicians.

Some discussion followed.

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## Abstracts, Extracts and Miscellany.

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### Department of General Surgery.

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In charge of DR. F. W. PARHAM, assisted by DR. LARUE, New Orleans.

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APPENDICEAL FISTULA.—John B. Deaver has an instructive article in the *Philadelphia Medical Journal* of Nov. 2, 1901, on the nature, causes and treatment of fistula following operations on the appendix. In the first place these fistulas may nearly always be prevented by early operation, when the appendix may be easily removed and the cecal opening safely closed; late operation, on the other hand, favors the occurrence of fistula owing to the difficulties inherent in the operation or to the consequences of the virulent infection. So, of course, early operation is to be advocated as the best means of preventing fistula. These fistulas may open internally or externally.

In the first variety, any hollow viscus of the abdomen, or even the chest cavity; any portion of the intestinal canal, the bladder, the ureter. These are fortunately quite rare and do



not often require surgical intervention, although such intervention must occasionally be had on account of certain distressing conditions.

The external fistulæ are much more common. The most satisfactory classification is that based upon the character of the discharge from the fistula. This may be fecal or non-fecal. The non-fecal are urinary, having source in an injured bladder or ureter; biliary, usually, from the breaking of an appendiceal abscess into the gall-bladder or from the gall-bladder infection without preceding abscess; other discharges are mucus, pus and flatus, due to the presence of a foreign body, such as the whole or a part of the appendix, a mass of lymph, an infected suture or fragment of gauze, or finally, a very small opening in the bowel, too small to let feces through, but large enough for gas.

Fecal fistula may be subdivided according to the part of bowel involved. The causes of fecal fistula are given as follows:

1. Slipping or sloughing of a ligature used to close the appendix stump.
2. Sloughing of an appendix left *in situ*, in which case we have not only the hole in the bowel, but the appendix as well.
3. Ulceration of the bowel at the point of adhesion of an inflamed appendix.
4. Pressure necrosis from abscess, drainage tube of gauze.
5. Necrosis from interference with nutritive blood supply, due to pressure on mesentery or septic emboli in the mesenteric veins.
6. Tearing the softened bowel in freeing adhesions at the time of operation.
7. Stripping of the serous coat at the operation, the significance of this being that most of the blood supply is through the peritoneal coat.

In the treatment of fistula, naturally the cause must be sought and removed. If due to a foreign body this must be removed, but care should be exercised that the bowel be not open and a non-fecal be converted into a fecal. A great many appendiceal fistulæ heal spontaneously, hence an effort should always be made to heal them without operation, unless it be in the small bowel interfering with nutrition. All interference with the tract should be avoided, no packing nor washing out of the canal be allowed until a sufficient time has elapsed to show that it cannot be thus healed.

Operation for fecal fistula is frequently a serious matter, owing to the danger of infecting the peritoneal cavity, which is best avoided by cutting wide of the area of infection and packing the cavity of the peritoneum, whilst the operation in the bowel is proceeding.

With so many causes of fistula and such great difficulties besetting us in late operations, we must needs agree with the advice of the writer of this article and urge a more frequent resort to the early operation as the best means not only of saving life but as well of preventing mortifying and annoying sequelæ.

Occasionally, we run across, in our foreign contemporaries, some amusing descriptions of discoveries of new surgical procedures.

Thus, in one of the German surgical weeklies we found a method described, as almost infallible, of finding the appendix vermiformis, by simply tracing a longitudinal band to its end. The appendix being found at the point of crossing of the bands, it would be most easily found by carrying out this plan. The plan is, of course, most excellent, but the funny thing about it is, that every surgeon probably recognizes its value and systematically utilizes it, at least here in America.

Another suggestion, very recent, from the same periodical, also very sensible, is to the effect that the appendix, having been amputated, is not to be tied but simply tucked into the cecum and the Lembert suture applied, thus removing the risk resulting from the locking up of infection between the ligature and the suture.

This method has also been well known in America for years. Stretching the opening and valve of Gerlach has been done to facilitate the invagination—an admirable method.

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### Department of Obstetrics and Gynecology.

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In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER,  
New Orleans, La.

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VAGINAL CELIOTOMY.—The *Medical Chronicle* contains a lengthy abstract of a paper contributed by H. Fritsch to the *Centralbl. fur Gynnaekol* on the above subject. Fritsch lays

down certain general principles as a guide to the selection of suitable cases.

*Ovarian Tumors.*—Vaginal section is indicated when cysts are benign, not larger than a child's head, of regular shape and freely movable. If, when Douglas' pouch has been opened, the tumor is found to be partially solid, or in other ways unsuitable for removal by the vaginal route, laparotomy may be performed, and the vaginal wound allows of perfect drainage.

*Uterine Myomata.*—The vaginal route has been extensively adopted even for large tumors. The operation is often difficult and tedious, but recovery is remarkably rapid. Not only is infection avoided, but also the circulatory disturbances caused by alterations of abdominal pressure, the exposure of the peritoneal cavity to air and traumatic influences are absent in vaginal operations. The method is not suitable if the tumor is adherent, or for cases of intra-ligamentous myomata. Fritsch concludes that only the tumors not exceeding the size of a child's head, and freely movable, should be removed through the vagina.

*Extra Uterine Gestation.*—In the presence of an old ruptured tubal pregnancy which has formed a hemocele, the vaginal route should be exclusively adopted. It is not always necessary to remove the ruptured tube, provided that all the contents of the sac are evacuated and free drainage is maintained. In recent tubal pregnancies, if the tumor exceeds the volume of a pear or is cystic and is not plainly felt in Douglas' pouch, abdominal section must be performed.

*Inflammatory Disease of the Appendages.*—It is particularly difficult to lay down definite rules for operation in these cases. Purulent collections in the appendages can be well treated by vaginal section without removal of the ovary and tube. If a free opening is made in Douglas' pouch, and the abscess cavity thoroughly drained, permanent cure may often be obtained without removal of the affected organs. The contamination of the pelvic peritoneum by the escaping pus, is rarely followed by any bad effects, as the pus, in chronic cases at least, is usually sterile. If the inflammatory tumor is unilateral and can not be easily reached by Douglas' pouch, the vaginal route is not generally advisable. In delivering a thickened and adherent tubo-ovarian tumor into the vagina, the Fallopian tube may be torn and cause free hemorrhage. The appendages have to be dragged

down by forceps which may cause laceration; and if intestinal adhesions are present, the bowel may be injured. In bilateral disease the vaginal route is only to be recommended if it is intended to carry out the "vaginal radical operation." If the uterus is to be left the abdominal route is preferable. In the technic of the operation Fritsch uses posterior vaginal section entirely, except in myomectomy, when it is necessary to obtain access to the anterior wall of the uterus. Douglas' pouch is usually opened by sagittal sections, commencing at the cervix and prolonged backwards to the rectum. If the uterus be then raised up by a long retractor, and the side of the wound held apart, a very good view of the field of operation may be obtained. It is essential also to provide efficient drainage by gauze packing after the operation.

ARTIFICIAL INTERRUPTION OF PREGNACY.—Dr. Richard C. Norris has reviewed for *Progressive Medicine* an interesting and valuable paper of Von Braitenberg on this subject. Von Braitenberg is assistant to Prof. Eherendorfer at Innsbruck and reports twenty-two cases of induced labor with great thoroughness. He states in this connection the saving of maternal life has received the most complete consideration, and that the propriety of such intervention for such a purpose is duly admitted on all sides. But there is another aspect to the question, namely, the survival of the child; the performance of this operation for the ostensible purpose of saving the life of the child as well as that of the mother. It is upon this point that authorities differ, and here we find the necessity for further research. In 1891 Keherer went over the statistic material and found it to be 14.2 per cent. Much of this material was from the pre-antiseptic period. To-day the material mortality in the conservative Cæsarean operation is 8 to 10 per cent., while for symphysiotomy Grusden finds the fatalities amount to 11 per cent. Turning to infantile mortality, this is confessedly high in premature labor; but we must not forget that Skorscheban, who traced up the fate of many children extracted by Cæsarean section, found an equally gloomy state of affairs. We must also remember that children, mature and healthy at birth, are often allowed to perish through neglect by some one. In 7472 cases of confinement there were but 22 cases of artificial prema-

ture delivery, the frequency of intervention being 0.29 per cent. In 8 cases the particular end in view was the saving of maternal life. One died seven days after intervention of septic peritonitis, and in 5 of the 8 cases the puerperium was febrile. In the other 14 cases the particular end in view was to save the life of the child. In all but one case the danger to the child's life came from the deformity of the pelvis. These 14 women had borne 16 children collectively before the present intervention. Of this number 14 or 87.5 per cent. were lost. As a result of the premature delivery the children in 8 of the 14 labors were born alive (43 per cent). The chance of infantile survival is therefore seen to be much improved. The mothers all survived and only three had febrile symptoms.

With regard to the value of the various methods employed, puncture of membranes, bougies, vaginal and uterine colpeury-sis, many different opinions prevail. In recent times new methods have been discarded and old ones revived. In the author's experience Krause's method of introducing bougies appears to be the best for intervention in irregularly narrow pelvis. As a precaution in puncture, however, there must be no likelihood of prolapse of cord. Puncture is also advocated under any circumstances when the indication is to save the life of the mother. In case Krause's method and puncture do not lead to satisfactory results, Von Braitenberg advocates intra-uterine colpeury-sis.

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## Department of General Medicine.

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In charge of DR. E. M. DUPAQUIER, New Orleans.

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**PROLONGED FEBRILE PROCESSES IN CHILDREN.**—To determine the cause of such a condition is at times a difficult matter. The following causes are given:

Accumulation of pus beneath the gums, with no pain, but a febrile temperature lasts for a week or two, and even more. The temperature drops to normal when abscess is emptied.

Adenoids with dry cough, obstruction of nares, snoring during sleep. The fever stops after the removal of the vegetations.

Chronic appendicitis, with constipation. Careful exploration will reveal soreness, and even some infiltration over the cecum. Surgical measures are indicated.

Pyelitis in a latent, painless form, will be detected by repeated examination of the urine, which should be systematically made in all cases of prolonged fever. Temperature may rise to  $102\frac{2}{10}$  deg. and last for three and four months, oscillating with progressive rise and fall. The child may be up and about in a pretty fair condition; yet, at times, it complains of transient abdominal pain, recalling renal colic. Urine is cloudy, of acid reaction, with pus, and if vesical symptoms be absent, the diagnosis is settled. This pyelitis is, in general, due to the bacillus coli communis, and if found to be unassociated with staphylococci or others, the prognosis is favorable.

Pleurisy when localized in a very small area, unattended with cough or any subjective symptom, may remain unsuspected for a long while, unless the little patient is carefully examined.

Endocarditis with no physical cardiac sign. Fever is of a septic character, exhausting the patient, accompanied by chills, articular metastases, petechiae, etc. Typhoid fever with enlargement of the spleen may drag along a very long course, and yet the Widal test may prove negative even during the second and third weeks.

Influenza in a chronic form, following an acute attack. Fever is prolonged during several months, the temperature regularly oscillating between normal and 100 deg. or 101 deg. F. A benign form as the general condition is quite satisfactory, and this child begs to be taken out of bed. Case is often mistaken for latent tuberculosis or malaria and the treatment in consequence is unsuccessful. In fact, the fever resists all medicinal measures and ceases as soon as the warm weather is nearing or upon a change to a southern clime. In the course of this protracted febrile process, exacerbations of three and four days' duration with vomiting will occur, repeatedly, at intervals of several weeks.

Malaria. A difficult diagnosis to clear up when the fever lacks the characteristic features. No such diagnosis is admissible unless the history gives an account of former febrile paroxysmic attacks yielding to quinin. The enlargement and chiefly the induration of the spleen are important signs in such obscure cases, and

these being absent, the fever showing a morning intermission is characteristic of malaria, not of influenza or of tuberculosis.

Anemia gives rise to a long febrile process; but when anemia is the cause of the temperature, the latter never rises above 100 deg. or at most 101 deg. If it be higher, it indicates leukemia or adenia. In the latter case, like in sarcoma of an abdominal viscus, the fever takes a typical recurrent character.

Hysteria gives rise in boys as well as in girls to a febrile process at times continued, at times paroxysmic. In the first case, it may last from a few days to several months, rising to 104 deg. F., with a very irregular course. But the nature is benign from the fact that both the general condition and urine are unchanged. The rise of the temperature is brought about by insignificant external influences or by brain work, the latter being a common cause among school children.

Pyemia, the abscess being unrecognized.

Tuberculosis, the most common cause of all, is not easily made out chiefly in the subacute form with no evidence of localization.

Pretubercular fever. There exists an infected area, a focus, from which toxins are thrown into the blood streams, causing fever. As long as the bacilli themselves remain in situ, there being consequently no acute general infection, no meningitis, the pretubercular fever is curable as the primary focus may undergo the process of calcification.

This pretubercular fever, though no antecedents would point to it, is always a permissible diagnosis, as we know (experiments of Carnet and Dobroklonsky) that tubercular infection may occur by way of an intact respiratory tract, promoting a seropathy without any evidence of tracheo-bronchial catarrh.

In closing, a case is reported in which the protracted fever attributed in turn to prolonged diphtheria (bacteriologic examination positive), to typhoid fever, to trachea-bronchial adenopathy, to appendicitis, speedily improved and ceased during a journey to Paris where the child was to be operated upon for its suspected appendicitis.—*Journal de Médecine et de Chirurgie Pratiques*, 10 Oct., 1901.

MILK-SUGAR IN INFANT FEEDING.—Said Heubner, a short year ago, "We have luckily advanced so far as no longer to believe

in our dependence on laboratory experiments in the feeding of infants. For decades we have suffered from the fact that we are too eager to apply the experiments of laboratories in practice," and many years before him Flügge plaintively expressed his regrets that "we have allowed ourselves to be guided by people who are neither hygienists nor physicians, but chemists, farmers or apothecaries."

Among the clinicians who prefer cane sugar to milk-sugar and see "no inconvenience in so doing," is Marfen. His first reason for this choice is the pregnancy of adulteration of the milk-sugar in the market. In addition to the intestinal and nutritive disorders caused by an excess of lactic acid resulting from inordinate milk-sugar feeding, there are other dangers. Excess of lactic acid appears to have detrimental effects on the nutrition to such an extent that rickets has been explained by its chemical action. Like acetic, oxalic, formic acids, lactic acid has been claimed as the cause of rachitis by Ch. Heitzmann in 1873, Tripier in 1875, Neiss in 1876, Siedamgratzky and Hofmeister in 1879, while Albarel could not verify their observations. Such differences had been noticed before. Schmidt and O. Weber had long ago met lactic acid in the bones of animals fed on that material. Marchand and Gariép-Besanez, in the urine; while Virchow and Lehmann found the bones and the blood alkaline. After all, however, it should be remembered that rachitis means more than merely excessive elimination of lime by the kidneys and intestines; its pathology is not complete without the soft swelling of the peri-epiphyseal cartilage of the epiphyses and of the periosteum, also deformities of the bones. That is why the presence of lactic acid in the circulation should not be accused of being the cause of rachitis. But this much is certain that by an undue presence of lactic acid the amount of phosphate of lime in the urine and in the feces, at least in one of them, is at once vastly increased, and that the bones are deprived of part of their calcium. It is on account of this and its eliminative chemical action on lime (and thereby diuretic effect) which it removes in the shape of salts, that Rumpf gives lactic acid in those cases of angina pectoris which depend on calcification of the blood vessels, about 15 grams daily for months in succession. It is self-understood that the food should be fairly free



of lime. That is why the diet is as follows: 250 grams meat, 100 grams bread, 100 grams fish, 100 grams potato, 100 grams apples (or instead green beans, peas or cucumbers). A. JACOBI, M. D.—*Archives of Pediatrics*, November, 1901.

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## Department of Therapeutics.

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In charge of DR. J. A. STORCK, New Orleans.

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SANTONIN (SANTONIC ACID) IN TABETIC PAINS.—Negro (*Giorn. d. r. Accad. di Med. di Torino*, February, 1901), has tried santonin with success in the treatment of the lightning pains of tabes. Of the eleven cases in which the drug was tried, eight were decidedly relieved, two temporarily relieved, and one unaffected. At first the author gave 15 grains in three doses at intervals of three hours; and, in subsequent attacks, began with 10 grains, 5 grains five hours later. The pain got decidedly less in three hours after the first dose, and completely ceased two hours after the second dose. So far, the author has only administered it during the crisis, not in the intervals. In one case it gave relief where a mixture of antipyrin and phenacetin had proved futile. None of the patients had this treatment more than four or five times in the course of two or three months.—*British Medical Journal*, May 18, 1901.—*Therapeutic Gazette*.

TREATMENT OF GLAUCOMA.—Professor Wicherkiewicz states that the following combination has proved highly beneficial in his hands in the treatment of glaucoma:

Eserin salicylate .....	$\frac{1}{6}$ grn.
Pilocarpin hydrochlorate.....	$\frac{3}{8}$ grn.
Cocain hydrochlorate.....	$1\frac{1}{2}$ grn.
Distilled water .....	$\frac{3}{4}$ to $2\frac{1}{2}$ dr.

This solution diminishes the intra-ocular tension to a great extent, while the mydriatic action of the cocain is counteracted by the eserin and pilocarpin. The author has seen great benefit follow the instillation of these eye-drops, once in twenty-four hours, at bedtime, in cases of chronic glaucoma, where iridec-

tomies and sclerotomies had no effect in stopping the progress of the disease. There was marked improvement in vision as well as in the eye structures.—*Merck's Archives*.

**TURPENTIN IN PARASITE SKIN DISEASES.**—Dr. L. Leven employs applications of oil of turpentin in the treatment of pityriasis versicolor and tinea tonsurans. In the first affection a cotton pledget is soaked in turpentin and vigorously rubbed on the diseased skin. This is done once daily. If the lesions are extensive, only small areas should be thus treated at each sitting.

For the second disease the author recommends the use of compresses soaked in turpentin and applied to the affected areas night and morning. The good results show themselves in a very short time.—*Merck's Archives*.

**SUCRAMINE.**—Under this name a new sweetener is being exploited in France. On analysis it has been found to be simply the ammonium salt of saccharin—ammonium benzoyl-sulphonic imide.—*Ibid*.

**THERAPEUTIC VALUE OF LECITHIN.**—Dr. Vacheron has written an important article on lecithin, the following being a review of its therapeutic bearings: Lecithin plays an essential part in the highest functions of our system. Its chief constituent is phosphorus. It seems rational, therefore, to administer lecithin whenever our tissues lack phosphorus. This is the case in affections leading to an increased elimination of phosphates, as diabetes, phosphaturia, rachitis, etc. Experimental and chemical tests have borne out this hypothesis.

Seros, of Turin, was the first to employ subcutaneous injections of lecithin in man. He experimented on neurasthenic, tuberculous, chlorotic and aged people with favorable results. Other Italian physicians used lecithin in infantile therapeutics. More recently, Gilbert and Fournier published new researches on the remedy. It may be administered in granules, 3 to 5 grains, daily, or preferably, by hypodermic injections, in doses of 2 grains daily. The therapeutic action is due to the phosphorus which is given off to the tissues, and also to a specific stimulating action on the cellular protoplasm.

In tuberculosis, nervous functional disorders, and all conditions with increased elimination of phosphorus, lecithin is a useful and entirely safe remedy. No untoward effects were observed after its administration.—*Merck's Archives*.

REMOVAL OF POWDER STAINS WITH HYDROGEN DIOXIDE.—*American Medicine* tells us in its issue of June 1, 1901, that Clark advises the method suggested by Dr. J. Neely Rhoades of removing powder stains with hydrogen dioxide. A boy came to the office of Dr. Clark with severe powder burn of whole face and neck. They cleaned him up thoroughly and removed several grains of powder from each eye, but the face was black with stains and embedded particles of powder. He was sent to the City Hospital on account of the injury to the eyes, and orders were given to keep the face covered with pieces of lint saturated with glycerin one part, and hydrogen dioxide three parts. A couple of days saw the complete removal of all the particles and stains, without any of the tedious and painful pricking processes usually resorted to; and all the marks promptly healed.—*Therapeutic Gazette*.

HYDROTHERAPIC DON'TS.—Dr. Simon Branch says: "The following scheme of don'ts affords a summary of what to do and what to avoid in the application of cold water in febrile diseases. I have adopted them as guides in the hydiatric management of fevers:

Don't bathe with cold water to reduce temperature, but to refresh the fever-stricken patient.

Don't permit cyanosis or chattering of teeth; stop.

Don't stop bathing because patient complains of chilliness, unless the teeth chatter.

Don't raise bath temperature on the latter account; shorten bath and increase friction.

Don't neglect friction during every cold procedure; it prevents chilling.

Don't disregard the well-ascertained fact that the Brand bath (of 65 deg. to 70 deg. F. every three hours when awake, with active friction) is the ideal bath for typhoid fever only.

Don't use the Brand bath in a bathroom.

Don't give up the cold bath because the ideal bath is not obtainable; other procedures are useful.

Don't use the ice coil to the abdomen; it has no refreshing effect and renders the skin beneath it cyanotic.

Don't lose sight of the fact that the chief aim of all cold procedures is reaction."—*Therapeutic Gazette*.

BAD EFFECTS OF CAMPHOR.—F. Bohlen (*Deutsche Medicinische Wochenschrift*, May 16, 1901) reports two cases in which marked delirium followed moderate-sized medicinal doses of camphor. The first was a man with compensated heart disease, in whom the pulse was very small and thready, and a catarrh of the lungs was present. Three-fourths of a grain of powdered camphor was given every two hours. In the second case, the patient was a woman, who was suffering from heart symptoms following an attack of influenza. The same dose was given to her. After thirty-six hours the man had received nine and three-quarter grains, and the woman nine grains. The effect on their hearts had been very satisfactory, but an intractable delirium had set in in both cases. At first, this was not ascribed to the drug, which was continued. Bromide was given to quiet the condition, without success. After three days it occurred to Bohlen that the camphor might be responsible for the delirium; he therefore discontinued the powder and gave bromide alone, and was gratified by seeing the disagreeable symptoms disappear very shortly.—*Therapeutic Gazette*.

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## Department of the Ear, Nose and Throat.

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IN charge of DR. A. W. DEROALDES and DR. GORDON KING,  
New Orleans.

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THE EARLY OPERATIVE TREATMENT OF ACUTE MASTOID INFLAMMATION.—In the *Medical News* of July 6, 1901, E. B. Deuchably sets forth his views on the treatment of acute mastoiditis. He points out the importance of close attention to the mastoid during the course of acute suppurative otitis, especially when that condition arises as the result of the infectious fevers, such as grip, measles, etc. The two most reliable indications of mastoid involvement are the presence of pain and tenderness

over the mastoid antrum and sagging of the upper portion of the auditory canal. Fever is an unreliable guide, as extensive affection of the bone may take place with little febrile disturbance; particularly is this the case in adults. Pain upon pressure over the tip of the mastoid is not as sure an indication as pain over the region of the mastoid antrum. The author has little faith in the wisdom of resorting to abortive measures, such as the use of the Leiter coil, local blood letting, etc., and strongly advises exploratory opening of the mastoid cells. By proper aseptic precautions and familiarity with the anatomy of the parts the danger of opening the mastoid is greatly minimized. He advocates a free opening, exposing the antrum and smaller cells to allow of thorough removal of diseased bone. Abortive treatment is seldom effectual and may obscure important symptoms of complications.

FOR ANTISEPSIS OF THE NOSE, MOUTH, AND PHARYNX IN SCARLET FEVER.—

℞ Menthol.....grs. iiii  
 Boric Acid..... ℥i  
 Vaseline..... ℥i  
 M Sig. To be applied in the nose

Or,

℞ Oil of Peppermint..... ℥x  
 Resorcín..... grs. xv  
 Olive Oil (sterilized)..... ℥v  
 M. Eight drops to be instilled into each nostril morning and evening.

The mouth should be washed frequently with borated, carbolic, or naphtholized solution and the same applied to the tonsils and pharynx.

AVIRAGNET.—*Bulletin Medical*, 1901, No. 1.

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## Miscellaneous.

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LEPROSY IN NEW SOUTH WALES.—Only one case of leprosy was admitted to the lazaret during 1899. This we gather from the report of Dr. Ashburton Thompson, recently received.

On December 31, 1899, there were remaining in the lazaret 13 persons; 10 were whites, 8 natives of New South Wales of European descent, one was a European native of Fiji, and one was a native of the United States. Of the colored lepers, one was a Javanese, one an aboriginal of New Hebrides, and one a female, native of China. From 1883 to 1899, 68 cases were admitted.

Dr. Thompson concludes his report with a comment upon his position with regard to the communicability of leprosy. He says: "I have never denied the communicability of lepra from the sick, as seems to be supposed, but have merely pointed out the entire absence of direct proof of it, the extremely doubtful significance of much commonly accepted for circumstantial proof, and certain circumstantial records which apparently weigh heavily against it; among which last I will refer here only to the remarkable contrast between the behavior of lepra in New South Wales and in Victoria, as being one well known to me (*Transactions of the Leprosy Conference, Berlin, 1897*). And therefore, while all pathological analogies suggest that lepra probably is communicable from the sick, and while the theory of the maintenance of lepra by indirect communication from the sick *plus* natural resistance, which was based by the Leprosy Commission in India on those analogies, is the best to account for the erratic incidence of the disease which can be based thereon, it has ever seemed to me that at the least a third factor is needed to reinforce those two—in other words, that this theory does not co-ordinate all the observed phenomena.

"In the total absence of direct proof of communicability from the sick, it occurred to me that a very careful investigation of the circumstances surrounding the succession of cases among a white and civilized population might ultimately shed useful light on the problem, if it were long enough continued; and no more favorable opportunity can be imagined than exists in this State, where, with a comparatively sparse population in the rural districts, and a steady continued succession of fresh cases in very small number, all the resources of an elaborate and highly efficient system of government could be brought to assist it. Investigation on those lines and with those advantages has now been carried on for ten years; and if it should be judged that the other group of cases resultant therefrom of which some par-

ticulars have just been given above, or if it should be thought that that other group described in the Annual Report for the year 1898, furnishes some ground for hope that after a further and much longer term a clue to the etiology of leprosy may be deduced from the record of its epidemiology in this State, then the tedium, labor and physical fatigue entailed by the lengthened quest may be hopefully disregarded. In the meantime, whether the record point towards or from maintenance of lepra by direct or indirect communication with lepers is indifferent to all those who are searching only for the fact."

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## Louisiana State Medical Society Notes.

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DR. T. E. SCHUMPERT, Shreveport, President; DR. HERMANN B. GESSNER, 124 Baronne street, New Orleans, Recording Secretary.

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Next meeting at Shreveport, June 3, 4, 5, 1902.

SPECIAL NOTICE.—In compliance with the regulations of the society, the secretary gives notice that he will hold back the 1901 Transactions of the Society from all members who have not paid fees due for 1901-1902. The treasurer's address is Dr. H. S. Cocram, 124 Baronne street, New Orleans, and the dues are \$5.

CHAIRMEN OF SECTIONS are urged to send titles for discussion to the JOURNAL so that they may be published at as early a date as possible.

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## Medical News Items.

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GALVESTON MEDICAL COLLEGE.—The following changes have occurred in the faculty of this college: Dr. Henry P. Cooke has resigned the deanship and the chair of pediatrics; Dr. Wm. S. Carter, professor of pathology, will be lecturer on pediatrics. Dr. Allen J. Smith has been made dean; Dr. Wm. Gannon has

been promoted from demonstrator to associate in pathology; Dr. Louis E. Magnenat has been made demonstrator of pathology; Dr. M. Charlotte Schaefer has been made demonstrator of normal microscopy; Dr. Kenneth H. Aynesworth has been made demonstrator of anatomy, and Dr. Thomas Flavin, Emeritus demonstrator of anatomy.

FOURTEENTH INTERNATIONAL MEDICAL CONGRESS—We are advised of two changes in the arrangement of sections as announced in our August issue. Section XI has been divided into two: XIa Otology and XIb Rhino-laryngology, independent of each other, with distinct presidents and secretaries. Section XVI will be called "Legal Medicine and Toxicology," instead of Legal Medicine alone, as previously.

THE FIRST EGYPTIAN MEDICAL CONGRESS will be held at Cairo on December 10 to 14, 1902, under the patronage of the Khedive. Particular attention will be directed to affections special to Egypt, such as: bilharzia, duodenal ankylostomy, bilious fever, abscess of the liver, etc. European physicians, and especially those located at or about Mediterranean ports, will of course be attracted more than those of this country, but we shall publish further information as it is furnished. Dr. Varonoff, of Cairo, is the general secretary.

NEW ORLEANS POLYCLINIC—The following physicians were matriculated at the New Orleans Polyclinic the early part of November: From Texas, Drs. D. D. Hamilton, G. M. Jones, J. F. Scruggs, J. W. Vermillion, A. B. Kennedy, L. Smith, A. M. Horner; from Oklahoma Territory, Dr. R. D. Lowther; from Arkansas, Dr. J. E. Little; from Mississippi, Dr. C. E. Burnham; from Virginia, Dr. R. H. Davis; from Louisiana, Dr. Jas. P. Parker; from Indiana, Dr. Vesta M. Swartz.

DR. J. B. MCELROY, of Stovall, Mississippi, was elected President of the Tri-State Medical Association held in Memphis November 19-21, 1901.

DR. WM. KOHLMAN HAS BEEN ELECTED HOUSE SURGEON OF TOURO INFIRMARY, to succeed the late Dr. Frederick Loeber. Dr. Kohlman was born at Rheinpfalz, Bavaria, Germany, and



graduated at Heidelberg. He served in the German army as surgeon. He came to New Orleans ten years ago, and was appointed assistant house surgeon by Dr. Loeber, at Touro, in 1893. The election at the last meeting of the Tourò Board is a deserved recognition of his services. He is favorably known by the medical fraternity, and is a member of the Louisiana State Medical Society and of the Parish Medical Society.

MARRIED—Dr. Burdette Atkinson Terrett and Miss Edna Lillian Trist were married on Saturday, November 16, 1901, in New Orleans.

Dr. A. S. Yenni and Miss Marie Adele Lafitte were married at the Church of the Immaculate Conception, New Orleans, November 30, 1901.

DR. C. R. DUDLEY has retired from the *St. Louis Courier of Medicine*, and is to be succeeded in the editorship by Dr. John Zahorsky. Dr. Dudley has succeeded in reviving the *Courier* and in placing it upon the highest ethic plane. We trust that the new chief will keep this estimable contemporary in the same place.

DR. L. H. WARNER, of New York, so pleasantly remembered here, has established a pathologic and bacteriologic laboratory in New York.

DR. ERNEST S. LEWIS attended the Southern Surgical and Gynecological Association at Richmond, November 12.

DR. A. W. DE ROALDES and family returned from Europe November 10.

DR. WM. E. BRICKELL, one of the nestors of the New Orleans profession, was honored by an entertainment at St. Vincent Orphans' Asylum, in celebration of his twenty-five years of service at that institution.

THE Ascension Parish Board of Health, through its president, Dr. Paul F. Thibodaux, reports for the quarter ending September, 45 births, 62 deaths. Reports were made by every physician in the parish, with one exception.

LINCOLN PARISH is to build a pest house, independently of any of the cities or towns in the parish.

DR. QUITMAN KOHNKE, president of the City Board of Health, has been appointed a member of the Yellow Fever Institute. The JOURNAL is pleased to see this recognition, and congratulates both the government and the recipient upon the appointment.

DR. HENRY DICKSON BRUNS, Professor on Diseases of the Eye in the New Orleans Polyclinic, and surgeon in charge of the Eye Department of the Eye, Ear, Nose and Throat Hospital, is to be congratulated upon his election to membership in the American Ophthalmological Association. The exclusive character of this association and the usual ability entailed make this honor the more distinctive, and we are pleased to offer our expression of appreciation to Dr. Bruns on this acknowledgment of his work.

THE TULANE PHAGOCYTE for November, 1901, contains a number of alumni notes and a biography of Dr. F. W. Marshall, who graduated in 1849. The editorial staff is as follows: Dr. H. B. Gessner, 1895, editor in chief; under-graduate collaborators, Messrs. Frank H. Lewis, 1903, Geo. H. Upton, 1904, A. G. Eustis, 1903, Lester J. Williams, 1903, J. W. Newman, 1902, with Mr. Dalton H. Trepagnier, 1903, as business manager.

THE GOVERNOR OF LOUISIANA HAS MADE THE FOLLOWING APPOINTMENTS: Dr. E. L. McGehee, of New Orleans, member of State Board of Medical Examiners *vice* Dr. H. S. Cocram, resigned; Dr. A. F. Barrow, St. Francisville, same board to succeed himself; Dr. Geo. S. Bel, of New Orleans, member of the Board of Administrators of Charity Hospital, to succeed Dr. F. Loeber, deceased.

CROWLEY PHYSICIANS FINED.—Eighteen physicians of Acadia parish were recently arraigned on the charge of not having reported the deaths and births to the proper authorities during the month of October. Ten of these pleaded guilty and were fined \$5.00 and costs in each case.

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION, at their meeting in November at Richmond, elected the follow-

ing officers for the coming year: President, Dr. W. E. B. Davis, of Birmingham, Ala.; First Vice President, Dr. J. Wesley Bovee, Washington; Second Vice President, Dr. John W. Long, Salisbury, N. C.; Secretary, Dr. W. D. Haggard, Nashville, Tenn.; Treasurer, Dr. F. W. McRae, Atlanta. The next meeting will be held in Cincinnati. Dr. T. A. Reamy was appointed Chairman of the Committee on Arrangements.

MESSRS. W. B. SAUNDERS & Co., announce the coming publication of the American edition of Nothnagel's Encyclopedia of Practical Medicine. The scheme aims at making each volume independent so that physicians may subscribe to a single volume or any number they may desire. Each volume is to be edited by some one specially posted on the subject to which it is devoted.

TOURO INFIRMARY APPOINTMENT.—The new system at Touro Infirmary is to begin with the election of Dr. D. Urban Maes as resident physician and surgeon to the Infirmary for one year. Dr. Maes graduated from Tulane in 1900 and is favorably known in the younger profession.

THE LOUISIANA STATE BOARD OF HEALTH held its quarterly meeting November 15. The President's report showed a satisfactory condition of the health of the State. Attention was called to the absence of yellow fever rumors and the importance of the fruit steamers carrying medical officers on board during the quarantine season. A few cases of small-pox have appeared. Public school children have been generally vaccinated.

Incidental to the meeting of the Board, the quarantine boards of the Gulf ports met and adopted definite resolutions with regard to the possibility of bubonic plague.

THE ORLEANS PARISH MEDICAL SOCIETY AT ITS MEETING OF NOVEMBER 9, passed the following resolutions on the death of Dr. Frederick Loeber:

WHEREAS, death has removed one who, as a physician and citizen, possessed those strong qualifications which placed him high in the estimation of all who knew him; whose charming personality endeared him to his friends and confrères, and who as a member of this Society was always prominent when original or analytical work was required,

*Resolved*, that in the death of Dr. Frederick Loeber the medical profession has lost a devoted colleague, this Society a valued member, and this community a useful and influential citizen.

*Resolved*, that this Society conveys to his family its attestation of the high esteem in which he was held, and extends its deepest sympathy in the loss they have sustained.

*Resolved*, that a page of the minutes be dedicated to his memory.

*Resolved*, that a copy of these resolutions be sent to his family and published in the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

Signed { W. H. WATKINS, M. D.  
 { RUDOLPH MATAS, M. D.  
 { GEO. J. FRIEDRICH, M. D., D. D. S.

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## Obituary.

### DR. TOUATRE.

Dr. Just Charles Touatre, whose death on September 21, 1901, has already been noticed in the JOURNAL, was born at Puycasquier, in the Department of Gers, France, on September 2, 1838. His literary education was obtained at the Lyceum of Auch, where he received the degree of *Bachelier-es-Lettres* in 1856, and *Bachelier-es-Sciences* in 1857. His medical studies were followed at the Faculty of Paris, graduating on the 9th of March, 1865, having in the meantime served as auxiliary surgeon on the frigate Admiral Belloc, and as surgeon-major to the transport Palikart. Shortly after his graduation, Dr. Touatre went to New Orleans, where he settled as a practitioner in November, 1866. Arriving in this city without acquaintances and without any special influence backing him, he made rapid strides in his profession and before long had attained an eminent place in the profession and enjoyed a lucrative practice, particularly in the lower, or French part of the city. While practicing in New Orleans he treated yellow fever during six

epidemics. After that of 1867, he was awarded a gold medal by the French government for his valuable services to compatriots. This was followed, after the terrible epidemic of 1878, by his nomination to the Legion of Honor, on account of his devotion and efficient services to the needy of his nationality and to the crews of French vessels then in the port of New Orleans.

For nineteen years he was Chief Surgeon to the French Hospital which he managed admirably. He was also physician to the French Consulate and to different corporations. He served a term as a member of the Louisiana State Board of Health. His literary work on medical subjects included several articles in medical journals of the day and a monograph on yellow fever, which was published in book form by this JOURNAL in 1898, having been translated from the French manuscript by Dr. Charles Chassaingnac. This work, published at a timely period, met with an immediate and large sale, being declared the best modern treatise ever published on this subject. It is still in demand, and will no doubt remain a classic as far as the clinical aspect of the disease is concerned.

Dr. Touatre is very much regretted in this city, as he was not only a successful practitioner, very much beloved by his large clientele, but also a scientific physician, who was always in the vanguard of progress. An interesting detail is, that he was the first to introduce in New Orleans the use of the clinical thermometer, having brought one of the little instruments in his trunk at the time of his journey to this country. Either as host or guest, he was always the life of a party at the festive board, which he was wont to enliven by anecdote and *bons mots*.

He was a warm friend, and as such will be missed by many of the best in and out of the profession.

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#### DR. CHARLES M. SMITH.

Dr. Charles McGill Smith died on November 7, at Franklin, Louisiana, his home. Born in Virginia, in 1826, Dr. Smith graduated from the University of Pennsylvania in 1848, since which time he has lived in Franklin. During the civil war, Dr. Smith was a surgeon in the Confederate army. He returned to St. Mary's parish and resumed his practice. Since 1879 he has

been the president of the Parish Board of Health and the coroner. At one time he was president of the Louisiana State Board of Health.

Dr. Smith leaves a loving wife and several children who have our expression of sympathy and condolence.

We can not refrain from a personal word in closing a line of requiem over a man so much esteemed by all who knew him. Dr. Smith was the type of physician who has always served as the exemplar for the younger votaries of *Æsculapius* and his death must note the passing of a model both in morals and manners. To young and old, to the tyro and to the eminent practitioner, Dr. Smith was always the man, physician, gentleman.

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DR. BOHN.

Dr. H. R. Bohn died at Biloxi, Mississippi, November 8. For several years Dr. Bohn has resided in Biloxi, but before his removal he was well known among the younger profession, many of whom were his fellow students at Tulane. He graduated from Tulane and also from the Charity Hospital in the early '90's and promised a bright career, which his early death has foreshortened. The JOURNAL extends its sympathy to his bereaved wife and family.

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MRS. FRANCES LOCKERT BEMISS, widow of Professor S. M. Bemiss and mother of the late Professor J. H. Bemiss, died suddenly in this city on November 18, 1901. She was seventy-four years of age and had lived here nearly half of her existence and all of her married life. An accomplished woman, a true spouse, a devoted mother, she will be missed and remembered for her own good qualities as well as her near relationship to members of our profession by such of us whose good fortune it was to know her.

## Book Reviews and Notices.

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*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

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*Introduction to the Differential Diagnosis of the Separate Forms of Gallstone Disease, by PROFESSOR HANS KEHR. Authorized Translation, by WILLIAM WATKYNs SEYMOUR, A. B., M. D. P. Blakiston, Philadelphia, 1901.*

The book is unique in so far as it represents the personal experience of the author in 547 operations, an experience not matched by any other operator in gallstone surgery. The importance of proper diagnosis is strongly set forth, and a plea is made for the physician to make himself more familiar with the pathology of this many-sided disease by being present during gallstone operation. In spite of the Doctor's splendid surgical success, he is conservative, sending many cases to Carlsbad for treatment. Dr. Kehr says: "I concede that the physician is right who in gallstone colic with acutely appearing jaundice favors more an expectant, than an operative course. I also delay in such cases with operation until I believe I have arrived at the decision that an acute obstruction of the common duct does not exist. Nevertheless, I am indeed now occupied with reflections concerning the medication for operation, and I am yet still very far from the end of my pathologico-anatomical observations." A fact rightly emphasized by the author is "that inflammation plays the leading role in all the symptoms of cholelithiasis, by which this many-sided disease makes itself known." In Lecture II, the anamnesis and examination in cholelithiasis is clearly set forth, and proves Dr. Kehr a master of the subject.

It is to be regretted that a chapter on operative procedures is not included in the book. The author speaks of his methods, but does not enlighten us on them. True, he refers to other articles written by himself, but we feel that a description of his technique would have added much of value to the work. Let him who is seeking light on gallstone disease carefully consult Dr. Kehr.

STORCK.

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*Photographic Atlas of the Diseases of the Skin.* By GEORGE HENRY FOX, A. M., M. D. Part IV. J. B. Lippincott Co., Philadelphia and London, 1901.

This part of Dr. Fox's atlas carries plates on Rosacea, Alopecia areata, Psoriasis, Pityriasis and Pemphigus.

We have been so cordially commendatory of the former sections of this work that it seems almost superfluous to repeat the deserved praise such excellent plates demand. The author for years has contended that the photograph is the best presentation of the subject, and these are absolutely true to the diseases shown. The publishers have spared no pains in making the work of the first quality in style and finish. This is the best work illustrating skin diseases which has yet been placed within the reach of every general practitioner.

DYER.

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*International Clinics.* Vol. II. Eleventh Series. J. B. Lippincott Co., Philadelphia, 1901.

The present volume of the Clinics is as full of useful articles as in former numbers which have come to us.

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*Warwick on the Knobs; a Story of Stringtown County, Kentucky.* By JOHN URI LLOYD. Illustrated. Dodd, Mead and Co., New York, 1901.

Environment, instinctive traits, the law of habit and of customs, all enter into this graphic sketch of provincial Kentucky life. The story of a girl's ruin and the incidents leading to it are surrounded with a coloring of war times in the atmosphere of Morgan's country.

With Judge Elford's arraignment of the preacher Warwick, in one of the last chapters, the author has summed up the moral of his story.

There are periods of fine description and of well-balanced dialogue; but after *Stringtown on the Pike*, there is something missing, in style, perhaps; more, we think, in finish.

The story ends with a taste of "sorrow weed," which is too often true in life to need reflection in fiction.

The illustrations are from photographs of the Kentucky scene of the story.

The publishers have been careful in presenting a finished book.

DYER.

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*Diseases of the Intestines.* By DR. J. BOAS. Authorized translation by SEYMOUR BASCH, M. D. D. Appleton & Co., New York, 1901.

The present volume is an authorized translation from the first German edition, with some addition on appendicitis, and hydrotherapeutics, and a special account of the intestinal gases. The author is well known as a specialist for gastro-intestinal diseases, and his many contributions to this branch of medicine always command the closest attention from the profession both in Europe and America. Anything that Dr. Boas has to say on the subject is worthy of careful consideration. He makes mention of the valuable contributions made by the profession in America to the study of intestinal diseases.



The author says that he has drawn largely on Rauber's *Lehrbuch der Anatomie* for his remarks on histology and anatomy. While the translator informs us that the work is intended more especially for the general practitioner, we feel, from our knowledge of the facilities at his command, that the average practitioner will find it difficult to carry out a chemical examination of the feces as laid down in this work. Despite this fact, it is exceedingly gratifying to notice how plain Dr. Boas has made the chapter on chemical and microscopical examination of the feces. The work is a lucid exposition of the most important of intestinal disorders. All of the essentials mentioned are well-known to those who keep abreast of knowledge on the subject. The measures and medicinal agents used are rational, and in keeping with our present practice in intestinal diseases.

The drawings, excellent in execution, are by Miss Paula Günter of Berlin, and Dr. Reitzenstein, who was a former assistant of Dr. Boas. At the end of each chapter is a list of the best literature treating of the subject. From what we are able to discern, the work has not suffered in translation. The practitioner will find this book a safe guide to follow in the diagnosis and treatment of the diseases of the intestines.

STORCK.

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*The Hygiene of Transmissible Diseases; Their Causation, Mode of Dissemination and Methods of Prevention.* By A. C. ABBOTT, M. D. Second Edition, revised and enlarged. W. B. Saunders & Company, Philadelphia. 1901.

It is no wonder that this work should grow popular; it fits the times. Laymen should ponder over it, and as for the students and practitioners of medicine and the health officials they should know it by heart. The latest researches concerning the prevention of specific diseases have been inserted in this edition. The exposition and discussion of facts, including the part of insects and rodents as disseminating agencies, relate to each specific disease, and to general sanitation as well. The article on dysentery, among others, is of great interest. Immunity, vaccination, protective inoculation, disinfection and disinfectants are carefully reviewed. The book is concluded by a summarizing consideration of the essentials of modern quarantine. The illustrations, the index and the whole mechanical portion of the work are also excellent.

E. M. DUPAQUIER.

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*Materia Medica, Pharmacy, Pharmacology and Therapeutics.* By W. HALE WHITE, M. D., F. R. C. P. Edited by REYNOLD W. WILCOX, M. A., M. D., LL. D. Fifth American Edition, thoroughly revised. Published by P. Blakiston's Son & Co., Philadelphia. 1901.

In a review of the fourth edition we took occasion to make mention of some of the good qualities of this work. In going over the present edition; we find evidence of the same painstaking care which characterized the previous edition. In fact, the few misprints which appeared heretofore have been corrected. About forty pages of new matter have been

added, bringing the work abreast of our knowledge. On comparison with the pharmacopeia, the knowledge is found to be correct in every instance. We are so well pleased with the work that we commend it among the text-books for our classes.

STORCK.

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*Progressive Medicine*. Volume III. September, 1901. A quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences, edited by HOBART AMORY HARE. Lea Brothers & Co., Philadelphia and New York. 1901.

Progressive medicine no longer needs to be recommended to those who perused the former numbers. The same effort has been made to present to the profession a concise, but comprehensive review of medicine together with comments by the reviewers, who are men of recognized authority in their different departments. The present volume is of unusual interest to the busy practitioner. It contains a review of the literature bearing upon diseases of the thorax and the viscera, including the heart, lungs, and blood vessels, dermatology and syphilis, diseases of the nervous system, and obstetrics. Nearly half of the first section is devoted by Dr. Wm. Ewart to Pneumonia and Pulmonary Tuberculosis and must be considered particularly valuable. The section on Dermatology and Syphilis by Wm. S. Gottheil, is ably arranged and properly illustrated. Dr. Wm. G. Spiller devotes more than the usual space to nervous diseases, and Dr. Richard C. Norris concludes the volume with a general review of Obstetrics. While the current year has not shown any epoch making work in Obstetrics, the literature shows that much has been done in verifying and weeding out the research of recent years. The technic of antiseptic midwifery, the range of surgical application to the complications of labor and lying-in period, medullary narcosis, and particularly the pathology of the placenta and fetal membranes, have been shown the most attention. The book could hardly be surpassed from the publishers' standpoint.

MILLER.

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*Saunders' Question Compend; Essentials of the Diseases of Children*. By WILLIAM M. POWELL, M. D. Third Edition, thoroughly revised by ALFRED HAND, JR., M. D. W. B. Saunders & Company, Philadelphia, 1901.

This is one of the numerous question compends which, at present, seem to occupy such a prominent place with students. The usual arrangement of questions and answers is noticed. The information here imparted is correct, and for review purposes the book has its function.

STORCK.

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#### PUBLICATIONS RECEIVED.

*Essentials of Obstetrics*, by Charles Jewett, M. D.; assisted by Harold F. Jewett, M. D.

*Diseases of the Digestive Organs in Infancy and Childhood*, by Louis Starr, M. D.—P. Blakiston's Son & Co., Philadelphia, 1901

*Report of Vital Statistics of the Cities of the Havana, Guanabacoa, Regla and Marianao, September, 1901.*

*Transactions of the Medical Society of the State of West Virginia, May 22, 23 and 24, 1901.*

*Physician's Pocket Account Book*, by J. J. Taylor, M. D.—The Medical Council of Philadelphia, Pa., 1901.

*The Diagnosis of Nervous and Mental Diseases*, by Howell T. Pershing, M. D.—P. Blakiston's Son & Co., Philadelphia, 1901.

*Disinfection Against Mosquitoes with Formaldehyde and Sulphur Dioxide*, by M. J. Rosenau, Passed Assistant Surgeon United States Marine Hospital Service.—Government Printing Office, Washington, 1901.

*Public Health Reports, Vol. XV., Part I, Nos. 1 to 26, Part II, Nos. 27 to 52.*—Government Printing Office, Washington, 1901.

*Photographic Atlas of the Diseases of the Skin*, by George Henry Fox, M. D., Part, V.—J. B. Lippincott Company, Philadelphia and London, 1901.

*Anatomy, Descriptive and Surgical*, by Henry Gray, F. R. S., edited by T. Pickering Pick, F. R. C. S., and Robert Howden, M. A.—Lea Bros. & Co., Philadelphia and New York.

*A Text-Book of Medicine for Students and Practitioners*, by Dr. Adolf Strumpell.—D. Appleton & Co., New York, 1901.

*Transactions of the State Medical Association of Texas, April 23, 24, 25 and 26, 1901, held at Galveston, Texas.*

*Transactions of the Medical Association of the State of Alabama, 1901.*

*The Physician's Visiting List, 1902.*—P. Blakiston's Son & Co., Philadelphia.

*First Aid to the Injured and Sick*, by F. J. Warwick, B. A. and A. C. Tunstall, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*A Laboratory Hand-Book of Physiologic Chemistry and Urine Examination*, by Charles G. L. Wolf, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*Atlas and Principles of Bacteriology and Text-Book of Special Bacteriological Diagnosis*, by Prof. K. B. Lehmann and R. O.

Neumann, M. D. Edited by Geo. H. Weaver, M. D. Part I—Atlas; Part II—Text.—W. B. Saunders & Co., Philadelphia and London, 1901.

*A Text-Book of Pharmacology*, by Torald Sollmann, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*The Principles and Practice of Medicine*, by William Osler, M. D.—D. Appleton & Co., New York, 1901.

*Surgical Treatment of Disfigurements and Deformities of the Face*, by John B. Roberts, M. D.—The Philadelphia Medical Publishing Company, Philadelphia, 1901.

*The Practice of Obstetrics*, by American Authors. Edited by Charles Jewett, M. D.—Lea Bros. & Co., New York and Philadelphia, 1901.

*Diseases of the Intestines*, by John C. Hemmeter, M. D. Vol. I.—P. Blakiston's Son & Co., Philadelphia, 1901.

*A Treatise on Surgery*, by American Authors. Edited by Roswell Park, M. D.—Lea Bros. & Co., New York and Philadelphia, 1901.

*A Treatise on the Acute, Infectious Exanthemata*, by William Thomas Corlett, M. D.—F. A. Davis Co., Philadelphia, 1901.

*Libertinism and Marriage*, by Louis Jullien.—F. A. Davis Co., Philadelphia, 1901.

*The International System of Electro-Therapeutics*, by Numerous Associated Authors. Edited by Horatio R. Bigelow, M. D.—F. A. Davis Co., Philadelphia, 1901.

*Transactions of the American Electro-Therapeutic Association, 1901.*—F. A. Davis Co., Philadelphia.

*The Standard Medical Manual*, by Alfred S. Burdick, M. D.—G. P. Engelhard Co., Chicago, 1901.

*The Medical News Visiting List, 1902.*—Lea Bros. & Co., Philadelphia and New York, 1901.

*An American Text-Book of Pathology*. Edited by Ludvig Hektoen, M. D., and David Riesman, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*Typhoid and Typhus Fevers*, by Dr. H. Curschmann. Edited, with Additions, by William Osler, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

## REPRINTS.

*Röntgen Rays in the Treatment of Diseases of the Skin*, by William Allen Pusey, M. D.

*General Considerations of Treatment of Placenta Previa.—The New Formation of the Female Urethra; with Report of a Case.—The Complications and Degenerations of Fibroid Tumors of the Uterus as Bearing upon the Treatment of these Growths*, by Charles P. Noble, M. D.

*The Cataphoric Treatment of Cancer*, by G. Betton Massey, M. D.

*A Study of Burns, With a Plea for Their More Rational Treatment*, by Frederick Griffith, M. D.

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*Etiologie du Stridulisme Congenital Chez L'Enfant*, by J. Thomson and A. L. Turner.

*Sur L'Etiologie du Stridulisme Congenital Chez L'Enfant,—Faux Adénoidisme Par Insuffisance respiratoire chez des névropathes. Troubles De La Voix Parlée et Chantée*, by Marcel Natier.

*Simple and Ethereal Sulphates.—Physiology the Basis of Clinical Medicine: A Plea for Scientific Methods*, by G. W. McCaskey, M. D.

*The Relation of the Medical Editor to Original Communications*, by Harold N. Moyer, M. D.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR OCTOBER, 1901.

CAUSE.	White.	Colored.	Total.
Fever, Malarial (unclassified) .....	...	...	...
“ “ Intermittent.....	11	4	15
“ “ Remittent .....	...	...	...
“ “ Scarlet .....	...	...	...
“ “ Typho .....	...	...	...
“ Yellow .....	...	...	...
“ Typhoid or Enteric.....	8	4	12
Puerperal Diseases .....	...	...	...
Bronchitis .....	5	6	11
Diphtheria .....	7	1	8
Influenza.....	...	1	1
Broncho-Pneumonia.....	...	...	...
Measles .....	...	...	...
Whooping Cough.....	...	2	2
Pneumonia.....	6	13	19
Cancer.....	13	2	15
Consumption.....	46	40	86
Diarrhea (Enteritis).....	15	9	24
Dysentery.....	2	...	2
Small Pox.....	...	...	...
Hepatic Cirrhosis .....	6	2	8
Other Diseases of Liver.....	4	1	5
Peritonitis.....	2	1	3
Debility, Senile .....	17	3	20
“ Infantile.....	8	8	16
Bright's Disease (Nephritis) .....	16	8	24
Sunstroke .....	...	...	...
Heart, Diseases of.....	38	16	54
Apoplexy .....	...	...	...
Congestion of Brain } .....	17	6	23
Meningitis .....	...	1	1
Trismus Nascentium.....	7	5	12
Injuries .....	21	15	36
Suicide .....	3	1	4
All Other Causes .....	52	50	102
TOTAL .....	305	198	503

Still-born Children—White, 23; colored, 18; total, 41.

Population of City (estimated)—White, 220,000; colored, 80,000; total, 300,000.

Death Rate per 1000 per annum for Month—White, 16.63; colored, 29.72; total, 20.12.

## METEOROLOGIC SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure ..... 30.13  
Mean temperature ..... 70.  
Total precipitation ..... 2.67 inches  
Prevailing direction of wind, northeast.

# NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

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VOL. LIV.

JANUARY, 1902.

No. 7.

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## Original Articles.

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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.]

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### BIONOMICS, EXPERIMENTAL INVESTIGATIONS WITH BACILLUS SANARELLI AND EXPERIMENTAL INVESTIGATIONS WITH MALARIA, IN CONNECTION WITH THE MOSQUITOES OF NEW ORLEANS.\*

BY PROF. GEORGE E. BEYER, DEPARTMENT OF BIOLOGY OF TULANE UNIVERSITY; DR. O. L. POTHIER, PATHOLOGIST TO CHARITY HOSPITAL, ETC.; DR. M. COURET, ASSISTANT PATHOLOGIST TO CHARITY HOSPITAL, AND DR. I. I. LEMANN, ASSISTANT DEMONSTRATOR OF MICROSCOPY N. O. COLLEGE OF DENTISTRY, NEW ORLEANS.

#### SECTION I.

##### BIONOMICS.

This section deals with the report on the mosquitoes of the city and environments, their seasonal and topographic distribution and other important data belonging to the subject.

While, of course, the faunistic work upon this family of diptera may be very incomplete as yet, as far as our State is concerned, your commission believes itself justified in stating that for all practical purposes, the mosquitoes of this city and immediate vicinity have been very thoroughly studied.

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\* Read before the Orleans Parish Medical Society, November 30, as a report to the Society of the Commission on Mosquito Investigation.—ED.



Plate No. I, Fig. 1.  
*Culex pungens*, male.



Plate No. I, Fig. 2.  
*Culex pungens*, female.



Of the nine genera which have been recognized thus far for the whole of the United States, seven belong to Louisiana. All of them, with the exception of one (*Toxorhynchites rutilus*, found by us at present only at Amite City), have representatives within our city limits.

The number of species also is considerable, since we have identified thirteen\* up to date, of which the genus *Culex* supplies us with seven, namely: *Culex pungens*, *consobrinus*, *excrucians*, *perturbans*, *stimulans*, *impiger* and *confirmatus*.

The first of these, *C. pungens* (Plate No. 1, Figs. 1 and 2), it by far the most common of all, infesting not only the busy haunts of the city, but also being found among the swarms of *Anopheles* in the more remote parts of the swamp lands. It is, moreover, common all the year around, and an exact rehearsal of its periodic increase and decrease in numbers would be more than futile and superfluous; suffice it to say, that with the beginning of April, or sometimes a little later, we have to suffer twice a month from a visitation of this mosquito.

This, of course, occurs at different times in different localities. If, for instance, the inhabitants of one section of the city are very generally troubled, those of another are comparatively free during the same period. Its preponderance in numbers in nearly every section of the city is due to the fact that any small or large quantity of water in any kind of receptacle, from an old tin can to the very Mississippi river, affords it opportunity to raise a progeny of two or three hundred or even more individuals. In a survey of the city, which was made by us, and in which we were greatly assisted by the co-operation of the president of the City Board of Health, Dr. Quitman Kohnke, as well as the Citizens' Protective Association, more than two hundred cisterns and other receptacles from nearly every direction of the city were examined, forty-five per cent. of these localities furnishing larvæ of this species. Four additional investigations of the river itself showed abundant larvæ of *Culex pungens* in all stages of development, from ten to forty feet from shore, in the more stagnant waters under the

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\* Since the reading of this report another species of mosquito has been identified by us for the city, *Culex spenceri* Theobald.

wharves at Race street, the Illinois Central Railroad fruit wharf depot, the Canal street ferry boat and the garbage boat at the foot of Robin street.

From these four instances it must not be surmised, however, that the river in general is a breeding place for mosquitoes, as the localities indicated (and there are other similar ones as well)

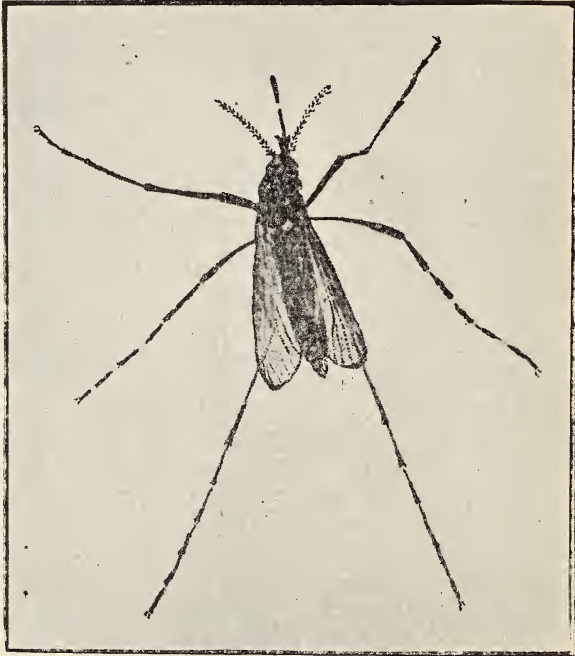


Plate II, Fig. 1.

*Culex perturbans*, female.

are really nothing but stagnant pools, in which the suspended sediment usually contained in our river water has settled, but in which decaying vegetable matter abounds.

*Culex pungens* is a very annoying insect, which, however, chiefly goes on its foraging expedition only upon the approach of night, continuing until midnight, when its activity virtually ceases.

The second species of mosquitoes of the city, *Culex consobrinus* Desv., resembles the former so very nearly that examination

with lenses is required to establish its identity. It seems to breed in the same places and flies at the same hours, but in numbers it is far less and its seasonal appearance is earlier, occurring as early as the beginning of February. From then on, of course, it continues to appear from time to time but, as stated above, close examination is required to recognize it.

The third of our species is *Culex excrucians* Walk., an altogether too uncommon insect in our city, and one about whose validity as species there should be some doubt, resembling as much as it does the fourth and by far more important species, *Culex perturbans* Walk. (Plate II, Fig. 1.)

Previous to the appearance of *C. pungens*, this large, sometimes brown and sometimes nearly black-looking, yellow-ringed mosquito becomes numerous, and in such places where it does occur, it is exceedingly troublesome. The first full flight of this species was noted from the middle of April to the end of May, when it gradually decreased in numbers without entirely disappearing. By the middle of July it was very numerous again, especially during the early part of the night and in the morning hours, about daybreak. After sunrise it ceases to be troublesome or even to be noticed. The third flight occurs about the middle of September and while it can only be found in isolated instances in and about houses and the more thickly-populated districts, it is exceedingly plentiful in the outskirts of the city. Thus far, this mosquito has never been noted by us as a cistern or even ordinary gutter breeder, but in larger pools and drainage canals its eggs may be counted by millions. Experiments made with larvæ have demonstrated that great abundance of fresh vegetable food, such as *Edogonium*, *Spirogyra*, *Stigioclonium*, etc., is absolutely necessary, and that ordinary refuse matter, upon which *pungens* larvæ can successfully thrive, will simply starve them out. As algæ of that kind are usually absent from our cisterns and water tanks, these places are not sought by the female of this species for the deposit of its eggs.

Quite the contrary we found, however, the fifth species, *Culex stimulans* Walk., which, while it is not very numerous at any time, has thus far often been found in the larval stages amongst the larvæ of *pungens* and even *Stegomyia fasciata* in the cisterns

and water-barrels. In general, this mosquito resembles *C. pungens* very much, with the exception of its faintly yellowish ringed tarsi. The larva resembles that of *pungens* in every respect, but its longer and more linear respiratory siphon. Not being numerous enough, at least in our vicinity, but little importance may be attached to this species in regard to its connection with the transmission of disease.

More important in this respect may possibly prove to be the next genus in New Orleans, *C. impiger* Walk., a mosquito



Plate II, Fig. 2.

*Culex confirmatus*, female.

which appears to be widely distributed, indeed, in many sections of the United States and West Indies. Wickham reports it from Stikine River, British Columbia. Dr. Couret, of this Commission, brought specimens recently from Wisconsin and reported it as common there. It was for the first time recorded from Louisiana by your Committee. Like all other mosquitoes, it is subject to fluctuating seasonal appearances, but as to localities, it is unquestionably and essentially a water-closet insect, especially in the larval stages.

In cisterns or water tanks, where, comparatively speaking, not much decaying vegetable matter, and, above all, no decomposing animal substances do, as a rule, occur, the larvæ have thus far not been found. The adult insects were for the first time observed on April 25. and again on May 7. In the first instance we found them at the entrance of the Physical Laboratory of Tulane University, and in the second in an ordinary backyard closet on Conery street, near St. Charles avenue. Since then, they have been taken in a number of localities, as widely separated as those of the first two records. The larvæ feed upon excreted matter, and, therefore, our ordinary water closets in which, unfortunately, our city abounds, should receive incessant attention and frequent oiling, if such be admissible in the premises. In general appearance and marking, the adult is a very handsome insect of medium size.

The seventh, and at present last species of the genus in the city, is *Culex confirmatus* Lynch (Plate II, Fig. 2), undoubtedly an imported and domesticated South American species, which is herewith recorded for the first time, not only for the city, but the whole of North America. In regard to this species we have been informed by Dr. L. O. Howard of the Division of Entomology in Washington that it belongs originally to South America, and was first described from the Argentine Republic. It will thus be readily understood that the importation of these insects is a frequent one; not only are new species brought in, but we also find the importation of species already domesticated here almost a daily occurrence.

*Culex confirmatus* is as yet a rather rare species, but a handsome and conspicuous insect. It occurs along the river front and in the swamps along the Spanish Fort railroad track.

During the summer a suggestion was made by your commission to the President of the City Board of Health, Dr. Kohnke, to undertake a systematic investigation of our cisterns and other artificial water receptacles, for the purpose of determining how many and which species of mosquitoes actually, and probably by preference, deposited their eggs in such receptacles. As stated above, the suggestion met with hearty co-operation from all sides, and as a result, more than two hundred cisterns and barrels, from almost every direction of the city, were examined,

and the larvæ contained in these samples bred in the laboratory with the following result:

In two hundred receptacles, such as cisterns, barrels, troughs and kettles examined, the species proved thus:

Larvæ of <i>Culex pungens</i> .....	74
“ “ <i>Culex stimulans</i> .....	6
“ “ <i>Culex pungens and Stegomyia</i> .....	20
“ “ <i>Culex stimulans and Stegomyia</i> .....	4
“ “ <i>Culex Stegomyia fasciata alone</i> .....	104
No mosquito larvæ .....	2
<b>Total</b> .....	<b>210</b>

In other words, the larvæ of *Stegomyia* in these receptacles predominated in more than sixty per cent.



Plate III, Fig. 1.  
*Stegomyia fasciata*, male.

These records bring us at once into contact with a second genus of mosquitoes, the now probably world-famous *Stegomyia*, one species of which is the yellow fever mosquito, *Stegomyia fasciata*, formerly known under the name of *Culex fasciatus*. Rubbed or worn individuals, which were supposed to be different species, as for instance *C. teniatus* Wied. and *Culex excitans* Walk., are now no longer recognized as such, having resolved themselves simply into synonyms of *Stegomyia fasciata*. (Plates III, IV, V and VI, Figs. 1 and 2.)

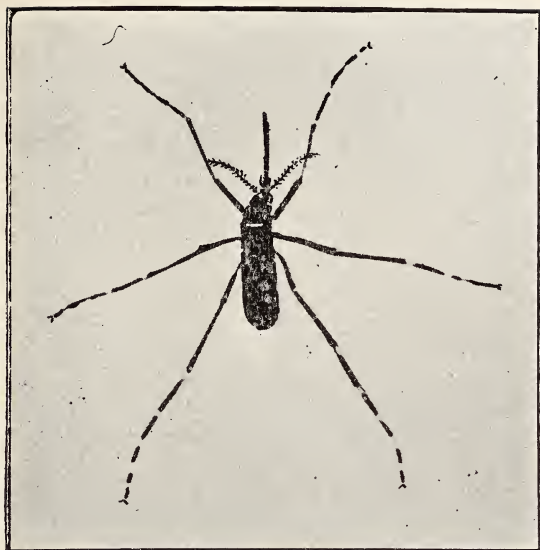


Plate III, Fig. 2.  
*Stegomyia fasciata*, female.



Plate IV, Fig. 1.  
*Stegomyia fasciata*, female.

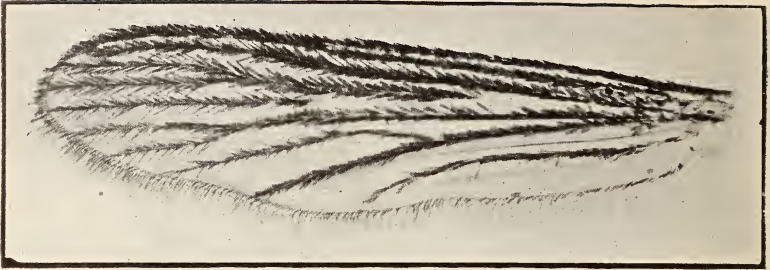


Plate IV, Fig. 2.  
Wing of *S. fasciata*.



Plate IV, Fig. 3.  
*Stegomyia*, female, from side.



Plate V, Fig. 1.  
Eggs of *Stegomyia*.





Plate V, Fig 2.  
Larvæ of *Stegomyia*.



Plate VI, Fig. 1.  
Female *Stegomyia* escaping from Pupa.

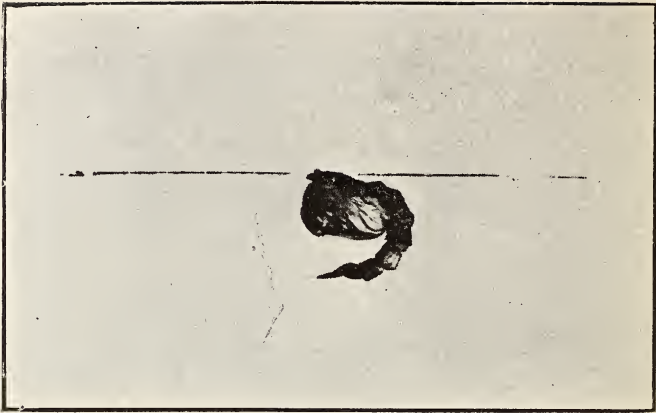


Plate VI, No. 2.  
Pupa of *Stegomyia*.

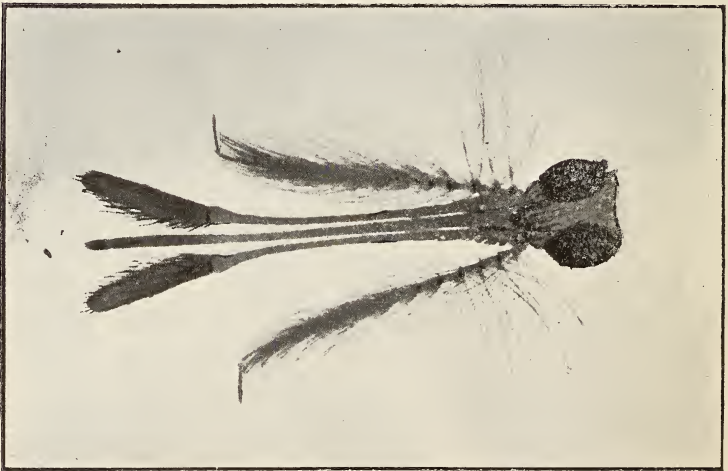


Plate VI, Fig. 3.  
Head, antennæ, palpi and proboscis of *A. maculipennis*, male.

The geographical distribution of this insect is a limited one, in certain respects. It is essentially an American species and principally confined to the tropic and semi-tropic regions, and here again to an either broader or narrower belt along the coasts of the Atlantic Ocean and the Gulf of Mexico.

Locally, its distribution seems to be confined to the larger populated centres and, in our country at least, is to be met with less in the rural districts than in the larger towns and cities, a few of which, New Orleans among them, are the permanent baiding places of this pest.

As we have remarked elsewhere, the importation from foreign countries of any species of mosquitoes and its subsequent domestication is seemingly not an infrequent occurrence. This was amply illustrated some time during the past summer, when, upon examination of the hold of a fruit vessel just arrived, five *Stegomyia fasciata* were taken; this instance, however, will again be touched upon in another section of our report.

In the light of the early history of yellow fever and its own distribution on our North American Continent, *Stegomyia fasciata* is, no doubt, originally a native of tropic America, imported into more northern latitudes and spread more and more by ever-increasing traffic and its own adaptation to new conditions and environments.

It is thus that it brings with it occasionally its bacterial parasite which, in itself, is indigenous only to the mosquito's original home.

The points just referred to seem to be further attested by the fact that in our country and State, at least, its distribution is not universal like that of our indigenous species, as, for instance, *Culex pungens* and *impiger*, but occurs, as mentioned above, only in circumscribed areas. This also would explain the undoubted immunity of certain regions and localities enjoyed by them in the past during the prevalence of yellow fever, the insect causing the dissemination of the disease not occurring in them.

As our investigations undoubtedly prove, *Stegomyia fasciata* is most decidedly a cistern breeder, but, unfortunately, in the suburbs of our city, it does not confine itself to such artificial breeding places alone, for the examination of twenty-one of the gutters in the Sixth and Seventh districts, which bred at the same time *Culex pungens*, also showed in no less than sixteen the larvæ of the yellow fever mosquito. In the thickly-settled and older parts of the city, however, it confines itself to cisterns and barrels, for a thorough canvass of the same sections, which showed on former investigations *Stegomyia* in preponderance in the cisterns, only yielded about 10 per cent. of them in the gutters, whereas *Culex pungens* was found in 77 of 82 different and far-apart localities.

The complete life-history of this mosquito had never been

worked out in full until quite recently, when your Commission was enabled to do so for the first time. Its eggs and manner of ovipositing, as well as the peculiar life habits of the larva and its short larval stage, were not observed, nor, in fact, was the entire life cycle as thoroughly understood before.

These points, however, have been fairly well-explained, we believe, in the September number of the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

It may, however, not be out of place to draw your attention again to the fact that the life-cycle of this mosquito is somewhat different from that of others, and that these differences might necessitate even more stringent measures at times than those which otherwise would suffice for the suppression of either *Anopheles* or *Culex* varieties.

The eggs of *Stegomyia* hatch in from ten to twenty-four hours; therefore, from six to twenty-four hours earlier. The larvæ are, under favorable conditions, full-grown in  $6\frac{1}{2}$  to 8 days and the pupa releases the complete imago within two days. In general, consequently, this species requires for its development from two to even four days less than the ordinary *Culex pungens* and fully two weeks less than any *Anopheles*.

The larvæ are exceedingly active and continually in search for food. Experiments in the laboratory have also demonstrated that they can subsist upon little food for a very long period, and in one instance an entire generation was kept through starvation from pupation for thirty-two days, the adults which eventually hatched being exceedingly small. In connection with *Stegomyia*, it was also noted that very close-meshed bars and screens are necessary to keep them from getting into places where they are not wanted. This point also may be well worth while keeping in mind.

In its daily flight, *Stegomyia* is essentially a diurnal insect, although during the height of its flight it is very troublesome, even during the evening and night hours. But it is the sense of your Commission that the chief danger of infection is principally during the day, and especially the afternoon hours.

The third genus of our New Orleans mosquitoes, *Anopheles*, has scarcely less repute than the preceding one, and contains the famous species *A. maculipennis* Meig., by which Grassi and Bignami first demonstrated the connection between mosquitoes and diseases in man. (Plates VII, VIII.)

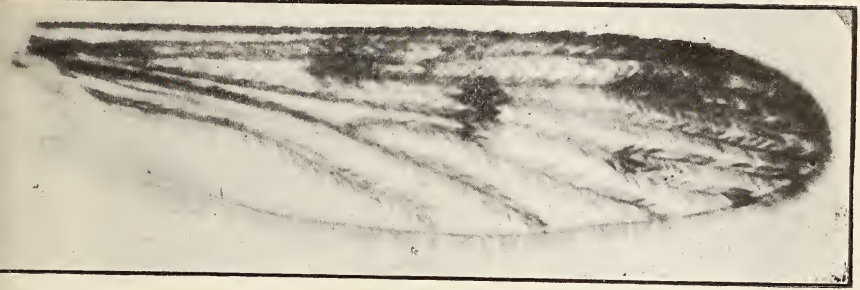


Plate VII, Fig. 1.  
Wing of *A. maculipennis*.



Plate VII, Fig. 2.  
*Anopheles maculipennis*, male.



Plate VIII, Fig. 1.  
*Anopheles maculipennis*, female.

*Anopheles maculipennis* (synonyms: *A. claviger* Fabr. and *A. quadrimaculatus* Say.) is an insect of wide geographical distribution. It is one of the most common *Anopheles* of the Sierra Leone and Southern Europe, penetrating into Northern Germany and France.

In our country it is scarcely absent from any of our Eastern States, and by Dr. Howard is reported as far west as Texas. How numerous it is in Louisiana need scarcely be mentioned; and yet, with all its wide distribution, it is principally a swamp mosquito, and one which, unlike *pungens*, *stimulans* and *fasciata*, will never become domesticated in large centres of population, where dwellings are standing close together and the soil is

closely drained. In the heart of the city it has been found by your Commission in isolated instances only; but in the outer districts it still exists in large numbers. In a survey of the city, the following localities have been noted for its appreciable presence: The Lower City Park, Slaughter House, Tenth Precinct Station, Spanish Fort, West End and Athletic Park, the



Plate VII, Fig. 2.  
Larvæ of *A. maculipennis*.

rear of Carrollton, and the rear of St. Charles Avenue, between Peters Avenue and Carrollton Avenue; also along the entire river front. But, strange to say, it was not noted on the right bank of the river, and on a tour of investigation of the swamps in the rear of Gretna, no *Anopheles* were found. On this occasion, however, *Culex teniorynchus* was very annoying in the swamps.

The larvæ of all species of *Anopheles* can only thrive in such

bodies of stagnant water as are possessed of large quantities of surface scum. Not being as active in quest of its food as other mosquito larvæ, it soon perishes by an increase of the low water level usually prevailing in our swamps, and any overflows coming suddenly are destructive to the majority, and especially very young larvæ. In our cisterns, etc., the larvæ of *Anopheles* can absolutely not exist; if they could, the population of New Orleans would certainly suffer more, not only from the exceedingly blood-thirsty attacks of the adults as from the variety of malarial fevers which they transmit. The adult insects of this genus are fortunately not as tenacious of life as other members of the family, especially if no meal of any kind can be procured soon after hatching, and it is by far only a small percentage which survives oviposition long enough to inflict further damage upon the human race by rearing within themselves the sexual generation of the plasmodium. It is the opinion of your commission that while the remarks and observations made here apply to the genus in general, our observations, so far, lead us to believe that, specifically, *Anopheles maculipennis* is mainly responsible for the tertian and quartan variety of malaria, but that we do owe the origin of the pernicious type, or æstivo-autumnal fever, to *Anopheles crucians* Wied. (Plates IX and X),



Plate IX, Fig. 1.  
Wing of *Anopheles crucians*.



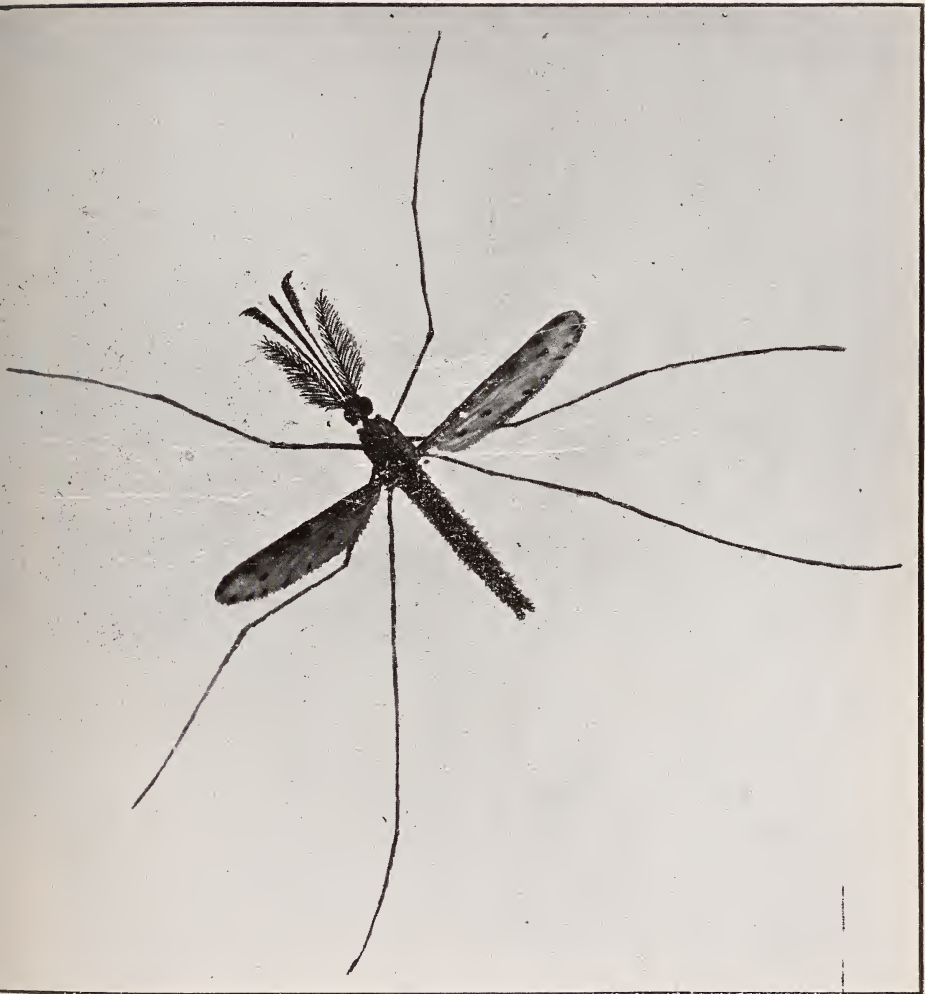


Plate IX, Fig. 2.  
*A. crucians*, male.

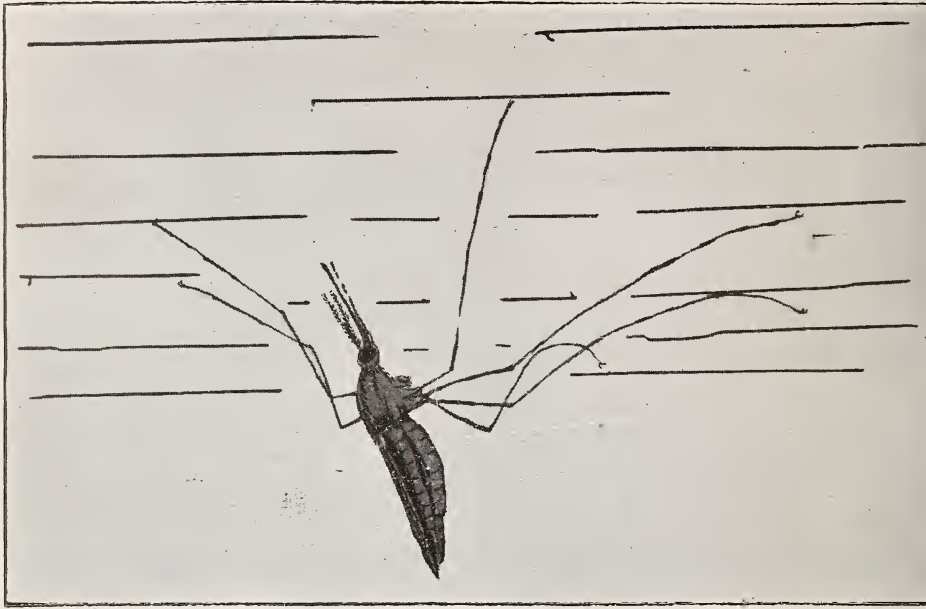


Plate X, Fig. 1.  
*A. crucians*, female, resting position.



Plate X, Fig. 2.  
*A. crucians*, female.

an insect which is not as rare as many authors have supposed. It is true, this species is even more of a brackish water breeder than the other just mentioned; nevertheless, it invades occasionally even our suburbs, where your commission has been enabled to take it time and again during the past months; it usually occurs in equal numbers with *A. maculipennis*, and the same localities given by us for the latter are also the breeding places of this species.

This contemporaneous occurrence readily explains the prevalence of our so-called mixed infection. Neither one of the two species seems strictly to hibernate with us, for the adults may be found as active and blood-thirsty during mid-winter as during high summer and the larvæ of *A. crucians* have been found as early as February 25. The latter seems to be the predominating species during the early part of spring and still more abundant at the end of summer and during the fall months. As a rule, the adults hatch in the afternoon and are able to go upon their hunt for victims after sundown; but in sheltered places, such as among the thick, tall grasses of our marshes, they bite ferociously in the day time, after once they have been disturbed. Unlike other mosquitoes, *Anopheles* continue sucking once they have fastened and do not fly off as soon as they are full, which is invariably the case with *Culex* and *Stegomyia*.

In conclusion of our observations on the bionomics of *Anopheles*, we must state that, as a rule, only the females enter the dwellings of man, about or after sundown, but leave the house again before morning, unless they are too gorged or prevented from getting out, when they may be found at rest in their characteristic position (Plate X, Fig. 1) in the darkest corners of the room. Sexual congress with them, as with all other mosquitoes, takes place as soon as the female takes to wing after emerging from the pupa. The males, often collected into veritable clouds, are awaiting the event.

The fourth genus to be reported upon has but one, as far as can be ascertained, insignificant representative in *Aedes fuscus* O. S. It is, no doubt, the smallest mosquito, not only of New Orleans, but the United States. The few females which your commission has been fortunate enough to take died, however, without oviposition. In its range, it is apparently a rural insect, rarely ever entering the city limits proper. It was taken as late as August 26, at the Athletic Park.

The fifth genus appears to have with us also only one species, *Conchyliastes musicus* Say. (Plate XI, Fig. 1). It is an exceedingly handsome form, of medium size. As there is absolutely nothing known of its life-history, we can only record its distribution from the adults. It has been sent to us from the country and also been found by us in the outskirts of the city (Tulane University), and is, no doubt, a rural species as well. While it may not be uncommon it can, in all probability, not be considered a form from which we must necessarily apprehend a great deal of danger, ex-



Plate XI, Fig. 1.

*Conchyliastes musicus*, female.

cepting its blood-thirsty proclivities. Your commission, however, is making efforts, at present, to work out its life-cycle.

The sixth and last genus known thus far for New Orleans furnishes us with one of the largest known mosquitoes: *Psorophora ciliata*. Fabr. (Plate XI, Fig. 2). In its distribution it appears to be cosmopolitan in the United States. In Louisiana, it may be met with in a number of sections, and wherever it does occur it is known as Gallinipper and greatly feared, notwithstanding the fact that its bite is certainly not worse than that of any other mosquito. Its occurrence in this city is, as far as we have determined, rather a restricted one. Thus far, it has been found in appreciable numbers in the vicinity of the St. Louis Canal

and the so-called Third or Hagan Avenue Canal, and in isolated instances in the Sixth district, near the river. The adult insects do not appear until midsummer, and for this reason their developmental stages are very likely protracted over a longer period than in other mosquitoes.



Plate XI, Fig. 2.

*Psorophora ciliata*, female.

Thus far, only the nearly full-grown larvæ and the pupa have been observed. Their eggs and early larval condition are still unknown. All efforts on our part to bring females to oviposition have proved failures; the conditions which we have offered them nearly always brought about <sup>the</sup> desired result in other mosquitoes, and, therefore, the breeding habits of *Psorophora* may be different from them. [The adult insects fly only at night, but are attracted by light. Whether *Psorophora* has anything to do with the transmission of or other connection

with disease, is not known at present, but if so, their size will easily render them conspicuous enough for us to deal with them.

This brings us directly to the problem of mitigation of the evils which the mosquitoes stand now convicted of being able to disseminate. For while we can, under existing conditions, never hope to exterminate the insects, it is nevertheless within our power to keep them at greatly reduced numbers, and thereby also to lessen disease dissemination. It is not in our province to discuss all the methods to destroy the insects which have been employed in various sections of the country, but a few points may be well worth emphasizing. Among all the mosquitoes of our city, *Stegomyia fasciata* is certainly the one which, off and on, has created for New Orleans financial as well as moral panics and touches the vital interests of our city and state the severest. It is, therefore, the one mosquito, at least, of which New Orleans must rid herself as far as possible, a problem which in this case seems to permit of solution much more readily than in other instances and with other species of mosquitoes. As we have seen elsewhere, the various species of these insects differ very materially in the selection of their breeding places, and it will be necessary to fight them accordingly. In the way our city is conditioned just at present, we should consider the methods of destruction under two divisions, namely:

Temporary and permanent measures. To make, however, the temporary ones at all adequate, we must certainly and very strongly recommend that their execution be made peremptory by the adoption of suitable city ordinances.

Unfortunately there will be many of our citizens who will endeavor to oppose any or all measures for one reason or other. That these oppositions are very often based upon no reasons at all, or at least upon very trivial ones, need scarcely be mentioned, as, for instance, such that the screening of cisterns would deplete our pockets and enrich the wire-screen makers, or that there could be no use to protect the cisterns or oil the gutters, as any wind would blow the mosquitoes into the city from the swamps.

In the first place, these wind-driven mosquitoes are pretty rare in our city, notwithstanding the assertions of people who, as a rule, never seek for primary causes; and, secondly, these swamp-

mosquitoes, if *Anopheles*, are rarely infected, and if of such species as *Culex perturbans*, *tæniorhynchus* or *sollicitans*, are not capable of remaining and breeding in the city. They will, therefore, disappear as quickly as they came. Such and other equally foolish oppositions must be met with by timely corrections, by general education of the public on the subject or by city regulations as the case may demand.

Among the temporary measures coal oil, it is true, has been proven a reliable agent in the destruction of the larvæ and pupæ of mosquitoes, but its application to cisterns and other receptacles of potable water is objectionable, for the reason that the film of oil upon the surface of the water prevents its proper æration and causes it to become offensive both to smell as well as taste, even within a shorter time than would be required for the attainment of the desired result.

A more suitable method for cisterns, etc., would be to render these receptacles inaccessible to the adult females, and thus prevent them from oviposition. This could be accomplished by means of screens or at least wooden covers, to fit tightly upon the cistern, but provided with an opening in the centre about  $2\frac{1}{2}$  feet square and protected by 18-mesh wire netting. This opening would be large enough to admit the air needed for the preservation of the water.

New cisterns should be required by law to be constructed at once to afford proper protection, and an adequate cover should form as much a necessary part of the cistern as its hoops or staves. However, the design of adequate devices does scarcely fall within the scope of your Commission's work and may, therefore, be left to the care of the proper authorities.

Against other species of mosquitoes, breeding as a rule in gutters, we would recommend frequent flushings and the application of coal oil to such which could not readily be flushed. Stagnant pools should be subjected to the oil treatment as well.

For the permanent eradication of the mosquito plague, the commencement has been made by the construction of our drainage and sewerage systems. The total abolition of cisterns will, no doubt, follow as soon as our city is furnished with the necessary supply of good and pure water by means of an efficient water works system.

The adult mosquitoes may be readily destroyed in rooms or

houses with any dense, and especially tobacco, smoke, or sulphur fumigation.

Exposure to either smoke or sulphur fumes for one hour or even less, will be sufficient to kill any or all mosquitoes confined in a room.

In conclusion, we may safely add that with stringent measures, uniformly and concertedly undertaken, the ridding of the city of mosquitoes to a large and safe extent is, in our opinion, not as difficult as it would appear, and the benefits the city would derive by forever banishing epidemics such as we have experienced in the past, would amply repay temporary inconvenience and comparatively small expenditure.

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## SECTION II.

### EXPERIMENTS WITH BACILLUS ICTEROIDES.

In presenting this section your Commission has thought it best to divide it into two parts: the first relates the experiments made with animals and the methods of infection; the second consists of deductions from the experiments.

Before entering upon the report of experiments we deem it advisable to consider a few points, so as to avoid repetition.

All the animals upon which we experimented were carefully examined and their temperature tested at least 24 hours before inoculation. In a few the urine analysis was made. There is one thing that must not be lost sight of in testing the temperature of animals, and that is the wide range of the temperature. The animals, especially the rabbits, when excited, would have high temperature, reaching at times to 102 deg. F. and above. This we guarded against by careful handling of animals and avoiding any source of excitement.

From the time the animals were selected and during the period that they were sick, they were kept in specially designed and constructed cages. The body of the cage was of wood, with sides and tops of wire screens. The wire screens were composed of an inner galvanized  $\frac{1}{4}$ -inch mesh wire screen and of an outer 18 mesh to the inch wire screen. The inner one acted as a guard-wire, preventing the animals from injuring the weaker outer wire netting; the outer one insuring a mosquito-proof cage.



The floor of the cage was inclined from before backward and from one side to the other, so as to convey all fluids to one corner, which was perforated, and through a tube conveyed these fluids, more especially urine, into a suitable receptacle. The whole floor was covered over with zinc and extended about three inches high on all sides of the cage. A better idea of the cage can be formed from the photographs. (Plate XII, Figs. 1 and 2.)

The temperature of every animal experimented with was taken daily and the urine analysis was also made daily. The cages of

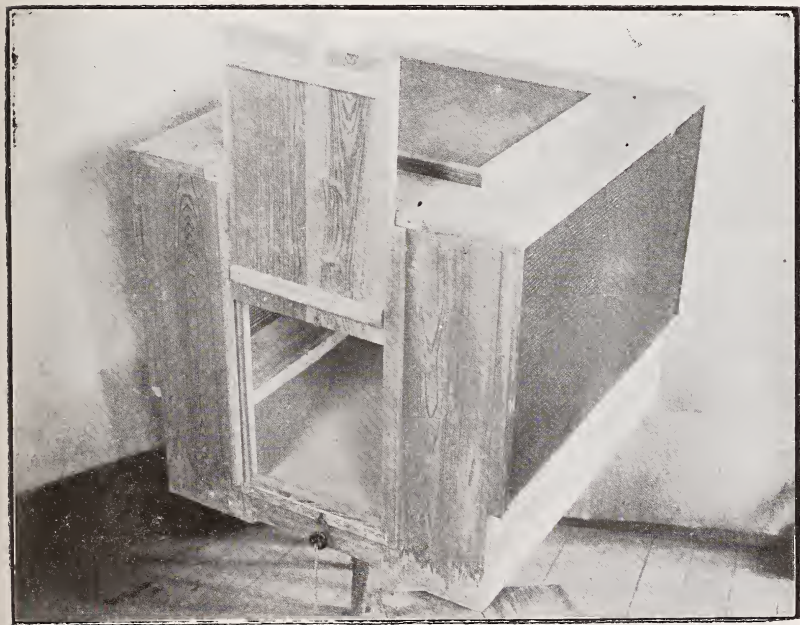


Plate XII, Fig. 1.  
Animal cage.

animals under observation were cleaned and the animals were fed at regular intervals.

We had to design also an easy method of feeding mosquitoes on animals and, after trying several methods, we finally adopted the cylindrical wire cages, made of 18-mesh to the inch wire netting. (Plate XII, Fig. 2.) This gave us perfect control of our mosquitoes.

Our mosquitoes were raised partly in the Biological Laboratory at Tulane University and partly in the Pathological

Department of the Charity Hospital. While the *Stegomyia* were in the breeding jar we had little difficulty in keeping them. But after they became infected we had a great deal of trouble in keeping them alive. We fed them on fruits, bananas especially, and occasionally on sugar and water. This difficulty in keeping our infected *Stegomyia* alive accounts for the repeated direct inoculations we were forced to make to have new infected mosquitoes.



Plate XII, Fig. 2.

Mosquito control and infection cages.

We employed in the following experiments two modes of infection. One was by direct inoculation of cultures and the other by mosquito bites. When dealing with direct inoculation we employed cultures of the *Bacillus icteroides* of Sanarelli. These cultures are denominated in the following report as *Bacillus icteroides*, human, 1898, because they are from a series of cultures obtained by one of us during the epidemic of yellow fever of 1898. This series is composed of twenty cultures, obtained from the capillary blood of twenty cases of yellow fever, on the second and third days of the disease. These have been kept in stock since 1898.

The second mode of infection was by feeding infected mosquitoes on healthy animals.

All our recovered cultures were subjected to the tests advised by Sanarelli to identify the *Bacillus icteroides*. After isolating by the usual methods an organism corresponding to the *Bacillus icteroides*, this culture was subjected to the following tests: It was planted in milk, litmus milk, glucose bouillon, lactose bouillon, and in Dunham's peptone solution, and stained by Gram's method.

The following reactions take place in these media if the organism is *Bacillus icteroides*: The milk and litmus milk remain unchanged; the glucose bouillon is fermented and the lactose bouillon remains unchanged. After growing twenty-four hours in Dunham's solution no indol reaction takes place after addition of sulphuric acid and nitrite of sodium. *Bacillus icteroides* does not stain by Gram's method.

The method used for indol reaction is that recommended in Abbott's Bacteriology: To an inoculated tube add ten drops of pure sulphuric acid, and if no reaction takes place after ten minutes, add 1 c. c. of a. o. 01 per cent. solution of nitrate of sodium. If no rose color appears, there is no indol present. It is always better to keep tube in incubator for twenty-four hours longer and note result.

All of our cultures answered these tests.

The method used to estimate the percentage of albumin is the ferrocyanide test, supplemented with the centrifuge, as advocated by Purdy. The estimation of urea was made with the Doremus ureometer.

We have, with one or two exceptions, made cultures at our autopsies from the lungs and liver, as these two organs, from past observations, furnished better original cultures.

We now come to our experiments, which we will report seriatim, as they were made, avoiding confusion of the dates and of the different animals.

#### EXPERIMENT NO. 1.—DIRECT INFECTION.

RABBIT I. DOG I. RABBIT NO. II. DOG NO II—The experiment on Rabbit No. I and Dog No. I, was made more especially to establish the virulence of our cultures. The culture used was *Bacillus icteroides* (human, 1898).

Rabbit No. I (male), was inoculated June 29, 1901, at 6:30

P. M., with 3.5 c. c. of a 48-hour old culture *Bac. ict.* (human, 1898) in marginal auricular vein. Animal died during night of 29th to 30th, about eight hours after inoculation.

*Autopsy Rabbit No. I.* The autopsy was held on the morning of June 30, about 10 A. M. Post-mortem rigidity absent, conjunctivæ injected and some extravasation noticed. Lungs intensely congested. Heart congested, small hemorrhagic spots at base, organ contained fluid blood; liver, congested, somewhat fatty; gall bladder one-half full; spleen congested, normal in size; kidneys congested, slightly fatty; stomach, vessels at cardia extremely congested; stomach filled with food. No cultures were made from autopsy.

*Dog No. I (female)* was inoculated on July 6, 1901, at 6:30 P. M., in saphenous vein, with 2.5 c.c. of a 24-hour culture of *Bacillus icteroides* (human, 1898). On the morning of the seventh, animal seemed lively and fed well. It had, however, loose and offensive stools. On morning of July 8, animal is sick, eyes injected, bowels still loose and very offensive. Six to eight mosquitoes (*Culex pungens*) had entered the cage and had fed on the dog. Recognizing the danger that might arise from an imperfect cage, we decided to capture the mosquitoes and kill the dog. All the mosquitoes in the room and cage were captured and destroyed, except one. All were *Culex pungens*. We kept the one for further experiments. The dog was then chloroformed to death.

*Autopsy on Dog No. I (female).*—Post-mortem rigidity absent; conjunctivæ injected; lungs, congested; heart, slightly fatty, contains many filaria worms; liver, markedly congested, areas of fatty degeneration, which are already extensive and boxwood in color; spleen is normal in size and appearance; kidneys, intensely congested and fatty; stomach slightly congested and empty. No cultures made.

About four hours after capturing the mosquito found in cage of dog No. I, a culture was made from it.

The mosquito (*Mosquito No. I*) still contained the dog's blood in its stomach and intestines. It was introduced in a culture tube containing 4 c. c. of sterile bouillon and crushed. After forty-eight hours the growth gave a small active bacillus.

The culture was plated and we isolated an organism which answered all the tests of *Bacillus icteroides*. This isolated or-

ganism we have in our stock as culture N. From this culture, Rabbit No. II was injected as follows:

*Rabbit No. II (male)* was injected on July 12, 1901, at 11:30 A. M. with 2 c. c. of a 72-hour culture from mosquito No. I, as stated above, in marginal auricular vein. On July 13, animal is quiet and has not urinated since injection; has fed very little and looks sick; eyes somewhat watery; on July 14, droopy, has fed sparingly; has urinated. July 15, droopy, does not eat much; has urinated from morning of July 14 to July 15 (9 A. M.), 120 c. c. of urine; conjunctivæ slightly congested, more especially the palpebral conjunctivæ; temperature, 106 deg. Cultures from capillary blood were made in bouillon. These were plated and subjected to the usual tests, which they answered, and are kept in our stock as culture E.

Examination of urine of July 15, reveals 3 per cent. urea, hyalin granular casts, epithelial casts, leucocytes, epithelial cells, oxalate of lime crystals, hippuric acid crystals, urates, bacteria; cells and casts have a slight yellowish tinge. Specific gravity 1.018. Reaction acid. No albumin could be detected. On the same day (July 15) at 10 A. M. three *Stegomyia fasciata* were fed on the ear of Rabbit No. 2. July 16, animal fed sparingly and did not drink since yesterday noon, nor has he urinated; otherwise seems better. Temperature 102 degrees F. Conjunctivæ paler.

July 17, retention of urine; temperature 103 degrees F.; animal seems better; fed well. The three same *Stegomyia* which fed on the 15th were again fed on this day. July 18, rabbit passed 15 c. c. of urine; temperature 103 F. Eats well and drinks sparingly; otherwise seems improved; conjunctivæ anemic. From this date animal did well and totally recovered.

Of the three *Stegomyia* which fed on Rabbit No. II, only one lived. This latter (*Mosquito No. II*) was kept until July 26, or eleven days and four hours from date of first feeding. It was then fed on Dog No. II, as follows:

*Dog No. II (female)* was infected by four successive bites of *Stegomyia fasciata (Mosquito No. II)* on internal surface of thigh and on inguinal region, at 1:45 P. M. July 26, 1901. At 2 P. M. the *Stegomyia* was taken and introduced in a culture tube containing 4 c. c. of sterile bouillon and crushed. Twenty-four hours after, a culture was obtained and subjected to the different tests, which it answered. This culture is our stock culture M.

On July 27, Dog No. II look well and feeds well. On July 28, same conditions. On July 29, temperature is 102 deg. F. Animal fed twice this morning and drank, but is restless. Conjunctivæ slightly injected, especially at inner canthus. July 30, temperature is 101.8 deg. F. Animal feeds well, but remains lying down most of the time; breathes rapidly; congestion of inner canthus and conjunctiva more marked. July 31, fed well; temperature, 101.4 deg. F.; looks apparently well; conjunctiva more injected; respiration same as yesterday. August 1, temperature 100.6 deg. F. Congestion of conjunctivæ less marked; breathes naturally; eats well. Culture was made on this date from fluid obtained with sterilized hypodermic syringe from region of liver and from blood of plantar surface of the forefoot. Then cultures were made by using same sterilized syringe and introducing fluid from abdomen into bouillon tubes. Those from the foot were made by washing and scrubbing the foot with 5 per cent. carbolic acid solution, then lacerating the skin, to produce a free flow of blood. This was taken up with a sterilized syringe and inoculated into bouillon.

Of these cultures, the first—the fluid from abdomen—remained sterile. The blood from the foot gave a growth which we were, unfortunately, unable to test, as they were sterilized by mistake.

August 5, 1901. Dog No. II has been doing well for the last four days and looks well to-day, but on taking its temperature, it is found to be 102.2 deg. F. Conjunctivæ are more congested and respirations labored and animal has a peculiar stable odor. Examination of urine reveals hyalin and granular casts; large quantities of triple phosphate crystals, bacteria; specific gravity, 1.060; reaction, alkaline, free from sugar and albumin.

August 6. Animal looks well. Temperature is down again, and from this date animal has remained well.

#### EXPERIMENT II.—DIRECT INOCULATION.

This comprises only one animal, *Dog No. III* (female). Temperature before inoculation (August 8, 1901, at 10:30 A. M.), 102 deg. F.; at 3:10 P. M., 101.4 deg. F.; at 6:30 P. M., 101.6 deg. F. Urine was examined morning of 9th and found normal. At 11:45 A. M., August 9, 1901, animal was inoculated

through saphenous vein, with 5 *c.c.* of a 24-hour bouillon culture of *Bacillus icteroides* (human, 1898). Two hours after inoculation temperature reached 103.2 F. During evening, animal kept very quiet. It had been fed that morning, before inoculation. At 6 P. M., when attendant of laboratory came to feed it, he found that animal had died in cage, with vomit in front of animal and scattered over floor of cage. From the time of inoculation to that of its death, animal had passed 71 *c.c.* of urine, red-colored and turbid. Bowels had also moved, feces being of a dark brown color, almost black.

Urine was examined on morning of August 10. Specific gravity, 1.035; reaction alkaline, free from sugar, free from bile, contains four per cent. albumin, three per cent. urea. Microscopic examination revealed large quantities of red blood corpuscles, excess of bladder epithelium, epithelium from kidney, triple phosphate crystals, amorphous phosphates, bacteria.

Autopsy of Dog III was held on August 9, 1901, at 9 P. M., three hours after death. Post-mortem rigidity marked. Conjunctivæ white, pupils dilated; gums congested; blood coming from rectum; heart intensely congested, left heart in systole, right heart filled with fluid blood, free from clots; lungs, left, apparently normal, right, hemorrhagic spots over whole surface; liver, congested, fatty in spots, giving it a mottled appearance; gall-bladder distended; kidneys intensely congested, blood exudes on section; urinary bladder empty; spleen, hemorrhagic spots on surface, otherwise, normal; stomach is filled with bloody fluid; mucous membrane intensely congested, of a blood-red color. Pyloric extremity almost normal in color, while congestion increases in intensity as cardia is approached. Pancreas intensely congested.

Cultures were made from all the organs. These cultures were plated and after subjecting them to the usual tests, we isolated a pure culture of *Bacillus icteroides*, which is our stock culture D.

#### EXPERIMENT No. III.—DIRECT AND IMMUNIZING INOCULATION.

This experiment comprises four animals: *Dog No. IV*, *Dog No. V* and *Dog No. II* and *Rabbit No II*. Dogs Nos. IV and V were new animals, while Dog No. II and Rabbit No. II had been in-

fects with mosquito inoculations and were reinoculated with pure culture, to test immunity.

*Dog No. IV* (Male). Had a temperature of 103 degrees at 1:15 P. M. August 14, 1901. At 1:35 P. M. it was inoculated with 3 c. c. bouillon culture of *Bacillus icteroides* (human, 1898) into the femoral vein. On morning of August 15, 1901, animal found dead in cage. It must have died after 12 P. M., as one of our resident students was in the laboratory after 11:03 P. M. and



Plate XIII, Fig. 1.

Sagittal section of *Stegomyia fasciata*, female.

the animal was then alive. Animal had vomited and passed urine. This latter was examined on morning of August 15. It contained red blood corpuscles, leucocytes, tissue and vomit, urates, bacteria, indican, 10 per cent. albumin, urea 1-10 per cent. It was free from sugar. Specific gravity, 1.013. Reaction acid. Autopsy was held on morning of August 15, 1901, about eight hours after death. Decomposition was setting in; blood was coming freely from nose. Gums slightly injected. Post-mortem rigidity marked. Conjunctivæ yellowish-white, pupils dilated. There was marked congestion of subcutaneous



tissues, marked hypostasis, especially about scrotum. There was blood in both pleural cavities. Lungs intensely congested. Heart filled with clots and filaria worms. Liver fatty and congested, undergoing decomposition. Fat globules in exuding blood; spleen normal, undergoing decomposition. Kidneys congested, fat globules in exuding blood, organs decomposing. Stomach



Plate XIII, Fig. 2.

Glands of *Stegomyia fasciata*, female.

empty, mucosa slightly congested, serous surface intensely so, decomposing. Small intestines contain blood, mucosa congested at upper portion only.

Cultures made from lungs and liver. These cultures, after being tested, gave us a pure culture of *Bacillus icteroides*, which is our stock culture P.

*Dog No. V.*—On August 14, 1901, at 1:45 P. M., had a temperature of 101.6 deg. F. At 2:05 P. M. it was inoculated with 3 c. c. bouillon culture B. I. (human, 1898), into long saphenous vein. When injected there was a profuse hemorrhage from vein at site of puncture. Animal ate well that evening. August 15, 1901, animal is listless and weak; urinated during night; conjunctivæ intensely congested. At 1:40 P. M. temperature is 105.8 deg. F.; saliva dripping from mouth; eyes watery. August 16, 1901, animal fed sparingly, is still listless and droopy; conjunctivæ intensely congested. At 12:30 P. M. temperature 104.4; it drank some water; eyes still water and suppurate at inner canthus.

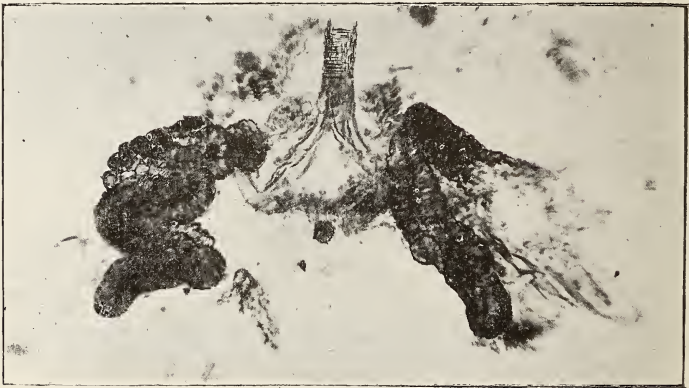


Plate XIV, Fig. 1.

Transverse section of Thorax of *S. fasciata*.

On August 16, 11:30, 48 hours after inoculation, three *Stegomyia fasciata* were fed on inguinal region. During night animal has passed 265 c. c. of urine. Specific gravity 1.040, reaction alkaline, free from sugar, contains a trace of albumin, bile, indican and skatol; 3 per cent. urea; microscopic examination reveals granular casts, bladder epithelium, leucocytes; cells and casts bile stained; triple phosphate crystals, bacteria.

August 17, 1901: At 12:35 P. M., temperature is 104 deg. F. Conjunctivæ are very congested; respiration rapid, gums spongy, soft and congested. Two *Stegomyia* were fed on animal to-day.

August 18: Temperature at 11 A. M., 102.6 deg. F.; conjunctivæ slightly congested; gums firm and not congested. Animal fed well and is livelier.

August 19: Temperature 103 deg. F.; conjunctivæ pale; animal brighter. Fed one *Stegomyia* at 12:30, August 20, 1901; urine contains a trace of albumin, is free from sugar, contains 2.6 per cent. urea, bile; triple phosphate crystals. Specific gravity, 1.024. Reaction, alkaline.

August 21: Temperature 102.6 deg. Looks well. Conjunctiva very slightly congested; urine, 2.5 per cent. albumin, 3 per cent. urea, bile, indican and skatol, leucocytes, bladder epithelium, granular casts, urates, bacteria, cells bile-stained.



Plate XIV, Fig. 2.

Horizontal section of Head and Thorax of *S. fasciata*.

After this date, animal recovered completely, and was sent back to pound.

On August 14, 1901, we inoculated Dog No. II to test its immunity after infection by mosquito. At 2 P. M. its temperature was 101.6 deg. F. At 2:30 it was inoculated with 3 c. c. of B. I. (human, 1898) into long saphenous vein.

August 15, at 1:55 P. M., temperature was 104 deg.; conjunctivæ very slightly injected; animal eats and drinks well, is fairly lively, but can not walk well on account of sore hind leg from incision made for inoculation.

August 16. At 11:45 A. M., four *Stegomyia fasciata* were fed on inguinal region. At 12:35 P. M., temperature is 103.6 deg. F.; conjunctivae normal; leg wound suppurating and painful. Animal is badly frightened; otherwise, has no bad symptoms. Urine, 140 c. c. Specific gravity, 1.050 R. Faintly acid urine, free from sugar and albumin; contains indican, 4 per cent. urea, leucocytes, bladder epithelium, triple phosphate crystals, bacteria.

August 17, at 12:30 P. M., temperature 101.2 deg. F.; otherwise well.



Normal Gland of *Anopheles*.

August 19, 12:35 P. M., temperature 101 deg. F. Animal looks well.

August 20. Urine, spec. grav. 1.038, reaction alkaline,  $1\frac{1}{3}$  per cent. albumin, 2.8 per cent urea, bile, triple phosphate crystals, bacteria, free from sugar.

August 21. Temperature, 100.8 deg. F. Animal looks well. Urine, spec. grav. 1.032. Reaction faintly acid, bile, 3.5 per cent. urea,  $1\frac{1}{3}$  per cent. albumin, indican, leucocytes, bladder cells, urates, bacteria. After this date, animal totally recovered.

Rabbit No. II. On August 14, 1901, at 10:45 A. M., its temperature was 102.4 deg. F.

On August 14, at 12:15 P. M., temperature was 102.6 deg. F. On the same day, 12:45 P. M., animal was inoculated to test immunity after mosquito inoculation. It received 2 c. c. of a 24-hour bouillon culture of *Bacillus icteroides* (human, 1898), into marginal auricular vein.

August 15. At 1:45 P. M., conjunctiva slightly congested; temperature 104.6 F. Animal is lively, but did not urinate nor eat. It drank about two ounces of water since inoculation.

August 16. Animal died between 12 and 1 A. M. of night of 15th to 16th. Urine obtained at post-mortem, 70 c. c.; spec. grav. 1.013, reaction acid, free from sugar, contains 1½ albumin, bile, indican, 1.2 per cent. urea, hyalin and granular casts, excess of bladder epithelium, renal epithelium, leucocytes, red blood cells, cells and casts bile-stained.

Autopsy of Rabbit No. II was held at 1 P. M. August 16. Post-mortem rigidity marked; conjunctivæ white; bladder exceedingly distended, containing 70 c. c. of urine, which furnished specimen examined on this date. Lungs congested; heart congested; liver intensely fatty; oil globules in exuding blood; spleen normal; both kidneys congested and fatty; stomach full. only slight ecchymoses.

Cultures were made from lungs and liver. We have recovered these cultures by the usual methods and they are now culture H of our stock.

#### EXPERIMENT No. IV.—MOSQUITO AND DIRECT INOCULATION.

This comprises two animals, *Dog No. VI and Dog No. VII.*

On August 23, Dog No. VI (female) had a temperature of 102.4 deg. F., looked well and was apparently well.

On August 24, 1901, at 11 A. M., we fed one *Stegomyia*, which had fed on Dog V on the 19th, and turned loose in cage another *Stegomyia*, which had fed on Dog V, on the 17th and 19th, five and seven days, respectively, having elapsed from last feeding on infected animal.

Temperature of Dog No. VI at time of feeding was 102 deg. F.

August 25, two days after feeding of infected *Stegomyia*, temperature was 103 deg., conjunctivæ red and eyes contain a purulent discharge. Dog is listless. *Stegomyia* is still in cage.

August 27, urine free from sugar, contains 2.2 per cent. albumin, 2.8 per cent. urea, bile, leucocytes, bladder epithelium, triple phosphate crystals, phosphates, mucus, bacteria. Spec. grav. 1.029; reaction alkaline. Eyes and nose filled with purulent discharge; gums slightly congested. Animal did not feed to-day; drank some water.

August 28, 1:15 P. M., temperature 104 deg., conjunctivae intensely congested, not as much pus; general condition better; more lively, but very emaciated; has not urinated; gums congested.

August 29. Temperature 102.4 deg. As dog was improving, we decided to kill it and hold its autopsy. Consequently, at 11:30, animal was chloroformed to death and autopsy held immediately. Conjunctivae slightly yellow; small quantity of pus coming from eye; pupils dilated; lungs normal; heart normal, contains fluid blood; liver intensely congested and fatty, almost totally fatty, boxwood in color; gall bladder full; spleen congested, but normal in size; kidneys slightly congested, intensely fatty, of a yellow color and show peculiar fatty lines at base of of pyramids (as observed by Dr. Pothier in autopsies of 1897-98 in cases of yellow fever). Stomach mucous membrane salmon-pink in color, organ empty. Intestines showed marked congestion at beginning of small intestines, absent in remainder of intestines.

Cultures made from lungs and liver. These were recovered by the usual methods and are kept in stock as culture F.

*Dog No. VII* (male). On August 23, at 11:30 A. M. had a temperature of 100.9 deg. F. There was a slight congestion of conjunctivae and a slight purulent discharge.

August 24, at 1:15 P. M., temperature was 102 deg. F. Animal was inoculated at 1:25 P. M. with 3 c.c. bouillon culture of *Bacillus icteroides* (human, 1898) into saphenous vein.

August 25, temperature 104.1 deg., eyes not injected; animal looks well; three *Stegnomia* were fed.

August 28. Temperature, at 1:05 P. M., 102.1 deg.; conjunctivae slightly congested; dog fairly lively. Three *Stegomyia* fed on it to-day. From this date animal totally recovered and was sent back to pound.

## EXPERIMENT No. V.

This experiment was made more particularly to compare the lesions of *Bacillus icteroides* and those of *Bacillus cholerae suis*. For this purpose, two dogs were used, *Dog No. VIII* and *Dog No. IX*. The culture of *cholerae suis* we used was one that we had received through Dr. P. C. Kellock., from the Marine Hospital Service Laboratory in Washington, D. C.

On September 2, 1901, at 1:30 P. M., *Dog No. VIII* (male), about thirty pounds in weight, had a temperature of 104.2 deg. F. Animal was excited. At 1:35, it was inoculated with 3 c. c. of a 48 hour bouillon culture of *Bacillus icteroides* (human, 1898) into saphenous vein.

On September 2, 1901, at 2 P. M., *Dog No. IX* (female) had a temperature of 102.3 F. At 2:30 P. M., it was inoculated with 3 c. c. of a 48-hour bouillon culture of *bacillus cholerae suis* into saphenous vein.

On September 3, 1901, we found *Dog No. VIII* had died during the night. We held autopsy at 1 P. M. Conjunctivæ were markedly congested, pupils dilated, gums congested; post-mortem rigidity marked. Lungs, right, intensely congested, left, slightly congested; heart contained fluid blood, organ congested; liver, mottled, yellow and red, areas of fatty degeneration all over organ, which was intensely congested; globules in exuding blood; gall bladder full; spleen normal; kidneys intensely congested, fatty degeneration, especially at base of pyramids (Pothier's Observations, 1897-98); stomach contains grumous grey fluid; mucous membrane slightly congested; ecchymoses about cardia; intestines, slight congestion at beginning of small intestines, none lower down; thymus normal.

Cultures were made from liver and lungs, which were recovered and tested by usual methods and kept as stock culture J.

*Dog No. IX* was also found dead on September 3, and its autopsy was held as soon as that of *Dog No. VIII* was finished. Conjunctivæ were intensely injected, pupils dilated, post-mortem rigidity marked; both lungs intensely congested; heart, blood partly clotted, organ intensely congested; thymus intensely congested; liver, intensely congested, free from fatty degeneration, organ spotted with small stellate cream-colored bodies, resembling small necrotic spots. Spleen normal; kidneys, slightly

congested and slight fatty degeneration, parenchyma granular. Stomach contains reddish fluid, mucous membrane not congested and free from ecchymoses. Peritoneal surface intensely congested; intestines intensely congested throughout small intestines; it is slightly diminished in large bowel.

Cultures were made from lungs and liver and were plated and tested and kept as culture K of our stock.

The point of difference in the lesions of the two organisms were well brought out by these two autopsies. In the *Bacillus icteroides* infection, fluid blood is found in the heart; there is marked fatty degeneration of the liver and kidneys, marked congestion and ecchymoses of the mucous membrane of the stomach; no congestion of the intestinal mucosa; no congestion of the thymus. In the *Bacillus cholerae suis* infection, we find the blood clotted in the heart, no fatty degeneration of the liver, but necrotic foci, slight fatty degeneration of the kidneys, intense congestion of the thymus, no congestion of the mucous membrane of stomach, but intense congestion of mucosa of intestines and intense congestion of the serous surfaces.

From the comparison of these two autopsies, the points of difference are apparent.

#### EXPERIMENT No. VI.—MOSQUITO INFECTION.

This comprises only one animal, *Dog No. X* (male), which was about twenty pounds in weight.

On September 4, 1901, at 11:05 A. M., its temperature was 102.4 deg. F.; conjunctivæ were slightly injected; gums normal. At 11:45 A. M., infected *Stegomyia* mosquito No. IV which had fed on Dog No. VII on the 25th, 27th and 28th of August was fed on Dog No. X. Seven days, therefore, had elapsed from date of last feeding on infected animal.

September 5, 1901, temperature 102.2 deg. F. Conjunctivæ slightly injected. Fed same *Stegomyia* as yesterday. On the same day another *Stegomyia* (III) which had fed on Dog No. VII also on the same date and which had died during the night of 4th to 5th was used to make a culture. This culture was plated, recovered and tested and is kept in our stock as culture L.

September 6, 1901, at 12:25 P. M., temperature of Dog No X



was 104.2 deg. F. At night and this morning at 11:30 animal passed black and liquid stools. Animal has become emaciated and looks very sick. Conjunctivæ intensely congested; respiration rapid and labored.

September 7, 1901. Animal still sick, listless and does not care to move; respiration rapid and labored. Body feels hot and gives off peculiar stable odor. Conjunctivæ congested, eyes watery and saliva somewhat yellowish. Temperature at 4 P. M. 104.4 deg. F. After this date temperature gradually fell, but animal did not recover. He became gradually emaciated, did not care to eat or ate sparingly. Emaciation progressed until he became so weak that he could not move in its cage and finally died on September 30, 1901.

The autopsy was held on September 30, 1901, at 8:30 P. M. Animal extremely emaciated; conjunctivæ normal, pupils dilated; heart, intense fatty degeneration; organ has peculiar dead leaf color; lungs anemic; liver, intense fatty deneration, genuine boxwood color. Spleen normal in size, but very anæmic; kidneys, intense fatty degeneration, of a wax color; stomach anæmic, otherwise normal; intestines normal.

Cultures were made from lungs and liver, but we failed in recovering organism.

This concludes the work of animal infection.

We, however, further experimented as to the possibility of mosquitoes becoming infected from dead bodies. For this purpose, we allowed several hungry *Stegomyia*, at different times, to feed on animals on which we had held autopsies. The places where they were applied had been shaven and washed. We found that while the insects endeavored to feed, they were continually changing their place and did not absorb any blood. After repeated ineffectual efforts, the same spots were smeared with the blood of the animal; but then, the insects flew off immediately and did not even make an attempt to feed. From these repeated experiments, we concluded that a dead body was not a possible source of infection for the mosquito. These observations are in accordance with those of the flea in the infection of plague, as they also leave the dead animal. The same observation applies to lice and other suctorial insects on dead bodies, which they soon leave.

From the work done in this section of the Commission and

from previous work done by one of us in 1897 and in 1898 (Dr. Pothier), the following deductions may be drawn: The infection conveyed to animals by the *Bacillus icteroides*, as described by Sanarelli, produces a disease in animals having the characteristic lesions of yellow fever. That this organism belongs to a group of organisms to which the *Bacillus typhosus* and *Bacillus coli communis* belong. That, as the *Bacillus typhosus*, it produces a disease which is a toxemia and not a septicemia. It is found only in the capillary circulation and not in the general circulation, while its toxin, as that of *Bacillus tetani*, is sufficient to produce the lesions characteristic of it. That the most favorable time to obtain a culture from the capillary blood, is on the second and third day of the infection. After this, the task is a difficult one on account of the presence of many other organisms, especially the colon bacillus in company with which the *Bacillus icteroides* cannot live long.

Further, that the disease is conveyed by *Stegomyia* and that these same *Stegomyia* cannot convey the disease from a dead body.

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Plate XIII in this section of the report shows the internal cephalic and thoracic structure, and especially the glandular organs of *Stegomyia fasciata* in their normal position.

Fig. 1 shows in a vertical sagittal section the sucking bulb (pharynx) in the superior region of the head. The salivary glands situated in the anterior portion of the pro-thorax (greatly enlarged in Fig. 2) exhibit their tri-lobed structure, and from them the salivary duct may be traced through the cervix, terminating just in front of the pharynx into the mouth-cavity.

The salivary muscles controlling the action of the glands is represented in the band which is seen parallel with the inferior lobe of the gland and the neck.

Plate XIV, Fig. 1, shows in a transverse section the paired structure of the glands. The ducts of the glands as well as the single salivary duct has been sectioned off lying in a superior plane to the glands.

Plate XIV, Fig. 2, exhibits in the head the infraesophageal ganglia and in the center of the thorax the large compound thoracic ganglion. The inferior lobes of the salivary glands are situated just in front of them.

## SECTION III.

## MALARIA.

It has not been attempted in this section to give the clinical aspect of malarial fevers. We have limited our remarks on this subject to a brief *resumé* of the varieties of its parasites and their relations to the different types of fevers, and the time required for their development in man. Our chief aim has been to study the life-cycle of the organism in the body of the mosquito, and, if possible, corroborate the experiments of European observers, who were the first to show its true mode of transmission through the bite of these insects.

The malarial parasite is a unicellular body, belonging to the class of Protozoa, and to one of its subdivisions, the Hæmosporidia.

Two cycles are necessary for its development: The asexual in man and the sexual taking place in the body of the mosquito.

These organisms are found attacking the blood corpuscles of infected individuals, and in their development gather pigment granules from the altered hemoglobin. After completely destroying the corpuscle, they burst from its remaining capsule at the time of sporulation.

The majority of observers distinguish three classes of parasites: The tertian, quartan and æstivo-autumnal, and associate each with a special type of fever.

Two subdivisions have been suggested for the tertian and quartan varieties. But of the æstivo-autumnal opinions are divided; some believing that, as there are two distinct periods of development, they must be separate organisms; others hold them to be the same parasites influenced by various circumstances.

The most common of the three classes above mentioned are those belonging to the tertian type of fevers. Their complete cycle of development, from mononts to sporulation, lasting forty-eight hours.

A characteristic point in this class, as well as in the quartan, is that the parasites are always found in corresponding stages of development.

In its earliest form, the tertian organism (Plate XV, Fig. 1) is a small hyalin body, having active ameboid movements. As

it grows it gathers small pigment granules, which are rather evenly scattered over its surface. These, while very active at first, become less so as the parasite approaches maturity. The full-grown organisms either sporulate and become mononts for a new asexual generation, or remain as large, round free bodies.

The quartan parasite (Plate XV, Fig. 2) is comparatively rare. It completes its cycle in seventy-two hours. Its younger forms resemble very much those of the tertian, except that their ameboid movements are more sluggish and their pigment granules coarser, darker and not as active.

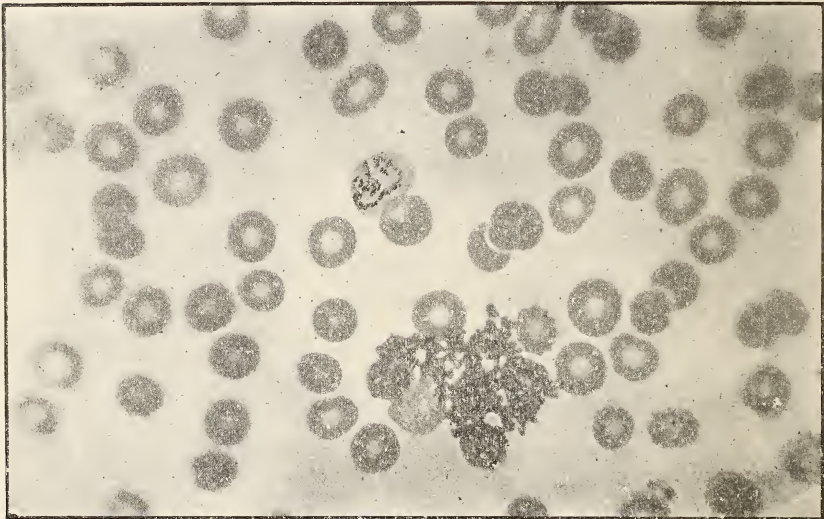


Plate XV, Fig. 1.

As the organism approaches the time of sporulation, the ameboid movement is lost. The pigment is then quiet and clumped and the body of the parasite becomes opaque. As in the tertian form, there appear, at this time, large, pale, free extra-corporal bodies.

By far the most important class of malarial parasites, and those to which observers have in recent years given their special attention, are the forms found in æstivo-autumnal fevers. While there is a regularity in the development of the tertian and quartan types, and we can quite accurately foretell the time of the next paroxysm, it is impossible to do so with this class of organisms, for, while some of them complete their cycle in twenty-four hours, others do not mature in less than forty-eight.

It has been difficult to study these organisms, as only the younger forms and fully developed bodies are found in the peripheral circulation; whereas a search for the intermediate stages must be made in the spleen and bone marrow.

The younger bodies are not unlike those of the other two classes, except that they are smaller and their ameboid movements more rapid. The pigment granules are fewer and appear later in their development. The full-grown parasite rarely

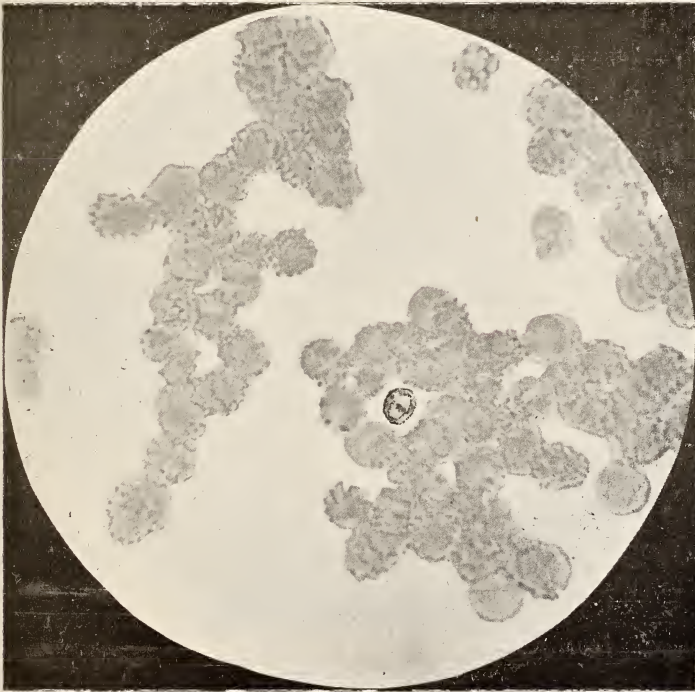


Plate XV, Fig. 2.

occupies more than one-half to two-thirds the size of the blood corpuscles. Its pigment is darker than that of the quartan.

Segmentation takes place in very much the same way as in the tertian and quartan.

From about the seventh to the tenth day of the infection, some of the parasites, instead of segmenting, continue to grow and appear in the peripheral circulation as large ovoid and crescentic bodies; before attaining these stages, however, they become elongated and the pigment granules, becoming more

plentiful and coarser, are distributed throughout their surface. On attaining the size of the blood-cell, they mould themselves on its edge, becoming at first ovoid and eventually crescentic in shape. The pigment clumps or forms a ring to the centre. On the concave side of the crescent, or on the edge of the ovoid, may be seen the pale remnant of the corpuscle known as the "bib."

While older observers considered these ovoids and crescents as belonging to a distinct class of organisms and later ones as full-grown parasites, capable of reproduction, it remained for Grassi, Bignami and Bastianelli to show that they, as well as the large, free, extra-corpuseular bodies of the tertian and quartan varieties, were really mature organisms, capable of further sexual development only in the bodies of mosquitoes.

It is therefore evident, that while these bodies show no structural difference in the fresh blood, they are really of opposite sexes.

Now, should a non-infected mosquito feed on a malarial patient, the blood thus sucked up, containing mononts and mature bodies, breaks down in the stomach of the insect. The mononts are digested and destroyed, but the mature bodies go at once through a process of development into sexually mature macrogamets and microgamets. The latter develop flagellæ, which, breaking off and entering the macrogamets, fertilize them.

The results of this process, or karyogamy, are spindle-shaped objects, which are for a time fairly active. These are the zygocytes.

Gradually penetrating the epithelial layer of the stomach and intestines, they become rounded and at rest, and are then known as zygotes or resting bodies.

As these develop, they slowly raise and distend the muscular layer of the stomach and intestines, and attaining about six times their original size, appear on the outer walls of these organs as cysts, not forming, however, cyst-walls for themselves. They are then called amphionts.

The amphionts now enter into a nuclear division and sub-division (Amitotic division), each nucleus having a small hyalin plasma surrounding it. This plasma gradually elongates itself and eventually has a fusiform structure; and thus these bodies, arranged in bundle-shaped packages and contained in the parent amphiont, become the gymnosporos of the second generation.

They are dispersed in countless numbers throughout the body cavity of the mosquito upon maturation and breaking of the confining capsule. By slow wriggling motions, they penetrate the tissues of its body, and eventually reaching the salivary glands, are ejected with the glandular secretion when the insect stings.

This constitutes the full sexual cycle of the malarial parasite.

Should now such an infected mosquito introduce by its sting into a human being some of these gymnospires, these will enter the blood corpuscles and at once begin their development and their subsequent asexual multiplication.

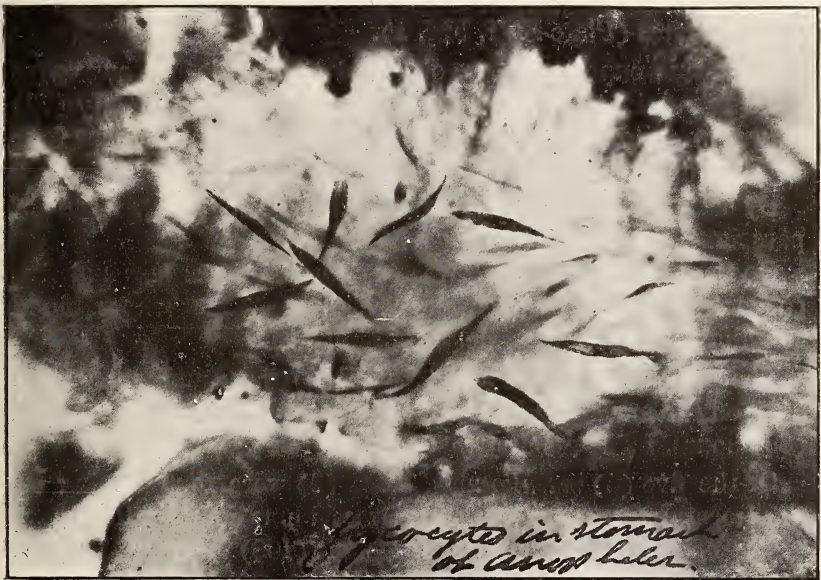


Plate XVI, Fig. 1.

Zygotes in Stomach of *Anopheles Maculipennis*.

While it is possible that other genera of mosquitoes may in time be proven to play the same part of secondary hosts to the malarial parasite, we have concluded to use for our experiments only the now famous *Anopheles*, and of this only the species of *maculipennis* and *crucians*, as these alone are to be considered for our city.

To this end, on September 14, 1901, five (5) *Anopheles crucians* were put to a patient whose blood contained tertian parasites. Of the five (5), only two (2) would feed, and these lived four (4) days, or ninety-six (96) hours, after feeding. They were

sectioned and examined after staining, but the results were negative.

On the following day, September 15, 1901, three (3) *Anopheles maculipennis* were fed on the same patient, after another examination had revealed the parasites still present.

Two (2) of these lived about forty (40) hours, or less than two days, and the third died seventy (70) hours, or nearly three (3) days after feeding.

On examination the two first to die gave negative results, but the third showed small spindle-shaped nucleated bodies, located near the walls of the empty stomach, and were recognized as the zygocytes (Plate XVI, Fig. 1).

From this experiment, we observed that while the zygocytes were found in the *Anopheles maculipennis* within seventy (70) hours, we failed to detect them in the *Anopheles crucians* four days, or ninety-six (96) hours after feeding.

By accident our attention was directed to the quartan type of parasites.

On September 28, 1901, three (3) *Anopheles crucians* and five (5) *Anopheles maculipennis* were fed on a patient whose blood contained the quartan variety of organisms.

The three (3) *crucians* lived three (3) days and were found dead on the morning of the fourth, having lived about eighty (80) hours. The results from these were again negative.

Of the five (5) *maculipennis*, three (3) were found dying on the morning of the fifth day and were immediately killed, having lived about one hundred and eight (108) hours after feeding. The results from these were also negative.

The fourth, killed on the morning of the sixth day, or one hundred and forty-four (144) hours after feeding, showed rounded, cyst-like bodies, studding the walls of the stomach, which they had distended and were plainly recognized as zygotes and amphionts (Plate XVII, Fig. 1). In some of these amphionts, which were larger and evidently maturing before others, the gymnospires could be easily detected with higher power lenses (Plate XVII, Fig. 2).

The last or fifth of this group of *maculipennis* was killed on the eighth day and showed the glands very much hypertrophied, their lumen distended and containing numerous and closely-packed



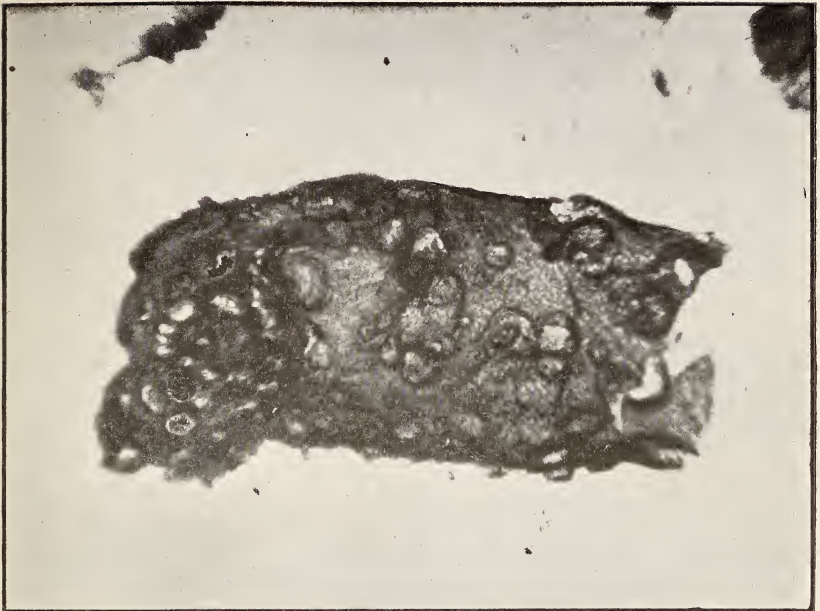


Plate XVII, Fig. 1.  
Zygotes in Stomach-wall of *Anopheles Maculipennis*.



Plate XVII, Fig. 2.  
Amphionts and Gymnospires  $\times 1200$  Diameter.

refractive bodies, evidently the gymnospires (Plate XVIII, Figs. 1 and 2). We see again from this experiment that the *Anopheles crucians* gave us negative results for the quartan type of parasites, while positive results were obtained with the *maculipennis*.

It might be contended, however, that the *crucians* died too early to find the zygotes. This is true, but then, why could not the zygocytes be found?

The last, but by far the most important variety of parasites experimented with, was the æstivo-autumnal. For this experiment, on October 8 and 9, five (5) *Anopheles maculipennis*, out of



Plate XVIII, Fig. 1.

Sagittal Section of Infected *Anopheles Maculipennis*.

a lot of about twelve (12), fed on a case whose blood showed crescentic and ovoid bodies.

One of these lived to the third day, the remaining four (4) died on the fourth, or ninety-six (96) hours after feeding.

In all of these, after very careful examination, the results were absolutely negative.

It is unfortunate, however, that on account of the comparative scarcity of æstivo-autumnal fevers this fall, we were unable to carry our experiments with these organisms as completely and satisfactorily as we would have cared to do.

Suffice it to say that by close observation, supported by the

foregoing experiments, we are able to connect this last type of malaria with the *Anopheles crucians*.

It is worthy to note in this instance the relation existing between the prevalence and location of these pernicious forms of fevers and time of flight and distribution of this insect. As is well-known, æstivo-autumnal fevers appear about the latter part of August and continue well into January. The *Anopheles crucians* begins its second flight about August and increases rapidly during the fall months, when they are thickest, gradually



Plate XVIII, Fig. 2.

Hypertrophied Glands of Infected *Anopheles Maculipennis*.

diminishing to the end of winter, when they disappear for a while, to begin their first full flight in April. (See Section I of this report).

Again, these pernicious fevers are more abundant and correspond to the general topographical distribution of the *Anopheles crucians*. For, as far as we have been able to determine, they are unknown where *crucians* is absent, even though *maculipennis* or other species of *Anopheles* be present.

Are these not sufficient points to suggest that the *Anopheles crucians* is chiefly responsible for æstivo-autumnal fevers?

Further experiments, we believe, will tend to confirm our observations on this subject.

Learning by the foregoing experiments the time required for the development of the parasite in the mosquito and knowing the actual time required for the complete cycle of the organism in different types of fevers, there remains now to determine if it is, or will ever be possible, to give a definite period of incubation.

In this connection, the first and most important point to be considered is the resisting power of the individual to be infected. Knowing this, it remains to be determined what quantity of gymnospires are necessary to produce a reaction; how many gymnospires are injected by the mosquito, and how many sporulate, and what the effects of phagocytosis would be on them.

Moreover, should the individual receive inoculations from several infected mosquitoes, at or about the same time, the number of spores injected would then be larger. Would not the period of incubation be consequently shortened?

Again: Experimental malaria has been produced in healthy individuals by the inoculation of blood from infected patients. Even in these cases, where the type of organism and quantity of blood injected was previously known, the period of incubation showed marked variations.

Your committee having tried by every means in its power to come to some conclusion in regard to this important point, believes that until means are at hand by which we can positively determine the amount of poison injected, and measure the resisting power of different individuals, the period of incubation of malaria must remain unsolved.

The technic employed by us for staining the malarial parasites and fixing, sectioning and staining the mosquitoes is as follows:

*For Staining Malarial Parasites.*—Fix the cover glass specimen in absolute alcohol and ether for at least half an hour. Then put in solution of  $\frac{1}{2}$  per cent. eosin in 60 per cent. alcohol, for 30 seconds. Wash in water, dry and place for fifteen minutes in a concentrated aqueous solution of methylen blue. Wash in water, dry and mount in balsam.

The red-blood cells and eosinophiles are stained a deep pink, while the leucocytes and parasites are blue.

*To Section Mosquitoes:* Prepare the insect for sectioning by carefully clipping off the wings and legs.

Put them in chromacetic acid 2 per cent. aqueous solution, for 24 hours, then in water 48 hours.

Then into 35 per cent. or 50 per cent., 65 per cent. and 95 per cent. alcohol for 24 hours each.

Then in absolute alcohol for one to three hours.

Then into  $\frac{2}{3}$  alcohol and  $\frac{1}{3}$  chloroform.

Then in pure chloroform; gradually saturated with paraffin, 24 hours.

Then soft paraffin from 1 to 8 hours in oven.

Then imbed in hard paraffin, cool in cold water until hard, and they are ready for cutting.

After cutting, put ribbon sections in cool water, or, if necessary, slightly tepid water; rub Meyer's Albumin briskly on surface of slide and float the ribbon on this to their proper position. Put these in incubator for a few hours until dry, and proceed as follows:

Pass in chloroform until paraffin is all dissolved, then into absolute alcohol, then 50 per cent. alcohol, then water.

Good results have been obtained with the following method of staining:

Delafield's hemotoxylon, about one-half hour; wash in water, then put in eosin, 1-10 per cent. to 50 per cent. alcohol about one to two minutes; wash in water and put in 50 per cent. alcohol; then absolute alcohol; then chloroform and mount in balsam before the chloroform evaporates.

## SECTION IV.

### SUMMARY AND CONCLUSIONS.

It now remains to view the Commission's work in the light of previous ideas and theories and known facts, in order to understand more clearly what has been added to our knowledge of the etiology of disease by this summer's work; secondly, to summarize concisely the conclusions of this report; and, lastly, to indicate the point of departure for new investigations.

We must not be under the impression that the idea of the transmission of disease by insects is a new one. The relation between mosquitoes and malaria was referred to by Roman

writers two thousand years ago, and all people living in malarious countries believe in the theory. Montfils, in 1776 (*D'Une Maladie Fréquente Connue en Bourgogne, sous le nom de Puce Maligne—Journal de Medecine, xiv, 500*), believed that anthrax might result from the bite of a fly; Nuttall (John Hopkins Hospital Reports, VIII, 1-2), quotes scores of others, 1780-1868, who echo the same belief, and he retells the histories of a number of cases where anthrax developed after the patients had been bitten by flies. Much earlier than this, it is said that in 1498 Bishop Knud, of Aarhus, in Denmark (in *De regimine pestilenti-co*), mentions flies in connection with plague, stating that they were a sure forerunner of the disease. Of recent years, a host of observers and investigators have conducted experiments to prove the connection of insects, such as flies, fleas, mosquitoes, bed bugs, etc., with diseases, such as anthrax, relapsing fever, cholera, plague, malaria and yellow fever. The first writer to enter into a logical discussion of the relations of mosquitoes to malaria and yellow fever, is Dr. J. C. Nott, of Mobile, who, in a paper published in 1848 in the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL, combated the idea then prevalent that yellow fever and malaria were due to gaseous emanations from the soil and advanced as a more probable solution of the problem the theory that insects were responsible for their propagation. His inductive reasoning in support of his belief is excellent and his arguments sound remarkably modern. He is convinced, he writes, that mosquitoes convey malaria, but believes that yellow fever is propagated by other insects that keep closer to the ground.

Dr. Charles Finlay, of Havana, in 1881, by a process of inductive reasoning, arrived at the theory that the mosquito was responsible for the conveyance of yellow fever from man to man, and to him belongs the credit of having first undertaken experiments to prove the theory. His idea then was that the mosquito acted merely as a mechanical factor in the transference of the disease, not as a true host, but he has since (1899), modified his opinion in this regard. Dr. Finlay was able in 1881 to produce in non-immunes, by a single bite of one mosquito contaminated by having previously bitten a yellow fever patient within the first six days of his disease, a fever which he characterized as abortive yellow fever. His series of experiments on 104 per-

sons within the past nineteen years, can hardly be held, however, to be conclusive proof of the theory, in fact, they go very little way to substantiate it.

Dr. A. F. A. King, in 1883 (*Pop. Sci. Mo.*, September, 1883), wrote an exhaustive and convincing article on the etiologic relation of mosquitoes to malaria, using (though probably ignorant of this fact) many of the arguments urged by Nott in 1848. Thus he notes the coincidence of the seasonal and topical distributions of mosquitoes and malaria, the facts that conditions which afford protection against mosquitoes are effective against malaria at the same time, that cultivation of the soil and drainage rid us of mosquitoes and malaria; that woods give us protection against malaria probably by impeding the progress of mosquitoes; that by avoiding sleeping where we may be subjected to the bites of these insects we may keep ourselves free from the disease, etc. From the epidemiologic standpoint, Dr. King's paper was the most logical and thorough up to that time and remains so even now, when we are in possession of the biologic and parasitologic facts.

Laveran, in 1891, and Koch, in 1892, are among the next to avow their belief in the theory, but without adding any further facts in its support, and it is to Manson, in 1894, that we owe the next link in the chain. Approaching the subject from another side (biology), he considered that it was necessary to find the way by which the malarial parasite escaped from the human body and advanced the opinion that this took place through the bite of some suctorial insect, *e. g.*, the mosquito. These mosquitoes, he supposed, die in the water after hatching and the resulting larvæ may become infected by feeding on the body of their mother. "Man," he writes, "I conjecture, may become infected by drinking water contaminated by the mosquito; or, and much more frequently, by inhaling the dust of the mud of dried up mosquito-haunted pools; or in some similar way." To Bignami, at about the same time, probably belongs the credit of having been the first to distinctly advance the theory that the mosquito conveys the infection by *inoculation* and he combats vigorously Manson's idea that man can be infected by mosquito-polluted water. Unfortunately, his first series of experiments, in 1894, which were intended to prove his opinion, were negative, through failure to secure the proper species of mosquito.

In 1895 Ross observed the presence of crescents in the stomachs of mosquitoes fed on a malarial patient and was able to follow these crescents to their development into spheres and flagellated bodies. In 1897, McCallum, of Johns Hopkins, showed that the gametocytes (that is, spheres and flagellated bodies) are sexual forms and that flagella are true spermatozoa. In 1897 Ross described some peculiar pigmented cells (zygotes) in the stomach wall of two mosquitoes, fed upon blood containing crescents. Having then turned his attention to malaria, of birds, he was able the next year, 1898, to announce the successful inoculation of well birds by the bites of mosquitoes previously fed on blood of birds suffering from proteosoma. He also reported the finding of gymnospires in the salivary glands of the mosquitoes, having previously described the freeing of these gymnospires from the parent zygote and their passage into the body cavity of the mosquito. In 1898, shortly after the announcement of Ross's work, Bignami repeated his experiments of 1894 and was able to convey malaria to a healthy individual by the bites of healthy mosquitoes, thus completing the circle of proof, convicting the mosquito of disseminating this disease. Grassi, Bastianelli, Dionisi, Marchiafava and Daniells have worked out further details.

As to the connection of the mosquito with the etiology of yellow fever, the chief evidence, of course, has been the experiments of the Army Yellow Fever Commission in Cuba, whose work within the past eighteen months is too fresh in our minds to need reviewing here. To Reed, Carroll, Agramonte and Lazear, all honor is due. In brief, they report that, 1st, yellow fever can be conveyed by direct subcutaneous injection of blood from a yellow fever patient; 2nd, yellow fever can be conveyed by the bite of mosquitoes which have previously bitten individuals suffering with the disease; 3rd, they do not recognize the bacillus of Sanarelli as the *causa morbi*, but 4th, they have not been able to discover any other cause.

Such, then, is the work of the past. The work of this commission is briefly to be summarized as follows:

I. We have studied the topographical and seasonal distribution of the mosquitoes infesting this city and vicinity and have determined that *Anopheles* inhabits the swamps surrounding the city, as well as the outskirts, while *Stegomyia* and some of the common



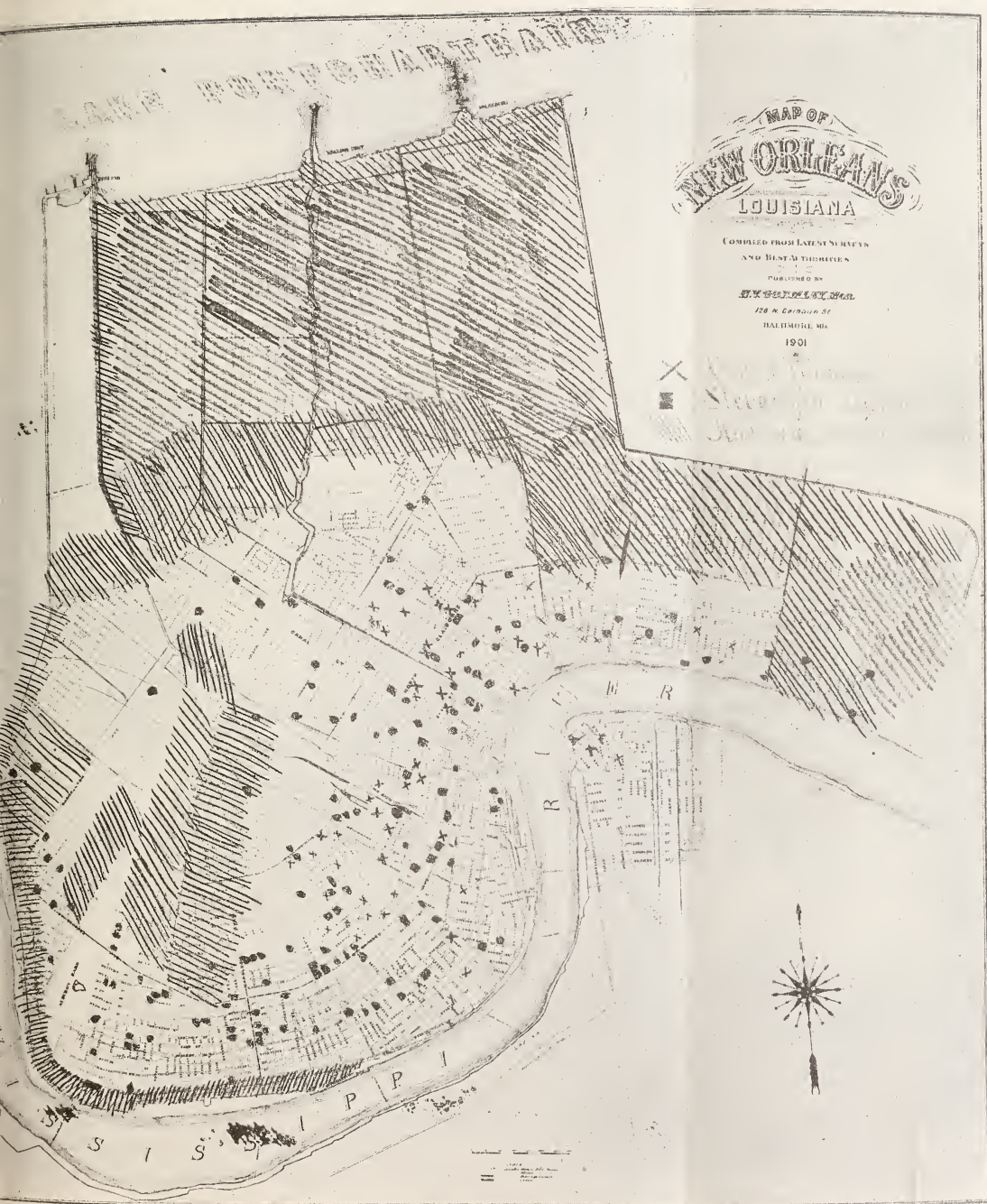
MAP OF  
**NEW ORLEANS**  
LOUISIANA

COMPILED FROM LATEST SURVEYS  
AND BEST AUTHORITIES

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1901



1897



forms of *Culex* prevail in the heart of the city, finding their breeding places in cisterns and gutters. In this connection, we would call attention to the maps of the distribution of these genera of mosquitoes and of the location of yellow fever cases in the year 1897, exhibited herewith (see Plates XIX and XX). The map of the mosquito distribution has been plotted from, and is illustrative of, the data given in the first section of this report. The yellow fever map has been kindly furnished us by Dr. Kohnke. Those plotting the mosquito map did not see the yellow fever map until both were completed. While there is a more or less striking coincidence between the distribution of *Stegomyia* and of yellow fever cases, and while we think this is in a degree significant, we ought not to lay undue emphasis upon this fact, for reasons which will readily present themselves. The maps are as accurate as the data we have at hand, but it must be remembered that these fever cases were not checked up by blood examinations and we can not be certain that all cases reported were yellow fever, nor that all yellow fever cases were reported. Moreover, *Stegomyia* is absent from those sections sparsely inhabited, which show no yellow fever infection, possibly because there were no inhabitants to have the disease.

II. Experimental work with *Bacillus icteroides* Sanarelli and mosquitoes.

a. We have established to our satisfaction that the bacillus described by Sanarelli as *Bacillus icteroides* is a distinct pathogenic organism.

b. We have infected *Stegomyia fasciata* by allowing them to bite animals infected with *Bacillus icteroides* Sanarelli and suffering from a disease corresponding experimentally to yellow fever, as observed in animals (dogs and rabbits).

c. We have recovered in pure culture the *Bacillus icteroides* Sanarelli from these mosquitoes so infected.

d. We have produced in healthy animals the same disease by allowing some to be stung by mosquitoes infected from five to eleven days previously, and by inoculating others with cultures made from infected mosquitoes.

e. We have recovered the bacilli again from these mosquito-infected animals.

f. We have not, however, been able thus far to stain and locate the bacilli in the tissues of the mosquito when sectioned.

III. Malaria: a. Mosquitoes (*Anopheles*) that have bitten malarial patients have been sectioned and the parasites found in these sections. These sections confirm in every way the descriptions given by English, German and Italian investigators of the life cycle of the plasmodium in the body of the intermediate host.

b. Epidemiologic considerations lead us to believe that while *Anopheles maculipennis* is responsible for simple tertian and quartan infection, *Anopheles crucians* is responsible for æstivo-autumnal disease.

IV. Prophylaxis: While we have not devoted experimental work to this section of the Commission's task, on grounds of past experience we would advocate proceeding on the following lines to keep this city free from these diseases—malaria and yellow fever:

a. We should aim ultimately to rid the city of all mosquito-breeding places, 1st, by doing away with cisterns when we shall have obtained a plentiful and cheap water supply from other sources; 2nd, by abolishing surface drainage; 3rd, by substituting sewerage for privy vaults.

b. Meanwhile, we should employ as temporary expedients, the following measures: 1st, screening of cisterns; 2nd, flushing of gutters; 3rd, pouring of oil on privy vaults and stagnant pools.

c. All patients suffering from malaria or yellow fever should be effectively screened by mosquito netting in order to prevent the access of mosquitoes.

Again, we emphasize the salient points of our work for which we claim credit:

1. Study of the New Orleans mosquitoes.

2. Correlation of distribution of *Stegomyia fasciata* and of yellow fever within limits of the city.

3. Mosquitoes may convey *bacterial disease* by inoculation, the organism experimented with being the one believed to be the cause of yellow fever.

4. Confirmation of the work on malaria by English, German and Italian investigators.

Such original work as is presented herewith has required, it will be appreciated, such attention to minutiae that a great deal of ground could not be covered. Much yet remains to be done

in this field. What then is the point of departure for further investigation?

In the first place, these experiments should be repeated in order to strengthen the evidence and from a series of cases form other conclusions we are not now in a position to deduce.

Second, it must be borne in mind that the commission has proceeded along lines of least resistance; that is to say, we have selected circumstances which from the experience of others and from a priori considerations we judged to be the most favorable. For instance, we have investigated the genus *Anopheles* in connection with malaria and *Stegomyia* in connection with *Bacillus icteroides* Sanarelli infection because the results of previous investigators and epidemiologic reasons led us to believe that these insects were the chief etiologic factors in the respective diseases. However, merely because these malefactors alone have been convicted does not necessarily imply that the uninvestigated genera are guiltless. They too should be investigated.

Third. Particularly still further attention should be paid in future investigations to the period of incubation, from the experimental point of view, of both yellow fever and malaria.

This is important, not merely from a scientific standpoint, but has also its utilitarian purpose in determining logically the quarantine regulations of the future.

Fourth. We have determined that the mosquito *Stegomyia fasciata* can inoculate the disease produced by *Bacillus icteroides* Sanarelli, after having had some days previously ingested blood from an animal infected with this bacillus. We have not disproven that the mosquito might convey the *materies morbi* simply mechanically, either by means of its mechanically infected proboscis or by means of its body, wings and legs, soiled by contact with dejecta and then touching food or drink of another individual. While this is not urged as a *probable* mode of infection, it is a matter that should be settled one way or the other; hence, it is a subject for future experiments.

Fifth. Further attempts should be made to locate the *Bacillus icteroides* Sanarelli within the tissues of the infected mosquito.

The commission has not worked merely for the satisfaction of scientific investigation, but has intended their results to aim at the practical benefit of the city and State, by not only ridding us of disease, but by freeing us from vexatious and unnecessary quarantine regulations.

The thanks of the commission are due to Dr. H. B. Parker, U. S. M. H. S., for kind assistance in taking photo-micrographs and for loan of apparatus; to Dr. J. D. Bloom, House Surgeon of the Charity Hospital, for facilities put at our disposal for carrying on our work and for interest shown in the experiments; to Mr. A. C. Eustis, resident student of the Charity Hospital, for efficient and faithful assistance, and to Dr. Quitman Kohnke, Health Officer of New Orleans, for his kindness in supplying us with maps of the distribution of yellow fever cases and other courtesies.

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#### SCIENCE AND PSEUDO-SCIENCE IN MEDICINE.\*

BY T. S. DABNEY, M. D., EX-PRESIDENT ORLEANS PARISH MEDICAL SOCIETY; MEMBER LA. STATE MEDICAL SOCIETY; MEMBER AMERICAN MEDICAL ASSOCIATION; MEMBER DE LA SOCIÉTÉ ROYALE DE MÉDECINE PUBLIQUE DE BELGIQUE, ETC., NEW ORLEANS.

That you may clearly grasp the full scope of this paper and may not, like many others, be led astray as to the real meaning of science, permit me to state that science may be regarded as knowledge classified and made available. Such is the scientific definition of science as given by recognized lexicographers. No one has any claim to being scientific merely from the fact of his having acquired more or less information on so-called scientific subjects. As a matter of fact there are no such subjects known to science as scientific subjects. In the popular mind all delvers in the unseen of our unaided senses are regarded as scientific, hence all who sweep the Milky Way with the telescope or who scan the protean protozoa with the microscope are classed among the scientific. An air of mystery surrounds all studies in unseen fields, hence when an astronomer gravely says he can measure and weigh the gyrating cauda of a comet we are amazed at his scientific attainments, little thinking how simple the mathematical problem is. Likewise when the bacteriologist minutely describes the flora and fauna of the invisible hosts of friendly and hostile families of micro-organisms that infect our soil, our atmosphere, our water, our very intestines and blood itself, we can but wonder "how one small head held all he knew."

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\*Read before the Louisiana State Medical Society, New Orleans, April 20, 1901

Add to the huge names the pigmies have, such as streptococcus (twisted berry) coryzae contagiosæ equorum, staphylococcus (bunch-of-grapes berry) pyogenes albus, and we give up in despair. Yet it is possible for a man to name constellation after constellation and galaxy after galaxy in the blue vault of heaven and be almost totally ignorant of the science of astronomy. So also one may, through industry, be able to recognize and classify most of the ordinary forms of germ-life and utterly fail to grasp the very essence of the science of that most bewitching study of bacteriology. I can not pass true scientific bacteriology by without acknowledging the inestimable debt medicine owes it, and the debt is constantly growing greater.

But to further illustrate the difference between the scientific and the so-called scientific, let me state that no one would dream of being surprised at a farmer's knowledge of the names, habits and uses of all the animals and plants on his farm, nor would any one call such information scientific; yet such knowledge, if properly systematized so as to be made available in breeding to color, function or some special use, is truly scientific.

The basis of all scientific attainments is *accuracy*, and whoever observes closely any phenomena and accurately classifies such observations so as to render them available is scientific, and who fails to do so, it matters not what his achievements are, is not.

A man may possess a vast deal of information about a given subject and yet have but a poor knowledge of the subject itself.

That we may be scientific physicians there must be the *scimus ut sciamus* as well as *scimus ut faciamus*. How often do we hear of physicians who, though enjoying the reputation of being learned, are eminently unpractical and unsuccessful.

Even college-bred men have a loose way of talking about pure science, applied science, science as applied to the arts, the exact sciences, etc. No science is pure that is not available. If called upon to name the man to whom we owe the first great advance of modern medicine, the man that rendered true scientific investigations possible, and who proved to the world the great economic value of scientific attainments, I would unhesitatingly name Lavoisier, who made the chemical balance the ultimate *ratio* and by so doing, established the basis of quantitative analysis. He introduced to the world what is now known as

the laboratory system, and had as his co-laborers the most eminent men of the day, Laplace, Fourcroy, Berthollet, Mager and others. He gave oxygen its present name, invented the chemical nomenclature of equivalents, analyzed water, synthesized carbonic acid gas. In 1776, being made director of the powder works of France, by Turgot, he soon quadrupled the output of powder and improved its explosive force by one-third.

Next he analyzed soils and manures, and then to show the economic value of the laboratory, doubled the product on his own farm. He reduced chemistry to an exact science and taught the world the value of science in dollars and cents. In 1794, through a frivolous charge brought by Dupin, the father of chemistry was led to the guillotine.

How different was this true scientist from the pseudo-scientist, Bombastes Paracelsus! The one a talker, the other a doer.

So it is to-day. Our ranks are over-run with *soi-disant* scientists, notably in our cities where medical colleges, hospitals, polyclinics and journals are created, not to advance science but to exploit their founders. This is notably true of the Western cities, in some of which it is hard to find a physician not connected with some institution by means of which he hopes to bring grist to his mill.

Specialism is absolutely necessary in medicine and surgery, and to nothing is the general advance in medicine due more than to this subdivision of labor; yet no one should claim to be a specialist or teach that specialty, when he himself is utterly unfit to practice it. How many do it? And how many more practice general medicine, whilst claiming special attainments in individual branches? It is a truism in medicine that no man can hope to attain marked distinction in our calling unless he possesses distinct attainments in some particular line of the profession. Hence the necessity for all of us to bend untiring energy to perfect ourselves in at least one branch of medicine or surgery, whilst we neglect none of the branches entirely. Let us always bear in mind that "practical medicine" is the only truly scientific medicine known, and that the physician who can diagnose accurately and treat successfully the various phases of hepatitis, the protean forms of malaria, the insidious advances of the great White Plague, and the various exanthems is far more scientific than the *soi-disant* savants who can discourse



learnedly about them, and yet be totally unable to promptly diagnose and treat them. The pendulum has begun to swing back.

Before Pasteur, "*le grand maitre*" as he is called, Koch, Laveran, Loeffler, Eberth and a host of others taught us the specific causes of disease, we were content to fight symptoms and we relied mainly on keeping the emunctories active, judicious diet and treating symptoms as they arose. In an instant all was changed. The "scientific" doctors talked learnedly about bacilli, bacteria, microbes, germs and so forth, and immediately set to work giving germicides ignoring the gastro-alimentary tract, the respiratory and cardiac centres, the skin, diet, etc. With what result? The people, our bread and butter, got afraid of scientific doctors and had the bad taste to prefer getting well of a pneumonia to dying of a pneumococcus. The insecticides, bactericides, germicides failed to destroy the various micro-organisms.

Next we learned that the germs produced toxins and these toxins in turn produced toxemia, and that this toxemia could not be reached by germicides. Next we had antiseptics, but unfortunately the antiseptics and the toxins seemed to mutually avoid each other, and there we were again.

Owing to the brilliant results obtained in diphtheria, rabies, anthrax and hog and chicken cholera by the use of attenuated viruses, as taught us primarily by Pasteur, the world-power in medicine, we rushed madly to the serums to have our hopes again dashed to the ground. In the meantime serums for everything were exploited by men in and out of the profession. Every organ in the body was next called upon to furnish its extract or its elixir, by which the old were to be made young, the impotent lusty, the wrinkled smooth as alabaster, and so on to the end of the chapter.

The pendulum has swung back.

In spite of Osler's dictum we now know that the hematozoa malariae may be revealed by the microscope, and yet the host be free from all evidences of malarial fever. Widal's reaction may be positive yet the man may be free from typhoid fever. Klebs-Loeffler bacilli may swarm in a healthy throat, Koch's tubercle bacilli may sport with impunity in our mucous membranes.

We no longer say "*ubi bacilli, ibi morbus;*" but rather "*nulli bacilli, nullus morbus.*"

Let no one think for a moment that, by reason of our many, very many failures to obtain better results in treatment, that bacteriology has been of no assistance to the practice of medicine; for the birth of bacteriology is the dawn of scientific medicine. The mistake we made was in our enthusiasm. We rushed to extremes. Having located the enemy, having studied his habits, his food, his family relations (*vide* Maccallum, Welsh, Manson, Ross, Celli, Marchiafava *et als.* in reference to *plasmodia malarie*) we thought we could easily kill him, entirely ignoring the fact that he had thoroughly fortified himself in the spruits, kopjes, and veldts of our minute anatomy. Without the microscope, preventive medicine would exist only in name; and judging from the recent experiments in Cuba of Reed, Carroll and Agramonte, we of New Orleans have especial cause for blessing bacteriology and bacteriologists. The road of true science is strewn with failures, yet no one hesitates on that account. The twentieth century will witness such a revelation in the practice of medicine that our very diplomas will have to be changed from Doctor of Medicine to plain Doctor or Doctor of Science. Thanks to the true science of medicine, physicians are giving less and less medicine each year. We no longer try to "cure" self-limited diseases, "break" fevers or cure coughs by syrups. We have actually demonstrated the existence of a number (small, it is true) of true specifics, cinchona in malaria, sulphur in itch ("seven years itch" it was formerly called), mercury in syphilis and several serums, notably the diphtheria antitoxin. This is a distinct advance over our predecessors who claimed a "nostrum" for every ailment. Empiricism has had its day, yet we must not forget that quinin was used in malaria long before Laveran demonstrated the *vera causa* of that disease. The same is true of sulphur in itch, and so far the germ of syphilis remains unknown. Scientific investigations have taught the surgeon the value of the precept that "cleanliness is next to godliness."

In the field of general medicine, however, scientific teaching has in many instances produced a skepticism that is very injurious; for a physician without faith in his own ability is unable to inspire confidence in the patient. The pendulum has swung

back and already earnest workers, well abreast of the most advanced thought of the day, are retracing their steps and, like their predecessors, are paying much attention to the patient himself, to his surroundings; to the ventilation of the sick chamber; to his bed linen, to his drinking and bathing; to the condition of his bowels, liver, skin, gums, stomach, and last though not least to his diet. There is no branch of medicine so sadly neglected as that of diet and it can truthfully be said of our hospitals, our sanatoria and our homes, that we sadly need cooks. A distinguished traveler said Texas was a great State, but that it needed 10,000 cooks. Without food properly cooked the science of the physician and the skill of the nurse, trained or otherwise, are unavailing. A physician ignorant of the method of preparing the various broths and soups, and the method of cooking in many ways, eggs and the various meats, can not hope to cope successfully with diseases of the gastro-intestinal tract and the various forms of dyspepsias incident to phthisis, nephritis and the protracted and wasting fevers. The trained nurse should especially be trained in such matters. Many a patient succumbs for want of food properly prepared and served in a tempting manner. Too much stress can not be laid on this matter, for whatever pertains to the recovery of the patient should be known to the physician.

Modern surgery and hygiene owe their success to the careful attention given to detail. No surgeon hesitates to shave, scrub, soap, rub and wash any part of his patient's body, for he well knows his very reputation depends upon his being clean himself and upon his patient's being so also. The surgeon is not above using the catheter, the douche or the rectal tube. Then why should the physician think that the preparation of food for the invalid beneath him? The reason is simple. The medical school is not yet sufficiently advanced to see the value of food.

Materia medica has a chair and the professor spends much, if not most of his time, in telling his class how many different medicines are of no use or are positively harmful.

Immense establishments throughout the world foist upon the profession their beef extracts, their peptonoids, their panopepton, their elixirs, albuminoids, their crackers, prepared soups, broths, etc. Is any albuminoid the equal of a fresh egg or a tender steak? Can any soup contain the nutriment of a freshly prepared one of beef, pease, beans or barley? Is not an eggnog

more tempting and of more nutritive value than any Ducros, or beef, sherry and iron? The fault lies with the college, but the failure of success lies with the alumnus.

The professor of therapeutics as well as the clinical professor of the practice of medicine should have practical courses on foods and their proper preparation, on fruits and their uses; on infant feeding; on anorexia and its rational physiologic treatment; on baths, their physiologic actions and indications; on sunshine, ventilation and climatology; on rest, exercise and their therapeutic indications. No physician can claim to be scientific who does not know these basic truths.

What a crusade was waged on the bacillus tuberculosis soon after Robert Koch's epoch-making paper and with what sad results to poor suffering humanity. And how are the tuberculous treated to-day? By being placed in commodious, well lighted, well aired, sunny rooms, in suitable climates and being furnished with wholesome nourishing food. Rest, air, sunshine, water, assimilable food, and no medicine save to correct ills of digestion, and the many concomitant derangements due to the disease; but absolutely nothing for the disease or its toxins. Oceans of nauseous codliver oil, tons of indigestible food, "gushers" of petroleum and shiploads of every conceivable drug have been poured down the throats of these hapless sufferers by pseudo-scientists.

The pendulum has swung back. We now endeavor by means of climate, environment, food, water, sun, air and rest to put the patient's system in such a condition as to enable it through phagocytosis to resist the invasion of the bacillus and to throw off its toxins. In pediatrics, dieting, clothing, bathing, air and sunshine are now recognized as the sheet anchor. The same can be said of all diseases of the digestive apparatus in the adult. And yet how many of our profession, well versed though they be in the pathology of disease, its causation, symptoms, natural history and sequellæ, know how to avail themselves of this necessary information. It is easy to order barley water, oyster soup, shirred eggs, barley water and milk mixed so as to prevent hard curd, broiled steak, essence of beef (genuine extract of its salts and albuminoids in soluble and grateful form, minus its fibrin), calves' foot jelly, custards, blanc-mange, etc., and yet how few physicians know how to prepare these foods properly.

And yet these same physicians can sterilize nature's great

emulsion (which is sterile when fresh and pure) and can digest *in vitro* what should be digested in the stomach or not at all.

“ We may live without poetry, music or art,  
 We may live without conscience and live without heart,  
 We may live without friends, we may live without books;  
 But civilized man can not live without cooks.  
 He may live without books—what is knowledge but grieving?  
 He may live without hope—what is hope but deceiving?  
 He may live without love—what is passion but pining?  
 But where is the man that can live without dining?”

MOLOKAI LEPER COLONY.—There are now 909 lepers and 164 clean persons at the Molokai leper settlement, in Hawaii, according to a report received from Chief Quarantine Officer Cofer, in charge of the Marine Hospital work in Hawaii. All these are housed, fed, clothed and governed for \$80,000 a year. He praises the hopeful and cheerful way in which these people resign themselves to their fate, and points out that such contentment can thrive only on a comfortable mode of life and good treatment. He made careful inquiries as to the chances of infection of the clean people working among the lepers. The general opinion was that in time they would become lepers. In the last ten years, however, only ten clean residents have become lepers.

The Board of Health has initiated a new system for preventing the lepers and their relatives and friends from embracing and kissing each other by marching the visitors immediately from the steamer landing to a corral with a double fence. The friends are compelled to remain inside this inclosure and lepers gather around and talk through the bars. Visitors are permitted at any time under this system, instead of only once a year, as formerly. The results of known exposure to leprosy show an uncertainty as to the chances of individual infections, which makes the disease one of the most difficult to operate against. Women are said to be less liable to it than men.

The oldest three patients at the settlement arrived in 1874, 1875 and 1879, respectively. The recruits to the settlement each year during the last decade range from 132 in 1890 to 85 in 1900, showing a gradual decrease, despite the fact that the hunt for lepers through the islands never before has been so vigorous.—*Phila. Medical Journal.*

# N. O. Medical and Surgical Journal.

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## Editorial Department.

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CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

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### THE NEW YEAR.

As the first year of the new century closes, the general rank and file of the world's citizens look ahead in speculative expectancy for the next roll of its panorama and its presentation of novelty.

Discovery and invention have rolled along at so rapid a pace in the last decade that it seems almost impossible that there should be much left for the newer champion of the greater things.

With the evolution of electric possibilities, the demonstration of the unused stores of potential energy accumulated for use in the earth itself, and its varied expression at the hands of the expert investigators, all point to almost unimaginable possibilities.

The sciences are all paralleling each other in the lines of advance, each in its own division, all moving on to that Utopian perfection, which is as infinitely remote as the Great Cause itself, but which ever is the symbol in the clouds, of ambition and endeavor, now and then pointing the way when it grows too hard.

Methods of technic in experiment have grown more and more exact, and the fields of application have grown with the means to study them.

The surgeon has already evolved methods of procedure directed even at its vital organs; temerity is no longer a surgeon's siboeth, but assurance born of both precept and experience. The lines of occupation in the medical and surgical world are growing more sharply defined as the days go by, and surgeons and doctors are graded and classified according to their particu-

lar field of usefulness, dictated among the honestest class by either peculiar fitness or training.

So it is that the laboratory has actually outgrown its everyday relation to medical practice, and each day sees it in a more advanced and more necessary position by itself, rising higher and higher in its separate importance, dictator, as it were, to the professional world of which it is so large a part.

Specialties are broader, more and more dependable and more and more trustworthy than heretofore, because, in the very nature of the things, the advanced knowledge of all art, now possessed by the laity and the general profession, compels the more specific and exact knowledge at the hands of the expert. Time was when the pretension to expert knowledge was a sufficient guarantee of the possession of such knowledge. To-day presumption is soon flaunted and bedraggled in the humiliation, which companions exposed ignorance.

The banner of the profession is more than ever unfurled in the charge for an enlightened future in medicine, and the very overgrowth of parasite charlatanism, nostrum and half-fledged new schools of medicine only make the endeavor for a higher plane the more active. The advance must lead to a victory marked by a succession of discovery and application and punctuated by the falling away of the burden impressed and imposed upon a too willing profession by the ignorance of a public too weak to think for themselves.

When 1902 has passed away the world must be wiser, because older, and better because wiser from age.

Whether we shall have dispensed with the visible physical means of effort and shall have substituted the wireless method, or we shall have fallen back to more laborious ways, the sun will likely still shine for all, and while each of us stands ready to watch the evolution of another panoramic cycle of events, the JOURNAL wishes to have a Happy New Year large enough to share it with all of you who read these signs and these lines with us!

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#### MOSQUITO INVESTIGATION IN NEW ORLEANS.

We are gratified at being the means through which the Orleans Parish Medical Society has seen fit to present the work of its

Mosquito Commission. The importance of this work must appeal to all who read it, and the JOURNAL feels proud of the laborers in this new field and congratulates them upon the results of their efforts.

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## Society Proceedings.

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### ORLEANS PARISH MEDICAL SOCIETY.

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MEETING OF NOVEMBER 9, 1901.

DR. LAZARD read a paper on "*A Case of Gonorrhoeal Arthritis with Complications.*" He also exhibited the patient.

In presenting this case of gonorrhoea complicated with arthritis and malarial fever, it is not my intention to bring out anything new in the pathology or treatment of gonorrhoeal arthritis, of which so little is known, but that a free discussion will follow and the sense of the Society may be had, as to what is considered the proper treatment. This is the excuse for the report, and the writer will be repaid if he can get others to express their views on this intractable condition. Showing a patient with this disease, one is sorely disappointed when he refers to his text-books and finds that the authors are in the same position in which we are placed.

The American Text-book of Applied Therapeutics dismisses the subject in fourteen lines, and many text-books on surgery give less.

This disease is sometimes called gonorrhoeal rheumatism, but like many other terms it has insidiously crept into our nomenclature. As we all know it has no relation or even resemblance to rheumatism except the swollen joint; both being distinct diseases, and each having its characteristic clinical manifestations.



It will be noticed that the later books are adopting gonorrhoeal arthritis as the term to be preferred.

The patient presented to you this evening gives the following history :

W. M., aged 30 ; born in Ireland ; in New Orleans 11 years ; common laborer. Father died at 72, mother at 68, a sister at 25 from causes which are unknown to him ; 4 brothers living, and in good health ; one brother died at 22 from pneumonia and one at 3 from drowning. Presents an excellent personal history, and had escaped the venereal trinity up to the present attack of gonorrhoea.

History of the disease : On August 14, at noon, he had a burning sensation at the urinary meatus ; performed coitus on August 12, at 10 P. M. On August 15, A. M., he noticed a creamy discharge. This will give an idea of the rapidity and virulence of the infection.

On August 18, he first complained of pain in the right knee, then the left knee, shoulders, elbows ; wrists and ankles, in the order named.

No other joints (temporo-maxillary, etc.) were involved. As early as he suffered pains in the joints, he noticed that the urethral discharge lessened to a marked extent. He applied no medication in any form to the urethra or joints before admission into the hospital.

Entered hospital in forenoon of Aug. 21 ; temperature in the afternoon of that day was 103.6 deg. F.

I saw him for the first time on Aug. 22, when he underwent a general examination. The result was negative as to any visceral disease. The heart was given close attention as to the conditions of the endocardium (gonorrhoeal endocarditis is not unheard of). The penis gave the characteristics of early gonorrhoea. The joints named above, except the right knee, gave pain only on pressure, they were not swollen. The right knee was red and swollen, and extremely sensitive to manipulation, and could scarcely bear the sheet which covered him. The inner tuberosity of the tibia could not bear a slightest weight. Some effusion was found to be present.

On Aug. 28, after his temperature had fluctuated irregularly between 100 and 102 deg., the knee was aspirated, but not thor-

oughly. The needle brought forth about one ounce of thin purulent liquid without the presence of flocculi.

The pus was stained, and examined ( $\frac{1}{12}$  oil immersion) but no gonococci could be demonstrated. This was not surprising, as a culture should have been made from the pus before the gonococci could have been seen. But the culture medium was not handy at the time.

After aspiration, the leg was placed in a plaster of Paris dressing at an obtuse angle. It was placed at this angle if in the event that his knee became ankylosed it would be in the best position for the performance of its function.

He was told early after his admission into the hospital, even before the application of the aspirator, that he stood in great danger of having a stiff knee, in spite of what was done for him or how skilful the treatment would be. This part of the prognosis is to be noted, in order that there should not follow any surprises from the physician or surgeon.

On September 3 it was noticed that the aspiration had not improved the temperature satisfactorily or as much as was anticipated, and that other agencies must be at work in continuance of the temperature. The curve sometimes looked like that of a septic one, and at other times favored something else, but atypical.

On September 3 a blood examination was made, with the following results: Widal's reaction negative; plasmodia malarie present; 2,400,000 red blood cells and 20,000 white cells to *c. m. m.* It will be noticed that there was some leucocytosis, and all the temperature was not due to the malarial element.

(*The presence of an appreciable leucocytosis is strong evidence against the existence of uncomplicated malaria.*—Thayer, Lectures on the Malarial Fevers, p. 277, 1897.) Attention being directed to a malarial element by the pathologist's report, this disease was treated by giving 10 grains of quinin sulphate three times a day for stated intervals, until September 9, when his temperature became normal for the first time since his admission to the hospital; it arose, however, on the next day to 100 deg., and fluctuated thereafter between the normal point and 102, taking 100.5 as its most desirable point.

On September 18 another blood examination was made. Plasmodia were absent, yet his temperature continued. The cast

having been removed by this time, it was noticed that the knee was not yet well; there still remained some pain, swelling and stiffness. Baths and passive motion were applied.

The temperature continued to be irregular until October 4; at this time the knee still contained some effusion, and was painful.

The effusion was greater than when he entered the hospital.

On October 5, the aspiration was repeated, and about 2 ounces were removed, the pus having the same characteristics of the former aspirated liquid. The leg was placed in a loose plaster dressing, at the same angle (obtuse).

He was discharged about October 20, with what I considered a good result, and is here for inspection. His stay in the hospital lasted about 60 days.

Internal treatment was directed to the malaria rather than the gonorrheal arthritis.

In reviewing the case it will be seen that the administration of the salicylates and other anti-rheumatic remedies would have proved futile.

I believe that the use of the salicylates was suggested in this disease by the term gonorrheal rheumatism, especially that we have no drug able to combat the disease satisfactorily.

Why are the salicylates given? It is conceded that they exert absolutely no influence over gonorrheal arthritis yet they are given. The practice is bad for the reason that patient believes something is being done for him, and the surgeon sometimes believes it himself.

If this case had not had effusion into the joint, I would have applied Osler's suggestion in using the actual cautery to the joint exterior, after which I would have given rest, and passive motion judiciously applied.

For urethral discharge astringent remedies were applied.

The Janet remedy was not used, because in my hands it has not been a primrose path of dalliance.

One thing that pleased the patient between the time that one cast was removed and another one applied, was an application to the knee of an ointment composed of wintergreen and lanolin. It produced a cooling, tingling sensation when applied.

As far as the benefit which it gave there was none, as the leg had to be subsequently aspirated. It was the agreeable sensation that it produced and he asked that it be continued.

## DISCUSSION.

DR. LEBEUF had found that the urethritis usually had to be treated before the joint complications could be cured. Dr. Miller believed that astringents should be used only in the later stages of gonorrhoea. The German authorities were now using ichthyol extensively in the treatment of this disease.

DR. WATKINS reported *two cases of obstetrics* in which he had found the *left hand and left foot presenting with the vertex*. In the first, which had been handled by a negro midwife, a non-pulsating loop of cord was found lying outside the vulva. Dr. Watkins performed version and delivered a dead child. The mother recovered. In the second case the doctor found a cone-like sac extending to the vulva, and the os insufficiently dilated. He ruptured the sac and dilated the os. Finding the hand and foot, he performed version and successfully delivered a living child. The mother recovered.

DR. GESSNER and Dr. LARUE spoke of the difficulty experienced in *diagnosing a case of encephaloid sarcoma of the testicles complicated by hydrocele*. The X-ray had been used and had penetrated only the periphery of the tumor.

DR. MARTIN mentioned a case of apparent hydrocele of the round ligament in a woman. The labium was immovable, and a fluctuating tumor presented on the inner side. Fluid had been obtained by tapping. When the sac was opened the omentum was found plugging the ring, but not adherent. The sac was ligated and a radical cure resulted.

## MEETING OF NOVEMBER 23, 1901.

DR. M. M. LOWE reported a *Case of Cerebral Injury*. About two years ago, this boy, John Thomas, aged 10 years, was kicked by a horse on the os frontis. I was called, and having arrived at his home I found him seated on a couch and covered with blood, and in a state of severe shock. The heart was weak and the temperature was 97 deg. F. A hypodermic of brandy was administered and his body was wrapped in a warm blanket.

Bichloride solution, of the strength of 1 to 2000, was used to wash off the manure and blood from the head. The hair having been cut off around the wound, I discovered a compound comminuted fracture of this bone. The fracture assumed the shape

of the horse's hoof, extending in an antero-posterior direction for the space of three inches. Beneath this fissure there were six or eight small fractured bones, and the gray and white substance of the brain was protruding from the cranial cavity. The protruded brain substance was cut off. The hemorrhage was very profuse, coming from the anterior temporal artery, from the anterior temporal vein, and also the anterior branch of the of the meningeal artery. The latter vessel was controlled only by torsion. A silver probe was made to arch over the wound, then the lacerated scalp and the fractured bones were drawn snugly over the silver probe, to the normal position, and remained fixed there and grew as they are now.

Aristol was dusted over the wound, plain gauze covered it, and the dressing was completed by a recurrent bandage, placed first on the sound side and afterwards on the fractured side of the head. He was put on his bed and an enema of a saline solution was given and bottles filled with hot water were put around him. Digitalis, brandy and potassium bromide were given for many days, and the lad rallied from the shock in fifteen hours. There was no other bad effect on him.

DR. MARTIN reported a case of acute softening of the brain, in which the respiratory centers were completely paralyzed and the patient kept alive for ten hours by artificial respiration, two hours by Sylvester's method and eight hours with the Fell-O' Dwyer apparatus.

W. A. W.—Male, age 29, native of Chicago. Thin, but apparently enjoyed good health. Only serious illness was an attack of yellow fever in 1898. No history of syphilis or tuberculosis. On September 29th, he called at my office and complained of a heavy feeling in the stomach, due, he thought, to an attack of indigestion or caused by a dinner to which he had been invited the previous day. I ordered a saline purgative, which gave relief. During the night of September 11, he was seized with a violent attack of nausea and vomiting. He was transferred at once to the Sanitarium, where he could be given proper care and attention. On arrival, his pulse was only 56, temperature  $97\frac{1}{2}$  degrees. Complained of severe headache, referable to the frontal and occipital regions. From the 11th to the 13th, his condition remained practically unchanged, except some relief from the severe headache. His pulse ranged from 38 to 52; temperature usually subnormal. Strychnin,  $\frac{1}{30}$  of a grain, was administered hypodermically, every three hours, and

nutrition kept up with enemata. On the 15th, he was materially improved. His temperature has risen to 99 degrees. On the 17th, he returned to his boarding house. Believing that a complete change and a much needed rest would prove beneficial, I suggested a trip. He consented to go to Pass Christian for a few days and left on the 19th. For the first two days, he felt remarkably well, eat and slept well. On the 21st, he was suddenly seized with another attack of nausea and vomiting and severe headache. He was then treated by Dr. Washington for what was again supposed to be an attack of indigestion. On September 24, he returned to the city. Convalescence was rapid and he was soon well enough to resume the practice of his profession—that of a veterinarian. On October 13 he expressed himself as feeling better than he had for months. That night at ten o'clock he was again seized with an attack of nausea and headache, the pain usually referable to the occipital region. On October 14 at 4 A. M. I was called to see him. He presented all the symptoms of cholera morbus and said he had eaten some dishes before retiring which had disagreed with him. His pulse was 90, whereas in the previous attacks it had been above. I administered a hypodermic injection of morphin (gr.  $\frac{1}{4}$ ), atropin 1-150. In half an hour he was quiet and apparently sleeping. At 8 A. M. his wife telephoned me he was still asleep and wanted to know what should be done for him when he woke. At 9:30 she noticed that he seemed very restless and was clutching at his clothing. She spoke to him, but receiving no answer, attempted to arouse him, but to no avail. I was sent for, but did not receive the message until 10:30, while operating at the Sanitarium. Dr. McGuire answered the call for me. On his arrival he found the patient unconscious, pupils widely dilated, pulse about 130, respiration only 14 per minute. About this time the patient had what resembled a convulsion. Very soon after this respiration ceased entirely and there was absolutely no sign of life beyond the pulse-beats. When a catheter was introduced to secure a specimen of urine it was noticed that priapism existed; this continued for an hour after.

Artificial respiration was kept up by Sylvester's method until 1 P. M. Faradic current applied, but without effect. Stimulation ineffective. Through the courtesy of Dr. Parham, I was enabled to get his Fell-O'Dwyer apparatus. The bulb was introduced into the larynx and worked most satisfactorily until 2

P. M., when it suddenly became occluded in some unaccountable manner. It seemed impossible to introduce it again, and finding that the patient was becoming cyanosed and the pulse rapidly disappearing, I performed tracheotomy and introduced the bulb into the trachea. The cyanosis disappeared and the pulse improved at once. I now realized that the case was hopeless, and so did several other physicians that had been called in. The respiratory centres were completely paralyzed and it was only a question of time before the heart would cease to beat. Artificial respiration with the Fell-O'Dwyer apparatus was kept up only to gratify a lingering hope in his poor wife, who held the pulse and begged us to continue. This condition lasted until 9 P. M., when the pulse failed and life was extinct.

As the condition was one of unusual interest, I succeeded that night in holding a post-mortem. This was done under trying circumstances and was rather unsatisfactory, as it was not as thorough as I would have liked to have made it.

On removing the brain, I found the ventricles distended with about an ounce or more of fluid. In the left ventricles, suspended by a mere thread, was a small tumor  $\frac{5}{16}$  of an inch in diameter. The base of the brain was quite soft; otherwise, normal in appearance.

Dr. Pothier, of the Charity Hospital, reported the tumor as being a gliomyoma.

In discussing this case with Dr. P. E. Archinard, the neurologist, he expressed the opinion that the tumor was one of the Pacinian bodies found in the brain and was not, as I thought might possibly be, the source of irritation in the ventricles and that the phenomena exhibited in the case were the result of hemorrhages in the medulla, which, I regret to say, I could not examine at the autopsy. I am at a loss to account for the action on the pulse in the first attack and the respiratory centers in the last attack.

MR. DAVIS exhibited photographs and explained precautionary details in the production of anti-diphtheretic serum.

DR. WATKINS desired to feel the pulse of the members of this society in regard to the fees charged by trained nurses. He thought the present rates prohibitive, as far as people of limited means were concerned. Some discussion followed, the general opinion seeming to be that the law of supply and demand would regulate the nurses' fees.

## Abstracts, Extracts and Miscellany.

### Department of General Surgery.

In charge of DR. F. W. PARHAM, assisted by DR. LARUE, New Orleans.

OPTIMISM VS. PESSIMISM IN THE SURGICAL TREATMENT OF CANCER.—Every surgeon of experience in the operative treatment of malignant disease has so often seen recurrence even at times when he had much reason to hope for cure and has felt his utter helplessness whilst watching the progress of a "recurrence" after one or more well-planned and seemingly thorough operations, which went carefully wide of the diseased tissues, that many excellent surgeons are pessimists with regard to the treatment of malignant disease of all forms, and especially of cancer. The words of a familiar hymn, slightly changed to suit the theme, are not inappropriate here:

"Plunged in a gulf of dark despair  
We wretched surgeons lay."

Eagerly one method of treatment after another, which presented some reasonable tender of assistance, has been seized upon, soon to prove disappointing. So, many seem resigned to the inevitable and leave their hopeless victims of cancer to quacks and mountebanks. But is not this attitude entirely wrong? Is the surgeon justified in waiting with "hands off" until the discovery of a germ of malignant disease leads to the finding of a remedy? Would it not be better for surgery and far better for afflicted humanity for us to seize upon two facts which the experience of surgery has well established, (1) that malignant disease is at some time in its history strictly local and may be radically removed, and (2) that the cases which are the opprobria of surgery are the cases which come to the surgeon late, when no assurance may be had that *all* the diseased tissue can be removed?

Abbe, in the *New York Medical Record* of December 14, 1901,



takes up the subject in this strain: "Unmistakable evidence," he remarks, "proves that when the disease reappears after operation, the so-called 'recurrence' is not a return of the disease, but a continued growth of left-over particles." This he considers a fundamental fact in the study of the disease and must be so indelibly impressed on the mind of the operator that he will every moment of the operation feel the necessity of going widely of the disease.

"The truth of this fact is shown by the localization of the recurring nodules, either in the immediate precincts of the scar, or in the nearest lymphatics. This is a definite law in cancer growth, and fixes in the mind of the operator the direction of his endeavors." In our operations the invisible as well as the visible particles of disease must be removed, and the only way to accomplish this is to make a wide excursion with the knife. Hence those great gaps in the field of operation which seem to the uninitiated horrible butcheries, and so appall the young operator that he "curtails his cut, a little here and there, and tries to get his wound 'nicely closed,' which balm he applies to his soul when he joins the friends in congratulations that it is 'all out.'"

Every surgeon of large experience in the operative treatment of cancer can recall many cases with gratifying result, and although he may have many times been sorely cast down by the unfortunate ending of his cases, still a few of like nature with those narrated in Abbe's paper ought to give him courage to go on. Pessimism never advances any science, and humanity's hope lies with the work of the optimist. We believe with Abbe, that "there is a much brighter aspect to this question to-day than ever before."

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## Department of Obstetrics and Gynecology.

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In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER,

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THE SURGICAL TREATMENT OF PAINFUL MENSTRUATION—The *Medical Record* contains an extract of a paper on this subject read before the Southern Surgical and Gynecological Association

by Dr. Henry D. Fry. He contends that pain should not occur at the menstrual period in a healthy woman with healthy pelvic organs. This dual relation between the general health and the generative organs must be constantly borne in mind. One or the other may be at fault, or the trouble may be with both in the same cases. In such cases as demand both medical and surgical care, it is important not to overlook the former. The concentration of attention too closely to the surgical aspect of the case is often the cause of failure to give relief. Surgical treatment carries with it the need of making an examination of the pelvic organs. As these sufferers are nearly always young girls or unmarried women, the indications must be clearly manifest. The character and severity of the pain, its duration, and the condition of the patient during the intermenstrual period, must be considered. What results can be expected from surgical treatment?

In the discussion of this subject before the last meeting of the American Gynecological Society, the reflected opinions presented a gloomy picture for the woman. His object in presenting this paper is to protest against that verdict rather than offer any original method. His experience has been just the opposite. Failure to give relief has been due, as a rule, to some complication, the removal of which subsequently resulted in cure. The line of treatment with such satisfactory results is that pointed out in the main by Gill Wylie: First, thorough dilatation of the cervical canal; then the endometrium is gone over with the sharp curette; irrigation, and often a second curettage; the application of pure carbolic acid; irrigation and dilatation repeated, if necessary. A Wylie drainage plug as large as will readily pass is inserted into the cervical canal, and kept in position by a Smith pessary. For a number of years he was accustomed to leave the plug in situ ten days, but, following the suggestion of Wylie, he now allows it remain from three to six weeks. He usually keeps the patient in bed two or three weeks after the operation, and if no discomfort be experienced, permits her to get up and go around wearing the plug several weeks longer. He believes the use of the hard rubber plug does much to aid in the permanency of the relief obtained. It causes the formation of a cicatricial ring of tissue at the point of constriction which insures patulency. He had

not seen any bad results follow its use. In a few cases it causes pain, and on that account must be removed sooner than the time mentioned. He attributes the failure of those who deplore their results to the omission of some important point in the technic of the operation. For instance, they simply dilate the cervix, or dilate and curette. Another cause of failure is the unfortunate division and sub-division of the disease into varieties; each variety being described, with its appropriate method of treatment. The desire to avoid empiricism has made the subject complex and unpractical. For all necessary purposes, dysmenorrhœa can be divided into two classes—simple and complicated. The simple comprises 80 per cent. of the cases and the treatment described relieves 3 out of every 4. The conditions usually found on examination are as follows: The external genitalia are undeveloped; the vagina, cervix and uterus are small. There is stenosis of the cervical canal and endometritis. The uterus is normal in position or one of exaggerated ante-flexion; it is movable and the appendages are healthy. The accompanying endometritis is chronic and due to deficient drainage of the cervix uteri in consequence of stenosis of the cervical canal. The undeveloped condition of the generative organs in young women is very common and parallel to deficient growth of the mammary gland, and its consequent failure to perform the function of lactation. The second class comprises the cases in which some complication exists. It may be displacement, small fibroids in the body of the uterus, or disease of the tube or ovaries. These complications must be recognized and corrected. In a very small proportion of cases, as in cirrhotic ovaries, operators are driven to produce the menopause artificially. In such cases he believes it advisable to amputate the uterus at the same time as the subsequent reflex nervous symptoms are diminished, and the period of suffering shortened.

EARLY RECOGNITION OF ASCITES.—The *Medical Chronicle* contains an extract of an article contributed originally to the *Centralbe. für Gynækol.*, by L. Landau, on this subject. He states that it is almost impossible to recognize small quantities of pus fluid in the peritoneal cavity by the ordinary methods of examination. It is, however, if present, an important sign, especially in the diagnosis of malignant tumors, when it is frequently a very early symptom. Landau has observed a characteristic sign,

which he has found of great value. It depends on the fact that, when only a small quantity of fluid is present, it is impossible to seize the uterus bimanually; the fingers do not meet at the sides of the pelvis. When the patient is lying in the horizontal position, the uterus is pushed down somewhat, and gives the impression that it is resting on a cushion of air or fluid. If now the patient is placed in the raised pelvic position, especially if the thighs are flexed, the uterus can now be recognized bimanually quite distinctly, and the fingers may meet at the sides of the pelvis, since the fluid has gravitated towards the diaphragm. It is, of course, essential that the bladder should be empty.

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## Department of General Medicine.

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In charge of DR. E. M. DUPAQUIER, New Orleans.

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THE THREE HYPERTENSIONS.—There are three kinds of hypertensions, viz.: arterial, pulmonary and portal.

*Arterial hypertension* has been known for a long time. It causes sclerosis. It is the period termed "pre-sclerosis," manifested solely by an increased arterial pressure. In employing at this stage energetic measures, we can prevent the formation of arterial cardiopathies and other allied diseases. Measures indicated are the following:

The milk and vegetable diet, the use of tension-reducing drugs such as veratrum, nitrites, extract of liver and thymus and massage. The latter acts at the same time as an anti-toxic (by promoting excretion of waste material accumulated in the muscles) and as a depletor, so to say.

*Pulmonary hypertension* is associated with mitral stenosis in arteriosclerosis and diseases of the stomach. It causes arrhythmia and palpitations, occurring together as a syndrome, and if in such occurrences digitalis be used, matters grow worse.

*Portal hypertension* is a new name for portal stasis and abdominal plethora. It causes enlargement of the liver, disturbances of the intestines, recurrences of bronchitis, torpidity

of the kidneys, hemorrhoids, obesity, etc. As a result of abdominal stasis follows anemia and as a result of hepatic incompetency follows auto-intoxication. Portal hypertension is usually operative in causing the disorders attending menopause. It also contributes to the causation of obesity, since laboratory experiments and clinical practice go to show that anemia, bleeding and repeated hemorrhages can promote the growth of adipose tissue in the whole economy.

The measure employed to prevent and ameliorate portal hypertension is the milk and vegetable diet associated with abdominal massage, the latter proving in this instance most effective, provided it be practiced in the proper manner, *id est*, deeply and gently.—*La Revue Médicale du Canada*, No. 11, Sept. 11, 1901.

TREATMENT OF SYPHILIS WITH INJECTIONS OF HERMOPHENYL.—Dr. Reynès, surgeon to the hospitals of Marseille, reported recently to the *Marseilles Médical*, 1900, No. 19, twenty-six cases of syphilis which he treated with injections of hermophenyl. This salt of mercury is an oxide dissolved in disulfonate of sodium phenol. Its chemic, physiologic and antiseptic properties were fully demonstrated by Lumière, Chevrottier, Perrin, Berard (of Lyon), etc. (See *Gaz. des Hôp.*, 1901, page 521.) Owing to the remarkable solubility of hermophenyl and to the fact that no induration or abscess formation followed the injection of it into the muscles, Dr. Reynès thought of trying it in the treatment of syphilis by injections. He used a solution of 5 centigrams of hermophenyl in 10 *c. cm.* of distilled water. At first the solution looks cloudy, but it soon clears up entirely. Each *c. cm.* contains half a centigram of hermophenyl, and he used for one injection 4 *c. cm.*, containing 2 centigrams of hermophenyl, which represent 8 milligrams of metallic mercury. The solution is so limpid, so easily absorbed, that of late Dr. Reynès injected it under the skin instead of deeply into the muscles of the gluteal region, as he did at first, the treatment being thereby simplified, as injections can be made into the arm.

In the twenty-six cases reported, one hundred injections were made, and as stated, no induration, no abscess, no skin pigmentation ever formed. The injection is painless and resorption takes place rapidly. The cases were of the primary and secondary periods and as a whole most excellent results were obtained.—*Gazette des Hôpitaux*, Nov. 23, 1901.

## Department of the Ear, Nose and Throat.

IN charge of DR. A. W. DEROALES and DR. GORDON KING,  
New Orleans.

IMMUNIZATION IN HAY FEVER.—Dr. Holbrook Curtis, of New York, in a paper read before the American Laryngological, Rhinological and Otological Society, gives the result of two years' experience he has had in the study of immunization in hay fever. He began his experiments by administering an infusion of roses hypodermically in a patient who was unable to smell a rose without having an attack of sneezing. The patient soon grew to tolerate the odor and she was then subjected to treatment with similar preparations made from other flowers, with equally good result. Following out this line of therapy the author had made a preparation of fluid extract of rag weed, the emanations of which are so often accused of producing hay fever. Administration of this extract internally led to encouraging results, especially in such cases as were attributed to the effects of this plant. Where asthmatic symptoms were associated the results were unsatisfactory.

These experiments have led to very interesting inquiry and opened up a new field of experimental medicine which may bring forth some valuable facts in regard to the treatment of this obstinate affection.

### IN THE TREATMENT OF OTORRHEA—

Perchloride of Iron.....	30 grains.
Alcohol.....	60 minims.
Distilled Water.....	60 “

M. Three or four drops to be instilled into the external auditory meatus three times daily.

—*Gaceta Medico de Costa Rica.*

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## Miscellaneous.

POTASSIUM RICARBONATE IN THE FIRST STAGE OF LOBAR PNEUMONIA.—Dr. Ira B. Bartle, in the *Oklahoma Medical News*

for November, 1901, says that in the early stages of pneumonia the use of potassium bicarbonate in .6 gm. to 1 gm. doses is of great benefit, making the congestion much less, thus making the area of consolidation smaller, holding the temperature to a lower point, and hastening the crisis, if in some cases it will not abort the attack. It relieves the congestion by dilating the peripheral vessels, thus directing the blood to the surface; it reduces the temperature by alkalinizing the blood.

In a case of tonsilitis, with temperature of 105 deg. F., the blood reaction, acid (by double test), gave .8 gm. potassium bicarbonate. In two hours and thirty minutes temperature was 103½ deg. F., blood neutral. In two or more hours, temperature 103 deg. F., gave .6 gm. In two hours had temperature of 101½ deg. F., and an alkaline blood reaction. That the potassium salts relieve congestion is well demonstrated by their almost universal use by the profession in all classes of congestions. All potassium salts increase oxidation, thus accomplishing one of our aims in the treatment of pneumonia.

The bicarbonate is not urged as of great value after the stage of consolidation sets in, but in the first few hours of the disease it proved of great service. In the cases tabulated the symptoms in the first twenty-four hours have been so ameliorated that they could hardly be said to run a complete course.

Knowing, as we now do, that the cause of pneumonia is the diplococcus pneumoniae (Coplin), probably associated with other pus germs, and that the toxins from these germs give rise to much of the symptomatology of pneumonia, our entire therapeutic endeavors should be directed toward making the conditions of the lung as adverse to germ life as possible, thus arresting their development, diminishing the quantity of toxins produced, and making their devastations less extensive. Being entrenched, as they are, deep in the lung structure, we at present know of no germicide that can reach them, hence we must try and limit their work. This is best done by depleting the infected area of its blood, thus relieving the congestion and making less culture media by reducing the temperature, thus making the diplococcus less active. These results are best attained, in the author's experience, by the use of potassium bicarbonate internally, and emplastrum sinapis externally. Other medicinal agents, strychnin sulphate 1-60 gr., and the proper diet and bowels are not disregarded.

The first case in October, 1900, was a girl of 11. Diagnosis, pneumonia of lower lobe of right lung. Temperature was 104 deg. F., respiration 36, pulse 110. Gave two .15 gm. doses hydrarg. chlor. mite and strychnin sulphate,  $\frac{1}{100}$  gr., every four hours, and potassium bicarbonate, .8 gm. in capsules, every four hours. Saw patient at 3 P. M., about five hours after initial chill. At 9 P. M. had taken two doses of potassium bicarbonate, had temperature of 102 $\frac{3}{8}$  deg. F., respiration 32, pulse 102, skin moist, complained of very little pain. Began to suspect diagnosis. At 10 A. M. next day had temperature of 101 $\frac{1}{2}$  deg. F., respiration 24, pulse 100; area of slight dulness had not increased, some crepitant râles. Dropped potassium bicarbonate and strychnin sulphate and put patient on anti-malarial treatment. At night had a temperature of 103 deg. F., pulse 112, respiration 32, and patient went on to crisis in six days, but at no time did temperature exceed 103 $\frac{1}{2}$  deg. F. On the evening of the second, my brother, Dr. P. J. Bartle, of Carmen, Okla., saw the case with me and made a diagnosis of pneumonia. I believe had I adhered to my original treatment I should have limited the area involved, should have had a lower temperature, and a less pronounced crisis.

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## Louisiana State Medical Society Notes.

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DR. T. E. SCHUMPERT, Shreveport, President; DR. HERMANN B. GESSNER, 124 Baronne street, New Orleans, Recording Secretary.

Next meeting at Shreveport, June 4-7, 1902.

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THE CHAIRMAN OF THE COMMITTEE OF ARRANGEMENTS, Dr. Oscar Dowling, Shreveport, urges chairmen of sections to send in titles for discussion for early publication.

The following title for discussion and papers connected therewith are announced for the coming meeting:

*Section on General Medicine.*—Dr. Whyte Glendower Owen, Chairman, White Castle, La.—A Symposium on Tuberculosis in Louisiana:—

(1) Vital Statistics of Tuberculosis in Louisiana, Dr. G. Farrar Patton—Orleans Parish.



(2) The Transmission of Tuberculosis, Dr. Whyte Glendower Owen—Iberville Parish.

(3) Education of the People as a Factor in the Prevention of Tuberculosis, Dr. Fred. M. Thornhill—Bienville Parish.

(4) Climatic Treatment of Tuberculosis, Afforded in Louisiana, Dr. P. E. Archinard—Orleans Parish.

(5) Medical Treatment of Tuberculosis and its Results, Dr. Charles McVea—East Baton Rouge Parish.

(6) Tuberculosis among our Negroes, Dr. John M. Barrier—Richland Parish.

(7) General Discussion by the Society.

*Section on Dermatology*—Dr. Isadore Dyer, chairman, New Orleans. The Importance of Diagnosis in Skin Diseases. Considered generally and as applied to Particular Diseases.

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## Medical News Items.

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THE CHARITY HOSPITAL TRAINING SCHOOL FOR NURSES held its seventh annual exercises November 12. The Miles Amphitheatre of Charity Hospital was the scene, which was enlivened by music and floral decorations. There were eleven graduates. The address was delivered by Mr. Samuel L. Gilmore, the City Attorney.

THE WESTERN SURGICAL AND GYNECOLOGICAL ASSOCIATION met at Chicago December 18 and 19, 1901, and discussed a very interesting program.

THE AMERICAN JOURNAL OF MEDICAL SCIENCES announces that for the coming year there will be added 64 pages of reading text, occasioned by the demand for more space in its reading pages.

MESSRS. PARKE, DAVIS & Co. announce with some degree of gratification that not one of the recent tetanus fatalities following vaccination at Camden, Atlantic City, Bristol, Brooklyn, Cleveland, and St. John, N. B., succeeded the employment of vaccine virus made by them. In not a single, solitary instance was P.-D. vaccine used.

AMERICAN MEDICINE IS TO HAVE A NEW MANAGER in its business department. Mr. H. D. Reynolds, having retired from this position, is to be succeeded by Dr. H. M. Simmons, formerly connected with the *Maryland Medical Journal*.

MARRIED: Dr. Paul Gelpi and Miss Marie Annette Hincks, on December 26, in New Orleans.

DR. HENRY R. SLACK, of La Grange, Ga., president of the Georgia Pasteur Institute and Laboratory, was in New Orleans last month.

DR. L. H. VIALON, of Bayou Goula, has just returned from a trip to Mexico, his health much improved.

DR. D. J. GRAGNON, of this city, has moved to Breaux Bridge to practice.

DR. J. C. MUNDAY, who practiced medicine for many years at Lake Charles, died at San Antonio, Texas, December 7.

THE STATE BOARD OF DENTISTRY at its last session here in December passed nine of the ten candidates who came before it.

JUDGE W. E. REDWINE, superintendent of the public schools of Lincoln Parish, reports that the opposition to compulsory vaccination is so great that only one-fourth of the schools are now open.

THE ANTIKAMNIA CHEMICAL COMPANY has just purchased a lot 80x109 feet for \$20,000, the site of a new laboratory, five stories high, covering the entire lot. The improvements will cost about \$45,000 irrespective of the laboratory apparatus and appliances which will be of most approved pattern, from Darmstadt, Germany. The offices and various departments will be fitted with all modern conveniences, making the whole plant one of the most complete specialty laboratories in the United States.

## Book Reviews and Notices.

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*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

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*First Aid to the Injured and Sick.* By E. J. WARWICK, B. A., M. B. Cantab., and A. C. TUNSALL, M. D., F. R. C. S. Ed., 16 mo. volume of 232 pages and nearly 200 illustrations. W. B. Saunders & Co., Philadelphia and London, 1901.

This little hand book, which is intended more for the layman than the physician, treats of hemorrhage, the immediate treatment of wounds, dislocations and fractures, asphyxia, poisoning, insensibility, burns and scalds, etc.; transport of the sick and injured. The subjects are dealt with in so clear and simple a manner that any person of ordinary intelligence can carry out most of the expedients suggested. The information it contains is intended as an aid in rendering immediate assistance until the arrival of a physician. The authors have carefully studied the subject, and the result of their efforts is admirable. The cuts are good and thoroughly illustrative of the subject. It must prove valuable to nurses, railway employees and managers of large mills and factories where accidents are of most common occurrence.

MARTIN.

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*A Practical Treatise on Diseases of the Skin.* By JOHN V. SHOEMAKER, M. D., LL.D. Fourth Edition. D. Appleton & Co., New York, 1901.

In a great many ways this edition declares itself in advance of Dr. Shoemaker's previous texts. Much care is evidenced in the revision and additions throughout have been made consonant with the recent progress of dermatology. The chapter on Treatment is exceptionally noteworthy as containing a broad consideration of the host of remedial measures employed in skin affections. The purpose might be better subserved if this chapter were made to follow rather than to precede those relating to the diseases themselves.

The classification followed is that of Hebra, modified according to the more modern scheme of pathologic considerations.

The text has been thoroughly overhauled and the work of the past ten years is recorded rather fully.

Among other notable articles that on leprosy calls for particular comment on account of its completeness. The reviewer is grateful for the

notice of the work done by him in the therapy of the disease, but it is regrettable that the Berlin Conference Transactions were not consulted for the Louisiana statistics; in this text stopping with the 1888 report of Dr. Blanc. In the Berlin transactions these are brought down to 1897, thereby adding many cases.

With the text of almost 900 pages there are numerous illustrations, all well selected and for the most part photographic plates showing clearly the diseases they present.

A formulary is appended with an indication of each disease for which the prescriptions are suited; although, in our judgment, a doubtful form of advice and pregnant with a responsibility which practical experience demonstrates. No general prescription can cover any type of disease, skin or other.

DYER.

*Photographic Atlas of Diseases of the Skin*, by GEORGE HENRY FOX, A. M., M. D. Part V. J. B. Lippincott Company, Philadelphia and London, 1901.

This part contains the same sort of highly valuable plates of colored photographs, of sycosis, scrofuloderms, papular syphilis, popular eczema and morphea, as have characterized the previous sections of Dr. Fox's Atlas.

The plates are as near an approach to the clinic appearance of skin diseases as art can make them. We are more and more pleased with the value of this work as each part comes to us. The text serves an excellent purpose in the many practical suggestions in treatment it carries.

DYER.

*The Standard Medical Manual. A Hand-Book of Practical Medicine.* By ALFRED S. BURDICK, M. D. G. P. Englehard & Co., Chicago. 1901.

The aim of the writer of this book seems to have been attained in the presentation of a mass of correlated information arranged for easy reference in alphabetical order. The elements of definition, diagnosis, etiology, prognosis, pathology, and treatment are considered, each or all where the importance of the diseased condition would seem to demand.

Such works find a useful place in the hands of the busy man who has neither the time nor the occasion for wider reference.

DYER.

*The Medical News Visiting List for 1902.* Philadelphia and New York: Lea Brothers & Co., publishers.

This is the time to get a visiting list. One of the most convenient of the many is the *Medical News Visiting List*. Its blank pages are arranged to record memoranda and engagements of every description occurring in the practice of the physician, surgeon or obstetrician. It includes an alpha-

betical table of diseases with approved remedies, a table of doses, sections on examination of urine, artificial respiration, incompatibles, poisons and antidotes, a diagnostic table of eruptive fevers, and a full-page plate showing the incisions for ligations of arteries.

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*The Physician's Visiting List for 1902.* P. Blakiston's Son & Co., Philadelphia.

One of the oldest and best. In addition to the blank pages for records, it contains a calendar, a table of signs, the metric system of weights and measures, table for converting apothecaries' weights and measures into grams, a dose table, hints for asphyxia and apnea, comparison of thermometers and a table for calculating utero-gestation.

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*The Medical Council Physician's Pocket Account Book* is a convenient daily companion for the physician who wishes to keep accurate memorandum of his work.

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*Reference Handbook of the Medical Sciences*, by Various Writers. Edited by ALBERT H. BUCK, M. D. Vol. III, CHL-EQU. Wm. Wood & Co. New York, 1901.

No work of reference has ever been prepared and presented to the profession with so complete a mass of information, possessing the highest merit of excellence, as the Reference Handbook. The former editor occupied a unique place of distinction on the library shelves of our forebears and the present edition has been made to meet all modern requirements in the practice of the modern practitioner.

Every page presents the careful work of the skilled and authoritative writer, aiming at conciseness and comprehensiveness at the same time. It is impossible, as we have before now remarked, to make detailed review of all the subjects embraced in so vast a compilation, but we must note particular articles of timely importance.

The article on Chloroform and the Anesthetics, by Dr. Thomas L. Bennett, is unusually clear and instructive, dealing not only with the general description of these materials, but exhaustively handling the methods and the opportunities. The illustrations carry an array of apparatuses, profuse and useful to the reader who is anxious to be informed. Dr. Hamilton's article on Cholera, Dr. Dreyer's article on the Circulation of the Blood, Dr. Mall's paper on the Development of the Cœloni (superbly illustrated and in remarkable detail), Dr. Theobald on the Conjunctiva, Dr. Hall on Contractility, Dr. Buller on the Cornea, Dr. Felix Formento (of

New Orleans) on the Disposal of the Dead, Dr. Gallaudet on Deaf Mutism, the several articles on Dermatitis, Drs. Evans and Fry on Diarrhea, Dr. Park (W. H.) on Diphtheria, Dr. Eve on Dislocations (graphic in the illustrative presentation), are among the most noteworthy contributions to the text. Nearly 100 pages are devoted to the Ear and its diseases, while considerable space is given to Electricity and Electrotherapeutics.

DYER.

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PUBLICATIONS RECEIVED.

*A System of Physiologic Therapeutics*, Edited by Solomon Solis Cohen, M. D., Vol. III—*Climatology, Health Resorts, Mineral Springs*. Vol. IV—*Health Resorts of Africa, Asia, Australia and America; Special Therapeutics*, by F. Parkes Weber, M. D., and Guy Hinsdale, M. D.—P. Blakiston's Son & Co., Philadelphia, 1901.

*A Reference Handbook of the Medical Sciences*, by various writers. Edited by Albert H. Buck, M. D. Vol. III.—William Wood & Co., New York, 1901.

*Report of Vital Statistics of the Cities of Havana, Guanabacou, Regla and Marianao*, October, 1901.

*International Clinics*, edited by Henry W. Cattell, M. D.—Volume III.—J. B. Lippincott Co., Philadelphia, 1901.

*Index-Catalogue of the Library of the Surgeon General's Office, United States Army*, Second Series, Vol. VI.—Government Printing Office, Washington, 1901.

*Transactions of the American Surgical Association*, edited by Richard H. Harte, M. D.—1901.

*The Principles of Pathological Histology*, by Harvey R. Gaylord, M. D., and Ludwig Aschoff, M. D.—Lea Bros. & Co., Philadelphia and New York, 1901.

*An Experimental and Clinical Research into Certain Problems Relating to Surgical Operations*, by George W. Crile, M. D.—J. B. Lippincott & Co., Philadelphia, 1901.

*Photographic Atlas of Diseases of the Skin*, by George Henry Fox, M. D., Part VI.—J. B. Lippincott & Co., Philadelphia and London, 1901.

*Report of the Essex County Hospitals for the Insane*, 1901.

*Water and Water Supplies*, by John C. Thresh, M. D.—P. Blakiston's Son & Co., Philadelphia, 1901.

*Essentials of Physiology*, by Sidney P. Budgett, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*The Four Epochs of Woman's Life*, by Anna M. Galbraith, M. D.—W. B. Saunders & Co., Philadelphia and London, 1901.

*Transactions of the American Otological Society*, Vol. VII, Part IV.—1901.

*General Medicine*, edited by Frank Billings, M. D., Vol. I.—The Year Book Publishers, Chicago, 1901.

*Matthews' Physicians' Blue Book*.—Lewis S. Matthews & Co., 1901.

*Report of Vital Statistics of the Cities of Havana, Guanabacao, and Marianao*, November, 1901.

*Progressive Medicine*, edited by Hobart Amory Hare, M. D., and H. R. M. Landis, M. D., Volume IV.—Lea Bros. & Co., Philadelphia and New York, 1901.

*Manual of Physical Diagnosis*, by James Tyson, M. D.—P. Blakiston's Son & Co., Philadelphia, 1901.

*Venereal Diseases*, by James R. Hayden, M. D.—Lea Bros. & Co., Philadelphia and New York, 1901.

*Hand-Book of Physiology*, by W. D. Haliburton, M. D.—P. Blakiston's Son & Co., Philadelphia, 1901.

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#### REPRINTS.

*Some Anomalies of the Uterus*, by B. Merrill Ricketts, M. D.

*Syphilis as a Non-Venereal Disease*, by L. Duncan Bulkley, M. D.

*Aneurism of the Thoracic Aorta of Traumatic Origin; Treatment by Introduction of Wire and Electricity—Treatment of Lateral Curvature of the Spine—Removal of Foreign Bodies from the Air Passages*, by De Forest Willard, M. D.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR NOVEMBER, 1901.

CAUSE.	White.	Colored.	Total.
Fever, Malarial (unclassified) .....	....	....	....
“ “ Intermittent.....	4	9	13
“ “ Remittent .....	....	....	....
“ “ Scarlet .....	....	....	....
“ “ Typho .....	....	....	....
“ Scarlet.....	6	....	6
“ Typhoid or Enteric.....	8	3	11
“ Puerperal Septicæmia and Convulsions .....	4	2	6
Bronchitis .....	8	2	10
Diphtheria .....	5	1	6
Influenza .....	....	1	1
Smallpox .....	1	3	4
Whooping Cough.....	1	....	1
Pneumonia.....	15	17	32
Cancer.....	18	7	25
Consumption.....	32	39	71
Diarrhea (Enteritis).....	19	6	25
Dysentery.....	4	2	6
Broncho-Pneumonia .....	2	2	4
Hepatic Cirrhosis .....	13	3	16
Other Liver Diseases .....	4	2	6
Peritonitis.....	2	....	2
Chronic Diarrhea.....	3	....	3
Debility, Senile .....	24	9	33
“ Infantile .....	7	1	8
Bright's Disease (Nephritis) .....	30	19	49
Heart, Diseases of .....	35	21	56
Apoplexy .....	15	9	24
Congestion of Brain } .....	2	2	4
Meningitis .....	1	7	8
Trismus Nascentium.....	12	11	23
Injuries .....	2	....	2
Suicide .....	65	22	87
All Other Causes .....			
TOTAL .....	342	200	542

Still-born Children—White, 31; colored, 25; total, 56.

Population of City (estimated)—White, 220,000; colored, 80,000; total, 300,000.

Death Rate per 1000 per annum for Month—White, 18.63; colored, 30.00; total, 21.68.

## METEOROLOGIC SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure .....	30.19
Mean temperature .....	59.4
Total precipitation .....	2.78 inches
Prevailing direction of wind, northeast.	



# NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

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FEBRUARY, 1902.

No. 8.

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## Original Articles.

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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.]

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### FRACTURES OF THE LONG BONES OF THE UPPER AND LOWER EXTREMITIES.

BY E. D. MARTIN, M. D., PROFESSOR OF MINOR AND CLINICAL SURGERY IN THE  
NEW ORLEANS POLYCLINIC, NEW ORLEANS.

In treating this subject it is not my purpose to discuss the pathology or etiology of fractures; nor to give the recognized treatment as laid down in text-books, but to call your attention more especially to what I believe to be some of the more rational methods in vogue.

**THE HUMERUS:** *Fractures of upper end.* Fractures of the anatomical neck, through the head or through the tuberosities and the head, are practically the same as far as the clinical history is concerned.

Fractures of the anatomical neck are rare; the line of the break generally follows the line between the tuberosities and the smooth cartilaginous head. These fractures usually occur from direct violence. It is very difficult and unnecessary to make a differential diagnosis between these fractures. The shoulder is usually flattened and a little swollen; there is loss of function with crepitus and pain on motion.

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\*Read before the Louisiana State Medical Society, New Orleans, April, 1901.

Fracture of the surgical neck is the most frequent and most important of this group; the line of fracture is below the tuberosities; may result either from direct or indirect violence. The symptoms are usually well defined; crepitus is distinct and can be elicited by traction and rotation; function is lost; the arm is shortened and mobility is marked. The fracture is sometimes complicated by dislocation. If reduction of this dislocation fails by manipulation, McBurney's method should be practiced as soon as the acute symptoms have disappeared.

*Treatment*—Reduction of the displacement following these fractures should first be accomplished and the dressings applied. The same treatment used in fractures of the surgical neck is applicable here. The deformities resulting from fractures of the surgical neck are best reduced by traction downwards, outwards and forwards. Pressure of the hand over the seat of fracture aids in coaptating the fragments. In treating this fracture we must ever bear in mind the tendency of the muscles to draw the lower fragments upwards and inwards. The upper fragment is also frequently displaced by muscular action, and is too short to manipulate—coaptation is essential, then, to successful treatment. The three important steps, therefore, are, reduction, traction and fixation. There are numerous methods and splints devised, which theoretically are good, but practically do not always succeed. Middeldorf's triangular splint is one of this class. In my opinion there is no better splint than one made of plaster of Paris. The humerus and forearm are first incased in this, the bandage being carried well above the point of the shoulder and held snugly in place by a bandage run under the opposite axilla, the arm and forearm are then firmly strapped to the chest; this is absolutely necessary to prevent lateral rotation at the seat of fracture. The weight of the splint is usually sufficient to overcome the action of the muscles. In those cases where abduction is necessary for the better coaptation of the fragments, a cushion, such as Stromeyer's, can be applied. I have treated these fractures with a splint made of binder's board, cut to fit and soaked in water to be more easily molded. It is light and easy to apply. Splints constructed to make counter extension serve this purpose in theory only. Counter pressure is made in the axilla, the force is brought against the pectorals and latissimus dorsi,

which are attached to the humerus below the seat of fracture, and the whole force is therefore applied to the two ends of the lower segment. Where the weight of the splint is not sufficient to make the necessary counter extension, a weight should be attached at the elbow. In robust persons it is often difficult to apply a splint satisfactorily.

*Fractures of the Shaft* comprise the region between the insertion of the pectoralis major and the upper portion of the supra-condyloid ridges. Every variety of fractures which may occur in long bones are found in fractures of the humerus. They are caused very rarely by muscular action, as a rule by direct violence. The symptoms are abnormal mobility, pain, crepitus, deformity and loss of function. Delayed union is of more frequent occurrence in this bone than any other, due undoubtedly to the difficulty of immobilizing the fractured ends. Reduction is made by traction on the condyles and manipulation over the seat of fracture. Fractures of the upper end are treated practically as fractures of the surgical neck. Abduction is frequently necessary to keep the fragments in apposition. Abduction is not necessary in fractures of the lower end. Plaster of Paris makes the best dressing. It may be applied in a variety of forms with a roller encasing the entire forearm, or as splints held in position with bandages. An excellent dressing is made of binder's board. After the arm has been snugly encased in the splint, the whole should be made fast to the body of the patient. This affords the best means of immobilizing the fracture. The splint or bandage to be used will of necessity vary with the character of the fracture.

*Fractures of the lower end of Humerus* are classified by Stimson as supra-condyloid, internal and external epicondyle, internal and external condyle, intercondyloid, separation of the epiphysis and fractures of the articular processes. Of these the supra-condyloid is the most important on account of its close proximity to, and possible involvement of the joint. They are usually caused by violence produced through the bones of the forearm, as from a fall upon the outstretched hand or by torsion, as demonstrated by the experiments of Kocher. The symptoms are pain, abnormal mobility, deformity and loss of function with marked swelling. This entire class of fractures is treated practically in the same way. Reduction and fixation. In adults

the plaster of Paris bandage applied to the arm and forearm held at right angles at the elbow is unquestionably the best dressing. In some cases where the deformity is easily reduced a splint made of cardboard and moulded to fit both the arm and forearm snugly is sufficient. In children it is sometimes best to keep them in bed with the forearm extended. It is an error to keep the elbow joint immobilized for too long a period, when the fracture is near or into the joint. In adults passive motion should be begun at the end of two weeks, in children even sooner. The beneficial effects of massage are too well established to be overlooked. I consider it one of the most important adjuncts in the treatment of all fractures about the joints.

*Fractures of the Olecranon* make up a small percentage of fractures about the elbow. The line of fracture may occur anywhere above the base of the coronoid process. The mechanism of the fractures is much like that of fractures of the patella. It is produced by a fall on the elbow when the triceps is contracted. There is some contention on this point, it is true, but I believe that a blow of sufficient force to fracture the olecranon would cause more traumatism than is apparent in the most of these fractures. The exceptions are rare. This fracture is recognized by the presence of pain, swelling, mobility of the upper fragment, occasional crepitus and the loss of the power of extension. The recognition of this fracture is important as regards treatment and the after effects, function is impaired either by adhesion or long fibrinous bands between the fragments. Bony union is very rare owing to the difficulty of keeping the fragments in apposition. Are we not justified in this period of anti-septic surgery to wire these fragments? The operation is no more dangerous than the recognized procedure for fractures of the patella. A staple driven through the fractured olecranon and fastened to the main body of the bone is in my opinion the ideal treatment; the specimen I present here will, I think, bear out my statement. A small skin incision over the seat of fracture is all that is required; the intervening soft structures are removed, the olecranon held in position with a vulcellum forceps, and the staples driven into position, the wound closed and the arm put up at right angles. This would do away with the contention of the different authorities on the subject. Manipu-

lation of the joint could be attempted much earlier and the dangers of ankylosis greatly lessened.

*Fractures of the Coronoid Process* are rare. The treatment consists in immobilizing the joint at right angles.

*Fractures of the Head and Neck of the Radius* are no very common, nor the treatment very clear. I believe they are best treated with the arm flexed at right angles to the humerus, and immobilized without much pressure in the bend of the elbow, as the pressure of the soft tissues may displace the fragments.

*Fractures of the Shaft of the Radius* are not as common as is generally supposed and are less frequent than fractures of the shaft of the ulna. They are caused usually by direct violence, sometimes by a fall upon the hand. In rare instances they are caused by muscular action. The displacement varies with the seat of fracture, due to the action of the biceps and pronator muscles. The condition is easily recognized by the displacement, crepitus and abnormal mobility. The deformity is reduced by drawing the hand forcibly downwards and towards the ulnar side and pressing the fragments into place. These fractures are best treated by securing the arm upon well padded anterior and posterior splints in the semi-pronated position. These splints should be long enough to include the hand and to extend beyond the condyles of the humerus, otherwise it will be impossible to prevent lateral rotation.

*Colle's Fracture*—Treatment includes fractures near the wrist, and next to those of the ribs, it is the fracture of most occurrence. It is caused by falling upon the palm of the hand. It is recognized by a silver-fork deformity. The styloid process of the radius while it is normally a little lower than that of the ulna, rises to the same level when fracture exists. The swelling upon the anterior surface of the forearm is marked. Crepitus can be obtained by steadying the forearm and grasping the fragment between the thumb and fingers and shoving it backward and forward. Pressure along the line of fracture is painful. With proper treatment the prognosis is good. Once reduced there is little tendency for the deformity to recur if held in position by properly adjusted splints. The best dressing is made of plaster of Paris splints applied with the hand in partial pronation. There should be a palmar and a dorsal splint, the former extending from below the elbow to the metacarpo-phalangeal

joints, the other from the same heights to the metacarpo-phalangeal joints; board splints of the same dimensions make an excellent dressing.

*Fractures of the Shaft of the Ulna* are produced usually by direct violence. Displacement is sometimes absent and when present may be in any direction. As the radius is intact there is little deformity, and pain and swelling are frequently the only noticeable symptoms. Crepitus may be obtained by grasping the arm firmly and rubbing the fragments together. Reduction is made by pressure with traction upon the displaced fragments. The most important displacement to overcome is the lateral one towards the radius, which is best overcome by passing the thumb and finger between the bones. As the radius acts as a splint in preventing overriding of the fragments it is only necessary to secure immobility to prevent lateral or angular displacement. If there is only slight traumatism to the soft parts the lateral splints used in fractures of both bones are all that is required. A gutter splint makes an excellent dressing, and personally I prefer it to the lateral splints.

*Fractures of the Shafts of Both Bones of the Forearm* occur rarely in the upper third with about equal frequency in the middle and lower thirds. They are reproduced by direct and indirect violence. The displacements are of the usual kinds. They are recognized by pain, deformity, abnormal mobility and loss of power. If the fractures are not complicated the prognosis is favorable. Reduction is effected by extension and counter-extension, aided by pressure upon the bones at the seat of fracture. Proper reduction is the most important step in the treatment to secure perfect results, as displacement might destroy the special function of rotation of the forearm. If the displacement cannot otherwise be reduced owing to inter position of the soft parts, they should be exposed, the intervening tissues removed and the wound closed. These fractures are best treated with forearm midway between pronation and supination. The position which the limb naturally assumes when suspended in a sling. The best dressing consists of splints made from gauze or blanket soaked in plaster of Paris about three inches in width and applied on either side while traction is being made. They should be long enough to extend from the metacarpo-phalangeal joints to beyond the condyles of the humerus. By applying

these snugly, not only will traction be maintained but lateral rotation prevented.

**FEMUR: *Fractures of the Head***—Are very rare and are due to direct and severe injury. They are frequently associated with dislocation.

*Fracture of the Neck, Intra-capsular*—Is an accident of old age, more frequent in women than men. Is frequently due to slight injury.

*Extra-capsular or Mixed*—In this class of fractures the lines follow the junction of the neck and shaft quite closely, they may traverse the great trochanter.

*Diagnosis*—Interference with function, pain except in rare cases, crepitus may or may not be present. Disability is much greater in old than in young subjects. When lying on back limb appears shorter, is everted, slightly flexed and abducted. Upper portion of thigh is swollen. Gosselin says a rigorous diagnosis between intra- and extra-capsular fractures is impossible and useless, in fact all authorities on this subject agree that it is of little importance. The prognosis will depend upon the age of the patient. The nature and extent of injury and treatment. Failure of union does not necessarily result in complete disability.

*Treatment*—In the reduction of these fractures great care must be taken not to use too much force. The best good is accomplished by gradual and steady traction. A band around the pelvis to press the fragments in with Buck's extension apparatus or side splints is good treatment. This dressing keeps the patient on his back, and is therefore objectionable for old people. Hodgen's splint properly adjusted is the ideal method. And with this splint I do not consider a band around the hips necessary. By the application of Hodgen's splint the leg is comfortably suspended, the slight traction made, overcomes the action of the muscles and the displaced bone is gradually brought into opposition. As the head is free in the acetabulum the remaining attachments to the neck are sufficiently firm to cause it to follow the movements of the limb, without pulling on the fragments at the seat of the fracture. And last but not of the least importance it allows the patient to assume the erect position, thereby lessening the tendency in the aged to hypostatic pneumonia.

Although I am, from personal experience, convinced of its advantages in the treatment of fractures of the neck of the femur, I am glad to quote Dr. Mudd on this subject: "Clinical results and theory confirm me," he says, "in the belief that it comes nearer adjusting and immobilizing the fractured ends of a break in the neck than any other method of treatment devised. If the ends are in apposition, the movement should be easier in the head than in the fracture. The head of the femur should move with the neck if the adjustment is good. The swing of the leg does not imply that the movement is at the break.

*Fractures high up* in children must be treated with plaster dressing. Fractures of the great trochanter and neck should be treated in the same way. A spica bandage covered with liquid glass will frequently aid in keeping the fragments in position and will also help secure immobilization.

*Fractures of the shaft*, including sub-trochanteric to supra-condyloid, are caused by direct and indirect violence. In the shaft every possible variety of fracture is found, the oblique is most common. Complications are rare.

*Diagnosis.*—Pain, loss of function, abnormal mobility, deformity and crepitus.

*Treatment.*—The fracture may be treated by any method which secures immobilization, such as plaster of Paris bandage with traction, Buck's extension, Hodgen's Splint, long side splint with traction. If, however, any of these methods will accomplish the same end it is the surgeon's duty to adopt that which in its application combines most of the requisites and gives to the patient the least amount of discomfort. In the Hodgen's splint we have the ideal method.

Delayed union is in many cases due to want of proper immobilization. In the femur it is best treated with plaster of Paris. In the bones of the leg an ambulatory splint, or frequently a lighter dressing may be applied and the patient allowed to get about on crutches, at the same time putting some weight on the injured leg. In children I believe the plaster of Paris dressing superior to any. Great care must be taken in its proper adjustment. I have had no experience with vertical suspension, but doubt that it is superior to a good plaster cast.

*Fractures of the lower End of the Femur.*—This includes inter-condyloid fractures, fractures of either condyle and separation of



the epiphysis. As a rule these injuries are serious both as to the integrity of the joint and the life of the patient. If there is no serious complication the condition is best treated by slight flexion and suspension. Either a Hodgen's splint or a posterior gutter splint suspended from several points—with traction. Though fractures of either condyle can be treated in the flexed position, Stimson favors extension, and recommends massage to shorten the period of convalescence and hasten restoration of function. When the fragments are not reducible on account of intervening tissues, I believe it justifiable to cut down to the seat of fracture, remove the obstructive mass and even wire or transfix the fragment if necessary to secure a good result. Should there be much effusion of blood into the joint it should be released by an incision sufficiently large to allow the escape of clots, irrigated with a warm normal salt solution and closed. This, I believe, will hasten a cure and lessen the danger of sepsis.

*Hodgen's Splint.*—The treatment of fractures by suspension belongs primarily to Nathan R. Smith, but the method was not perfected until John T. Hodgen, Professor of Anatomy in the Missouri Medical College, in 1852, devised the splint which bears his name. The Hodgen splint is undoubtedly the most equable and comfortable suspension splint yet devised; it is easy to adjust and leaves the fracture exposed for inspection.

The splint cannot be properly adjusted unless of proper proportions. It should be made of  $\frac{3}{8}$  round iron. The length of the outer side should be equal to the distance from the trochanter to a point 4 inches beyond the sole of the foot; the inner side should extend from the same distance from beyond the foot to within 2 inches of the pubis. The lower ends should be welded together at right angles to the side bars, which should be about  $3\frac{1}{2}$  inches apart; the base is held in position by a curved rod extending over the thigh and keeping the side bars separated at a distance equal to the diameter of the thigh. The rings, or hooks, two above and two below the knee, should be placed equi-distant from the knee to the foot, and the knee and end of inner bar. The flexion at the knee should be very slight. A piece of some strong material divided in two parts should be fastened to one side and left loose on the other side for adjustment. The suspension cords should be

provided with tent blocks, or may be made of leather with buckles; they should be about two and one-half feet in length. An extra cord provided with a tent block sufficiently long to reach from the shorter cords to the point of attachment should also be provided. To adjust the splints first apply the rubber adhesive strips to the leg and fasten with a bandage. This is then grasped by an assistant and with the other hand under the knee the leg is lifted from the bed, making always steady traction on the femur. The splint is then slipped into position and the lower end brought to the sole of the foot. The adhesive strips are fastened to this and the cloth is held in position with safety pins and so adjusted that the anterior surface of the thigh will be a little lower than the side bars, allowing the limb to be comfortably suspended and equally supported. The cords are adjusted from a ring attached to the single cord and the whole suspended from some fixed point not less than five feet from the leg and at an angle of about fifteen degrees from the perpendicular. The weight of the leg acts as the extending force and the body as the counter extending force. The suspended leg need not be raised more than a few inches from the bed. Although it is recommended that the pulley from which the limb is suspended be fixed to the ceiling, this is by no means necessary to insure a good result; it only adds to the comfort of the patient by giving more freedom of movement.

This splint will often get out of adjustment and allow the fractured bones to sag. To overcome this difficulty I apply a gutter splint of paste-board, or one made of a piece of blanket soaked in plaster, to the thigh, before applying the splint. This aids in immobilizing the fragments. If the splint should slip out of adjustment at any time this collar will prevent sagging and keep the fracture in proper position until the cords can be readjusted.

*Fractures of Upper End of Tibia and Fibula.*—Causes—Direct or indirect violence. Line of fracture may be transverse, oblique or longitudinal. May pass into joint and separate only portion of articular surface, etc. The displacement varies with character of the fracture and fracturing force. Implication of the joint causes effusion into it. These fractures are always serious on account of their proximity to the joint and the danger of implicating vessels. An anesthetic may be required in order to

make the diagnosis. The injury is usually recognized by swelling, irregularity, pain and crepitus. Prognosis always serious.

*Treatment*—These fractures differ so much in different cases that no fixed mode should be adopted for their treatment. Displacements should be corrected by traction and manipulation and should be kept in position by a suitable dressing. I prefer the plaster of Paris dressing to hold the fragments in position and the legs suspended by a Hodgen's or Smith posterior splint—with traction. If the fragments are difficult to reduce on account of great displacement of the intervening tissues I believe it is good practice to cut down upon them, and reduce them to their normal position and fix with kangaroo tendon, wire or staples. This should be attempted only by a surgeon of some experience, and under the most rigid asepsis.

*Avulsion of the Tubercle of the Tibia*—This is a rare condition but must result seriously if not properly treated. It is caused by contraction of the quadriceps in some violent effort at jumping, etc. Symptoms are similar to those of fractured patella, inability to use limb. It is recognized as a movable nodule of bone about two inches below patella.

*Treatment*—Fixation with bandages or rubber adhesive strips and posterior splint. If fixation is difficult the tubercle can be held in position by transfixing with a drill or nail. This should be left in position about two weeks.

*Fractures of the Shaft*—These may occur at any point when due to direct violence. When due to indirect violence they usually occur at the junction of the lower and middle thirds. They may be transverse, oblique, comminuted or compound.

*Treatment*—These fractures are more easily reduced by fixing the leg at right angles to the thigh. This relaxes the powerful muscles of the calf of the leg (the soleus and gastrocnemius) by holding the thigh just above the knee, and making slight traction on the foot the fragments are usually easy to reduce. Keeping them in the proper position is sometimes difficult, especially if they are oblique in character. These cases I have always treated by first reducing, then applying a temporary splint of any character, plaster, binder's board or other suitable material. As soon as the patient is put to bed the leg should

be suspended. The reasons for this are obvious. As a rule these cases are fixed with plaster of Paris bandage, the patient put to bed and a sandbag applied on each side of the plaster dressing to keep the leg from being moved. This erroneous method, I believe, does more harm than good. The foot is firmly anchored, but any movement of the patient's body, and there must be some, is apt, especially after the swelling has subsided, to cause displacement of the fragments, or if not to give pain, and, I believe, in many instances delayed union. By suspending the limb at once we secure greater comfort to our patient, who can assume any position he may desire; if old he may be allowed to sit propped in bed during the day, thereby lessening the tendency to hypostatic pneumonia, a danger not to be overlooked. When properly suspended the weight of the leg on the proximal side of the fracture is sufficient to carry the splint along in the direction in which the body is moved, without displacing the fragments. Furthermore it favors depletion and the swelling is more rapidly reduced. Numerous devices have been suggested for making traction, but none have come into general use owing to their defects. All the traction necessary can be accomplished by properly adjusting the splint and suspending at a slight angle as is done with the Hodgen's splint. When the leg is reduced to its normal size an ambulatory splint should be applied, unless some contra-indication exists. This of course applies to simple fractures only, or such as were rendered simple by the proper treatment. For compound fractures of the shaft there is nothing superior to a fenestrated plaster splint, reinforced, if necessary, with Stillman's brackets.

*Fractures of lower end of Tibia. Supra-malleolar Fractures.* Due to direct violence, or to a fall from a height when the bone is broken by transverse strain. The injury is recognized by abnormal mobility.

*Treatment*—Fix the leg in plaster of Paris, with foot at right angles to leg and suspend.

*Pott's Fracture*—Caused by eversion and abduction from a fall on the foot. The appearance of the foot is so characteristic that the diagnosis can usually be made at a glance. The foot is displaced outwardly and the internal malleolus is correspondingly prominent.

*Treatment*—Reduction is difficult to accomplish without an anesthetic. It is made by pressing the calcaneum inward and forward. If the tip of the malleolus has penetrated the skin and there is doubt about rendering the wound thoroughly aseptic it should be packed with a gauze drain and left open, otherwise it may be closed and the dressing applied, or a posterior or lateral splint made of a piece of blanket soaked in plaster, or Dupuytren's lateral splint can be used. At the expiration of ten days or two weeks an ambulatory splint should be applied and the patient allowed to walk about.

*Fractures of the Fibula*—Are caused by direct violence or muscular contraction of the biceps, or forcible abduction of the leg acting through the external lateral ligament attached to the head of the fibula.

*Treatment*—These fractures can all be treated with the ambulatory splint, and patients should be able to get about with little discomfort.

*Ambulatory Splint.*—To Prof. Louis Pilcher, of Brooklyn, we are indebted for the revival of this method. The ambulatory splint is best described in the language of Prof. Pilcher himself: "The bandage," says he, "is applied as follows: With foot flexed at right angles to the leg a flannel bandage is smoothly and evenly applied from toes to a point just above the knee; this bandage is made to include, beneath the sole of the foot, a padding of ten or fifteen layers of cotton wadding, making a pad about three-fourths of an inch thick when it is compressed by the moderate pressure of the flannel bandage. Over this is applied the plaster bandage from the base of the toes to just above the knee, especial care being taken that the application is made smoothly and somewhat more firmly than is customary with the ordinary plaster cast. The layers of the bandage should be well rubbed as it is applied, with a view of obtaining the greatest amount of firmness with the smallest amount of material. The sole is strengthened by incorporating with the circular turns an extra thickness composed of ten or twelve layers of bandage well rubbed in together extending longitudinally along the sole. The bandage is applied especially firm about the enlarged upper end of the tibia, and here it is made somewhat thicker. As it dries it may be pressed in so as to conform more closely to the leg, below the head of the tibia and fibula." The

bandage should be applied immediately and will prevent swelling, which is often due to movement of the ends of the fragments. The splint can be reinforced by incorporating in the bandage wire gauze or tin strips, which should be allowed to lapse under the sole of the off foot and help to support the weight of the body. My method of applying the splint has been a little different. It has been my practice to pad the foot from the toes to a point just above the seat of fracture, covering the whole snugly with a flannel bandage; the plaster being applied over the dressing holds the distal end of the fracture firmly suspended, while the weight of the body is supported by that portion of the leg above the seat of the fracture. I have been led to pursue this method as best suited to the cases which have come under my observation—that is, in cases where there has been much swelling or the injury extensive, or where there is a great deal of tenderness over the seat of fracture. The cast should be allowed to remain on the leg for at least four weeks unless there is cause for its removal.

*Compound Fractures of the Long Bones of the Extremities.* It would be time spent uselessly to treat of these fractures in detail. A few remarks in regard to the importance of the great caution to be exercised in preventing as far as possible the infection of compound fractures is all I believe that is necessary. Next perhaps to the dangers of infection of the peritoneal cavity are those following the infection in compound fractures especially where the joint is involved, a danger not only to impairment of function but to life itself. The preparation for the treatment of a compound fracture should be no less rigid than that of a punctured wound of the abdomen. The free use of a brush, soap and a razor should lay the foundation of the strictest aseptic treatment to be followed. When it is possible to thoroughly cleanse the wound a compound may be converted into a simple fracture by closing the wound and applying such a splint as will best immobilize the limb. Should, however, the slightest doubt exist in the surgeon's mind a gauze drain should be inserted and the wound treated by the open method. In such cases a plaster splint through which a fenestrum can be cut or a fenestrated tin or Hodgen's splint should be applied. Should the opening to be made be of such size as to weaken the plaster splint it should be reinforced by a Stillman bracket splint or a brace that can

be attached in the same way. Free drainage should be maintained at all times either by the use of drainage tubes or gauze packs.

*Ununited Fractures*—This class of fractures is to be treated by exposing the fractured ends, freshening the opposing fragments and holding them in apposition. This can rarely be done without some mechanical means. The material in general use is silver wire and kangaroo tendon, neither of which is satisfactory, as they simply tend to hold the fragments in apposition, depending upon the application of a properly adjusted splint to do the rest. I now wish to present for your consideration a method suggested by myself at your last meeting for fractures of the patellâ. I refer to the use of staples in all ununited fractures. I have been able to so perfect this method both in the character of the staple and its application that I believe you will readily see its value. These samples of fractured bones that I present will in themselves be a sufficient guarantee for my claims. In hard bones it may be necessary to drill before driving in the staples. A drill with the diameter not greater than that of the staple should be used. In the softer bones or in newly formed callus they can be easily driven with the aid of this simple mechanical device. These staples are made of numbers 57 and 60 steel wire and are sufficiently strong for all purposes. They are unyielding and when properly adjusted fix the fragments absolutely.

*Delayed Union*.—Delayed union is best treated by massage and fixation. It is usually the result of improper treatment or constitutional debility.

*X Rays*.—In conclusion I feel it my duty to say a few words in regard to the X Rays in the diagnosis and treatment of fractures. Time and experience have proven that at best it is only an aid in the hands of one of experience. It will show the line of fracture only when the fracture is transverse, and the intervening space sufficient for the rays to penetrate without interference from projecting points. Deformities are always exaggerated and skiagraphs seldom reliable. As an aid in expert testimony it can never carry great weight with any who are familiar with its use.

## THE NEGRO AS A SURGICAL SUBJECT.

BY LUCIEN LOFTON, A. B., M. D., EX-PRESIDENT SEABOARD MEDICAL  
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EMPORIA, VA.

After a varied surgical experience, comprising many years, upon the Afro-American race, it has occurred to the writer to briefly outline the same, especially regarding the seeming immunity which herein exists relative to septic infection, following trauma and surgical operations.

We of the so-called "Southern black belt" are daily engaged by the race in the capacity of surgeon and physician, and the remarkable results obtained in surgical practice from among the colored population appears, upon first thought, marvelous.

Certainly the environments of the negro are anything but inviting, surgically speaking, and while septic conditions abound on every hand, no more brilliant recoveries are ever seen than those which are found in negro cabins and hovels. Aside from this the colored race, whose work may be classed among the most arduous and most uncleanly to be seen, yet notwithstanding this fact, your mortuary report is practically the same. Sepsis really appears to be an unknown quantity with the negro, as it were. His stoic nature encourages the operator from the beginning, and you may rely upon his immense vitality to tide him over many dangerous places.

One thing is certain, the fact of his ignorance regarding his own condition helps the course of recovery. Then again, he is generally obedient should you lecture him beforehand. Further, he is by nature an optimist. He is sanguine in sickness or health, and even under circumstances trying to both surgeon and patient he is an optimist, which is no minor part of the battle.

Grease, dirt and filth galore do not assert their septic influences in the colored patient as they do in the white patient. Though on the other hand, the negro, now being practically an amalgamated race, is decidedly more susceptible to contagion than is the white race, *i. e.*, a greater mortality follows epidemics among the blacks than among the whites. And, again, contaminated blood is the rule rather than the exception in the negro. I dare say few, if any, who contract, for example, syphilis ever take the trouble or expense to have this disease fully eradicated



If external symptoms melt away the negro is satisfied, and marriage and intermarriage apparently broods no insults in the pickaninny progeny. If he survives the infection, well and good; if otherwise, the result is the same; the parents believe it the natural process of circumstances.

I have operated upon negro syphilitics when one would believe a recovery out of the question; but splendid results followed irrespective of any constitutional therapy. Being as a rule very phlegmatic, turn you to any point of his anatomic compass, incisions and wounds of whatever description generally close by primary union in about one-third the time allotted to white patients. The generous blood supply and heavy pigment, no doubt, help nature in the process of repair. Rarely does a stitch abscess present itself. Kangaroo or wire is as exempt from confusion as is the best sterilized silk or gut.

Out of hundreds of cases, the author has never witnessed a case of hemophilia. The coagulability of the negro's blood is proverbial. Even good-sized arteries and veins are controlled by torsion or simple compression. Wounds of the cranial, thoracic or abdominal cavities do not produce in the negro the amount of shock noticed in white subjects.

I cite cases in which this is proved: A negro man of middle age and robust suffered the misfortune to have driven into the lateral aspect of his skull, just above the right lateral sinus, an axe, half-way to the helve, from which I removed about two ounces of brain tissue. The man did not at any time lose consciousness, yet hemorrhage from the severed temporal artery was quite profuse. In two days the patient was upon his feet and on the morning of the seventh, resumed his usual occupation, that of a sawyer. He has never experienced *any* impediment of speech or motion. This accident happened four years ago.

On another case of recent record a negro farmer some five miles distant was shot by another negro with a pistol ball of a 32-calibre just above the left superciliary ridge which glanced around the skull and imbedded itself behind the ear. The blow did not render the recipient even "sick at his stomach." On the contrary, he remarked: "If it had not been for the blood flowing in my eyes I would have fixed him." The day following the accident he was walking about through his cotton field.

To satisfy a morbid curiosity upon the part of my patient I extracted the missile in about ten days, and much to his surprise he found the bullet a great deal more flexible than his skull, having been flattened to such an extent as to resemble a pewter five-cent piece. The bone was not shattered in the least.

In the case of a negro woman paramour who was shot four times; once upon the top of the head, over the cardiac region, through the right hand and right shoulder, all four balls being obscured, practically little shock was experienced from first to last. The bullet in the hand was removed by request on the eleventh day, while the remaining balls have never been located. She is to-day a resident near this city and enjoys splendid health.

While the fleshy integument heals with great rapidity in the colored race, the bony structures sometimes give you concern in not uniting properly. This, I believe, is due to meddling, from the fact that the average negro you attend in these cases is inclined to be meddlesome, "to see if the bone has knit," as it were. I recall one case in which a negro train hand had received an ugly comminuted fracture of the femur, a transverse fracture of the humerus, besides a crushed frontal bone, who thought it a test of his "nerve" to ascertain daily the amount of weight he could lift with a broken arm, or compare strength in his lower extremities; in fact, the splint applied to his broken thigh bone was utilized in making a "rabbit box." Not being in a position to use his head as a battering ram, the frontal bone healed very kindly without interruption. With all this trouble the man was walking without assistance in about twenty-seven days, while the splint which supported the arm was only kept in position about ten days.

Negroes rarely ever suffer from attacks of appendicitis unless an epidemic of la grippe is on, when they are peculiarly liable to be so affected.

Piles are a rarity with him. Likewise calculi of all kinds, while cancer infection, barring osteo-sarcoma, is very unusual. However, they are especially prone to neuromata and keloid growths.

Finally we must admit the negro by nature and environment is septic, yet the immunity which he enjoys is to be accounted for in some way.

It may be due to profuse and continued excitement of the emunctories; the cold food he eats, the airy clothing he wears

or probably the natural laws he is compelled to observe. Yet he wears what we do, eats the same food minus the heat, works in the same way, only more arduously, but sleeps *ad libitum*, in hovels and oftentimes with a dozen with him in the same room. But with all this his constitution will resist septic poisons, when the white man will readily succumb. Surgically everything is against the negro. Physically he is operable, and without a peer.

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### A PLEA FOR A MORE GENERAL DISSEMINATION OF SURGICAL TALENT THROUGHOUT OUR COUNTRY TOWNS.

BY DR. BURDETT ATKINSON TERRETT, NATCHITOCHEs, LA.

The fact that surgical procedures—particularly of a serious or grave character—have always been regarded as impossible of execution in our country towns by the majority of practicing physicians in these localities, the idea is quite rife and pretty firmly imbedded in the minds of the laity, that all operations however trivial must needs be performed within the walls of a well-regulated hospital in order to be successful.

This fallacious opinion has gained some credence and even an undue stronghold with many rural practitioners in towns of from 3000 inhabitants and upward, where medical assistance is with facility procured, and where extemporaneous quarters could be easily arranged for the exigency, and, in fact, for most of the surgery which comes in hand.

It is not my intention to attempt to decry the intrinsic merit of, or to underestimate the incalculable advantages of a well-equipped hospital, where trained assistance is in abundance and where exists every conceivable device for facilitating and accelerating work, but I do propose to enter a vigorous protest against the non-handling of much of the surgery by my compatriots, who reside like myself in towns of 3000 people where, as a universal rule, ample assistance might be gotten.

The idea of the impossibility of ordinary surgical work under the conditions heretofore mentioned, is still quite prevalent, and is fostered by a stifling credulity by many rural practitioners which, in itself, inevitably works a deterrent influence and holds in abeyance the young, ambitious and capable graduate with a

surgical proclivity and a desire to manipulate these cases as far as his ability and the environment will permit.

It is an infallible and irrefragable truth that a doctor of good surgical attainment in most of our towns of the population aforementioned who will unshrinkingly and conscientiously seize upon those cases which demand and admit of operative interference, and who will zealously and seriously strive to develop the conditions for surgical service, will find the task less arduous as the work augments, and the experience and compensation which he will receive will assuredly be commensurate with and justify him for the labor expended.

I readily accede to the point that it requires some amount of confidence and courage, as well as indefatigable industry, to enter a community where comparatively speaking surgery is unknown, and where exists, if not an overt hostility against its practice, at least a discouraging attitude by some of the long-resident physicians towards the doctor who would feel disposed to initiate the innovation.

The traditional conception that every case must with celerity be bundled up and forwarded at once to some hospital or sanitarium in a large city, is gradually, but surely, falling into disfavor, and the alleged insuperable difficulties which were supposed to hinder and thwart any form of surgery, are now known not to exist largely and seriously, for the reports which are slowly sifting into medical literature of operations done is incontestable evidence that surgery of a good class is feasible in not a few of our rural cities.

It may not be irrelevant for me at this juncture to define what is meant by a "surgeon of good attainment" hence, a more perspicacious and accurate exposition of this idea may be briefly found in that fact, that I allude to doctors who have passed not less than two years in a thorough-going hospital, for any student of ordinary ability and sound and capable judgment and who possesses alike the proper degree of interest and enthusiasm in his work, will, if his observations have been circum-spect and thorough, emerge well enough fortified and equipped to enter upon the prosecution of the duty herein mentioned.

While I do not intend to disqualify the non-hospital man as totally ineligible or incompetent for such service, for, by post-graduate work and studious attention to this phase or special

department of medicine, some efficiency can be attained, yet I do mean to condemn and contend as partaking of criminality, those who would dare participate in this special line without adequate instruction or some aptitude therefor.

Let there be no misconstruction or misinterpretation placed upon the idea which I mean to convey along these lines, for I should regard the competent man as culpable and no less guilty who would willingly undertake the enucleation of a large adherent tumor of the abdomen, or extirpate the kidney, or uterus or like, without adequate assistance or under imperfect aseptic environment and thus juggle with human life.

I wish to acknowledge here the universal encouragement and assistance which I have uniformly received from all of my professional brethren, not alone in Natchitoches, but in the surrounding country in which a small portion of this work has been done.

It may be well to remark in this connection, that, as a rule, only will minor surgery come first in hand, and it is both opportune and advisable that such occurs, since it subserves the useful purpose of enhancing the operator's confidence and skill; and, secondarily, reacts beneficially upon public sentiment, as a feeling of assurance is gradually established as to the doctor's ability to execute the work, and it also erects a feeling of the possibility of such procedures at home, which, in itself, is a tantamount and vital issue.

The question naturally forces itself for consideration: "Is there sufficient surgery in a town of 3000 to 5000 people to warrant the expenditure of money for a suitable armamentarium and for the giving of special attention to this line of work?" I will answer this emphatically and in the affirmative, provided there is a fair population in the adjacent or immediately surrounding country, and but one doctor will assume this class of practice which as an invariable rule will be found to be the case.

Further on I hope to testify in more substantial terms to the absolute practicability and efficiency of the claim which is herein advocated.

Scarcely is there a surgeon in any large metropolis who confines himself exclusively to surgery; possibly in a few isolated instances such may exist and no medical cases are intermixed with this specialty, but as a standard rule, and which can be

safely asserted, medical cases absorb a certain amount of the surgeon's attention, and this is eminently applicable and forms a stable and firm basis upon which to establish comfort and assurance of healthy activity, since a paucity of surgical cases at times will be combated, or rather counterbalanced by medical work which can be found in the rural city.

What are the factors which militate so tenaciously against rural surgery and which influence so energetically and powerfully its non-prosecution? The answer may be definitely and with precision given in the following trio of causes:

(A) Inability to educate the community to the feasibility of home work.

(B) Insufficient and lack of ample assistance.

(C) Imperfect environment for aseptic technic.

To the first of the prohibitory causes comes the reply that, with self-confidence, industry, carefulness, and a practical comprehension of general surgery, one can eventually reverse the decision and create in turn a healthy and appreciative public sentiment regarding the work at home.

As to the second proposition or postulate, "insufficient and lack of ample assistance," I scarcely consider as a tenable argument or opposite arraignment, for in all rural towns of from 3000 to 5000 people there are at present six to ten, and not infrequently twelve doctors, and surely it is a discredit to any community which can not at least claim three competent assistants.

The third clause formerly was unmistakably the most cogent in derogating from the efficiency and results of rural work, as anti- and asepsis were not brought to that nicety and thoroughness which obtains to-day, and were regarded as impracticable outside of hospitals, but this desideratum of "efficient asepsis" which so vitally concerns surgery is now susceptible of refutation in so far as it involves its non-application in country work, and its rebuttal is found indisputably in the work which is now being performed in not a few of our country towns.

The fact that pyo and pathogenic germs are not in the ascendancy (tetanus bacilli rarely encountered), in other words, are not so numerous and noticeable as in crowded localities, would offer some extenuation should some little indiscretion or oversight be practiced as to the general aseptic technic, for even amid the strenuous and exacting influences of the amphi-

theatre where operations are frequent, the rules of asepsis are semi-occasionally trespassed upon through inadvertence.

This latter is not adduced in defense of, or excuse, a lax and indifferent asepsis, for it should be a bounden duty to endeavor to develop this question at every step, and I merely allude to this phase of the question to show that transgressions of the law are sometimes done, and are made without culminating disastrously in each instance.

It will be an individual of unreasonable and iniquitous bias and temerity who will pronounce as totally unaseptic and unjustifiable the prosecution of ordinary surgery where rubber gloves are employed which have already been subjected to sterilization by boiling, where instruments have been treated likewise and where all dressings and paraphernalia have been submitted to sterilization, and when, too, the patient has previously undergone the regular process of thorough cleansing.

The difficulty of finding a suitable and clean apartment for work in the majority of instances is not a very vexing and annoying element, and the alacrity with which most people in a household will respond and lend their assistance in general work has been in my experience, a most striking and noticeable as well as helpful feature.

Under the status hitherto enumerated I contend that much general work can be done satisfactorily, and that by perfecting the system by careful and vigilant attention to the general details and by tireless industry, the scope of work will become amplified to such an extent as to warrant the erection of a suitable building for those cases alone, and a trained nurse can be brought into requisition.

I have endeavored to abridge as far as practicable and to encompass in as narrow limits as possible, the salient features which are to be maturely considered by those who would aspire to the class of work herein indicated, in other words, those obstacles, which, since time was, were conceived as insurmountable.

Now let us consider cursorily those conditions which would seem to evoke something more than a superficial and casual notice for the plea of rural surgery.

Who will dare gainsay that many a life has been sacrificed in such conditions as suppurative appendicitis, pyo-thorax, hepatic abscess, mechanical obstruction of the bowel, extra-uterine

pregnancy, sub-dural hemorrhage, traumatic conditions of the abdominal viscera, and asphyxia from diphtheria, etc., when, if timely surgical intervention had been instituted, a certain percentage would have recovered?

In this connection let it be implicitly understood that I intend no adverse criticism or reflection upon the judgment or capacity of the rural practitioner, for, indeed, some of the strongest minds are to be found located in these parts, men whose diagnostic acumen and keen medical perception are not transcended by any of their city brethren, but in this instance history simply repeats itself, and the medical man who does not incline agreeably towards surgery, who cares nothing for the work, who feels his incompetency for the emergency, and who is too conscientious to attack those cases, will urge upon the patient to repair to the nearest city, which too often means hundreds of miles, and places in jeopardy his life by making the journey, and where, as is often the case, the patient objects, if not positively refuses to leave; then temporizing or conservative medical treatment is inaugurated, which is the best that can be done—resting the case, as it were, in nature's hands.

When, as is not infrequently the case, the patient defers and latterly accepts his doctor's counsel to consult a surgeon, the conditions will perhaps have progressed to such an extent as to render chances of recovery, despite all of the skill and nursing which can be had, as somewhat meager, when, if surgical attention had been obtained in the very inception of the trouble, the results would have been better.

It is not solely for these desperate conditions that I make the appeal, but for general work, and this general work will be found to be no small and unpretentious item either to the doctor or to the community and surrounding country in which he resides.

There are many patients who are averse to going to hospitals in a large city, and especially true is this of our country patrons, and there are others whose means will not permit them to defray the expenses of a private sanitarium, etc., though willing to go to private institutions and not to regular hospitals; hence, to this class of patients the home surgeon is a positive boon, since he lightens the expense, gains for himself experience and compensation and, in a measure, gives to the patient a few of those home influences which seem to exert a healing effect.



There are some individuals who will not as a rule submit to operative interference at home, just as there are patients who will leave New Orleans for New York, or from New York to Europe, but these are so far in the minority as to offer important argument and it is for the mass and not the class that the claim is herein set forth.

If along these lines the coming graduate will work, who entertains a desire to enter these fields and who is ever watchful and loyal to his duties, he will find himself probably before he is quite aware of it, well into harness and his territory will undeniably expand as confidence is gradually established, and it is right here that I wish to clinch the issue, for inferentially 3000 inhabitants would scarcely seem sufficient to satisfy the demand for surgical endeavor, but the territory will assuredly enlarge, and it is this territorial acquisition which renders propitious a comparatively prolific field for activity.

That a field can be developed—created, as it were—where ripe experience can be gained and remuneration sufficient to satisfy—except those of an inordinate parsimonious tendency—I know to be true.

What is the present status of our young surgical aspirant in a large metropolis? It is not encouraging, to say the least, for competition is so acute, so keen, surgical talent of good order is so conspicuous and plentiful, and the dire fact that most of the surgery is in the hands of the few, makes it a fortuitous accident rather than phenomenal talent when the young aspirant creeps into distinction amid such opposing forces.

Let me in this connection quote from Dr. Dodson (*American Medicine*, Vol. II, No. VIII, August 24, page 295) in his address before the graduating class of the Rush Medical College, Chicago.

His words, which reverberate with so much pregnant truth, are as follows: "Do not despair of attaining to great power and usefulness if your lines are cast in a small city or even in a rural community."

The conditions of the practice of medicine are rapidly changing in such localities.

Twenty-odd years ago, when antiseptic surgery first made possible the invasion of the various cavities of the body, few surgeons except those in large cities possessed the training, the equipment or the surroundings essential to the accomplishment of such operations.

But the young generation of surgeons adequately trained in modern methods, often by hospital experience, are finding their way to these places. Small hospitals are being established, and to-day some of the best and most daring surgery is there being performed.

In a little city of Minnesota of less than 16,000 inhabitants two brothers are accomplishing an amount of surgery equaled by few of their city brethren.

A few weeks ago a friend of mine visited these progressive men and witnessed sixty major operations in one week.

In a little city in Iowa of about 5000 inhabitants a graduate of this college maintains a small hospital and performs annually operations of an amount and character which would do credit to any surgeon of a large metropolis.

These are but examples of a large and increasing class of men who are scattered all over this country and are doing all of the surgery in the localities in which they reside.

If, therefore, your inclination, your special ability and your position lead you in the direction of surgery or gynecology, or any of the special lines of practice, do not imagine that it is necessary to seek a large metropolis to find a suitable field of effort.

It requires no astute discriminating judgment or incisive ability to glean from these utterances a salutary lesson along these lines of medical activity; indeed, it is heralded as a lucid note of admonition to the over-zealous and ultra-ambitious young graduate who is fain to quit urban life, with its opportunities and its seductive environments, where the contest not for supremacy alone but for common maintenance in the field of medicine is severe, and it gives to the earnest worker who is instilled and impelled with the proper idea of his profession, that conscientious endeavor in these small cities will eventuate in no mean success.

As an ardent advocate of this recent departure, I sincerely trust that my motive will not be misapprehended in the tabulated cases which are herewith presented, since they speak more potently than any theoretic deduction which I may adduce, and I present these cases merely to demonstrate that even in such small localities an encouraging amount of work can be found.

With the assistance of my confreres in Natchitoches, I have during this, my first year in private professional work in this little city, performed the following operations. (See table of cases)

## TABLE OF CASES.\*

Laparotomy—Ovarian cysts, 2; appendicitis, 2 (*a*); tubal pregnancy, 1.

Osteotomy—Osteomyelitis of femur, 1; of humerus, 1; of tibia, 1.

Craniotomy—Depressed fracture, 2 (*d*).

Urethrotomy (external)—Impassable stricture, 1; vesical calculus, 1.

Thoracotomy—Pyothorax, 2.

Tracheotomy—Diphtheria, 1.

Skin Grafting—Chronic ulcers, 4 (*b*).

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\*I have especially omitted fractures and dislocations of which, I have had 15, also, incised and lacerated wounds, suppurative conditions like inguinal (bubo) and cervical glands, carbuncles, infected wounds of the hand, etc., as these scarcely deserve to be cited in the table, although, I have admitted circumcision to the list, which, is a very minor operation.

(*a*) Out of this list, I lost 3 cases: 1 case of suppurative appendicitis which died 4 weeks after the operation from the formation of a secondary pelvic abscess; 1 case of diphtheria, upon which I did tracheotomy, survived 36 hours; tubal pregnancy—general peritonitis already present when operation commenced.

(*b*) In 2 cases of skin grafting, one circumcision and amputation of penis I employed the sub-arachnoid injection of cocain, with results in 2 of the 4 cases. In one case of skin grafting in a patient 73 years old, for traumatic ulcer of the leg of 26 years standing, the anesthesia worked admirably and there were no subsequent bad effects. The ulcer healed without incident.

(*c*) These cases were senile cataracts, and, the patients were unable to leave home because of dire poverty. As a matter of charity and because I had done the operation several times before under a well known and skillful oculist, and because these patients were unable to defray their traveling expenses to see a specialist, I performed the operations with fairly good results. Only under the aforementioned conditions would I have attempted to encroach upon this special department. In an old man who was confined to his home, and unable to discern a single thing, not even to find his way about town, I operated for cataract, and he is now moving around town with as much ease and recognizing his friends just the same as before.

(*d*) These 2 cases present several interesting features, which I hope to present later in more detail. One case was of 2 years' standing, the other 6 months; mental symptoms of a pronounced character latterly supervened which were decidedly ameliorated by the operation.

(*e*) These represent various forms of growth occupying the superficial or external portions of the body, such as lipomata, fibromata, epitheliomata, etc.

- Enucleation of the Eyes—Panophthalmitis, 1.  
 Curettage, 12 (endometritis).  
 Colpotomy—Pelvic abscess, 2.  
 Perineorrhaphy and anterior colporrhaphy, 2 (cysts and rectocele).  
 Resection Venle Saphenæ—Varicosity, 2.  
 Extirpation tumors, 25 (*e*).  
 Dilatation os uteri, 6 (stenosis).  
 Extirpation Bartholin glands, 2 (for gonorrhœal suppuration).  
 Arthrotomy for pyo-arthritis, 1.  
 Excision hemorrhoids, 1.  
 Fissure and ulcer of rectum, 2.  
 Dilatation and cauterization, 6.  
 Fistula in ano (excision), 3.  
 Excision of tonsils, 1 (hypertrophia).  
 Tenorrhaphy, 1.  
 Resection first 2, metacarpal phalanges, 1.  
 Amputation of digits, 4.  
 Extirpation polypus of uterus, 1.  
 Amputation penis, 1 (epithelioma).  
 Excision condylomata of anus, 1.  
 Proctotomy and dilatation stricture of rectum, 2.  
 Varicocele (excision), 1.  
 Partial resection fibula, 1.  
 Extirpation tubercular glands, neck, 2.  
 Cataracts, 4 (*e*).

Out of the foregoing catalogue of cases I am forced to chronicle a mortality of 3, which were desperate in the extreme, 2 of which were practically moribund at the period of operative interference.

The table of cases which is herein set forth represents a small minority, and is incomparable to anything like the amount of work which is being annually performed in larger towns and cities by even moderately active doctors in this line; but, in my mind, it affords incontrovertible argument of the possibility of such general work, and, without an adumbration of doubt, clearly evidences that a certain-degree of encouraging activity is to be found in these rural cities.

I will conclude by offering the following summary:

(1) That the traditional and dominant idea amongst many individuals that general and common surgery at this hour in rural cities is impracticable and impossible of execution, is a fallacy.

I want specially in this connection to express my thanks and full appreciation to my warm and personal friends, Drs. Gallion and Stephens, and Mr. Kaffie (medical student), who have so readily extended to me their invaluable and material assistance in the major portion of these cases; also to my friends, Drs. McClean, Janin and Williams, of this city, and Drs. Keator of Bermuda, Waddell of Clarence, and Scruggs of Cloutierville, for assistance rendered in some of these cases.

(2) With the advent and materialization of the highly developed anti- and aseptic technic now in common vogue, surgical cases are amenable to intervention, are scarcely more hazardous since the peril of sepsis is no more imminent, as in other and larger localities, when due care is exercised.

(3) That in towns averaging from 3,000 and upwards and where exists a country not too sparsely settled, sufficient surgery can be found to keep interestingly and encouragingly busy the doctor who is prepared for such service.

(4) That proper assistance can be procured, and that suitable quarters can be made available, by the exercise of ordinary judgment and industry.

(5) That the field for observation, for activity, for reasonable compensation, for the distributing of good and for the development of surgical aptitude to no mean extent can be found largely in many of our rural cities.

(6) The metamorphosis which surgery has undergone during the past quarter of a century, and which has culminated in rendering accessible and easy of execution under ordinary environment procedures which were pristinely regarded as impossible outside of hospitals, should elicit some serious consideration from the young doctor who is surgically inclined, since a field, if not prolific at least moderately full of work, can be found in not a few of our rural cities.

# N. O. Medical and Surgical Journal.

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## Editorial Department.

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CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M.D.

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### PHYSICIANS AS BUSINESS MEN.

Proverbially, physicians are poor business men ; actually they are so if taken collectively, but considered individually, there are brilliant exceptions enough to show that there is no real incompatibility between the practice of medicine and business success. It is quite possible that the high motives which generally actuate the members of the profession are the cause of the trouble. They are taught that their vocation is philanthropic, their mission to relieve human suffering and to eradicate disease ; of course, they must incidentally make a living, and they may expect, if they are very successful and work very hard, to earn a competency. So they live their lives unselfishly, alleviating the pains of others, sharing their sorrows, sometimes deriving joy from their joys, rarely accumulating much of the world's goods. They can not compete with those who are trained to think of themselves first, last, and all the time, whose motto is to get ahead of others by any method which does not make them amenable to the law.

A notable illustration of the lack of business methods on the part of physicians is to be gleaned from the valedictory of the *American Gynecological and Obstetrical Journal*, which recently ceased publication after ten years of existence. The cause of its demise appears to be the lack of appreciation on the part of the profession, or more the lack of financial support, as the statement is made that "over \$30,000 have been lost through unpaid subscriptions." We regret to see an able and clean journal die this way of inanition ; we condole with Dr. Emmet, its editor and proprietor, yet if he will pardon us for so saying, it was doubtless the lack of observance of business principles on his part as well as on the part of so many of

his subscribers which led to the failure. If the subscribers had been handled in a thorough business manner, they would probably have better realized their responsibility and more would have responded with cash. We feel satisfied that the "5000 subscribers" complained of by Dr. Emmet are not dishonest. Yet, as they themselves do not run their affairs on business principles the result is some of them were perhaps unable and the rest too careless to meet their obligations. Any one of the 5000 could probably have collected a fee of \$5, which would have paid his subscription and left a balance, that now will never come in and go in the wrong column of "Profit and Loss."

A temporary embarrassment is one thing and an habitual or slipshod method another. To those under the stress of the former every consideration should be shown; for those afflicted with the latter, the kindest treatment is to be called to time. If made to recognize their just obligations, especially to settle them, they will likely pursue the same tactics with those indebted to them, and the opposite of the vicious circle of careless paying and careless receiving will be established.

In this intensely utilitarian and commercial age, doctors must adopt sound business methods. To charge well and collect systematically is a good plan to follow. People appreciate you more if you value your own services. They pay nearly everybody else better than the physician. The doctor gets less when he saves a human life than the undertaker would have received if he had had the patient to bury, and much less than the lawyer would have charged if he had had the chance to settle the succession. If your services are valuable, make the patient understand and pay them in proportion. Your families will be better off and the profession will have a better business reputation, even if there are a few people less who *say after you are dead*, how kind you were.

## Abstracts, Extracts and Miscellany.

### Department of General Surgery.

In charge of DR. F. W. PARHAM, assisted by DR. F. LARUE, New Orleans.

THE OPERATIVE TREATMENT OF TRAUMATIC INTRACRANIAL LESIONS.—Charles Phelps, in the *New York Medical Journal* of January 11, 1902, discusses the subject of injuries of the skull with special reference to the explorative investigation as to intracranial damage and its relief:

“The operative management of depressed fractures of the vertex in all cases,” he says “was advocated and practised fifty years ago by that eminent surgeon, the late Dr. James R. Wood, who was then opposed by the great majority of his surgical contemporaries. The propriety of elevating depressed bone when no symptoms of intracranial injuries are discernible is, I think, not even yet generally admitted, though accepted by a continually increasing number of surgeons. I have advocated for some years still more radical measures. I believe that even a rational suspicion of the existence of a simple fracture, as in case of hematoma with a history of considerable violence inflicted upon the head, with or without concurrent symptoms of intracranial lesion, demands explorative incision. This procedure is sustained not only by the necessity of exploration for an intelligent appreciation of existing conditions, but by reason of its absolute safety. Unsuspected osseous depressions and most serious, yet remediable, complications have thus been discovered, and where incision has been neglected have often been disclosed on post-mortem examination. It entails no conceivable danger. The matter of infection is within the control of the surgeon and the amount of shock or hemorrhage is inappreciable. I have practised it in a multitude of cases during the past ten years, and when incision has proved unnecessary, have never failed of a primary union. The recovery from immediate shock, a fair constitutional condition, aseptie precautions,



the careful repression of hemorrhage, and the restriction of the wound to the limits required for the purpose are always to be assumed."

In cases of manifest damage to the outer table the indications are clear to explore and carry out the possible intervention. Injury of the internal table is often disproportionate to that of the external, and there may be, beside, damage to the brain or its membranes. "Dural or cortical abscess, cerebral necrosis, epileptic convulsions and multiform disturbances of functional control have been no infrequent results of a so-called conservative policy of inaction."

In the case of an osseous fissure, if this be open, the probabilities of sub-osseous injury are sufficient to demand the exploration; if the fissure be fine and closed, "the probabilities of a more extensive concealed osseous lesion are insufficient to warrant further intervention in the absence of symptoms of intracranial complication." "In the presence of such symptoms "while it will be probable that they are independent of the osseous wound, trephining is indicated at the site of injury, not only because of possible error in this inference, but because it will afford the best chance of reaching and relieving the intracranial complication."

The article then goes on to discuss the general rules of procedure for the treatment of intracranial injuries, which we shall not abstract here, as our purpose has been rather to stress the importance of considering the possibility of intracranial injury in every case of violence to the skull, where the circumstances attending the violence and an examination of the wound do not clearly exclude such possibility. Of course intervention is only to be considered where the region involved and the condition of the patient at the time make such intervention practicable.

"If operation is to be done, the time at which it is to be done may be of vital importance." When shock exists, unless there be a continuing hemorrhage, "no question of operation should be entertained until reaction has been established," and this warning can not be too emphatic.

Where the failure of full reaction or the progressively increasing gravity of pressure symptoms indicates that hemorrhage is going on, the patient's only chance lies in the intervention to check the hemorrhage. It must be borne in mind, however, that

the resort to operation for hemorrhage other than supra or epidural, is of very limited utility. A pial, mistaken for an epidural hemorrhage, has in some instances been successfully treated in this manner. "Such an operation, however, when premeditated, is without adequate reason and can afford no just expectation of success."

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## Department of Obstetrics and Gynecology.

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In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER,

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TREATMENT OF RUPTURE OF THE UTERUS.—Norris has re-reviewed for *Progressive Medicine* an exceedingly valuable article by H. Schmidt upon the above subject. The article is based upon the result obtained in nineteen cases which came under his own observation in Schunta's Clinic. The following general principles of treatment are given: Delivery was accomplished with as little injury to the mother as possible—*i. e.*, when the fetus had escaped into the peritoneal cavity, by laparotomy; when it remained in utero, per vaginam, if this could be accomplished without danger of enlarging the rent already made. Treatment of the case after delivery was determined by the amount of hemorrhage. If there were considerable hemorrhage the treatment was operative. In other cases simple tamponing of the rupture with iodoform gauze was considered sufficient.

Seven of nine cases of incomplete rupture were treated by drainage, two of whom died; giving a mortality of 28.57 per cent. Of ten cases of complete rupture four were treated by operation, six by drainage. The percentage of mortality in these cases was 50 per cent., the same as in the non-operative cases. If the cases are taken according to the method of treatment without reference to the variety of rupture the mortality in operative cases is 50 per cent., in those treated by drainage 38.46 per cent.

From these figures is shown a decided preponderance of favorable results in cases treated by drainage, as compared with those operatively treated—a fact first proclaimed by Piskacek,

Koblanck and others, and recently by E. Schröder, who was the first to study a large series of cases. He gathered 179 cases, one hundred and fifteen of which is of importance in discussing the question of drainage versus operation. A study made it obvious that drainage gives far better results than operation. The question is then asked: what is the reason for the higher mortality in the cases subjected to operation? There are two reasons. First, it was employed for the severe cases in which the child had escaped into the abdominal cavity, and which are very dangerous. The second reason for the greater mortality in operative cases is to be found in the greater liability to infection. It was formerly supposed that the principal sources of danger in uterine rupture were hemorrhage and shock, but sepsis is now generally recognized as the principal cause. Sepsis caused eight deaths, hemorrhage one. That sepsis constitutes the chief danger is confirmed by the fact that the cases of rupture occurring in hospitals afford a good prognosis. No death had occurred in Schuntha's series from sepsis. After discussing the prevention of sepsis and the importance respecting peritoneum, Schmidt states that a broad opening for drainage is already present in these cases and that iodoform gauze serves equally well for drainage and antisepsis. In cases of complete rupture, one can pass the gauze through the rent for a short distance into the peritoneal cavity, and thus not only prevent the prolapse of intestines, but also drain that portion of the peritoneal cavity at the site of rupture. It should be remembered, however, that the gauze is to be used for drainage only, and not for hemorrhage, since, as Fritz remarks, it may be itself the cause of a renewal of hemorrhage. Conservative treatment by means of drainage seems preferable to the purely expectant treatment by rest and the ice bag. The only case which Schmidt treated by the latter method was lost, and he also found in Schröder's collection that such treatment gave a higher mortality than the drainage method. The general conclusion is, that except in those cases in which severe hemorrhage or extensive lacerations make operative treatment imperative, better results will be obtained by conservative treatment. In other words, we should content ourselves with drainage and limit operative procedures as far as circumstances permit.

## Department of General Medicine.

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In charge of DR. E. M. DUPAQUIER, New Orleans.

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STERNO-COSTAL VENOUS FESTOON.—The experience of Thin leads him to reject the common belief that this festoon is associated with emphysema, or with any other morbid affection of the lungs. The condition, once established, becomes permanent, and we may have to look back to youth or boyhood for its time of formation. From an analysis of the habits of young men in whom it is found, Thin is led to look for a history of violent exercise having been taken at irregular intervals; he does not find its occurrence frequent in the ordinary artisan, whose muscular exercise is regular. In other words, the veins are competent to the strain put upon them by severe exertion, so long as they are in "hard" conditions, but not when "soft." The veins affected are those corresponding to the terminal branches of the internal mammary artery, and corresponding roughly, as they do, to the attachment of the diaphragm are apt to be overdistended, when the diaphragm is put into prolonged vigorous action. He considers that there is a special predisposition in the individual, as evidenced by simultaneous dilatation of nemiles on other parts of the body.—*The Practitioner*, November, 1901.

SUDDEN DEATH IN INFANTS FROM HYPERTROPHY OF THE THYMUS GLAND.—This is of common occurrence in babies under two years, and of great interest, chiefly from the medico-legal standpoint. In London (Taylor) 400 infants died, in Paris (Ducrot) 30 to 40 infants died whose mysterious death could not be accounted for. In Vienna (Paltauf) 100 such cases occurred within the year 1887-88. In most cases these infants went to sleep in perfect health and never waked; death in more than one instance came during sleep, so quietly, that the mother resting beside her infant never noticed anything abnormal. Post-mortem examination often proves negative, and up to late years for want of something better, the cause of death was attributed to smothering. But it is known at present that in

such cases hypertrophy of the thymus gland is common, so much so that Brouardel in his standard medico-legal work writes: "It is necessary to always examine the thymus gland of infants whose death was sudden in order to clear at once an innocent person from any suspicions of a criminal act." The cases reported present widely different pictures, but they may be grouped under the following:

1. *Clinical Picture of Laryngismus Stridulus.* The babe has succumbed to a speedy asphyxia. Previously it had had sudden severe attacks, but it had outstood the crisis. In other words, it was suffering from a chronic malady and it died during one of the paroxysms. Post mortem in such cases revealed nothing but hypertrophy of the thymus gland.

2. *Clinical Picture of Sudden Death in Every Acceptation of the Word.* The babe had never shown any sign of the slightest indisposition. It nourished and slept well—see. The little corpse itself has the look of health. It was resting at its best when the tragic end came, and it came so suddenly, so quietly, and how, when witnessed—well, it is a shocking sight! The head fell back, the pupils enlarged, the eye-balls rolled; the chest rose, twice perhaps, and it was all over, noiselessly. There was no inspiratory hissing, as in laryngo-spasm; there was no outcry. No wonder, then, that in some cases, mothers close by could not have been aware of their infant's quiet passing away. Post mortem showed nothing but hypertrophy of the thymus gland.

3. *Clinical picture of progressive Asphyxia.* Death follows after several hours of struggle with pressure and obstruction symptoms (Marfan). Post mortem reveals evidences of asphyxia besides the hypertrophy of the thymus gland, which it seems rational to designate as the primary cause.

In considering the pathogeny of these various cases, it seems clear enough that death resulted from either one of the following causes: spasm of the glottis, arrest of the heart, compression of the trachea. The primary cause, itself, viz: hypertrophy of the thymus gland remains as yet unexplained, and the diagnosis of such a condition is impossible.—*Journal de Méd. et de Chir. Prat.*—*Revue Médicale*, Dec. 28, 1901.

IMPROVED METHOD OF USING GELATIN.—Racchi considers that gelatin given by the rectum in serum solution is more rapidly

absorbed than when given hypodermically. He gives 10 drachms of a warm 2 per cent. solution of gelatin in *normal* serum. Its action is manifest in controlling hemorrhage in from five to ten minutes, and lasts about six hours.—*Gazetta degli Ospedale—The Practitioner*, Nov., 1901.

## Department of Therapeutics.

In charge of DR. J. A. STORCK, New Orleans.

COCAIN PHENATE.—Efele (*Journal des Praticiens*, August 31, 1901) uses cocain phenate in preference to cocain hydrochlorate as a local anesthetic. Its action is more prolonged, and there is less danger of toxic effects. He employs the following formulas:

- (1) For local application in the pharynx and on the tonsils, etc.:

Cocain phenate.....	15 grains.
Absolute alcohol.....	2 $\frac{2}{3}$ drams.

- (2) For hypodermic injections:

Cocain phenate.....	1.5 grains.
Dissolve in alcohol.....	1.5 drams.
Add distilled water.....	1.5 drams.

15 to 45 minims may be used for an injection.

- (3) For powders and inhalation in diseases of the larynx and bronchial tubes:

Cocain phenate.....	1.5 grains.
Menthol.....	5 grains.
Dilute alcohol.....	1.5 minims.

One-fifth of this may be employed in powder daily.

—*American Medicine*.

THE EMPLOYMENT OF PHOSPHORIC ACID AND ITS DERIVATIVES.—Joulic (*Journal des Praticiens*, March 16, 1901) recommends phosphoric acid in cases of hyperacidity of the urine. The following formula may be employed:

Phosphoric acid (official French Codex).....	3 drams.
Boiled water.....	1 quart.

1 or 2 teaspoonfuls in a wineglass of water before meals. This dose may be increased or diminished according to the degree of hyperacidity.

The following solution may also be used:

Sodium phosphate pure.....	4 ounces.
Phosphoric acid (official French Codex).....	2 ounces.
Distilled water, enough to make.....	1 quart,

Roussel states that albuminuria, rachitis, scrofula and neurasthenia are greatly benefited by hypodermic injections of phosphorus used as per the following formula :

Pure phosphorus.....	6 grains.
Eucalyptol.....	5 drams.
Sterilized oil, enough to make.....	$\frac{3}{4}$ ounces.

A daily injection of 16 minims of this solution may be made for 5 days, then stopped for 5 days, and again renewed. Each injection contains  $\frac{1}{15}$  of a grain of phosphorus. Should this amount prove too active, it would be well to begin with  $\frac{1}{65}$  of a grain of phosphorus to each injection. Subcutaneous injections of sodium phosphate in 5 per cent. solution are also recommended by Roussel for the diarrhea of tuberculosis.—*Ibid.*

TREATMENT OF NEURASTHENIA.—Mauricede Fleury (*Journal des Practiciens*, August 3, 1901), after reviewing the role of psychotherapy in neurasthenia, believes that isolation is rarely necessary in the treatment of this disease. When the patients' surroundings tend to aggravate their condition it is well to isolate them. Exercise should be recommended if the patient is strong. A moderate amount of intellectual work should also be permitted. In case of feebleness, with lowered arterial pressure, impaired nutrition and depressed mental condition, the treatment should combine rest, plenty of fresh air, progressive super-alimentation, and stimulation of the nervous system and of the nutrition by saline injections.—*Ibid.*

TREATMENT OF ASTHMA IN CHILDREN.—Kissel reports a number of cases of bronchial asthma in children aged from six to fifteen years. He obtained excellent results from sodium iodide, first recommended by Trousseau. Not only the individual symptoms, but the general condition as well improved markedly under this treatment.—*Merck's Archives.*

FORMULA FOR CHAFING.—For chafing about the groins and under the arms in children, Dr. R. B. Elderice recommends the following formula :

Ichthyol.....	1 dr.
Comp. tinct. benzoin.....	1 dr.
Boric acid (finest power).....	1 dr.
Petroleum.....	1½ to 2. oz.

Apply to each change of napkin.

—*Ibid.*

PYRAMIDON CHAMPHORATE IN NIGHT SWEATS.—Drs. B. Lyonnet and Lancon have used the drug in fifteen tuberculous patients for its effects on night sweats. The results were good. The sweats ceased and the patients generally felt better. The dose administered were 8 grn. twice a day in cachets, but this dose may safely be exceeded. With but rare exceptions the pyramidon camphorate is well borne.—*Ibid.*

SULPHUR IN DYSENTERY.—Dr. G. E. Richmond treated two cases with 20 grn. of sublimed sulphur with 5 grn. of Dover's powder every four hours, with good results. It is no specific, but a welcome addition to our remedies. As soon as the diarrhea diminishes, less frequent doses should be given, otherwise obstinate constipation will follow. The remedy seems to exert an antiseptic action.

Pain and tenesmus are relieved by sulphur more effectually than under other methods of treatment. Moreover, the cure obtained seems to be more lasting, the disease showing less tendency to become chronic or to relapse. Bloody and mucous stools rapidly give place to fecal evacuations, and the odor of the feces becomes less offensive, though the number of movements does not at once diminish.—*Ibid.*

IN INTESTINAL PARALYSIS FOLLOWING OPERATIVE PROCEDURES within the abdominal cavity, give a high enema consisting of sulphate of soda, sulphate of magnesia, inspissated ox-gall, 2 drachms each, and turpentin, 1 drachm, in a pint of water. The prompt use of this injection has saved many lives.—*International Journal of Surgery.*

TRACHEO-BRONCHITIS IN CHILDREN.—The following is recommended by Marcan, in *Medical Press and Circular*, in cases in which irritation and cough is proportionately greater than the inflammation :

℞ Syr. aurantii (flores)..			
Syr. codeinæ .....	aa	ʒi	32
Tinct. aconiti .....	m	xii	75
Aqua .....	ʒ	ii	

M. Sig.: One teaspoonful daily for a child of three months, to be increased according to the age of the child.

—*Jour. of the American Med. Assn.*



## TREATMENT OF ACUTE ALBUMINURIA AFTER SCARLET FEVER. —

The following is recommended by Otto Maier, in the *Post-Graduate*:

℞ Pilocarpin hydrochlor .....	gr. i	06
Infusion digitalis .....	ʒiii 9c	

M. Sig.: One teaspoonful every three hours.

He also recommends that a hot bath be given daily and a diet consisting of milk and ice cream. To promote elimination by the bowels gives the following:

℞ Hydrarg. chloridi mitis.....	gr. iiss.	15
Pul. jalapae.....	gr. ivss.	

M. Ft. chart. No. i. Sig.: One such to be taken twice a week.

—*Journ. of the American Med. Assn.*

## Department of the Ear, Nose and Throat.

IN charge of DR. A. W. DEROALDES and DR. GORDON KING,

New Orleans.

### NASAL NEURALGIA THE RESULT OF GALVANO-CAUTERIZATION.—

Lermoyez publishes in the *Archives Internationales de Laryngologie d'Otologie de Rhinologie*, July-August, 1901, an interesting observation of a case of hypertrophic rhinitis in which the usual treatment by means of the galvano-cautery was employed, and which later developed a painful infraorbital neuralgia. The cicatrix on the inferior turbinate, the result of the cauterization, was found to be very hyperesthetic, and when touched with a probe gave rise to severe infraorbital pain on the corresponding side. The neuralgia was relieved permanently by excision of the cicatrix.

INJECTION OF PARAFFIN IN RHINOPLASTY.—Broeckaert, of Gaud, writes encouragingly of his experience in this new method of plastic surgery as applied to deformities of the nose. He reports four cases in which he employed injections of paraffin subcutaneously, according to the method of Eckstein, for irregularities in the shape of the nose, and the results were highly satisfactory. Eckstein's method differs from that of Gersung, in that

he makes use of solid paraffin instead of vaselin or the vaselin-paraffin mixture. It has the advantage of being less fusible and of solidifying quickly when injected. It can be readily sterilized and is not absorbed by the tissues, remaining permanently encysted and giving rise to no danger of embolism. To correct the deformity of a sunken nose the paraffin is melted and injected subcutaneously at the depressed part, and as it hardens in the tissues is molded to correct the deformity. This is considered an important advance in plastic surgery of the face.—*Revue Hebdom. de Laryngologie*, etc., Dec. 7, 1901.

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## Department of Ophthalmology.

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In Charge of DRs. BRUNS and ROBIN, New Orleans.

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THE USE OF POTASSIUM IODIDE.—In the November, 1901, number of the *Pennsylvania Medical Journal*, Dr. Edward Stieren, of Pittsburg, reports a case of gumma of the ciliary body that carries a useful lesson. The patient, a young married woman, was the victim of tertiary syphilis, and was afflicted with a large gummatous tumor of the right upper ciliary region, and, of course, severe inflammation of this eye and almost complete loss of vision. There was also the common syphilitic complication of paralysis of an external rectus. Fortunately, the patient bore the potassium iodide well; and fortunately her physicians pushed the drug vigorously and without regard to the amount exhibited so long as tolerance lasted. From December 24 until January 16 the condition of the eye grew worse, although at the latter date the patient was taking 180 grains of the drug *t. i. d.* On January 19 the patient taking 200 grains showed the first signs of real improvement. By the 1st of May the tumor had entirely disappeared, the eye looked well nigh normal and vision was practically perfect. This completely accords with our experience of the use of the iodide for eye affections due to late syphilis and especially in all forms of choroiditis and opacities of the vitreous. If the drug is well borne we may accomplish great results, but doses of less than one drachm

*t. i. d.* have seemed to us usually worse than useless. As Dr. Stieren well says, "no limit in dosage need be thought of." The amount that the patient can and will take should "be aye your border" and the dose be rapidly and relentlessly pushed. In our experience most persons take best after meals and the pure drug is less disagreeable than mixtures designed to disguise its taste. High dilution of the salt and the free drinking of water render it most tolerable—Turkish baths or hot baths at bed time with a dose of jaborandi increase the efficiency and also aid toleration. We believe it to be the experience of all who have made great use of the drug that small doses are more likely to produce the peculiar disagreeable effects, running of nose and eyes, sore throat from the headache, nausea, etc., of the iodide than massive doses. When the patient cannot or will not take the pure salt dissolved in water the excipients that may prove of use are legion and will vary in each individual.

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### Miscellaneous.

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SUBSTITUTION.—The *Medical News*, at some length, discusses substitution in the December 14, 1901, number. This with particular reference to the *Farbenfabriken* of Elberfeld Company, who have lately suffered from a wholesale and flagrantly criminal substitution of their products. This was fathered in Detroit, and bogus preparations were sold all over the country put up in boxes, with labels, etc., to counterfeit the originals. The JOURNAL has given much space and time to the consideration of this subject, and we realize some efficient punishment should be provided for these malefactors.

A DEVICE FOR IRRIGATING THE MALE BLADDER is described by Dr. U. S. Bird, of Tampa, in a recent number of the *Medical Record*.

What advantage it exhibits lies in the addition of a bulb to a gravity irrigating apparatus for a specific purpose.

To sum up, the writer has noted the following points of excellence in the use of his device:

1. There is greater safety from infection than when instruments are passed into the bladder.

2. The possible pain and nervous reaction are more tolerable than when either intravesical instrumentation or gravity alone, as a motive power, is used.

3. It is more certain than gravity alone as a motive power.

No claim to priority is made, as the writer says he is not sufficiently versed in the literature on the subject. The device is original with the author, as may appear from the steps in its evolution.

ACCORDING TO STENGEL (*American Journal of the Medical Sciences*, August, 1901) pulmonary embolism following the use of ether or chloroform as anesthetics is generally the result of pre-existing disease of the myocardium. It occurs more frequently after operations for uterine myomata than under any other circumstances, the sequence of events being: thrombus of the pelvic vessels, pulmonary embolus, pneumonia, death. Sometimes these events follow one another with astonishing rapidity. The role played by the heart in this process is that of a predisposing cause.

He further states that fatty degeneration of the myocardium after chloroformization must be an occurrence of the greatest rarity, if, indeed, it ever happens. This is indicated by the thousands of chloroformizations in which no suspicion or subsequent trouble of that nature arises. The direct and rapid entrance of the inhaled chloroform into the blood would certainly produce such a result frequently, if the drug is ever capable of producing fatty degeneration of tissues.

## Louisiana State Medical Society Notes.

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DR. T. E. SCHUMPERT, Shreveport, President; DR. HERMANN B. GESSNER, 124 Baronne street, New Orleans, Recording Secretary.

Next meeting at Shreveport, June 2-5, 1902.

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MEMBERS WHO HAVE NOT RECEIVED THEIR 1901 TRANSACTIONS will notify the secretary, Dr. Gessner.

THE CHAIRMAN OF THE COMMITTEE OF ARRANGEMENTS, Dr. Oscar Dowling, Shreveport, urges chairmen of sections to send in titles for discussion for early publication.

The following titles for discussion and papers connected therewith are announced for the coming meeting:

*Section on General Medicine.*—Dr. Whyte Glendower Owen, chairman, White Castle, La.—A Symposium on Tuberculosis in Louisiana:—

(1) Vital Statistics of Tuberculosis in Louisiana, Dr. G. Farrar Patton—Orleans Parish.

(2) The Transmission of Tuberculosis, Dr. Whyte Glendower Owen—Iberville Parish.

(3) Education of the People as a Factor in the Prevention of Tuberculosis, Dr. Fred. M. Thornhill—Bienville Parish.

(4) Climatic Treatment of Tuberculosis, Afforded in Louisiana, Dr. P. E. Archinard—Orleans Parish.

(5) Medical Treatment of Tuberculosis and Its Results, Dr. Charles McVea—East Baton Rouge Parish.

(6) Tuberculosis Among Our Negroes, Dr. John M. Barrier—Richland Parish.

(7) General Discussion by the Society.

*Section on Dermatology.*—Dr. Isadore Dyer, chairman, New Orleans. The Importance of Diagnosis in Skin Diseases. Considered generally and as applied to Particular Diseases.

*Section on Genito-Urinary Diseases.*—Dr. Chas. Chassaignac, chairman, New Orleans. Varicocele.

## Orleans Parish Medical Society.

The following officers for 1902 were inaugurated on January 14: Dr. H. B. Gessner, president; Dr. E. J. Graner, first vice-president; Dr. S. P. Delaup, second vice-president; Dr. Gordon King, third vice-president; Dr. I. I. Lemann, secretary; Dr. J. A. Storek, librarian; Dr. W. H. Seemann, treasurer; Drs. John Callan, L. G. LeBeuf, E. D. Martin, members board of directors.

The following standing committees were appointed by the president:

*Judiciary.*—Drs. W. M. Perkins, chairman; E. H. Walet, M. J. Magruder, M. M. Lowe, Jules Lazard, M. W. Rainold.

*State Medicine and Legislation.*—H. D. Bruns, chairman; E. S. Lewis, J. B. Elliott, E. L. McGehee, C. Chassignac, W. T. O'Reilly.

*Library.*—M. H. McGuire, chairman; O. L. Pothier, A. Nelken, T. S. Dabney, J. J. Ryan.

*Conference.*—R. Matas, chairman; W. Kohlmann, F. W. Parham, A. W. DeRoaldes, J. D. Bloom, E. Souchon, Philip Asher.

*Scientific Essays, Reports and Discussions.*—F. A. Larue, chairman; J. Barnett, E. J. Huhner, C. N. Chavigny, E. Moss, H. J. Dupuy.

*Publication.*—I. I. Lemann, chairman; W. H. Seemann, S. L. Théard.

## Medical News Items.

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HEALTH OF HAVANA.—The Chief Sanitary Officer of Havana, Maj. W. C. Gorgas, reports for December, 1901:

The last month of the year, 1901, shows the same steady improvement in general sanitary conditions that has been going on for the other months. The number of deaths, 463, gives a death rate of 20.47. In December, 1900, there were 485 deaths, giving a death rate of 23.28. Since last December the population of Havana, outside of the ordinary increase, has been augmented by the incorporation of the suburb of Regla.

Taking the last nine years of Spanish rule, from 1890, to 1898, inclusive, we find that the minimum number of deaths for December occurred in 1893, when there were 517, with a death rate of 28.32; the maximum, 1924 deaths, in 1897, giving a rate of 100.08 per 1000.

Taking the three years of American occupation, we have for December, 1899, 534 deaths; for December, 1900, 485 deaths, and for December, 1901, 463 deaths, showing a progressive decrease, which is the best indication of the general sanitary conditions of the city, and places Havana in the class of healthy cities of the civilized world, having an equal population.

Very few cases of infectious diseases occurred during the month and not a case of either yellow fever or small-pox. The last case of small-pox occurred in July, 1900, and the last case of yellow fever on the 28th of December, 1901. There were but four deaths from typhoid fever during the month.

But the matter most deserving of comment is the entire disappearance of yellow fever during this month and the two preceding months. This has never occurred in Havana before, and taken together with the record of the year, seems to confirm the claim that yellow fever has been rooted out of Havana, after more than a century of continuous existence here.

Taking December from 1890 to 1900, inclusive, we find the minimum number of deaths from yellow fever to have been 8 in 1897; the maximum, 147, in 1896; the average for the eleven years, 29.90. For 1901, there were no cases and no deaths. We have fairly accurate records of the deaths in Havana from

yellow fever from the year 1871, and these tables show the figures for December to average about the same as those quoted above.

Again:—Considering the yellow fever year as commencing April 1, and comparing the same eleven years, the minimum number of deaths for the nine months was 101 and occurred in 1899; the maximum 1,262, in 1896; the average 440. This year we had only five deaths in that period; that is, this year we had only 1-20 of the lowest recorded number of deaths from this disease. The chart in the body of the report brings out well the relations of the various years.

Again:—If we take the months of October, November and December from 1890 to 1900, inclusive, we find that the smallest number of deaths for these months is 52, in 1898; the largest, 631, in 1896, and the average 144.54. In 1901, for the same period we had no deaths. 1901 is the only year in which any attention has been paid to mosquitoes, in connection with yellow fever. In the two preceding years of American occupation, 1899 and 1900, every means known to science, and which money could command, backed by unlimited military authority, was used to destroy fomites, on the theory that fomites were the means of propagating yellow fever. In 1901, the same efforts were directed to the destruction of mosquitoes, on the theory that the mosquito is the only means of propagating this disease, and the hygiene of yellow fever was carried out from this point of view, the effort to destroy fomites having been entirely laid aside.

THE LOUISIANA STATE BOARD OF HEALTH, impressed with the importance of determining, as nearly as possible, the extent to which tuberculosis prevails in Louisiana adopted at the special meeting of January 4, the following resolution:

*Be it Resolved*, That a circular letter be sent to each registered physician in the State requesting him to fill in the accompanying blank relative to tuberculosis in his practice, and return same to the Secretary of the State Board of Health; said report to be filed in the archives of the Board and be considered a confidential communication.

It is hoped to compile fairly reliable statistics based on the reports received, so as to make a proper showing of the healthfulness of the State, but the individual reports will be seen only by the proper officers of the State Board of Health.



DR. GORDON KING was recently made a member of the American Laryngological Association. This is a high distinction, as this association is among the oldest and most conservative of those composing the American Congress. Excepting Dr. A. W. de Roaldes, Dr. King is the first to receive this honor in New Orleans.

DR. VESTA M. SWATS, of Auburn, Indiana, has been doing post-graduate work at the Polyclinic the past two months.

THE BROOKLYN MEDICAL JOURNAL, with the beginning of the Sixteenth Volume, has appeared in new form, following the style of the larger weeklies. Dr. F. D. Bailey, the efficient business manager, has resigned on account of the increasing demand upon his professional time. We wish the *Journal* continued success.

MARINE HOSPITAL SERVICE NOTES.—A. H. Glennan, Surgeon, and G. M. Guiteras, Passed Assistant Surgeon, have been detailed to represent the U. S. M. H. S. at the meeting of the International Sanitary Conference at Havana, Cuba, February 15.

THE MOBILE MEDICAL AND SURGICAL JOURNAL made its appearance in January. Its initial number presents a clean cover, in grey, with only the title of the *Journal* and the announcement of the editor, Dr. E. L. Maréchal, and the business manager, Mr. Stuart McRae.

Several articles of merit are published and the editorial declaration that the *Journal* is in accord with ethics and good manners is thoroughly sustained by the general character of the first number. We welcome our sister effort to the field of medical letters.

ONE THOUSAND DOLLARS, FIRST PRIZE, and a second prize of five hundred dollars, in cash are offered for the best essays on Preventive Medicine by the Maltine Company, Brooklyn, N. Y.

THE NEW ORLEANS POLYCLINIC.—The following physicians were matriculated at the New Orleans Polyclinic in December and January: From Mississippi—Drs. E. B. Partin, H. L. Lewis, B. W. Inman, L. E. Robinson. From Texas—Drs. E. B.

House, J. B. Gordon, W. G. Elliott, W. E. Wills, H. R. Ammons, J. M. Watkins, M. W. Pitts, J. M. Blackwell, O. D. Radney, W. T. Brown, B. E. Hudgins, I. T. Clemons, J. S. McKown, C. F. Ulmer. From Arkansas—Drs. G. P. Sanders, W. M. Gibson, R. A. Hilton. From Louisiana—Drs. F. P. Jones, R. D. Wilson. From Kansas—Dr. W. H. Lyle. From West Virginia—Dr. D. H. Thomas.

AMERICAN MEDICINE ANNOUNCES it will have special departments and gives a list of those who will have the individual subjects in charge.

DIED.—Dr. Emile Sauter, aged 35, at Covington, Sunday, December 22, 1901.

RAPIDES (LA.) PARISH BOARD OF HEALTH met January 10 and held a meeting on routine business. It was resolved to meet the first Wednesday after the first Monday of each quarter.

FOR THE CONVENIENCE of our readers in forming an opinion on the important subject of national sanitation and health, we publish in full the "Perkins Bill," as introduced in the Senate of the United States, December 19, 1901.

A bill to increase the efficiency and change the name of the United States Marine Hospital Service.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the United States Marine Hospital Service shall hereafter be known and designated as the United States Health Service, and*

The Supervising Surgeon-General and the officers now or hereafter commissioned under Act of January fourth, eighteen hundred and eighty-nine, entitled "An Act to regulate appointments in the Marine Hospital Service of the United States," are hereby designated as the Surgeon-General, surgeons, passed assistant surgeons, and assistant surgeons of the United States Health Service; and

The salaries and allowances of said officers, the Surgeon General excepted, shall be the same as now allowed by regulations of the Marine Hospital Service.

Acting assistant surgeons, hospital stewards and employees shall be continued in employment under the United States

Health Service, and shall be employed hereafter under the regulations of said service.

Nothing in this act shall be held or construed so as to discharge any officer or employee now serving in the Marine Hospital Service or to deprive any officer of his commission.

The care of sick and disabled seamen and all other duties now required by law to be performed by the Marine Hospital Service shall hereafter be performed by the United States Health Service; and

All funds and appropriations now provided by law for use by the Marine Hospital Service and all properties and rights pertaining to said service are hereby made available for use, for like purposes and in like manner, under the Treasury Department, by the United States Health Service.

SEC. 2. That the salary and allowances of the Surgeon-General of the United States Health Service shall be the same as now allowed by law to be paid to the Surgeon-General of the Army.

SEC. 3. That commissioned medical officers, when detailed by the Surgeon-General for duty in the United States Health Bureau at Washington, District of Columbia, in charge of the administrative divisions thereof, namely, marine hospitals and relief, domestic quarantine, foreign and insular quarantine, personal and accounts, sanitary reports and statistics, and scientific research, shall, while thus serving, be assistant surgeons-general, United States Health Service, but

Their pay and allowances shall be the same as now provided by regulations of the Marine Hospital Service for officers in charge of said divisions; and

The senior officer thus serving shall be the assistant within the meaning of section one hundred and seventy-eight, Revised Statutes of the United States.

SEC. 4. That the President is authorized, in his discretion, to utilize the United States Health Service in times of threatened or actual war, and

The commissioned medical officers of said service, while thus serving, or while serving on boards or otherwise, brought into official relations with medical officers of the Army or Navy, shall have rank as follows: The Surgeon General ranking with and after the Surgeons General of the Army and Navy; assistant surgeons general ranking with and after assistant surgeons general of the Army and medical directors of the Navy; sur-

geons with and after surgeons of the Army having rank of major, and of the Navy having rank of lieutenant commander; passed assistant surgeons with and after assistant surgeons of the Army having rank of captain, and of the Navy having rank of lieutenant; assistant surgeons with and after assistant surgeons of the Army having rank of first lieutenant, and of the Navy having rank of junior lieutenant.

SEC. 5. That there shall be an advisory board for the hygienic laboratory provided by the Act of Congress approved March 3, 1901, for the purpose of conferring with the Surgeon General of the United States Health Service relative to the investigations conducted in said laboratory.

Said board shall consist of the Surgeon-General of the Army the Surgeon-General of the Navy, the chief of the Bureau of Animal Industry of the Department of Agriculture, and the director of the said laboratory, who shall be ex-officio members of the board and serve without additional compensation;

And five other members, to be appointed by the Secretary of the Treasury on recommendation of the Surgeon-General of the United States Health Service,

Who shall be skilled in laboratory work in its relation to the public health, and

Not in the regular employ of the Government.

The said five members shall each receive compensation of ten dollars per diem while thus serving,

Together with allowance for actual and necessary traveling expenses and

Also hotel expenses while in conference,

Said conferences not to exceed ten days in any one fiscal year.

The period of service of the first five of the members not in the regular employment of the Government shall be so arranged that one member shall retire each year,

The appointments thereafter to be for a period of five years.

Appointments to fill vacancies occurring in a manner other than as above provided shall be made for the unexpired term of the member whose place has become vacant.

SEC. 6. That the President shall appoint and commission one chemist, one medical zoologist, and one pharmacologist whenever in the opinion of the Surgeon-General commissioned officers of the United States Health Service are not available for this duty by detail,

Who shall be in charge of the divisions, respectively, of chemistry, zoology, and pharmacology of the hygienic laboratory, and shall each have the pay and emoluments of a surgeon of the United States Health Service and

Be subject to the regulations of said service.

The director of the said laboratory shall be an officer detailed from the corps of commissioned medical officers of the United States Health Service as now provided by regulations for such detail from the Marine Hospital Service, and

While thus serving shall have the pay and emolument of a surgeon.

SEC. 7. That when in the opinion of the Secretary of the Treasury the interests of the public health would be promoted by a conference with the State or Territorial boards of health or health authorities, the District of Columbia included, the Surgeon-General of the United States Health Service is hereby authorized, with the approval of the Secretary, to invite one or more of said boards of health or authorities to send delegates, not more than one from each State or Territory and District of Columbia, to said conference, and

When thus convened said delegates shall be entitled to reimbursement for their necessary expenses of travel and of maintenance not exceeding five days at the place of conference, in accordance with such regulations as may be made by the Secretary of the Treasury.

SEC. 8. That to provide uniformity in the registration of mortality, morbidity and vital statistics it shall be the duty of the Surgeon-General of the United States Health Service, after conference with the State boards of health, to prepare the necessary forms for the collection and compilation of said statistics, and said statistics, when transmitted to the United States Health Bureau on the approved forms, shall be compiled and published by the United States Health Service as a part of the health reports published by said service.

SEC. 9. That the President shall from time to time prescribe rules for the conduct of the United States Health Service.

He shall also prescribe regulations respecting its internal administration and discipline, and

Shall prescribe the uniforms of its officers and employees;

And the Surgeon-General shall transmit annually to Congress, through the Secretary of the Treasury, a report of the transactions of said service.

## Book Reviews and Notices.

*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

*Climatology and Health Resorts, Including Mineral Springs, Two volumes, with colored maps. By F. PARKES WEBER, M. A., M. D., F.R. C. P., London; and GUY HINSDALE, A. M., M. D., Philadelphia. With a special article on the Climate of Hawaii by DR. TITUS MUNSON COAN, of New York. P. Blakiston's Son & Co., Philadelphia, 1901.*

These are volumes III and IV of the System of Physiologic Therapeutics edited by Solomon Solis Cohen, A. M., M. D. Volume III treats of the principles of Climatotherapy, ocean voyages, Mediterranean, European and British health resorts. Volume IV treats of health resorts of Africa, Asia, Australia and America. It also includes an interesting article on the Hacorahan Islands. It closes with a sort of catalogue of special therapeutics or Climatotherapeutics. This is a timely and useful compilation. Practitioners in general lack information on this all-important subject in modern practice, and with this treatise at hand we can, if consulted, furnish proper directions and accomplish some good work in many cases where drug-giving is useless and at times harmful.

Regarding New Orleans, some of the statements ought to be revised in the light of recent events. *It is a fact that New Orleans is no more liable at present to epidemics of yellow fever and cholera than either Philadelphia itself or New York. "Good drainage is not well nigh impossible"* (italics ours) as heretofore in New Orleans; and as regards malaria, "the scourge of the land," the mosquito has every facility for propagation elsewhere just as well as in New Orleans, as stated. Moreover, the death rate from paludal diseases is not so high in New Orleans as stated. Such inaccurate information as the above, to say the least, should not appear in a book that claims to be up to date. Aside from these remarks on this State, the work can be recommended as a very useful one. Each volume has a good index. The maps have been prepared by Dr. W. F. R. Phillips, of the U. S. Weather Bureau, Washington, D. C.

DUPAQUIER.

*A System of Physiologic Therapeutics; A Practical Exposition of the Methods other than Drug-giving, Useful in the Treatment of the Sick, Edited by SOLOMON SOLIS COHEN, A. M., M. D. Vols. I and II. Electrotherapy. By GEO. W. JACOBY, M. D. P. Blakiston's Son & Co., Philidelphia, 1901.*

These two volumes form part of a System of Physiologic Therapeutics, and, while each book is complete in itself, the individual book has been

written and edited with relation to the integral whole. The arrangement of the study of the physiologic action and the therapeutic application of the different measures preceding the consideration of the special diseases for which these means are advised, is to our mind a happy one.

While the work is large—eleven volumes—it is essentially practical; certain encyclopedic features are absent; history receives but brief mention, and references to literature are not frequent.

Through the medium of this work it is possible for the general practitioner to become thoroughly acquainted with all the electrotherapeutic measures, and the means by which they may be applied. Dr. Solomon Solis Cohen opens the first volume with "A Foreword to the System of Physiologic Therapeutics." The preface follows, by Dr. Geo. W. Jacoby, the author of the first two volumes. He points out the fact that electricity is acquiring more importance every day to the medical practitioner,

Part I, Chapter I, Volume I, deals with Electrophysics. The two-fluid theory of Symmer is dismissed with a few words; the one fluid theory of Franklin, which is now adopted by electricians, is used exclusively.

From Chapter II to Chapter VI., inclusive, the author treats of the different electro-motor forces.

In Part II, under the heading of Frictional Electric Apparatus and its Use, Dr. Jacoby says: "For the use of static electricity any good influence machine, the type of which is represented by the Holtz machine, will suffice; yet, in order to obtain the best results from a machine, attention must be paid to its construction, to the size and number of its plates, to the method of driving it, and to its proper care." Each of the points mentioned above is taken up in this chapter and explained in plain language.

From Chapter II (Galvanic Apparatus and its Use), we extract the following: "As many of these appurtenances are essential for the application of all forms of current, no matter what their source, constant, magneto, or volta induced, sinusoidal, and high frequency—it will be more convenient, in order to avoid repetition, to begin by describing the accessory apparatus, and then to give a description of the medical apparatus itself as employed for the generation and application of the different currents." This is an excellent arrangement, as it familiarizes the physician with his apparatus.

Chapter III discusses Sources of Current Supply for Diagnostic and Therapeutic Purposes and the Apparatus for its Use, and Chapter IV, Apparatus for Altering Electro-motive Force.

Chapter V treats Röntgen Rays or X-Rays Apparatus for the Production of Skiagram and for the Transillumination of the Body by means of Röntgen Rays. Volume II opens with part III, Chapter I, Electrophysiology and Electropathology.

Chapter I deals with the Physical Compartment of the Electric Current in the Human Body.

Chapters II, III, IV, V and VI treats the following subjects: Electrophysiology of Motor Nerves and Muscles; Electropathology of Motor Nerves and Muscles; Electrophysiology and Electropathology of Sensory

Nerves and Reflex Contraction; Electrophysiology and Electropathology of Nerves of Special Sense and Vasso-Motor and Secretory Nerves, and Electrophysiology of the Central Nervous System.

Chapter VII deals with the Physiologic Action of Sinusoidal and High Frequency Currents; Chapter VIII, with Injuries Due to the Electric Current. Burns and Death by Electricity are briefly discussed.

Part IV embraces Electrodiagnosis and Electro-Prognosis. In Chapter I, the part dealing with the motor points is particularly plain, illustrations being used profusely.

Chapters II and III contain treatments of Principles of Electrodiagnosis and Electroprognosis of Diseases of the Motor Apparatus, and Diagnostic and Prognostic Implications of Alterations of Resistance, Disorders of Cutaneous and Muscular Sensibility, and of Anomalous Reactions of Nerves of Special Sense.

In Part V., Electrotherapeutics, Section I. treats General Electrotherapeutics. Chapters I, II and III include respectively Theoretic Basis of Electrotherapy, General Methods and Effects and Methods of Application of the Various Forms of Current. Section II deals with Special Electrotherapeutics. In chapter I, occurs Electric Treatment in Diseases of the Motor Nerve and Muscles; in chapter II, Electric Treatment of Diseases of Muscles and Joints.

In chapter III, Electric Treatment in Diseases of Sensory Nerves, the author says: "The benefits obtained from the use of electricity in many forms of neuralgia are so decided and so evident that even the most pronounced opponents of the therapeutic value of electricity cannot avoid seeing and acknowledging them. Chapters IV, V and VI include Electrical Treatment in Diseases of the Central Nervous System; Diseases of the General Nervous System without known Anatomic Basis; and Electric Treatment in Diseases of the Thoracic and Abdominal Organs.

Addenda: Electrolysis, Cataphoresis and X-Ray Therapy. In electricity in Diseases of the Eye, Dr. Edward Jackson points out in a clear, succinct manner the few conditions in which electricity is useful in diseases of the eye.

The article on The Application of Electricity in Diseases of the Nose, Throat and Ear is from the pen of our fellow-townsmen, Dr. Wm. Scheppegrell. The doctor is well known in New Orleans as an electrician and his article, while not lengthy, is to the point.

Electricity in Gynecology, by Dr. Franklin H. Martin, gives much valuable information in small compass.

The Electric Therapeutics of Skin Diseases is by Dr. A. H. Ohmann-Dumesnil. The doctor calls attention to the fact that in the treatment of carbuncle the application should be made in their incipiency.

The different articles show careful condensation; at the same time nothing essential is omitted. These two volumes are a storehouse of valuable information. We most heartily commend this work as the best of its kind, far surpassing any previous publication with which we are acquainted.

The typographic work is of a high order, and, taking the work as a whole, it deserves every success which its painstaking promoter merits.

STORCK.



*International Clinics*, Vol. III, Eleventh Series. J. B. Lippincott Company, Philadelphia, 1901.

This volume speaks highly for the usefulness of this publication, and more than once we were pleased to point out the practical value of the articles published in the preceding volumes. By far the dominant subject in the present volume is "Photo-therapy after Finsen's Methods," where illustrations and demonstrations are rife. The volume closes with a more modest article within the reach and scope of the general practitioner, *The Clinical Laboratory in Private Practice and in the Physician's Office*. We cannot but praise this publication.

DUPAQUIER.

*The Principles and Practice of Medicine*. By WILLIAM OSLER, M. D. Fourth Edition. D. Appleton & Co., New York, 1901.

It affords us much gratification to take notice of a new edition of Dr. Osler's work on medicine. To the present generation Osler is a synonym of authoritative reference, and any emanation from his pen carries the weight of import and of instructive value.

Aside from the careful detail which marks the review of the history of each disease, the author makes much of the importance of etiology and of diagnosis.

Diseases are classified as they are considered, without the usual tiresome introductory, and along the lines of accepted groups. Of particular note are the articles on typhoid fever and cardiac diseases.

We must, in passing, add to the information contained in the article on leprosy by stating that at present there are almost two hundred known cases of leprosy in Louisiana, with thirty-five in the Leper Home. Dr. Osler has been good enough to give us credit for the successful use of Calmette's antivenene in leprosy, but has not indicated that we initiated this treatment.

The differentiation brought out between measles and scarlet fever is most excellent. We are glad to also notice that mention is made in careful detail of the rash of influenza.

We regret to see that the author apparently missed the work of our Dr. Touatre when revising his article on Yellow Fever, particularly as this work has been so much commented in other quarters for its clinical value and importance, in suggestions of both treatment and diagnosis.

Dr. Osler still follows the divisions of syphilis into the diagrammatic primary, secondary and tertiary, etc., but we can forgive this after his qualifying clause under the discussion of the tertiary stage: "No hard and fast line can be drawn between the lesions of the secondary and those of the tertiary period; and, indeed, in exceptional cases, manifestations which usually appear late may set in *even before the primary sore has properly healed*." (Italics ours). Yet Dr. Osler defines the tertiary stage—"after a period of months or years granulomatous growths develop, in the viscera, muscles, bones, or skin—tertiary lesions." How much better to discard a confusing classification and to call syphilis, as we do with other diseases, syphilis and define its type according to its variety and *not* ac-

ording to the *time* at which it may develop, especially when the exceptions to the rule in this are so much more frequent than the rule itself. Syphilis is really a disease with manifestations which depend upon the *degree of infection* rather than upon the *length of time* of infection, and the intensity of the lesions are accountable for rather by the resistance of the individual and the virulence of the attack than upon the stage of the disease. Even years after the original infection, so-called "secondary lesions" may be manifested due to an exacerbation of the disease because of a lessened resistance in the presence of a reawakened focus of infection within the individual. (See Taylor's cases.)

If our criticism seems inadvertent we would remark that to disagree with Dr. Osler is to fight a fair fight for a principle which his acceptance would make an usage, broad and general.

Dr. Osler's work is not aimed at being exhaustive but rather at a clear presentation of each of the diseases taken up and these are the conditions commonly classified under the different divisions of disease.

As a text and reference work, this edition can always command the high place its predecessors have always occupied.

DYER.

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*The Transactions of the Louisiana State Medical Society for 1901, the 22nd Annual Meeting, have been published. As most of the original papers of this meeting have from time to time appeared in the pages of this journal, we are content at this time to notice the appearance of the transactions and to compliment the secretary and editor on the general appearance of the book. While it was our pleasure to attend most of the sessions of the Society, we notice that interpolations of papers and expanded discussions have added to the volume and value of the transactions, while not altogether a part of the proceedings as they occurred.*

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*Matthews' Physicians' Blue Book. A complete Medical and Surgical Register of the State of Missouri. Price \$2.00 net. Lewis S. Matthew, & Co., St. Louis, 1901.*

While the larger directories of physicians cover the census of the profession generally in the United States, the special edition in any one State is most valuable, particularly when the information is carefully compiled and presented by reliable publishers.

Not only does the book before us give thorough information on the physicians of Missouri, but also almost every point of query is anticipated in the detailed quotations of laws, acts, societies, institutions, etc.

DYER.

## PUBLICATIONS RECEIVED.

*Transactions Louisiana State Medical Society, 1901.*

*A Manual of Minor Surgery and Bandaging*, by Christopher Heath, F. R. C. S.—P. Blakiston's Son & Co., Philadelphia, 1901.

*The Mental State of Hystericals, a Study of Mental Stigmata and Mental Accidents*, by Pierre Janet, M. D.—G. P. Putnam's Sons, New York and London, 1901.

*The Practical Medicine Series of Year Books—Volume II, General Surgery*, Edited by John B. Murphy, M. D.—The Year Book Publishers, Chicago, 1901.

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## REPRINTS.

*The Present Status of the Carcinoma Question*, by N. Senn, M. D.

*An X-Ray and Dissection of the Ureter and Utero-Ovarian Artery.*

*The Utero-Ovarian Vascular Circle*, by Byron Robinson, M. D.

*Extrauterine Abdominal Pregnancy; Operation by the Vagina: Recovery*, by Charles Gilbert Davis.

*Perineal Prostatectomy*, by Parker Syms, M. D.

*Annual Report of the Chief Surgeon, Division of the Philippines*, by Charles R. Greenleaf, Colonel, Assistant Surgeon General, U. S. A.

*Dermoid Tumors*, by William Davis Foster, M. D.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR DECEMBER, 1901.

CAUSE.	White.	Colored.	Total.
Fever, Malarial (unclassified) .....	....	....	....
“ “ Intermittent.....	1	3	4
“ “ Remittent .....	....	....	....
“ “ Scarlet .....	....	....	....
“ “ Typho .....	....	....	....
“ Yellow.....	....	....	....
“ Typhoid or Enteric.....	5	1	6
“ Puerperal Septicæmia and Convulsions .....	....	....	....
Bronchitis .....	9	4	13
Diphtheria .....	....	....	....
Influenza.....	....	1	1
Smallpox .....	....	....	....
Whooping Cough.....	....	1	1
Pneumonia.....	31	21	52
Cancer.....	13	4	17
Consumption.....	31	34	65
Diarrhea (Enteritis).....	16	9	25
Dysentery.....	6	2	8
Broncho-Pneumonia.....	....	....	....
Hepatic Cirrhosis .....	7	2	9
Other Liver Diseases .....	5	2	7
Peritonitis.....	....	2	2
Chronic Diarrhea.....	....	....	....
Debility, Senile .....	15	17	32
“ Infantile .....	9	2	11
Bright's Disease (Nephritis) .....	37	16	53
Heart, Diseases of .....	47	16	63
Apoplexy .....	....	....	....
Congestion of Brain } .....	17	10	27
Meningitis .....	5	3	8
Trismus Nascentium.....	6	9	15
Injuries .....	25	17	42
Suicide .....	2	....	2
All Other Causes .....	72	31	103
<b>TOTAL .....</b>	<b>359</b>	<b>207</b>	<b>566</b>

Still-born Children—White, 19; colored, 20; total, 39.

Population of City (estimated)—White, 220,000; colored, 80,000; total, 300,000.

Death Rate per 1000 per annum for Month—White, 19.58; colored, 31.50; total, 22.64.

## METEOROLOGIC SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure .....	30.10
Mean temperature .....	52.
Total precipitation .....	4.86 inches
Prevailing direction of wind, southeast.	

# NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

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## Original Articles.

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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.]

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### A SUGGESTION IN THE TECHNIC OF SUPRA-PUBIC LITHOTOMY.

BY CHARLES CHASSAIGNAC, M. D., PROFESSOR IN GENITO-URINARY AND RECTAL  
DISEASES, AND PRESIDENT NEW ORLEANS POLYCLINIC, ETC., NEW ORLEANS.

The earliest known instance of the removal of stone from the bladder by the supra-pubic method is most interesting. The records show that the operation was performed in an emergency in the year 1561, by Pierre Franco, and, so far as we know, was entirely *impromptu*. A coincidence is that it was performed on a child, or at about the period of life believed at present to be the one in which, everything else being equal, the high operation is most frequently indicated. While making a perineal lithotomy, finding the stone too large for removal by this route, Franco pressed it up by means of the fingers in the rectum and manipulated it until it could be felt over the pubes, when he extracted it through an incision at that point. The operation was successful and, what is not considered as necessarily a sequel in the twentieth century, the patient recovered. Strange to relate, however, Franco instead of being puffed up by this result, solemnly warned others against any similar attempt. Our wonder

is divided between the obtuseness which prevented this success from promptly leading to the demonstration that wounds of the bladder proper were not necessarily fatal and the conservatism which dictated that one cure should not establish the propriety of a measure which, according to their lights, should prove fatal. What a contrast with our day! Less fettered by traditions and precedents, how rapidly would such an occurrence be interpreted and followed up; yet how quickly, on the other hand, would a conclusion be jumped at and the operation with the unique successful result be heralded as one to displace all of its like.

It is superfluous to refer further to the past history and development of supra-pubic cystotomy or to the alternations in its popularity, notwithstanding such fascinating details as the conception and description in the sixteenth century of what is practically the established procedure of to-day by Rousset, who never performed it, as he was not a surgeon. Needless to say, it was the advent of modern asepsis and antisepsis which gave the final impetus to the progress and adoption of this operation, as it did for many others.

It is not the object of this paper to discuss the indications or advantages of this operation, nor the different methods for its performance; not even the debated and debatable points as to whether the rectal bag should or should not be used, or as to whether the bladder should or should not be closed after removal of the calculus. They should be determined by indications in any given case and their consideration would be out of place except in a general discussion for such specific purpose.

It is intended merely to suggest a convenient detail in the technic of supra-pubic cystotomy, for stone, when it has been decided to suture the bladder in order to obtain prompt healing, a plan for which the writer must admit a preference when there is no special contra-indication.

The features of the method are:

1. Introduction in a special manner of stitches to hold the bladder while it is incised and the calculus is extracted.
2. Utilization of the same stitches in the closure of the bladder.
3. Formation of temporary drain by the collection of ends of catgut stitches.

4. Drainage by means of the Pezzer self-retaining catheter during the healing process.

To illustrate conveniently the *modus operandi*, I shall describe it as performed on one of the five patients upon whom I have had occasion to resort to it. He was a comparatively young white man, of good constitution, but run down and nervous from long and constant suffering. Had been treated for chronic cystitis and for prostatitis by two other physicians, who had used internal medication, irrigations and instillations, and was finally referred to me by one of them. History causing suspicion of stone, I searched for same without result; he said that had been done before. Rest, diluents, mild irrigations of bladder caused temporary improvement. Exacerbation led to a second search and the detection of a calculus. Operation proposed, was accepted, and for several reasons, especially the condition of the bladder, the supra-pubic route was selected.

After usual preparations had been made, patient's bladder was washed out, then filled with a 3 per cent. solution of boric acid. The rectal bag was dispensed with and a modified Trendelenburg position adopted. The usual incisions and dissection brought the bladder into view without exposing the peritoneum. The needle (which I had had made on the Reverdin pattern, but well-curved and finished so as to give the smallest and cleanest puncture compatible with a good-sized eye, and adapted to an all-metal handle), after being threaded with medium sized chromicized catgut, was thrust quickly into the middle of the presenting part of the bladder; it was then made to emerge nearly three-quarters of an inch higher, or about a half-inch from the upper margin of the incision, slightly to the right of the median line; the catgut being released from the eye of the needle, the latter was withdrawn from the second puncture, thus leaving it just as after the first thrust, but unthreaded; the two ends of the catgut showing at the first and second punctures respectively, were held by an assistant and used to steady and slightly raise the bladder-wall without scarcely any escape of the boric solution following; the needle was then, by a turn of the hand and without having been withdrawn from its original point of introduction, made to present about three-quarters of an inch lower, or a half-inch from the lower margin of the cut, slightly to the left of the median line;

threaded with a second piece of the catgut, it was withdrawn entirely, thus bringing out one end of the catgut at the point where the needle was originally thrust, and an extremity of piece number one was already being held, leaving the other end at the third and last puncture. These two ends were held in a similar manner as the first two, giving good control of the bladder-wall. The blade of a small bistoury was slipped into puncture number one and an incision made in the direction of and until opposite punctures numbers two and three respectively. This gave an opening nearly an inch and a half in length, supported on either end and on either side by a catgut stitch. Only a small portion of the fluid escaped. With good illumination, a calculus was seen and removed with forceps; its comparative smoothness and its suspicious shape emphasized the necessity of further attention and two other calculi were detected, partly encysted, and were removed. The bladder was thoroughly irrigated with warm boric solution; a Pezzer catheter was introduced by the urethra and left *in situ*, after it had been ascertained that its umbrella-shaped terminal was well spread, as I had determined to close the bladder, which was in better condition than expected.

By means of my needle, each of the catgut threads was utilized as a suture and two more were introduced near the middle of the incision in the bladder and tied; the ends were not cut, but the eight threads were gathered together and deposited like a wick at the inferior margin of the incision. Finer catgut sutures were passed between and beyond the larger ones just mentioned and cut off short. The bladder was filled with boracic solution, through the catheter, under moderate pressure, and was found to hold the fluid. The muscle layer was also sutured with catgut and the skin was stitched with silk-worm gut, the catgut "wick" being allowed to protrude so as to act as a possible drain in case of a slight subsequent leak. A dressing of iodoform gauze and absorbent cotton was applied and held by means of a firmly applied flannel laparotomy bandage. Patient was placed in bed and a siphon arrangement was connected to the catheter. There was very little shock. Siphonage was continued until the fourth day, everything doing well, although there was some rise of temperature on second day.



Catheter was washed twice daily and bladder cautiously once a day. On the fourth day the siphon was discontinued and the catheter closed by means of a small clamp, which was removed to allow the escape of urine, at first every hour, then every two, and at gradually increasing intervals until, finally, the patient was allowed to regulate the time by his desire to urinate, which was ordered promptly gratified. I had intended to allow the catheter to remain ten days, but on the seventh day the man prevailed upon me to take it out, as it was beginning to annoy him and I thought the risk of leakage small. The removal of the catheter was easy and it was found comparatively clean. Fully twenty-four hours later, after a rather long nap which gave the opportunity for a pretty thorough filling of the bladder, a slight leakage was detected at the point of exit of the catgut wick, which had dwindled down considerably by this time. No inconvenience resulted save some intermittent wetting of the dressings and slight soreness during the next few days. Patient was up in less than two weeks from the day of operation. The leakage diminished gradually and the progress of recovery was otherwise uneventful. The calculi proved to be uric and oxalic.

In two of the other cases there was no leakage. The first of the series was that of a boy about twelve years of age who pulled the catheter out, supposedly in his sleep, on the sixth day after the closure of the bladder, yet suffered no inconvenience whatever and was discharged from treatment in less than two weeks from the day of operation.

In connection with the remaining cases, in adults, there is nothing of special note to relate. The catheter was retained without difficulty; leakage was slight; the result was entirely satisfactory.

The cases are small in number, owing mainly to the comparative rarity of vesical calculi in this section of country; still, they are numerous enough to show the convenience and efficiency of the procedure, considering that it is not the purpose of this paper to insist upon the closure of the bladder as a routine measure any more than to urge the selection of the supra-pubic route in all instances.

When, however, the case is a suitable one and complete suture of the bladder is decided upon, the technic previously described has some marked advantages. The needle takes the place of the

tenaculum, which is generally used to hold the bladder, and makes no puncture not utilized for a subsequent suture, except the first one, the starting point of the incision. The bladder is probably better upheld and controlled for the making of a careful and clean incision; in consequence, the fluid used for distention is retained in larger proportion, thus facilitating a good view of the interior of the bladder; also diminishing the risk of contusioning the vesical walls or the edges of the incision during the extraction of large or rough calculi, a point of some moment when immediate union is the desideratum. Good catgut, of medium size, varying slightly according to the age of patient, outlasts the healing process, if there is to be union, and causes no further concern as to necessity of removal or possibility of dropping into the bladder. The gathering together of the ends of the main sutures to form a temporary drain lessens the chances of having to open up everything in case of an inconsiderable leak; a minute canal begins at the topmost stitch, enlarging as each stitch adds its threads, reaching its maximum very properly at the outlet, the skin being sutured in such manner as to give sufficient space for the exit of the "wick." I have shown how well this worked in the case I have related, selecting it for that special reason, notwithstanding the fact of its being the least favorable in several respects.

The length of the operation is shortened, I believe, by this method, a feature always worthy of thought from the standpoint of shock, particularly if a general anesthetic is administered and the patient is elderly.

Drainage by way of the urethra is very efficient and convenient with the Pezzer catheter. The retaining end is soft, quite elastic, and divides the pressure very equally; it is quite patulous, which allows a free flow of urine, facilitates its cleansing and prevents the accumulation of mucus or the formation of concretions. This catheter is not difficult of introduction, especially as in these cases the latter may be facilitated by means of the supra-pubic opening; it does not cause irritation of the vesical neck to any extent; it cannot drop out of its own weight or from contractions of the bladder, yet it is easy of removal when the proper time comes.

The modified technic described is indicated, as stated before, especially in such instances as it may be advantageous at once

to close the bladder completely, yet it could be used on occasions where it may be thought best to close it only in part, by using the two supporting threads as the limiting suture at either end.

“There is nothing new under the sun,” and analogous details may have already been carried out; still, as they have been found simple and expeditious in my hands, if they should prove useful to any one who had not thought of them, the presentation of the technic will be justified.

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### SOME SURGICAL CASES TREATED WITH A SIMPLE AND VERY EFFECTIVE ANTISEPTIC DRESSING.

BY E. L. SHARPE, B. A., M. D., MEMBER WEST TEXAS MEDICAL SOCIETY,  
PLEASANTON, TEXAS.

For almost seventeen years, I have been in pursuit of some simple and effective surgical dressing; one non-toxic, non-irritating and inodorous, or at least of a pleasant odor, and at the same time perfectly antiseptic and antiseptic within itself, would be the ideal. That I have found one to meet all the conditions, I do not claim, but that I am now using one that comes very near filling the bill, I do know. It is simply impossible for country physicians to carry out the elaborate hospital directions for asepsitization. What we need is a simple, practical method, a few chemicals that we can carry, with plenty of soap and hot water that are always in reach. My remedies for the asepsitization both of the surface of the part to be operated on and the surgeon's hands, are only two. First prolonged and thorough washing with soap and water hot as can be borne and then the application of the following chemical compound. I have no name for the substance, but make it as follows: Take pure gum camphor and pure white crystal carbolic acid, and by trituration make a saturated solution of the camphor in the carbolic acid. I do not know what the result is chemically, but we have a clear, heavy, oily liquid, with an aromatic, pleasant, camphoraceous odor. When made correctly it is perfectly bland, not toxic, and outside of a momentary stinging, is non-irritating. In fact it is quite a local anesthetic, and is the best all around anti- and aseptic dressing I have ever used. I have used it successfully in all conditions and classes of wounds

about the body, except the eye. As it is very stimulating, it might possibly do harm and I can conceive of few conditions in this locality that it would be indicated.

This remedy is soluble in olive oil, and for after dressings I generally use it in solution in proportion of one in three to six of the olive oil. It evaporates on exposure to air and the oil prevents this to a great extent, thus lessening the necessity of too frequent dressings.

For burns I have found the oily solution very soothing and the remedy excellent to stimulate healthy granulations. Scarcely any odor is noticed even during considerable sloughing of tissues. It is a good local application in eczemas, tetter, erysipelas, etc.

Cases I, II, III and IV show the aseptic qualities of this saturated solution of camphor in carbolic acid. The others its marked power in wounds already infected.

CASE I—Strangulated hernia; operation; recovery.—On May 31, 1901, I was called to see a Mexican, aged about 60 years; found him in a tent lying on a saddle-blanket on the ground. On examination found a large scrotal hernia, tightly strangulated; had been so all the preceding day and night. He had taken six purgative pills the night before and his suffering was now most intense, a continual desire to defecate being present. I gave him a morphia shot and informed him that only an operation could relieve him. He assented readily after I had tried taxis a little. I had him washed thoroughly with very hot water and soap, and kept very hot applications to the hernia until I could return to my office, four miles distant. I got my druggist, Mr. John Shannon, and Mr. Walter Smith to return with me. We found him in the same condition. Had a kettle of hot water on a fire just outside his tent door; Mexicans understand what you mean when you say *hot* water, and we had it *hot*. I gave him a hypodermic of morphin and strychnin; shaved the parts, washed them with very hot water and soap and applied the camph. carb. solution over the field of operation. Mr. Shannon chloroformed him, and Mr. Smith acted as my assistant. I cut down on the sack, which was old, thick and black from the strangulation.

On opening the sack at least a pint of coffee colored serum escaped. This was carefully washed out with pure hot water.

Found about twelve inches of gut involved. It was very much congested and so black that I feared the operation would prove too late. The stricture was so tight that I had to cut it twice in order to reduce the hernia. After cutting the stricture the bowel still remained black, but under the stimulus of the hot saline solution, we could soon notice the return of the circulation, so I deemed it safe to return the gut into the abdominal cavity. The sack was left *in situ*. After again thoroughly washing with hot water, the wound was closed entirely with interrupted silk sutures. Pure sat. sol. camph. and carbolic acid was applied along the line of suture. A compress of absorbent cotton with a liberal amount of the oily solution, with a tight bandage, completed the dressings. On my visit next day, I found him all right. No fever nor pain present. Bowels had moved several times. I removed the dressing and applied the oily solution. I visited him every day and found no complications; on the fifth day I removed the stitches. There was never any suppuration and the entire wound healed by first intention. In less than ten days he was up and at work.

CASE II—Amputation of leg. Recovery.—June 9, 1901, Mexican brought to me with caries of all the bones of the right foot, except the phalanges. The foot was enormously distended and more than a hundred sinuses leading down to dead bone. This had been going on thirteen years. The man was in a very bad condition. Pulse 120, weak and anemic. No dead bone above the ankle but veins very much varicosed. I believe this was a case of actinomycosis though no microscopical examination was made. After a few days preliminary treatment, I amputated the leg in the upper third, going this high on account of the varicosed veins. Mr. Shannon kindly gave the chloroform, and Dr. J. W. Hayden and Mr. Walter Smith assisted me.

The same program as before was carried out to asepticize the leg. Shaving, thorough washing with very hot water and soap and the application of the pure solution over the parts to be operated on.

There was extensive venous hemorrhage. The arteries and some veins were ligated with catgut, and the oozing controlled with hot water. A little aristol was dusted over the flaps. They were then closed throughout the entire wound and the pure solution applied along the line of sutures. The patient re-

acted badly from chloroform and required considerable strychnin for several hours. By the next morning, he was all right and made a rapid recovery. A little oozing of blood the first twelve hours, but never a drop of suppuration, and no rise of temperature. On the fifth day I took out some of the stitches, and a day or two afterwards, the balance. The entire wound healed by first intention. In four weeks he had made him a peg leg and was going about on it.

CASE III—Excision of a cyst of the patella.—On August 20, 1901, I was called by Dr. Coble to see a patient of his. I found a Mexican woman about 45 years old with a cystic tumor over the patella. The doctor had made a small incision into the tumor a few weeks before and evacuated a quart or more of clear straw colored serum. The wound closed and the cyst immediately commenced to refill. When I saw the case the cyst was again filled up. The skin over the cyst was very rough, and in places an inch thick. This was a case of "housemaid's knee," brought about by washing on the rocks on the banks of the Rio Grande some six or eight years before. As she was helpless in her present condition, I decided to operate at once. An incision was made at the most dependent part in the middle line of the leg. More than a quart of the straw colored serum was evacuated. The incision was then carried straight up the middle line clear across the tumor some eight inches in length. A large mass of cheesy material was found to line the whole cyst wall. This was removed and the cyst was pulled down on each side to its base, which was found to be the patella. I saw that the adhesions here were so great that it could not be separated from patella without exposing the bone, and probably opening the joint, so I trimmed off the cyst wall as close to the bone as possible, and did not interfere with the patella or joint. I next removed a strip of the integument on each side of the incision, as there was too much loose flap. The same aseptic and antiseptic preparations and dressings were carried out as in the preceding cases; only a small drainage tube was left in the lower angle of the wound. A tight bandage and extension splint was put on and the leg put in an extension splint. On the third day the dressing was removed. There had been no constitutional disturbance, and the wound was found in good condition. No oozing of serum

or blood had taken place. The drainage tube was removed. It had never been necessary. The wound was dressed every day with the oil solution. Made an uninterrupted recovery, with no suppuration except a few drops around where the drainage tube was. I am satisfied there would have been none, had I not used the drain.

Case IV—Contused and lacerated scalp wound, with serious concussion of brain.—On August 27, 1901, I received a hurry call to the side of a lad 16 years old, who had run into a tree on horseback. He was running horses, and had leaned over on the left side of his horse to dodge some low limbs. A large oak tree was directly in front of the brush, and he was upon it before he could recover his seat in the saddle. The blow was terrific, as the horse was running. His head seems to have been caught between the tree and the horn of his saddle. The left temporal and parietal region were terribly contused, and the horn of his saddle or a limb made a lacerated wound from the right parietal eminence backwards to the occiput about four inches long, clear through the scalp and periosteum. He was unconscious; left pupil widely dilated; pulse 60, and stertorous respiration. The cut wound was bleeding profusely from a small artery, which I immediately secured. The wound was full of dirt, clotted blood and hair. This was in the woods, and I had no hot water, so used some ordinary creek water and applied the pure solution to the wound. I had no hopes of his recovery, but gave strychnia hypodermically. This revived him considerably and he vomited a large amount of undigested food. I trimmed the hair with scissors and sewed up the wound, putting a compress saturated with the pure solution over the injury. A careful examination showed no fracture of the skull. We brought him immediately to his home in Pleasanton and commenced the application of cloths wrung out of hot water to the whole head. This was kept up for twenty-four hours with little intermission. The swelling became enormous; both eyes were closed and the whole left side of face and neck were very much swollen. There were no symptoms of paralysis, local or general, at any time, so I felt safe in my diagnosis of concussion without fracture or compression. We cropped the hair short and used the oil solution continuously. Whenever he became restless we used *hot* applications, which invariably

quieted him. Urine and feces were voided involuntarily; catheter had to be used only one time. He remained utterly unconscious for 17 days, and pulse averaged about 60; had frequent weak spells which were counteracted by strychnin. Could swallow liquids after a few days, so had no trouble in nourishing him.

The scalp wound healed *without suppuration*. On the 10th day my friend, Dr. Peltrie, of Fairview, came over. As the swelling had now greatly receded, we could diagnose a sub-periosteal effusion on each side of the head. A small place was shaved and prepared and an incision made. Both effusions proved to be blood under the periosteum. This blood was liquified and aseptic. It was withdrawn and a compress wet with the oil solution put on. Small gauze drains were put in each wound. I removed these next morning as no more effusion had taken place. The compress was kept up and these wounds healed *without suppuration*. The lad began to gain consciousness about the third week and is now (two months later) up and around though still "queer" in his head. His memory is gradually returning and I hope for ultimate recovery. Some may question *hot* applications, and claim ice is better, but I am satisfied that ice has no place in the treatment of contused wounds in any location, and it seems to me that ice should be the last thing used where there is shock and concussion of the brain present.

Now a few instances in which I have used this preparation in infected wounds:

In April, 1901, a rattlesnake bit a Mexican on the finger. I scarified the wound and injected permanganate potash. Gave strychnin internally. After treatment the oil solution. Small slough separated in a few days with healthy granulations at base.

In August, 1901, was called to an incomplete abortion. Woman already septic. Foul flow from uterus. Temperature 102, pulse 90. Cured the womb, removing considerable debris. Washed it out with hot saline solution, and applied pure saturated camphor-carbolic solution on swab to uterine cavity. This was repeated next day. Gave mercury and quinin internally. Patient recovered in a few days.

In the latter part of August, 1901, a young man came to me with a carbuncle on left scapular region. Made a free incision



and removed an incased tissue that was loose, and applied the solution pure. Gave sulphide calcium internally. Same treatment on two or three successive days. Uneventful recovery.

The remedy is also of great value in inflammations of the ear. For barbed wire wounds, which are nearly always infected, it is of great value. To sum the whole matter up, there are few conditions of wound where it will not prove a good dressing.

I do not claim the discovery of this compound. It is closely allied to a well known proprietary remedy. My claims for it are that it is easily made, easily carried, and a very effective antiseptic and aseptic dressing. It is not merely a surface remedy; it penetrates deep into diseased tissue.

As camphor and carbolic acid make such a non-toxic compound, the question arises, would not camphor be an antidote to carbolic acid poisoning?

I have never used the remedy internally, but believe it would be safe and prove an efficient internal antiseptic.

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## Clinical Report.

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### DISLOCATION OF LENS INTO ANTERIOR CHAMBER IN HIGH MYOPIA—RECOVERY AFTER REMOVAL WITH SCOOP.

BY DRs. BRUNS AND ROBIN, NEW ORLEANS.

R. H. McM.—*Aet.* 34, lumber-checker by occupation, came to the clinic on March 23, 1901, complaining of defective vision, and a bulging of right eye interfering with complete closure of lids. We found a large equatorial staphyloma of right eye, the vision reduced to light perception. The left eye was found under atropin to be highly myopic, the vision with correcting lenses:— $13^{\circ} \text{C}$  —  $25.0^{\circ}$  axis  $15^{\circ}$  being only 20 /LX — Vision without glasses = 20 /CC. Javal showed an astigmatism of 3 D. axis  $120^{\circ} / 30^{\circ}$ .

We ordered above correction for left eye worn constantly and advised enucleation of right eye.

March 29, 1901. Right eye enucleated under chloroform with no accident.

April 6, 1901. Patient discharged improved.

May 7, 1901, or a month later, he returns complaining of intense pain and total loss of vision in left eye, coming on suddenly on previous day. We found severe injection of ciliary region, pupil dilated to maximum, tension enormously elevated, the lens dislocated into anterior chamber. Vision is reduced to faint light perception. Under cocain, we immediately proceeded to remove the lens with scoop, and succeeded only after losing a large quantity of vitreous; eye was bandaged securely. Two days later, removed bandage; eye doing well; healing processes progressing favorably, atropin and bandage. Bandage is removed every other day and atropin instilled—progressing nicely.

On May 22, fifteen days after operation, we find corneal wound healed with small prolapse of iris—counts fingers at four feet. Bandage continued.

May 28—Applied actual cautery to prolapse of iris under cocain and bandaged.

June 5, eye looks very well. Vision with  $+ 7^s \text{ C} + 3^{\circ}\text{ax } 180^{\circ} = 20$  /XL well with  $+ 10^s \text{ C} + 3^{\circ}\text{ax } 180^{\circ} =$  Snellen No 1.

July 15th, Javal ophthalmometer showed 12 D ax  $170^{\circ}$ —L. E. V.  $+ 4^s \text{ C} + 8^{\circ}\text{ax } 170^{\circ} 20$  /XL with  $+ 4^s$  added to this glass=Snellen No 1—ordered these glasses in reversible frame for far and near. Discharged two days later decidedly improved.

This case presents many points of vital interest, the most important of which is the extreme complication of dislocation of the lens with secondary glaucoma directly traceable to the myopic process, and hence is a remarkable example of the danger of myopia when allowed to remain uncorrected and without restriction concerning the prolonged use of the eyes at the near point.

Secondly, the condition would have been certainly fatal to the eyesight without immediate surgical interference.

Thirdly, the infrequency of this desperate complication, this being the first in our experience.

Fourthly, and not the least, the fortunate result obtained in spite of the great difficulty in extracting the lens and the enormous loss of vitreous following it. The conversion of the eye into a hypermotric eye of moderate degree, thus removing to the full extent of our present knowledge, the danger of increase in the myopic process.

## Clinical Lectures.

[Specially reported for the JOURNAL.]

### I.

#### ENCOURAGING RESULTS FROM USE OF SUPRA-RENAL EXTRACT IN ADDISON'S DISEASE.

BY DR J. M. ANDERS, PROFESSOR OF MEDICINE AT THE MEDICO-CHIRURGICAL HOSPITAL, PHILADELPHIA.

This patient is K. S., aged 45, and by occupation a mechanic. Both parents died late in life of apoplexy; three brothers and three sisters are living and comparatively well; has had the usual diseases of childhood, including scarlet fever and diphtheria. The patient had typhoid fever, after which he was subject to abdominal cramps until a few years ago. The present trouble made its appearance about a year and a half since. He first became easily fatigued; he experienced a lack of energy, both physical and mental. There soon developed increasing debility, feeble pulse, faintness on the slightest exertion, loss of appetite, pain in the epigastrium and lumbar regions, and progressive emaciation. He had been treated by tonics and other measures calculated to increase the bodily strength and vigor, but without any beneficial effect. Six months later he first observed that he was growing darker in color over the trunk, and this pigmentation of the skin went on increasing for about six months.

During the past six months, however, there has been little change in the skin-tint. His pulse is feeble; also his heart action, and the extremities are decidedly cool and clammy. There has been vomiting at long intervals, but this has been ascribed to the medicine he had taken. Now, in the presence of these symptoms, the lumbar pain, the constantly increasing physical weakness and lassitude, the feeble circulation and marked pigmentation of the skin, we naturally think of the so-called Addison's disease.

In the first place we do not know the exciting causes of Addison's disease, but we are acquainted with some of the predisposing conditions. The patient is a male in middle life, circumstances that favor the development of the disease. There

is no history of injury; you will kindly recollect that traumatism may act as a disposing factor. The most common cause, perhaps, of this disease is tuberculosis, especially of the adrenals. There is tuberculosis of other organs of the body in many cases as of the lungs, and for this we must look most carefully. We can only surmise the presence of tuberculous lesions of the supra-renal capsules.

Observe this man's face; it indicates more or less apathy and mental weariness. You will notice that the skin of the trunk is distinctly bronzed, but this is most marked upon the face, neck, arms, hands, and over the exposed portions of the body; here the pigmentation began first, and is of a deeper, darker hue than elsewhere. This is always the case in true morbus Addisonii. This is a typical case so far as the skin is concerned. The mucous membranes are likewise involved. Notice, if you please, the mucous membrane of the lips; there is a line of pigmentation near the junction of the skin with the mucous membrane. Notice, too, there are a few smaller brownish spots scattered over the lip. On holding the cheek out by the use of the tongue depressor, the discoloration can readily be seen on the mucous membrane of the inner side of the cheek. The feebleness of the circulation should also be carefully noted. The heart is weak; no cardiac murmurs, however, are present, but the heart sounds are distinctly feeble. Diarrhea is often a troublesome symptom, and it comes on late in the disease, as a rule.

We can not make the diagnosis of Addison's disease, however, with a feeling of positive assurance until we have eliminated other affections and conditions in which more or less general or patchy pigmentation of the skin occurs. Thus, in so-called "vagabonds' disease," there may be presented a bronzing of the skin that may closely simulate the affection under consideration. In these cases the pigmentation is occasioned by the irritation of lice and dirt, combined with exposure. You should not fail to look carefully over the skin surface of the body, more especially that of the back, for parallel scratch marks; they are often to be found on vagrants, and should lead to a thorough, systematic, daily use of the bath, with appropriate soap, which generally suffices to remove the discoloration. The pigmentation of the skin may be confounded with tuberculosis and carcinoma, especially when these morbid processes are situated in the abdomen and involve the peritoneum.

A careful examination of this man's organs, however, fails to reveal anything pointing to these conditions. Again, in so-called diabetic cirrhosis, the skin may be decidedly pigmented; but in this condition there is glycosuria and hepatic enlargement—symptomatic indications that are absent in the patient in your presence. I have known exophthalmic goitre to be confused with Addison's disease, and it must be recollected that a marked bronzing of the cutaneous surface may occur in the former condition. In exophthalmic goitre, however, the presence of tachycardia, fine tremor, exophthalmus, and enlargement of the thyroid gland, should prevent the occurrence of a mis-diagnosis. The prolonged use of silver nitrate may produce this discoloration but we find that this man had not taken any of the preparations of silver. Moreover, it is to be recollected in argyria the mucous surfaces are not discolored as they are in this case. Having eliminated the conditions most apt to be confused with Addison's disease we are justified in making an assured diagnosis.

The prognosis is exceedingly grave, although since the introduction of adrenal feeding in the treatment of the affection it has become more favorable. In the treatment of this serious disease resort should be had to all hygienic measures calculated to improve the physical and mental vigor of the patient. I have instructed this man to move about slowly so as to avoid an accident from syncope, and have enjoined an hour's recumbency each day after lunch. Iron and arsenic are often recommended, but are not necessary in this case since the blood examination shows an exceedingly slight grade of symptomatic anemia. I have ordered the use of supra-renal extract in capsules, beginning with one grain thrice daily to be increased every third day by one grain. This remedy is prescribed for the reason that the adrenal ferment which is necessary to normal metabolism is supposed to be missing. [This patient was brought into the amphitheater two weeks later. The blood pressure and the head symptoms had undergone marked improvement. The skin also presented a lighter hue; this was first observed by the patient himself.]

## II.

## REPORT OF AN INTERESTING CASE OF TYPHOID FEVER.

BY DR. J. M. ANDERS, PHILADELPHIA.

I now desire to call your attention to some interesting specimens in connection with the history of a case of typhoid fever, and am anxious that you should note carefully the anamnesis.

W. S., aged 39, motorman by occupation, was admitted October 4, 1901, to the medical wards of the Medico-Chirurgical Hospital. Father had died five years previously, probably of apoplexy; mother living and well, and also several brothers and sisters. A maternal aunt had died of tuberculosis. He had had the usual children's diseases, including scarlet fever. He had never used much liquor and never any tobacco. He had occasionally suffered from "colds," but they did not last long; in fact, had never had any serious illness since childhood, until the last fatal attack of typhoid fever. Typhoid is usually contracted from drinking-water or from the use of contaminated milk, but the patient declared that he had drunk melted ice exclusively instead of ordinary water, and but little milk. Be it recollected, however, that ice may contain the bacillus typhosus in an active, viable condition.

On September 29 he became decidedly ill; the symptoms being headache, anorexia and languor, to which were added symptoms of a "cold," as coughing, sensations of chilliness and muscular pains affecting every part of the body. This was a case not unlike influenza at the onset, and we not rarely see this mode of invasion, since the days of influenza epidemics. Patients frequently keep up and walk about for days and even several weeks before taking to bed, and this patient had made that mistake.

On admission the pulse was weak and its tension low; there were a few moist râles over the bronchi; appetite was gone; thirst was great; tongue coated, but not everywhere, for the tip and edges had begun to clean off. The eruption was present on the abdomen; hence the case must have reached the eighth day at least. The spleen was also decidedly enlarged at the time of admission, and a day or two later the Widal test responded positively. The diagnosis of typhoid was beyond question almost immediately after he had been admitted. Before

admission the temperature had been comparatively high, but after admission it went up to  $104\frac{3}{5}$ , and later to  $104\frac{4}{5}$ ; there were slight nocturnal thermometric remissions, and just before death he had a marked hyperpyrexia, the temperature touching 107 deg. Fahrenheit. In typhoid fever we very often have that marked elevation of temperature just before dissolution.

The pulse is usually slow in proportion to the fever; and this was the case in the first week, but in the second week it became more and more frequent, 116, 120, and at last it was so rapid that it could not be counted. This is apt to come on in the third week as the result of extreme debility. We may have the rapid pulse as a temporary affair any time during typhoid; it may be the result of excitement, or it may develop after too great exertion, but then it usually does not last for long. It is simply dangerous or serious in character when it persists, and when the tendency is for the pulse rate to rise higher and higher. We did not observe active or violent delirium; but mild delirium of the usual type at night, preceded by mental hebetude. The nervous manifestations were rather serious; there were tremor of the tongue and of the extremities, and slight twitchings of the muscles of the face, including subsultus tendinum. These symptoms show the type of infection to have been severe. There was an intestinal hemorrhage a few hours before his death. He showed the characteristic eruption over the trunk, consisting of a few rose-colored papules; a few purpuric spots were also noted. This is rare and occurs usually in severe forms of the disease.

Before showing you the specimens I shall read a synopsis of postmortem notes. The autopsy was held October 16, by Prof. J. MacFarland, about ten hours after the death of the patient. The ventricles of the heart were empty; the right auricle, however, was distended with blood. This was a case in which there developed an extreme general debility with cardiac weakness predominating.

The right lung showed in the lower lobe areas of varying size of dark purplish color. These areas did not bleed very freely. Dr. MacFarland supposed them to be the early stage of a catarrhal pneumonia. When the heart grows progressively weaker we should keep on the lookout for pulmonary complications, and among these lobular pneumonia is the most prominent. Spleen and omentum were adherent, and beneath this attach-

ment was a splenic infarct, which not infrequently occurs in typhoid. The spleen was enlarged and soft.

Both kidneys showed some parenchymatous degeneration. This is usual in all infectious diseases. The pancreas was normal; also the biliary duct, stomach and gall bladder.

In the small intestines were lesions which are of special interest in the study of typhoid fever. In the ileum at its upper part as you can see (the specimen was now shown to the class) we have small ulcers; here at the ileo-cecal valve we find large ulcers. The larger patches you see here are Peyer's plaques. Some of the little glands you see in the upper part (here) are merely infiltrated; then lower down you observe the crusts have become partly separated. The glands affected do not all become necrotic, but those near to the lower end of the ileum are apt to do so. The stage of infiltration ends on the eighth to the tenth day; the necrotic process eight to ten days later or at the end of the third week. The base of the ulcers in this case is the sub-mucous coat.

Marked tympany and diarrhea were absent. There are, however, some deep ulcers in the cecum. The reason that we did not have diarrhea in this case is the fact that the colon was not affected below the cecum.

What was the immediate cause of death in this particular case? is a pertinent question. In the first place, the indications of a severe type of typhoid fever were all in evidence. There was the high temperature, with tendency to hyperpyrexia; the pulse was from the very beginning feeble and compressible, and later distinctly more and more frequent. We have had here the presence of unfavorable nervous manifestations. I allude to the evidences of motor irritation and muttering delirium. Note carefully these points in formulating a prognosis; the temperature, the condition of the nervous system and that of the heart. Another consideration is the absence or presence of complications. These are apt to occur during the third week; this is the dangerous period; it was the case here. Hemorrhage occurred an hour before death, and we had here a partial development of broncho-pneumonia, but these complications probably had nothing to do with the fatal termination. The serious accident in this case was the cardiac collapse. High temperature, and even hyperpyrexia, is not always a fatal symptom; it may be merely the result of an infectious process, and not the cause of the danger.



# N. O. Medical and Surgical Journal.

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## Editorial Department.

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CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M.D.

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### THE CITY BOARD OF HEALTH.

We have heard it stated that the *personnel* of the present Board of Health, whose term expires next August, is to be arranged in such manner as to change at least the executive (or salaried) officers of this Board. We doubt the credibility of this rumor, as such a move could only be made for "political reasons" in the *little* sense of the term, otherwise personal favoritism, and we do not believe that the City Council, or a majority of its members, would be guilty of such unwise action. The chairman and the secretary of the Board have been diligent and intelligent in the discharge of their duties; the members of the whole Board enjoy, we believe, the confidence of the public and hence the endorsement of the profession; they were the pioneers in our city Board since the division between the State and the local Boards was made; they inaugurated their work during trying times. Now that the municipal health is good, that everything is working smoothly and satisfactorily, it would be folly to make a change. We hope there is no reason to fear it, and that the Council will settle all doubt by re-electing before long the present incumbents.

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### IMMIGRANTS WITH TUBERCULOSIS.

It seems that the New York Academy of Medicine is objecting because the authorities are endeavoring to exclude from this country such immigrants as are suffering from pulmonary tuberculosis. Their admission is refused for the reason that they are suffering from an infectious or contagious disease. The Academy denies that pulmonary tuberculosis is infectious, hence protests against the exclusion of the diseased immigrants.

If we are to prohibit the immigration of persons dangerous to public health at all, and we doubt whether any one will question the advisability of such a policy, what can we find much more objectionable than tuberculosis? Should we not agree

with the the Academy of New York and believe with the majority of experts to-day that the disease is infectious, evidently it is one to be most dreaded because it causes more suffering, disability and mortality than any other malady, hence should be rigidly excluded. Granting the correctness of the Academy's contention as to the non-infectious nature of tuberculosis, we nevertheless fail to perceive the wisdom of their position. If the disease is not infectious, then it is hereditary, either directly or because a strong tendency to its development is transmitted, and we should be about as strongly opposed to the admission of persons whose offsprings are almost sure to be puny or diseased. In other words, we should keep out persons who either are dangerous to public health during their lifetime or to posterity by begetting deficient or diseased beings. Tuberculous individuals are such whether tuberculosis is infectious or is hereditary, and that it is one or the other or both not even the New York Academy of Medicine will controvert.

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THE NEW YORK COMMITTEE OF SEVEN AND THE BRUSSELS  
CONFERENCE IN SEPTEMBER NEXT.

It is a sad commentary on the morals of a country when the confession is uttered that "venereal diseases are ignored by the sanitary authorities." This is the note of most value in the report of the Committee of Seven of the County Medical Society of New York appointed for the study of measures for the prevention of venereal diseases.

A careful perusal of the report shows practically nothing new in the presentation of the subject; in fact there is largely a reiteration of what almost all students of the social evil and its concomitants, venereal diseases, have said before now.

Apathetic or indifferent responses were obtained from most of the profession solicited and replies of questionable value from those in a position to have had both opinions and judgment in the matter. The whole status of venereal diseases is reviewed from the viewpoint of the committee itself and opinions are advanced which may or may not hold in the final balance of judgment.

Some stress is laid upon hospital neglect of proper records of venereal diseases and unfortunately too little is said of the hospital neglect of venereal cases in acute stages. With an esti

mated morbidity of 225,000 venereal cases in 1900 in New York City, it would seem that the Committee should have had more positive recommendations than appear in their report. As a matter of fact, however, regulation of prostitution is deprecated and enforced isolation of those found diseased is not favored. Some reasons are advanced for these opinions, but the report is meagre in suggestions for the relief of these conditions otherwise.

Segregation is not held wise, and because "public sentiment is extremely sensitive to anything like legal recognition or sanction." Yet the committee is quite emphatic in declaring that "prostitution is inherent in the human race; it can not be annihilated, it is a necessary evil in our social system." Domiciliary separation is urged, and the deduction advanced that the prostitute class will of necessity "aggregate."

The report reads well, but shorn of all but its substance there remain but two points clear in value and of sufficient seriousness of conclusion to be worth while: The protection of minors by raising the age of consent, and the proper education of medical men, so that they may not only practice but may think about the treatment and conduct of venereal diseases.

Unfortunately, the whole report seems colored by a sense of delicacy in deference to that same public sentiment, which, until recently, made no distinction between disease and vice, and which has usually lacked all of the humanitarian in its expressions of public interest.

Some good has been done by the Committee of Seven, but we can not see where the practical solution of the problem has been advanced by these gentlemen, no matter how honest may have been their efforts and conclusion.

In this line it is timely to direct attention to

#### THE SECOND INTERNATIONAL CONFERENCE FOR THE PROPHYLAXIS OF SYPHILIS AND VENEREAL DISEASES,

to be held, as was the first conference, under the auspices of the Belgian government. The first conference seemed to have shown that regulation of prostitution has not been satisfactory; that young girls should be protected; that the dangers of syphilis should be generally taught; that all countries should keep proper statistics of venereal diseases. The forthcoming conference, to

take place at Brussels, September 15 to 20, 1902, is to take up the question of prostitution of minors; the obligation of public bodies to moral and sanitary questions; procuring; the relief of venereal diseases and the duties of institutions to such; contagion in syphilis, etc.; the question of penal control of venereal diseases. The direct education of the youth and general public and the best methods of so doing are to be considered as well. It is quite possible after the second conference adjourns that some more light may be brought to the New York authorities, as the lines of discussion are to be quite pertinent to the needs of New York, as well as other urban communities.

The end is not yet, but the very need of open-handed consideration of these pressing evils will ventilate the question of venereal diseases because of the fact that this is the only way to make education in such things common.

The every day experience of all physicians has demonstrated the popular ignorance of the venereal diseases while no pains have been spared in the periodicals and the daily press to go deep into the discussion of other current diseases, e. g.: Small-pox, tuberculosis, malaria, etc., etc. We recall one striking forensic effort in the *North American Review* which made an appalling story of syphilis under the title, "The Wages of Sin is Death." Beyond this we have missed any such if they have appeared. It is easy for the upper gallery to pass criticism and to carp at those who make the play, but when the spirit of criticism is *con amore* and for the common good, we justify ourselves. The New York Committee refer to the baneful practice of drug-store treatment of venereal diseases and make the positive declaration that over 25 per cent. of venereal diseases are treated by charlatans, and yet legislative action is neither recommended nor encouraged and existing laws are hardly considered in passing.

It is too true that the ignorance of the physician himself is responsible for much of the existing condition of venereal disease, and this is further evidenced by his carelessness in the treatment of these cases both from the standpoint of general hygiene and from his obligation to the patient himself.

The majority of patients carry from the sanctum of a physician's office the advice of a routine treatment attended with scant instruction, and in most cases with little or no injunction

as to the dangers and possibilities incident to the disease in hand.

Medical colleges are at fault for not teaching venereal diseases properly and adequately; State legislatures are at fault for not enforcing the laws they enact covering the criminal practices of druggists and charlatans; the physician is at fault because he does not acknowledge and treat the seriousness of venereal diseases, even if he does hold these vicious enough for him so often to multiply his fee when the victim of these afflictions comes his way!

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## Abstracts, Extracts and Miscellany.

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### Department of General Surgery.

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In charge of DR. F. W. PARHAM, assisted by DR. F. LARUE, New Orleans.

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THE OPERATIVE TREATMENT OF GUNSHOT WOUNDS OF THE ABDOMEN AT THE CHARITY HOSPITAL, NEW ORLEANS.—In a valuable paper, prepared for the last meeting of the Southern Surgical and Gynecological Association and published in the *Annals of Surgery* for January of the present year, Fenner, of New Orleans, has collected the statistics of one hundred and fifty-two cases of penetrating wounds of the abdomen (gunshot and stab) submitted to laparotomy from January, 1892, to January, 1901. Of these 152 cases there was a mortality of 87 or 57.23 per cent. of all penetrating wounds. Of the 152 cases, 113 were from gunshot injuries, giving 78 deaths, a mortality of 69 per cent., including all laparotomies, for penetrating gunshot wound with and without visceral injuries. Of the 113 laparotomies for gunshot wounds, 96 showed visceral injuries, giving a mortality of 71 or 73.95, say 74 per cent.

Of the six cases reported from the experience of Dr. Fenner himself in the past two years, two were for stab, the other four from gunshot wound. The two stab wounds were un-

attended with visceral injury, whilst all the gunshot wounds were marked by serious injury, the last (Case VI) being especially grave, requiring *splenectomy, and suture of diaphragm, stomach and liver*. All six cases recovered. This is a remarkable series of cases and their results reflect great credit on the operator. It is probable that all four of the visceral cases, that is, all the gunshot cases, would have died without the skilful intervention. These cases add emphasis to the conclusion of the writer of the paper:

“In spite of the high mortality shown by these tables, I do not think they should discourage the operation. A mortality of 73.95 per cent. in gunshot wounds *with injury of the hollow viscera* means, in my opinion, that 26 per cent. of these patients had their lives saved by the operation and a death rate of  $33\frac{1}{2}$  per cent. in stab wounds with the bowels cut means that two-thirds were saved from certain death.”

We believe the teaching of these statistics entirely sound, urging the necessity of submitting cases of probable intra-abdominal injury to the earliest possible skilful surgical intervention. When one bears in mind the fact, as stated by Dr. Fenner, “that one can never tell from general symptoms or external appearances whether the viscera have been wounded or not, the danger of delay is manifest, and we believe that a careful study of well classified statistics on the plan of those of W. E. Parker, will justify agreement with the conclusion of Miles in 1893:

“If the operation of enterorrhaphy be done before general peritonitis supervenes and done quickly, cleanly and thoroughly, with judicious after-treatment, the patient has more than even chances for recovery now, and surely these chances will be improved with the coming years.” Without in any way intending to criticize unfavorably the statistic work of Fenner’s paper, but simply in the interest of historic accuracy, we wish to call attention to an error of statement inadvertently made, we are sure, in the opening sentence of the paper, that “operative intervention was first attempted” in January, 1892.

The first case in our knowledge was enterorrhaphied by Dr. Richardson, the case being one from ward 7, one of the assistants being the writer of this comment, and the interne in charge of the ward being Mr. Forsythe, now Dr. Forsythe, of Monroe,

La. This was in 1886. The case died. Subsequently, the writer of this did two laparotomies for gunshot wound, one of which is reported in the statistic tables of W. E. Parker, both cases being done prior to 1889, both fatal. These three cases are unfortunately not available for statistic purposes, the data having been lost. They are reported simply in contravention of the statement that operative intervention was first attempted in 1892. But most important of all omitted cases, both because the cases in themselves were illustrations of the brilliant work of our deceased fellow-citizen, Dr. A. B. Miles, and also and especially, because the cases have been reported in detail and published in the *Annals of Surgery*, vol. xviii, 1893. In this article Dr. Miles reports thirteen cases operated upon for wounds of the small bowel, between March 9, 1890, and January 5, 1893, with a mortality of eight. Of these cases, one (seven perforations) was operated on in March, 1890; a second (sixteen perforations of small intestines and three of mesentery) September 11, 1890 (see also lengthy report in Transactions of Southern Surgical and Gyn. Association, 1890); a third (twenty-one perforations) on January 25, 1891; a fourth (eleven perforations) on March 16, 1891; a fifth (eleven perforations) on December 26, 1891; the rest were after January, 1892. Of these cases, operated on before 1892, the first, third, fourth and fifth died, but the second, a very remarkable case with sixteen perforations of the small intestine and three of the mesentery, recovered and was the object, for a long time about the hospital, of much interest.

But taking the paper of Dr. Fenner as applying to the period between the years 1892 and 1901, we find collected an extremely valuable exposé of the work in this line of abdominal surgery. It is unfortunate, however, that as Dr. Fenner remarks there are so many imperfect records of similar cases, making it necessary to exclude them from the tables. This can but emphasize the necessity of seeing to it that such valuable data are not in the future lost to the hospital and from the general fund of surgical experience.

## Department of Obstetrics and Gynecology.

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In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER

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### RESULTS OF OPERATIVE TREATMENT FOR THE DIFFERENT FORMS OF PUERPERAL SEPSIS.

Dr. Barton Cooke Hirst contributes to the January 18 number of the *Philadelphia Medical Journal* a very important article on the above subject, which shows the very gratifying advance that has been made in this direction in the last few years. Conditions that were well nigh hopeless ten years ago are easily amenable to a surgical treatment that has steadily improved in precision of technic and certainty of results. As examples of what can be done and of the conditions demanding surgical intervention, eleven cases are selected from the writer's hospital services of the last season. They include two cases of septic salpingitis, with streptococcic infection and necrosis of the uterine cornua and fundus and perforation of the bowel. One case of gangrenous ovarian cyst, a case of streptococcic infection and necrosis of a submucous myoma. Three cases of septic salpingitis; a case of pelvic peritonitis binding down the uterus and appendages firmly in a subsequent pregnancy, a case of suppurative cellulitis, resulting in a large abscess between the bladder and uterus, and the two cases of pelvic abscess localized in Douglas' pouch. Two operations were performed (for the ovarian cyst and fibroid tumor) within six days of labor. The woman with an ovarian tumor was profoundly septic; delirious, with a rapid pulse. Its removal was followed by prompt recovery. The patient with a fibroid had been infected by the manual extraction of the placenta. She had septic phlebitis of both legs and pneumonia, but she recovered from the hysterectomy, which removed the primary source of infection. The two cases of necrosis of the fundus and the cornua of the uterus associated with salpingitis are quite interesting. One was operated on four; the other six weeks after labor. The whole infected area was removed by salpingectomy and exsection of the diseased portion of the uterus. A wedge-shaped piece was removed from



the latter, the wound being united by interrupted catgut (formalin) sutures. A few years earlier the writer would have performed hysterectomy for such a condition, but recent experience has taught him that the less mutilating operation often suffices. Both of these women recovered and possess one normal tube, an ovary and an uterus capable of further child bearing. In one woman there was the embarrassing complication of a fecal abscess in Douglas' pouch, and a large perforation of the portion of the sigmoid flexure. The mistake was made of putting stitches in the necrotic bowel to close the opening. They did not hold and the patient had for a time fecal fistula. In another non-puerperal case in the hospital at the same time with an enormous abdominal abscess and a large perforation of the lower bowel, the whole pelvis was packed with gauze and drained with a glass tube. No attempt was made to close the bowel opening though in two weeks it ceased to discharge.

The pelvic peritonitis following labor and only manifesting serious symptoms in a subsequent pregnancy, nine months later, is an interesting example of the late manifestations, subsequent complications and recrudescence of puerperal sepsis. She gave the history of a sharp attack of pelvic peritonitis following her last labor, from which she had apparently made a good recovery. She had fever and pain that quite incapacitated her. There had been amenorrhea for more than two months. She was found to be pregnant, the uterus and appendages firmly fixed in a retrodisplacement. The abdomen was opened, the adhesions freed and the uterus replaced. The woman was symptomatically relieved and the pregnancy continued.

The other cases present equally interesting features, but these suffice to show the tendency of modern surgery in dealing with septic complications arising during the puerperium. A few years back radical operations during the lying in state were almost repulsive to the surgeon, and where hysterectomy for puerperal sepsis was recommended it was received with no little condemnation. Hysterectomy gave the opportunity of inspecting and arriving at the state of actual disease of the pelvic tissues due to sepsis, and the present conservative lessons taught by Dr. Hirst are the natural sequence. Such reports are most valuable and the reporting of series of these cases will assist materially in the final solution of this very complex subject.

## Department of General Medicine.

In charge of DR. E. M. DUPAQUIER, New Orleans.

**DYSENTERY IN CHILDREN.**—The following is noted in a most interesting article by Samuel Amberg, M. D., in the *Bulletin of the Johns Hopkins Hospital*, December, 1901.

During the fall of 1900 and winter of 1900-1901, 5 cases of amebic dysentery came under observation at the children's department of the Johns Hopkins Dispensary, and were admitted to the hospital. There seem to be only two more cases on record, where amebæ were found in children of the first decade of life in the United States. Several cases were reported by foreign authors. In two of the five cases reported here, the disease befell members of the same family exposed to the same influences. A third child of their company was taken sick with the same symptoms.

The clinical type to which these five cases belong, is that of moderate intensity as described by Councilman and Lafleur. A rather surprising feature in the clinical picture of these cases is the little amount of discomfort experienced, although one had a prolapsus recti. In none of the cases was there any sign of affection of the liver; abscess of the liver, which is a rather frequent complication of amebic dysentery in adults, seems to be of very rare occurrence in children.

The diagnosis was based upon the finding of motile amebæ containing red blood corpuscles. Motile amebæ were seldom absent from passages. The examination of the feces is to a certain degree unsatisfactory. At times little material is obtainable with the rectal tube, sometimes the passages contain but little suitable material, and if much suitable material is available, it is hardly possible to examine all and we must rely on samples; thus, a true picture of the contents of the intestines is not always obtainable.

The usual treatment consisted in rest in bed, dieting, irrigations of 400 c. cm. of a quinin solution (sulphate of quinin), gradually increasing in strength from 1:5000 to 1:250 twice a

day and bismuth subnitrate, and in some cases, 500 c. cm. of a 1:20,000 solution of nitrate of silver instead of quinin, and tannigen instead of bismuth. Complete rest is a very important factor in the treatment, at least in regard to shortening the course of the disease.

Rocaz, in *Gaz. Hebdom. des Sc. Med. de Bordeaux*, December, 1901, reports an epidemic of dysentery in children near Bordeaux, and states that irrigations with a 1 to 5 solution of hydrogen peroxide (10 vol.) in lukewarm sterilized water have given him good results. A simple enema as an evacuant was first given. The amount of medicated irrigation varied according to the child's age and to the bowel's tolerance. The irrigation is painless if gentleness is used and precaution taken. In ten cases, of age varying from two to twelve years, the beneficial effects of the treatment began to show in 48 hours. The stool's picture improved, there was less slime, pus and blood, their number was reduced and the anal sphincter toned up. The treatment should be continued a few days after all dysenteric symptoms have disappeared.

LAVAGE OF THE STOMACH IN THE INFANT.—Babonneix states that the temperature of the liquid used in this proceeding is most generally lukewarm, although it is varied according to the condition of the patient. If there is tendency to collapse and the temperature is below normal, the liquid may be  $98\frac{1}{2}$  F. or  $100\frac{1}{2}$  F. If, on the contrary, there is fever, the liquid used may be cool. It is difficult to state definitely any fixed quantity to be used, as the process is continued until the water returns limpid. The solutions used also vary according to the case. These washings are kept up every day, at least during the acute stage of gastro-enteritis; but they ought not to be indefinitely prolonged. The time for lavage is at the end of the period of digestion, that is, as a rule, two hours and a half or three hours after a feeding. Accidents from this procedure are very rare. The effects of lavage are especially mechanical: evacuation and cleansing of the stomach, diminution of the fermentations, etc. Still more, lavage excites reflex intestinal contractions, also of the muscles of the abdominal wall, and hypersecretion of the glands of the digestive tube.—*Gazette des Hôpitaux*, January 14, 1902.—*Medical Record*, February 8, 1902.

## Department of Therapeutics.

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In charge of DR. J. A. STORCK, New Orleans.

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TO REMOVE THE ODOR OF VALERIAN FROM THE HANDS.—Wash the hands thoroughly with soft soap and hot water, with the addition of a little ammonia. Then lather well with soap and dip the soapy hands into some freshly-ground coffee. Rub with this paste well for five minutes, then rinse off with cold water. The treatment is equally useful for iodoform.—*Druggists' Circular and Chemical Gazette*.

SUBCUTANEOUS INJECTIONS OF CHAULMOOGRA OIL IN LEPROSY.—Dr. Hallopeau comes to the following conclusions: (1) Lepers treated with large doses of chaulmoogra oil, either by intra-muscular injections or by the mouth, may show so much improvement as to be considered cured; (2) more frequently the disease continues to show itself, but usually in a benign manner; (3) in some cases marked local and general exacerbations occur in spite of the treatment; (4) the effect of chaulmoogra oil, although beneficial, can not be compared with that of mercury and iodine in syphilis, or of quinin in malaria; (5) the hypodermic method is to be preferred if it is well borne; it is, however a painful method; (6) the comparative effects of the various products supplied under the name of chaulmoogra oil should be studied. Du Castel is not in favor of subcutaneous injections as a routine method on account of the pain and induration, and the possibility of fatty pulmonary embolism.—*Merck's Archives*, Jan., 1902.

THE ACTION OF ARSENIC ON THE SKIN.—The occurrence of a recent epidemic of arsenic beer-poisoning gave Dr. Leslie Roberts an opportunity of observing the action of arsenic on the healthy skin. The physiologic effects of the metalloïd may be grouped as follows: (1) Pigmentation, (2) hyperkeratinization, (3) desquamation, (4) atrophy, (5) fatty degeneration.

(1) The pigment in arsenic pigmentation is melanin, and is apparently the normal melanin greatly increased in quantity. In marked cases the entire epithelium is pervaded. The old notion that melanin originates from hemoglobin is not borne out by the author's observations. The strongest argument against this conception is the fact that no natural arsenic affinity exists between arsenic and the blood. Arsenic hypermelanosis is actually accompanied by an increase in the number of red blood corpuscles, at least in some cases. It would seem, therefore, that the melanin is developed in the epithelial cells as a result of arsenic stimulation.

(2) *Hyperkeratinization.*—Even in an early stage of arsenic poisoning, the epithelium is hypertrophied, and this is the most important clinical sign. The most characteristic evidence is furnished by the palms and soles. A well-marked arsenic palm is not easily forgotten when once seen. It is more simian than human in type, clammy from excessive perspiration, with deep grooves and lines. It feels like wet shagreen to the touch. The surface is studded with little nodules, which are often better felt than seen. These nodules are frequently horny, and any previously existing callosities also become enlarged.

(3) Another highly characteristic symptom of arsenic poisoning is desquamation. No part of the body, not even the nails, are exempt from it. On the chest and abdomen it is more pronounced. The degree of desquamation is very irregular, like all effects of arsenic. This desquamation is not a final stage of erythema, but the direct result of the action of arsenic on the epithelium.

(4) Following the initial hypertrophy of the skin a reverse process soon takes place, terminating in atrophy, which in its advanced stage involves the sweat glands and the sebaceous glands.

(5) Fatty degeneration occurs in the skin as a result of chronic arsenic poisoning. Sections of the skin immersed in arsenic acid become black in a few seconds. In the final stage the nutrition of the skin suffers profoundly, and the epithelium arsenic is reduced to an extremely thin and delicate plate, the granular layer of cells having partially or entirely disappeared.

The author concludes from his investigation that arsenic is not merely a drug and is not an irritant poison only. Its effects

are of a nutritive order, brought about by the agency of active oxygen, and these effects seem to be injurious to the organism when the exudation is rapid, while being beneficent if it is slow. When arsenic is tolerated, improved nutrition is the result, and this improvement manifests itself chiefly in keratinized structures, as hair and cuticle.—*Ibid.*

OLEIC ACID IN HEPATIC COLIC.—Dr. S. Artault deVevet attempts to show that in oleic acid, the active principle of olive oil, we possess a powerful preventive of biliary lithiasis.

The author insists on the prime importance of obtaining the pure product, as often fraudulent substitutes are dispensed.

The following conclusions seem to be warranted :

(1) Oleic acid is a specific remedy for biliary lithiasis. (2) The remedy relieves promptly the pain of an attack of biliary colic, but its chief efficiency is shown in preventing the return of the paroxysm, by interfering with the further formation of gall-stones. It is thus curative and preventive at the same time. (3) The single dose is 8 to 16 min. in capsules, one in the morning for ten days of the month, if the attacks recur monthly, or for fifteen days preceding the expected paroxysm. After continuing this treatment for some time it may be stopped.

Needless to say, the usual hygiene and dietetics required in such cases should be strictly adhered to.—*Ibid.*

EUCALYPTUS AGAINST MOSQUITO LARVAE.—Efficient prophylactic antimalarial measures require the destruction of mosquito larvae. After trying numerous antiseptics, petroleum oil was found to be the only agent that could be relied on for the destruction of the larvae. Dr. W. R. Battye, experimenting with kerosene oil, found it not altogether so efficient, and decided to try eucalyptus oil. The effect was instantaneous in killing the larvæ as well as the mosquito. Of course, the high price of eucalyptus oil will prevent it from superseding kerosene on a large scale, although much smaller quantities of the former are required, and it seems to be more rapid and more deadly in its action.—*Ibid.*

THE THERAPEUTIC VALUE OF ADRENALIN is the title of an article by Dr. John J. Kyle in the *Therapeutic Gazette*, for January, 1902. We quote the following from the article named :

“Adrenalin is a fine crystalline powder, yellowish white in color, slightly alkaline in reaction, slightly soluble in water, and insoluble in hydrocarbon oils. The crystallized powder dissolved in normal salt solution, 1.1000, with 0.5 per cent. chloretone, is supplied ready for immediate use. In this form it may be directly applied to the mucous membrane of the nose, throat, or eye; the ischemic effect is practically instantaneous, lasting from fifteen minutes to an hour. Its action upon the ocular conjunction is probably the most prolonged.

There seems to be a wide discrepancy of opinion among operators relative to the after-effect of adrenalin upon the blood-supply to the affected parts. Some claim that there is a predisposition to secondary hemorrhage after operation.

Dudley Reynolds makes a bold statement that adrenalin lessens rather than encourages secondary hemorrhage. My opinion is that the retractile effect of adrenalin is followed by subsequent dilatation of the blood vessels, though this is often slight.

As to the stability of adrenalin solutions, there still exists a degree of doubt. Since they can be frequently sterilized without loss of strength, there is scarcely any excuse for taking chances on an old solution, or one which has been exposed frequently to the atmosphere. Numerous experiments warrant the statement that solutions, properly protected, remain perfectly stable for at least six months.

Previous to applying the adrenalin solution, an amount sufficient for the work in hand should be poured into a small glass receptacle, and thus the chance of introducing any deteriorating agent into the original solution is obviated to a great extent.”

IS HYDROGEN A POISON?—Quoting from the *Druggists' Circular and Chemical Gazette*, the *London Chemist and Druggist* says: “Many of our readers may have come across cases of persons who are affected with headache, exhaustion, and other symptoms after working in small laboratories at processes involving the evolution of small quantities of hydrogen. Hitherto the number of those who have occasion to breathe an atmosphere largely charged with hydrogen has been limited, but Dr. J. C. McWalter, Dublin, calls our attention to the fact that he has noticed several cases of ill-effects from inhaling hydrogen. The per-

sons affected are those working gas-engines for electric lighting, the hydrogen being developed from the accumulations, which are kept charged to supply electricity when the engine is stopped. Dr. McWalter points out that although many of the symptoms shown are such as would be exhibited by the inhalation of carbon monoxide, carbonic acid gas, and other impurities of house gas, the inconvenience resulting from the inhalation of hydrogen is only developed after the day's work. Hydrogen has hitherto been looked upon as harmless, but perhaps after all it may turn out that it cannot be inhaled with impunity.

**PURGATOL.**—Tschirch having found that the majority of purgative bodies are derivatives of oxymethylantraquinone, Gottlieb (*Pharm. Zeit.*) has experimented with the diacetyl ester of anthrapurpurin, which, under the name of purgatol, has been introduced into commerce as an aperient. It forms a yellow crystalline powder, insoluble in water and in dilute acids, but dissolved by dilute alkalies. It has the great advantage of being tasteless, and is stated not to give rise to any unpleasant secondary symptoms. The ester is decomposed in the intestines, a portion of the hydroquinone being excreted with the urine, which is thereby colored blood-red.—*The Druggists' Circular and Chemical Gazette.*

**BISMUTH POISONING.**—Dr. F. P. Henry, apropos of comments in the *Journal of the American Medical Association* on bismuth poisoning, writes to that paper that he has long been aware of the fact that bismuth applied to sore surfaces may exert a toxic and even a fatal effect. Several years ago he saw patient in hospital with an extensive burn of one arm over which bismuth subnitrate had been thickly dusted. The powder had united with the secretions of the ulcerated surface and formed a thick "cast" like that of plaster of paris. The patient developed acute stomatitis characterized by great pain, tenderness and swelling, and broad bluish lines along the edges of the teeth and the inner borders of the lips, eventually falling into a state of profound asthenia ending in death. He regarded the case as one of bismuth poisoning.—*Ibid.*



## Department of the Ear, Nose and Throat.

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IN charge of DR. A. W. DEROALDES and DR. GORDON KING,  
New Orleans.

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**METHYLEN BLUE AND OTITIS.**—Prof. H. Gaudier finds a most effective method for the treatment of chronic suppurative conditions of the middle ear in the use of a 2 per cent. solution of methylen blue. The ear is first syringed out with a warm soap and water solution, then the patient is made to incline the head to the side for five minutes, with 15 to 20 drops of the solution instilled into the affected ear. While in this position he is required to inflate the ear by the Valsolva method to insure penetration of the liquid into the tympanic cavity. The solution used is a strong disinfectant and deodorant. Care should be taken to use the pure medicinal methylen blue and not the dye mixture.—*La Semaine Medicale.*

**THE USE OF CAMPHOROXOL AND MENTHOL IN SUPPURATION OF THE MIDDLE EAR.**—A recent acquisition to the list of remedies used in the treatment of middle ear suppuration is described by Dr. A. E. Phelan, of San Francisco, in a paper read at the meeting of the Society of Eye, Ear, Nose and Throat Surgeons of that city, December 5, 1901. Camphoroxol and menthol, the preparations described, have, as their active ingredient, a three per cent. solution of hydrogen peroxide, combined with menthol, camphor and alcohol. They are non-irritating and stable compounds. The camphoroxol is given the preference, and may be used by instillation in ten per cent. solution or applied pure where the tympanum is freely exposed. Phelan reports a series of cases treated with this agent, with very satisfactory results. It may be used also in suppurative inflammations of the nose.

## Miscellaneous.

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SPOONER BILL.—That the profession may have the opportunity of comparing it with the Perkins Bill, published last month, we print the Spooner Bill, of 1899, first introduced in the Senate of the United States, on December 12, 1899.

A bill relating to quarantine and the public health.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That there is hereby established a commission of public health, to be composed of a commissioner and of a representative of each State and Territorial board of health, the Surgeon-General of the Army and of the Navy, the Supervising Surgeon-General of the Marine Hospital Service, or such other medical officer from either service as may be designated by the chief thereof, with the approval of the President, to be known as the "National Commission of Public Health", which shall be a bureau in the Treasury Department, and the duties of which shall be to collect and disseminate information with regard to the prevalence of infectious diseases in this and other countries; to collect and publish vital statistics; to prepare rules and regulations for securing the best sanitary condition of vessels from foreign ports and for preventing the introduction of infectious diseases into the United States, and there spread from one State or Territory or the District of Columbia into another State or Territory or the District of Columbia; and in general, to make investigations, publish information, and formulate rules with a view to the preservation of the public health; and they shall perform such other duties as may from time to time be prescribed by the Secretary of the Treasury, with the approval of the President.

SEC. 2. That the executive officer of said commission shall be the commissioner, who, subject to the supervision of the Secretary of the Treasurer, shall be charged with the administration of the laws relative to quarantine and the public health, and with the rules and regulations relating thereto. Said commissioner shall be appointed by the President of the United States, by and with the advice and consent of the Senate; and his term of office shall be six years; he shall be a physician holding a diploma from a legally incorporated medical college in good standing; he shall have had at least ten years' experience in the practice of his profession, he shall be learned in sanitary science, practically familiar with quarantinable diseases, and shall hold a membership in one or more reputable sanitary

or medical societies or associations in the United States. He shall receive a salary of six thousand dollars per annum, and in addition the actual and necessary traveling expenses incurred in the performance of his official duties.

SEC. 3. That there shall be appointed by the Secretary of the Treasury, upon the recommendation of the commissioner, an assistant commissioner of public health, who shall possess similar qualifications prescribed by section two for the commissioner, who shall receive a salary of four thousand dollars per annum, and all actual and necessary traveling expenses incurred in the performance of his official duties. That there shall be an executive committee, consisting of nine members of the commission, of which the commissioner, the representative from the Army, the Navy, and the Marine-Hospital Service shall be ex-officio members, the remaining five members of said committee to be elected by the commission at its annual meeting, the term of office of the members so elected to be one year. The executive committee may be convened by the commissioner whenever in his judgment the public interest shall so demand, and the said executive committee shall be convened by the commissioner when any three members thereof shall in writing so request. That said executive committee shall have, when the commission is not session, full power to modify the regulations adopted by the commission, and to make new regulations; and the regulations, as modified or made by the executive committee, shall, when approved by the President of the United States, have the same force and effect as if the same had in the first instance been adopted by the commission.

SEC. 4. That the commission of public health shall annually, on the second Tuesday of January of each year, meet in the city of Washington.

And at such other times as in the opinion of the Secretary of the Treasury the condition of the public health shall demand.

It shall be the duty of the commissioner of public health to preside at all meetings of said commission, and in case of his absence a president *pro tempore* shall be chosen by the commission.

The meetings of said commission shall not include more than six days at each session, unless a longer time shall be authorized by the President; and the actual and necessary traveling expenses of the members of said commission and of the said executive committee to and from all meetings and their actual expenses while in attendance thereon, shall be paid on vouchers in the form to be prescribed by the Secretary of the Treasury.

SEC. 5. That the commission of public health hereby created shall be provided with proper offices in the city of Washington, District of Columbia, in which it can conveniently transact its business.

Said offices to be supplied with proper fixtures, laboratories and all needful apparatus and appliances, and all buildings, boats, laboratories, fixtures and appliances now occupied and used by the Marine Hospital Service for quarantine or public health purposes shall be transferred to the said commission of public health.

SEC. 6. That it shall be the duty of said commission of public health to perform all the duties in respect to quarantine and quarantine regulations which are provided for by this act, or by any existing act of Congress of the United States.

And all duties in regard to the prevention and spread of diseases throughout the United States, and to obtain information of the sanitary condition of foreign ports and places from which infectious diseases are or may be imported into the United States; and to this end the consular officers of the United States at such ports and places as shall be designated by the commissioner of public health, shall make weekly reports to the Secretary of State for transmission to the commission, through the Secretary of the Treasury, of the sanitary condition of the ports and places at which they are respectively stationed, according to such forms as the commission of public health shall suggest, with the approval of the Secretary of State; and the commissioner of public health shall also obtain, as far as may be, through all sources accessible, including State and Territorial sanitary authorities throughout the United States, weekly reports of the sanitary condition of ports and places within the United States, and shall prepare, publish and transmit to collectors of customs, and to State and Territorial boards of health, and through them to municipal health officers and other sanitariums, weekly abstracts of the consular sanitary reports and other pertinent information received by him, and shall also, as far as he may be able, by means of voluntary co-operation of State and Territorial health authorities, and, through them, municipal health authorities, public associations, and private persons, procure information relating to the climatic and other conditions affecting the public health.

SEC. 7. That a special report of the said commission of public health, relative to such action as will most effectually protect and promote the health of the people of the United States, may at any time be required by the President. That whenever any department of government, or the executive of any State or Territory, or the Commissioners for the District of Columbia, or the health authorities of any State, shall request information from the commission of public health in regard to any matter pertaining to the protection or promotion of the public health, said commission shall promptly furnish such information as it may possess, together with any necessary or pertinent advice; and whenever any information shall be received by the com-

mission which the interest of the public health require should be promptly communicated to any department of the government or to any State officer, such information shall be forthwith furnished to the respective department or officer; that in communicating information to and receiving reports from the different States and Territories the commissioner shall conduct all correspondence through the State or Territorial health authorities, except that in his discretion, when in his judgment the public interest will be thereby subserved, he may in addition communicate information to and receive reports from the local health officers.

SEC. 8. That the commission shall take such action, by adopting and enforcing rules and by correspondence or conference, as will tend most effectually to secure the co-operation of State, municipal and local boards of health in establishing and maintaining an efficient and accurate system of notification of the existence and progress of contagious or epidemic diseases in the United States; and said commission shall also, by co-operation with the health authorities of foreign nations and municipalities, endeavor to extend to the United States a reliable system of international notification of the existence and progress of such diseases as cholera, yellow fever, typhus fever, small-pox, bubonic plague or any other dangerous infectious diseases.

SEC. 9. That the Secretary of the Department of Agriculture and the commissioner of the Department of Labor shall, respectively, furnish for the use of the commission of public health such information as they shall from time to time gather upon the following and kindred subjects, to-wit: First, the investigation of foods, drugs, liquors and wines, their standard of purity and their adulterations. Second, the transmission of disease from animals to man, and *vice versa*, such as tuberculosis, glanders and so forth. Third, the statistics of climate with relation to infectious or other diseases.

SEC. 10. That any vessel at any foreign port, clearing for any port or place in the United States, shall be required to obtain from the consul, vice-consul, or other consular officer of the United States at the port of departure, or from any medical officer, where such officer has been detailed by the President of the United States for that purpose, a bill of health in duplicate, in the form prescribed by the commission of public health, setting forth the sanitary history and condition of said vessel, and that it has in all respects complied with the rules and regulations in such cases prescribed for securing the best sanitary condition of said vessel, its cargo, passengers, and crew; and said consular or medical officer is required, before granting such duplicate bill of health, to be satisfied that the matters and things therein stated are true; and for his service in that behalf he shall be entitled to demand and receive such fees as shall by

lawful regulations be allowed, to be accounted for as is required in other cases. That it shall be unlawful for any merchant ship or other vessel, from any foreign port or place, to enter any port of the United States except in accordance with the provisions of this Act and with such rules and regulations of State, Territorial, or municipal health authorities as may be made in pursuance of or consistent with this Act; and any such vessel which shall enter or attempt to enter, a port of the United States in violation thereof shall, upon conviction thereof, in a proper proceeding at the instance of the United States Government in an indemnity court of the United States, forfeit to the United States a sum not to exceed five thousand dollars, which shall be a lien upon said vessel, to be recovered by proper proceedings in the proper district court of the United States; and any master of any vessel who shall enter, or attempt to enter, any vessel into a port of the United States in violation of the provisions of this section, shall, upon conviction thereof, be deemed guilty of a misdemeanor, punishable by a fine not to exceed one thousand dollars, or by imprisonment for a term not exceeding six months, or both, in the discretion of the court. In such proceedings the United States district attorney for such district shall appear on behalf of the United States, and all such proceedings shall be conducted in accordance with the rules and laws governing cases of seizure of vessels for violation of the revenue laws of the United States: The President of the United States, in his discretion, is hereby authorized to detail any medical officer of the government to serve in the office of the consul at any foreign port for the purpose of furnishing information and making the inspection and giving the bills of health hereinbefore mentioned.

SEC. 11. That the commissioner of public health shall from time to time issue to the consular officer of the United States, and to the medical officers serving at any foreign port, and otherwise make publicly known the rules and regulations made by the commission of public health to be used and complied with by vessels in foreign ports for securing the best sanitary condition of such vessels, their cargoes, passengers, and crews, before their departure for any port in the United States, and in the course of the voyage, and all such other rules and regulations as shall be observed in the inspection of the same on the arrival thereof at any quarantine station at the port of destination, and for the disinfection and isolation of the same, and the treatment of the cargo and persons on board; so as to prevent the introduction of cholera, yellow fever, leprosy, bubonic plague, small-pox, or other infectious disease; and it shall be unlawful for any vessel to enter said port or discharge its cargo or land its passengers or crew except upon a certificate of the health officer at such quarantine station, certifying that

said rules and regulations have in all respects been observed and complied with, as well on his part as on the part of the said vessel and its master, respect to the same and to the cargo, passengers, and crew; and the master of every such vessel shall produce and deliver to the collector of customs at such port entry, together with the other papers of the vessel, the said bills of health required to be obtained at the port of departure and the certificate herein required to be obtained from the health officer at the port of entry; and that the bills of health herein prescribed shall be considered as part of the ship's papers, and when duly certified to by the proper consular officer, or other officer of the United States, over his official signature and seal, shall be accepted as evidence of the statement there in contained in any court of the United States.

SEC. 12. That the commissioner of public health shall, at such times as he may deem necessary, examine the quarantine regulations of all State and municipal boards of health, or detail an officer of said commission to make such examinations, and shall co-operate with and aid all State, municipal and local boards of health in the execution and enforcement of the rules and regulations made by the commission of public health under the provisions of this Act, or any other Act of the Congress of the United States providing for a quarantine against disease, and to prevent the introduction of infectious diseases into the United States from foreign countries, and into one State or Territory or the District of Columbia from another State or Territory or the District of Columbia; and all rules and regulations made shall operate uniformly, so far as climatic or other unalterable conditions will permit, and in no manner discriminate against any port or place.

Sec. 13. That at such ports and places within the United States as have no quarantine regulations under State, Territorial, or municipal health authority, and where such regulations, in the opinion of the commissioner of public health, are necessary to prevent the introduction of infectious diseases into the United States from foreign countries, or into one State or Territory or the District of Columbia from another State or Territory or the District of Columbia, and at such ports and places within the United States as quarantine regulations exist under the health authority of State, Territory, or municipality, which, in the opinion of the commissioner of public health, are not sufficient to prevent the introduction of such diseases into the United States, or into one State or Territory or the District of Columbia from another State or Territory or the District of Columbia, the commissioner of public health, if in his judgment it is necessary and proper, may, with the advice and approval of the executive committee, make such rules and regulations, additional or otherwise, as may be necessary to prevent the introduction of such diseases

into the United States from foreign countries, or into one State or Territory or the District of Columbia from another State or Territory or the District of Columbia; and when said rules and regulations have been made and approved by the President of the United States they shall be promulgated by the commissioner of public health and enforced by the health authorities of the State, Territory, or municipality, where the State, Territorial, or municipal health authorities will undertake to execute and enforce the same; but if the State, Territorial, or municipal health authorities shall fail or refuse to enforce said rules and regulations the commissioner of public health is hereby empowered to execute and enforce the same, and to adopt such measures as in his judgment shall be necessary to prevent the introduction or spread of such diseases, and may detail or appoint officers for that purpose.

SEC. 14. That the commissioner of public health may make such rules and regulations, with the advice and consent of the executive committee and approval of the President of the United States, as are necessary to be observed by vessels at the port of of departure and on the voyage, where such vessels sail from any foreign port or place to any port in the United States, to secure the best sanitary condition of such vessel, her cargo, passengers, and crew, which shall be published and communicated to and enforced by the consular officers of the United States. None of the penalties herein imposed shall attach to any vessel, or owner or officer thereof, until a copy of the rules and regulations made in pursuance of this Act has been posted up in the office of the consul or other consular officer of the United States for ten days in the port from which said vessel sails; and the certificate of such consul or consular officer, over his official signature, shall be competent evidence of such posting in any court of the United States.

SEC. 15. That on the arrival of an infected vessel at any port not provided with proper facilities for treatment of the same the commissioner of public health will remand said vessel, at its own expense, to the nearest national or other quarantine station where accommodations and appliances are provided for the necessary disinfection and treatment of the vessel, passengers, cargo, and crew; and after treatment at such quarantine station, and after certificate shall have been given by the quarantine officer in charge at such said station that the vessel, cargo, passengers, and crew, if allowed to remain on said vessel, are each and all free from infectious disease or danger of conveying the same, said vessel shall be admitted to entry to any port of the United States named in the certificate; but at any ports where sufficient quarantine provision has been made by State, Territorial, or local health authorities the commissioner of public health shall direct



vessels bound for said ports to undergo quarantine at such said State, territorial, or local quarantine station.

SEC. 16. That whenever necessary there shall be purchased or erected, under the orders of the commissioner of public health, with the approval of the Secretary of the Treasury, suitable warehouses where merchandise may be unladen and deposited from any vessel which shall be subject to a quarantine or other restraint pursuant to the health laws of any State, or of the United States, at such convenient places therein as the safety of the public revenue and the observance of such health laws may require. That whenever the cargo of a vessel is unladen at some other place than the port of entry or delivery under the foregoing provisions all the articles of such cargo shall be deposited, at the risk of the parties concerned therein, in such public or other warehouses or inclosures as the collector of customs shall designate, there to remain under the joint custody of such collector and of the owner or master or other person having charge of such vessel, until the same are entirely unladen or discharged and until the articles so deposited may be safely removed without contravening such health laws. And when such removal is allowed the collectors having charge of such articles may grant permits to the respective owners or consignees, their factors or agents, to receive all merchandise which has been entered and the duties accruing upon which have been paid, upon the payment by them of a reasonable rate of storage, which shall be fixed by the Secretary of the Treasury for all public warehouses and inclosures.

SEC. 17. That whenever it shall be shown to the satisfaction of the President of the United States that by reason of the existence of cholera, yellow fever, or other infectious or contagious diseases in a foreign country there is danger of the introduction of the same into the United States, and that, notwithstanding the quarantine defense, this danger is so increased by the introduction of persons or property from such country, that a suspension of the right to introduce the same is demanded in the interest of the public health, the President shall have power to prohibit, in whole or in part, the introduction of persons and property from such countries or places as he shall designate and for such period of time as he may deem necessary.

SEC. 18. That whenever the proper authorities of a State shall surrender to the United States the use of the buildings, grounds, and disinfecting apparatus at a State or municipal quarantine station the Secretary of the Treasury shall be authorized to purchase them at a reasonable compensation or pay a reasonable rental for their use if in his opinion they are necessary to the United States; and the expense of said purchase or rental is made payable from the epidemic fund.

SEC. 19. That the commissioner of public health is authorized whenever a conformity to such quarantine and health laws requires it, and in respect to vessels subject thereto, to prolong the terms limited for the entry of the same and the report of the entry of their cargoes, and to vary or dispense with any other regulations applicable to such reports or entries. No part of the cargo of any vessel shall, however, in any case be taken out or unladen therefrom otherwise than is allowed by law or according to the regulations and rules adopted and promulgated by the commissioner of public health under the provisions of this Act or any existing Act.

SEC. 20. That whenever the evidence shall appear conclusive to the commissioner of public health, that cholera, bubonic plague, small-pox, typhus fever, typhoid fever, diphtheria, scarlet fever, or other dangerous infectious disease exists in any State or Territory, or in the District of Columbia, to such an extent that there is great danger of the spread of such disease into other States, Territories, or the District of Columbia by means of vessels and vehicles engaged in transportation of goods, passengers, and the United States mail by land or water, or by persons traveling, on foot or otherwise, and it shall appear conclusive that the State, Territorial, or local health authorities are unable to prevent the spread of such disease, or that said health authorities are inefficient in the performance of their duties he is hereby authorized, subject to the approval of the President, to take such action as may be necessary to prevent the spread of such disease from one State or Territory into another, or from any State or Territory into the District of Columbia, or from the District of Columbia into any State or Territory; and the commissioner of public health shall make such rules and regulations, by and with the advice and consent of the executive committee and the approval of the President, as may be necessary to meet the emergency, and all such rules and regulations shall have the force of law and supersede all other rules, laws or regulations for the time being at the place designated; and any one violating any such rules and regulations shall, upon conviction thereof, be subject to imprisonment for a period of not less than thirty days. The commissioner of public health may temporarily employ such inspectors and other persons as may be necessary to execute all rules and regulations adopted as aforesaid to stamp out and prevent the spread of such diseases.

SEC. 21. That it shall be lawful for the commissioner of public health, when in his judgment it may seem necessary, to confer upon any municipal or local health officer or health authority, through the State or Territorial health authorities in which he may have jurisdiction, power also to enforce the provisions of this Act and any rules and regulations made in pursuance thereof; and any person who shall knowingly disobey or violate

any order, rule or regulation made pursuant to the authority herein conferred shall, upon conviction thereof, be deemed guilty of a misdemeanor, punishable by a fine of not less than five hundred dollars or by imprisonment for a period of not less than one year.

SEC. 22. That the commissioner of public health, assistant commissioner, medical officers of the United States, municipal and State health officers duly clothed with authority to act as quarantine officers at any port or place in the United States, or engaged in carrying out any of the provisions of this Act, and when performing such duties are hereby authorized to take declarations and administer oaths in matters pertaining to the administration of quarantine laws of the United States or the enforcement of any of the provisions of this Act or any other Acts of the Congress of the United States pertaining to quarantine or the prevention or the introduction and spread of contagious or infectious diseases within the United States.

SEC. 23. That the commissioner of public health shall make an annual report of the operations of the commission to the Secretary of the Treasury, with such recommendations as he may deem important to the public interest; and all mail matter of whatever class relative to the commission of public health and its duties, and addressed to the commissioner of public health and indorsed "official business, commission of public health," or mailed by said commission, shall be transported free of postage; and if any person shall make use of such indorsement to avoid the payment of postage in his private letter, package, or other matter in the mail, the person so offending shall, upon conviction thereof, be deemed guilty of a misdemeanor and be subject to the penalty prescribed by the existing law.

SEC. 24. That the commissioner of public health may engage the services of experts, not to exceed six in number, in such laboratories in the United States as are best adapted by location, equipment or special fitness to aid the commission of public health in making investigations. The pay to be allowed such experts to be fixed by the commissioner of public health, with the approval of the Secretary of the Treasury.

SEC. 25. That the Secretary of the Treasury may appoint for the bureau of public health one chief clerk, at a salary of one thousand eight hundred dollars per annum; one clerk of class three, at one thousand six hundred dollars; one clerk of class two, at one thousand four hundred dollars; four clerks, at one thousand dollars each; one messenger, at seven hundred and twenty dollars; one stenographer, at one thousand two hundred dollars; one watchman, at six hundred dollars. No officer nor person in the service of the United States detailed to perform any duty under the provisions of this Act, or any existing Act of the Congress of the United States providing for quarantine

against diseases, or to prevent diseases from spreading within the United States, shall receive any additional compensation except for actual and necessary traveling expenses incurred in the performance of such duties, such expenses to be approved by the commissioner of public health or his assistant, and to be paid on vouchers provided by the Department of the Treasury of the United States.

SEC. 26. That any officer or person acting as an officer, or an agent at any quarantine station or other place, or other person employed to aid in preventing the spreading of disease, or any common carrier of officer, agent, or employee of any common carrier, or any person who shall willfully violate any quarantine laws of the United States, any of the provisions of this Act, or any of the rules or regulations lawfully made and promulgated under the provisions of this Act, or any other Act of Congress providing for or regulating quarantine against disease or to prevent the spread of any disease within the United States, or any officer who shall disobey any lawful order of his superior officer in the execution of any of the provisions of this Act, or any rule or regulation made and promulgated in accordance with any provision of this Act, or any other Act of the Congress of the United States providing for or regulating quarantine against disease or to prevent the spread of any disease within the United States, shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than one hundred dollars, nor more than five hundred dollars, or imprisonment for not more than one year, or both, in the discretion of the court.

SEC. 27. That all convictions for the violation of any of the provisions of this Act, or any other Act of the Congress of the United States providing for a quarantine against disease and to prevent the spread of any disease within the United States, shall be tried in the district where the offense was committed, and it shall be the duty of the United States district attorney for such district to appear on behalf of the United States; and all trials and proceedings shall be conducted in accordance with the rules and laws governing criminal cases triable in the United States courts.

SEC. 28. That all rules made and promulgated, adopted, and published pursuant to the provisions of the Act entitled "An Act granting additional quarantine powers and imposing additional duties upon the Marine-Hospital Service," approved February fifteenth, eighteen hundred and ninety-three, shall remain in force until the same are annulled, changed, or modified as provided for by this Act and other Acts of Congress providing for quarantine against diseases and the spread of any disease within the United States.

SEC. 29. That all rules and regulations made and promulgated to enforce the provisions of this Act, or any other Act

of the Congress of the United States providing for quarantine against disease and to prevent the spread of any disease within the United States, shall be approved by the President of the United States, and when so approved by him shall have all the force and effect of law.

SEC. 30. That there shall be, and hereby is, appropriated out of the moneys in the Treasury and not otherwise appropriated, the sum of one hundred thousand dollars for the purpose of this Act. The sum of one million dollars already appropriated, and known as an emergency fund to be expended by the President of the United States, or the balance thereof not already expended, shall be a fund and held and expended at the discretion of the President of the United States in the execution of the provisions of this Act.

SEC. 31. That the duties heretofore imposed by law upon and discharged by the Marine-Hospital Service, in relation to quarantine against diseases and the spread of any disease within the United States, shall continue to be discharged and performed by the said Marine-Hospital Service until the fifteenth day of November, Anno Domini eighteen hundred and ninety-eight. At which time said duties shall devolve upon and be thereafter discharged by the commission by this Act provided for, which shall take possession of the quarantine stations, and to which shall be transferred the services of all persons now employed under the Marine-Hospital Service in quarantine duty and preventing the spread of disease within the United States.

SEC. 32. That all Acts and parts of Acts conflicting with or in any manner contravening the provisions of this Act are hereby repealed; and this Act shall take effect and be in force from and after its passage.

This bill has been re-introduced at the present session. It has the approval of the American Medical Association and has recently been endorsed by the Orleans Parish Medical Society.

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## Society Proceedings.

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### ORLEANS PARISH MEDICAL SOCIETY.

MEEETING OF JANUARY 25, 1902.

DR. GESSNER, the President, in the the chair.

DR. OTTO LERCH read a paper on *Hydrotherapy*.

In the discussion which followed Dr. G. J. FRIEDRICHS drew the conclusion from the paper read that water is merely a

vehicle for conveying heat and cold, which are the true therapeutic agents.

DR. ASHER asked what was meant by the chemical effect of water applied externally.

DR. DABNEY thought no such good effects could be obtained in heart disease by other agents as could be obtained by hydrotherapy. He wished to emphasize Dr. Lerch's caution as to the potency of the hydrotherapeutic measures and to insist on attention to the care of technic. Merely putting a patient in a hot or a cold bath was not practicing hydrotherapy. He had been using baths for many years in such diseases as diphtheria, scarlet fever, small-pox, etc.

DR. LERCH, in closing, said that the chemical reaction of water applied externally had been studied by physiologists, but he was not prepared to reply to Dr. Asher's question fully. The action of water thus applied was on the end organs of nerves. Chemical compounds were formed, especially by processes of hydration and dehydration.

DR. GORDON KING read a paper on *Epistaxis; its Etiology and Treatment*.

DISCUSSION: DR. LEBEUF had observed nausea in children when supra-renal extract, with chloroform, had been used. Was the nausea due to the supra-renal extract? He had also noticed cicatrization in a case following the use of this solution.

DR. DUPUY wished to corroborate Dr. King's experience with adrenalin. Had checked copious arterial hemorrhage in floor of nose with supra-renal extract. He called attention to the ischemic and hemostatic qualities of hydrogen peroxide. Thought the objection urged against peroxide that one may infect the sinuses by its use was theoretical, not practical. Adrenalin was the remedy par excellence, but next to this (when not available) peroxide was the best agent for the control of epistaxis.

DR. G. J. FRIEDRICHS asked if the hemostatic action of peroxide was not due to the astringent effects of the acid contained.

DR. DERBOFEN suggested that the hemostatic action of peroxide was due to the heat it generated.

DR. DUPUY thought that heat generated was not sufficient, but that the hemostasis was due to the nascent oxygen which promoted coagulation.

DR. MAINEGRA was of the opinion that peroxide was simply

escharotic. He reported a case where he accidentally destroyed the vaginal mucous membrane by the application of pure peroxide.

DR. DEPOORTER attached importance only to epistaxis of constitutional origin; others would stop of their own accord. He had tried adrenalin in vain in some cases. He thought that in cases of arterial hemorrhage, the cautery, if at hand, should be used. Peroxide acted as an escharotic.

DR. KING, in closing, said that he had not noticed any constitutional effect following the use of any supra-renal preparation. Nausea might have been due to swallowing some of the chlore-tone solution.

Adrenalin was the least toxic of all these preparations. He had a very high opinion of peroxide as an hemostatic agent.

DR. LEBEUF reported a case of *variola in the new-born*. The mother developed varioloid six weeks after delivery. Child was vaccinated immediately, but vaccination did not take. Two weeks later, the child was taken with fever and was re-vaccinated. It then developed a typical case of variola. Though temperature went as high as 104, child was not at any time very sick. It was not until the first bath in convalescence that the first sign of vaccination appeared. The scar is now typical. Dr. LeBeuf considered that the second vaccination really protected the child during the attack, which lasted eleven days and caused the attack to be very light. Vaccination was not merely prophylactic, but therapeutic.

#### MEETING OF FEBRUARY 8, 1902.

DR. JULES LAZARD read a paper on "*Hemorrhoids; Causation and Treatment.*"

DISCUSSION.—DR. CHASSAIGNAC wished to lay stress on the question of choice of operations. A surgeon should have no "favorite" operation, but each case should be judged separately and that operation decided upon which is best for the particular case in hand. In general, he favored the cautery for the "strawberry" variety of hemorrhoids; for the pediculated internal hemorrhoids, the ligature was the ideal method. The clamp and cautery method was the one best adapted for large areas of combined external and internal hemorrhoids. Sometimes a combination of both methods could be used to advantage in the treatment of a single case. Each method had its advantages and disadvantages. The ligature method had the advantage of ease for operator and a supposedly less degree of

danger. The clamp and cautery operation had the advantage of not leaving a sloughing mass in the rectum, and there was in addition less liability to retention of urine and less pain than after use of ligature. While insisting on the necessity of fitting operation to needs of each case, he thought that in the aggregate the clamp and cautery would fit the greater number of cases. Several factors usually contributed to post-operative retention of urine: 1st. Connection between nerves centres of rectum and those of bladder; 2d. The opiate used, which acted (a) by assisting in nerve paralysis, (b) by obtunding sensation, so that the patient did not become aware of the bladder filling.

DR. E. SOUCHON had recently used carbolic acid injections in treating piles in cases where the patient refused anesthesia in formal operations. The advantages of the method were: 1st. It did not require anesthesia. 2d. It did not lay up the patient. It was necessary to inject carbolic acid in proper strength ( $\frac{2}{3}$  carbolic acid,  $\frac{1}{3}$  glycerin), to avoid injecting beyond the centre of the pile and, above all, to avoid injecting into the areolar tissue. Not more than two piles were to be injected at a sitting, and these two should be at diametrically opposed points. If more were injected, too great sloughing might be caused. The treatment was rather tedious, necessitating a series of sittings at intervals of fifteen days; hence it was not well adapted to hospital practice. He had used 2 per cent. cocain as a local anesthesia in these cases with satisfaction. The case of tetanus followed operation by ligature mentioned by Dr. Lazard had occurred in Dr. Souchon's practice years ago, before the era of asepsis and antiseptis.

DR. ROBERTSON called attention to the fact that Ball, of Dublin, denied the etiologic significance of a connection between the inferior hemorrhoidals and the portal system. Dr. Robertson urged the use of cold water enemata as a beneficial mode of palliative treatment. The stronger solutions of carbolic acid were safer in the injection treatment, because they caused coagulation of the blood contained in the pile and thus prevented absorption and carbolic acid poisoning. He had yet to hear of a case of embolism following the injection treatment.

DR. PARHAM had employed carbolic acid in the treatment of nevi and had used even *pure* carbolic in injecting a nevus at commissure of lip. In view of success obtained by quacks, this method of treating piles deserved attention at the hands of the



profession. The treatment of limited excision, *i. e.*, stitching as you go, had proved very satisfactory. He had been in the habit of using the Pennington tube after operation for hemorrhoids or rectal ulcer; this served to prevent hemorrhage and also to allow the gas to escape. Its removal was almost painless.

DR. SEXTON reported a case in which he had used 10 per cent. carbolic acid in olive oil with splendid results. The employment of the method, however, omitted the dilatation of the canal sphincter, which was in itself a very important curative agent. He had noticed piles follow the use of bromo-quinin, due probably to the contained aloes or podophyllin.

DR. ROBERTSON remarked that piles should not be injected when in a state of acute inflammation. This should first be combated by appropriate measures.

DR. CHASSAIGNAC was of the opinion that spinal analgesia had done away with the chief excuse for injecting piles with carbolic acid, *i. e.*, the avoidance of a general anesthetic. He thought it best we should resist the importunities of patients to use the injection treatment, for he had seen following its use by quacks many bad effects, such as strictures, fistula, severe inflammation. He had seen a severe secondary hemorrhage follow the employment of this mode of treatment which came near causing the patient's life. The method was fitted to but comparatively few cases, and many patients *were* laid up after injection, which was not *always* painless.

DR. PARHAM, on the other hand, was much more chary of spinal analgesia than he was one year ago. Reclus reported six deaths in 2,000 cases and Legeux had reported two deaths following shortly after spinal injection. The spinal injection caused dilatation of the sphincter and procedure seemed well-adapted to rectal surgery; however, he was getting to the opinion that where spinal analgesia was safe, chloroform would often be safe also.

DR. PERKINS insisted that a proper conclusion as to the merits of the carbolic acid injection treatment should be reached only from a tabulation of a long series of cases. This he had never seen. Threats of patients to go to quacks for treatment should not bias us in our opinion. In his opinion, the procedure was unsurgical, bad and to be condemned.

DR. GESSNER called attention to Pickering Pick's suggestions in the line of palliative treatment. Patients should train their bowels to move at night before retiring instead of the morning,

because the condition was aggravated by the patients going around all day after the hemorrhoids had been caused to protrude at the morning action. Patients should wash anus with warm water for sake of cleanliness, then with cold water for astringent effect, then apply some simple ointment and go to bed. Elevating the hips also contributed relief. Same instructions, if followed out, might actually bring about a cure. He had seen some very alarming symptoms follow the sub-arachnoid injection of cocain. He thought that filling a pile with a 2 per cent. solution of cocain (according to Dr. Souchon) was rather a dangerous procedure.

DR. LAZARD, in closing, said that one of the objections to the clamp and cautery method for the general practitioner was that he had to get a special clamp, which he was not likely to have much use for. The use of the Pennington tube for the control of hemorrhage was very commendable.

DR. MAINEGRA was excused on account of a call and the reading of his paper on Erysipelas was postponed to the next meeting.

DR. M. M. LOWE desired an expression of opinion on the question as to whether the practitioner in attendance should charge when in consultation a fee equal to that of the consultant. Cathell, in his book on "The Physician Himself," expressed an affirmative opinion. No discussion.

DR. WILLY read a communication on *Gelatin as a Styptic*.

DISCUSSION.—DR. MATAS thought that in making experiments it would be wise to separate the gelatin and the adrenalin, so as to determine to which agent the hemostatic effect should be attributed. His experience with gelatin as a local styptic was not satisfactory. Lancereaux recommended large quantities to be injected. By accident, Dr. Matas had injected eight ounces of 10 per cent. solution gelatin and this gave rise to a tremendous chill. It acted probably as a ferment. Gelatin could not be used without some inconveniences and perhaps danger from thrombosis, when massive doses were used by hypodermoclysis. There was no risk attended to its administration by the mouth. He had prescribed gelatin to be taken *ad lib.*, flavored to the taste, for example in the form of calf's foot jelly with sherry.

DR. WILLY: His experience with gelatin used both internally and locally were satisfactory. It was impossible to administer the necessary one ounce of gelatin in 24 hours in the form of a jelly, as this would necessitate the patient's taking three or four quarts of jelly—almost a physical impossibility.

## Louisiana State Medical Society Notes.

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Next meeting in Shreveport, June 3, 4 and 5, 1902. Dr. T. E. Schumpert, President, Shreveport; Vice-President, Dr. F. A. Larue, 1st Congressional District, New Orleans; Dr. E. D. Martin, 2nd Congressional District, New Orleans; Dr. G. W. Remage, 3rd Congressional District, Jennings; Dr. J. M. Callaway, 4th Congressional District, Shreveport; Dr. J. M. Barrier, 5th Congressional District, Delhi; Dr. A. F. Barrow, 6th Congressional District, St. Francisville; Dr. Hermann B. Gessner, Recording Secretary, 124 Baronne Street, New Orleans; Dr. A. G. Friedrichs, Corresponding Secretary, 641 St. Charles Street, New Orleans; Dr. H. S. Cocram, Treasurer, 124 Baronne Street, New Orleans; Dr. Oscar Dowling, Shreveport, Chairman of Committee of Arrangements.

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MEMBERS OF THE SOCIETY are urged to remember the dates of the meeting and to make arrangements to attend. The Shreveport fraternity is anxious to do everything to make the meeting a success and every member should help to this end. Already the president has issued a circular notice and the arrangement committee have solicited papers and the programs of chairmen of sections. A few of these have responded, but it is time now for all to take the interest necessary to make a successful scientific meeting. We would urge this point upon all sections. Below are given the names of sections with the chairmen and openers of discussion, and where already supplied, the title of subjects for discussion.

It would be well to advise Dr. Oscar Dowling, at Shreveport, of the intention to attend, as soon as each member has so decided, in order that he may be facilitated in his arrangements for railroad rates as well as in the provisions for social entertainment.

The departure from the usual custom of holding meetings in New Orleans was largely ventured in the hope of making the interest in the Society greater, and of affording many of the men in the upper parishes the opportunity of attending the meeting and of creating that interest in medical organization which should result in an increased membership from that section.

The JOURNAL believes that the successful gatherings of the past few years point to a repetition of the good work in Shreveport, and we hope that every member will cherish the same belief to the point of coming in June to see.

THE COMMITTEE OF ARRANGEMENTS is anxious to issue a preliminary program, so every member who has a paper and every chairman should at once send titles of these to Dr. Dowling.

REDUCED RAILROAD RATES will be assured as soon as the requisite number of physicians attending is known. Every one buying a ticket should ask for an agent's excursion receipt in order to avail of the rates arranged. Full fare will probably be required in going.

#### REVISION OF CONSTITUTION AND BY LAWS—

*To the Members of the Louisiana State Medical Society:*

The "Committee on the Revision of the Constitution and By-Laws," composed of Doctors Chas. McVea and F. M. Thornhill and the undersigned, are expected to present a report in the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL "two months before the June meeting," that is, in the April number of the JOURNAL.

Suggestions or recommendations received prior to March 15, will be embodied in the Committee's report to the Society, through the JOURNAL.

Very truly yours,

SIDNEY L. THÉARD, M. D., *Chairman.*

LIST OF SECTIONS WITH SUBJECTS where announced, together with names of chairmen and those to open discussion:

GENERAL MEDICINE—Chairman, Dr. Whyte Glendower Owen, White Castle. To open discussion, Drs. F. M. Thornhill, Arcadia, and J. M. Barrier, Delhi.

#### *A Symposium on Tuberculosis in Louisiana:*

(1) Vital Statistics of Tuberculosis in Louisiana, Dr. G. Farrar Patton—Orleans Parish.

(2) The Transmission of Tuberculosis, Dr. Whyte Glendower Owen—Iberville Parish.

(3) Education of the People as a Factor in the Prevention of Tuberculosis, Dr. Fred. M. Thornhill—Bienville Parish.

(4) Climatic Treatment of Tuberculosis Afforded in Louisiana, Dr. P. E. Archinard—Orleans Parish.

(5) Medical Treatment of Tuberculosis and Its Results, Dr. Charles McVea—East Baton Rouge Parish.

(6) Tuberculosis Among Our Negroes, Dr. John M. Barrier—Richland Parish.

(7) General Discussion by the Society.

SURGERY—Chairman, Dr. J. D. Bloom, New Orleans. To open discussion, Drs. R. Matas and F. W. Parham, New Orleans. *Subject not announced.*

NEUROLOGY, INCLUDING MENTAL DISEASES—Chairman, Dr. G. A. B. Hays, Jackson. To open discussion, Dr. P. E. Archinard, New Orleans. *What can be done to prevent the increase of degenerates?*

MATERIA MEDICA AND THERAPEUTICS—Chairman, Dr. H. C. Coty, Shreveport. To open discussion, Dr. W. L. Dickson, Shreveport. *Subject not announced.*

DISEASES OF CHILDREN—Chairman, Dr. J. F. Oechsner, New Orleans. To open discussion, Drs. John Callan and G. F. Patton, New Orleans. *Subject not announced.*

OBSTETRICS AND GYNECOLOGY—Chairman, Dr. R. A. Gray, Shreveport. To open discussion, Drs. J. M. Callaway, Shreveport, and R. F. Harvell, Ruston.

OPHTHALMOLOGY—Chairman, Dr. H. D. Bruns, New Orleans. To open discussion—Drs. E. W. Jones and P. L. Reiss, New Orleans. *Control of Suppuration in Anterior Portion of the Eye.*

OTOLOGY, LARYNGOLOGY AND RHINOLOGY—Chairman, Dr. W. Scheppegrell, New Orleans. To open discussion—Drs. Gordon King and C. J. Landfried, New Orleans. *Subject not announced.*

MEDICAL JURISPRUDENCE—Chairman, Dr. S. L. Théard, New Orleans. To open discussion—Dr. F. J. Kearny, Plaquemine.

*An Open Letter to the Members of the Society from the Chairman of the Section on Medical Jurisprudence:*

DEAR DOCTOR—It is my sincere wish to revive interest in the rather neglected Section on Medical Jurisprudence by securing for our next meeting a number of papers on that important subject. Should you feel inclined to contribute to the Section, I would be pleased to learn at an early day the subject of your paper.

The selection of the Subject for General Discussion will depend largely upon the response of the members to this appeal for a contribution, and will be announced in the next issue of the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL, the official organ of our society.

Very truly yours,

(Signed) SIDNEY L. THÉARD, M. D.,  
Chairman Section on Medical Jurisprudence,  
840 Canal street, New Orleans, La.

DERMATOLOGY—Chairman, Dr. Isadore Dyer, New Orleans. To open discussion, Dr. J. N. Roussel, New Orleans.

*The Importance of Diagnosis in Skin Diseases. Considered generally and as applied to particular Diseases.*

The chairman of this section earnestly solicits the assistance of members and especially begs contributions of papers relating to the occurrence of

skin diseases in country districts, particularly referring to leprosy, types of syphilis, the eruptive fevers, impetigo ("Indian Fire"), rhus poisoning, summer eruptions on the feet and hands, etc. Points in diagnosis and the statement as to numerical frequency are of importance.

QUARANTINE—Chairman, Dr. J. C. Egan, Shreveport. To open discussion, Drs. A. Nolte, New Orleans, and J. S. Stephens, Jr., Natchitoches. *Quarantine.*

BACTERIOLOGY—Chairman, Dr. O. L. Pothier, New Orleans. To open discussion, Dr. John J. Archinard, New Orleans. *Subject not announced.*

ANATOMY AND PHYSIOLOGY—Chairman, Dr. T. G. Ford, Shreveport. To open discussion, Drs. N. M. Hebert, Covington, and W. E. Barker, Plaquemine. *Subject not announced.*

GENITO-URINARY SURGERY—Chairman, Dr. Charles Chassaig-nac. To open discussion, Drs. W. K. Sutherlin, and R. Hunt, Shreveport.

*Varicocele.*

SANITARY SCIENCE—Chairman, Dr. Edmond Souchon, New Orleans. *The Defences of Louisiana Against the Introduction of Yellow Fever.*

ORAL SURGERY—Chairman, Dr. A. G. Friedrichs, New Orleans. To open discussion, Dr. Geo. J. Friedrichs, New Orleans. *The Care of Children's Teeth.*

HYGIENE—Chairman, Dr. F. J. Mayer, Opelousas. To open discussion, Dr. W. A. Holloway, Plaquemine.

(1) *Farm Drainage in its Relation to Health.* (2) *Hygiene of the Rice Fields.* (3) *Relation of the New Discovered Oil Fields to the Hygiene of the State.* (4) *Hygienic-Dietetic Treatment of Tuberculosis.* (5) *Mosquitoes.*

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## Medical News Items.

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THE LOUISIANA STATE BOARD OF HEALTH met in New Orleans, on February 18 and 19, 1902, at the office of the Board—with Dr. Edmond Souchon presiding. Every member was present, viz: Dr. J. C. Egan, Shreveport; Dr. T. T. Tarlton, Grand Coteaux; Dr. W. G. Owen, Whitecastle; Dr. J. S.

Stephens, Natchitoches; Drs. P. B. McCutcheon and Arthur Nolte, of New Orleans, and Dr. G. F. Patton, Secretary.

Dr. P. E. Archinard, the bacteriologist to the Board, and Dr. J. N. Thomas, the Quarantine Officer, were also present.

Among the many points of general interest discussed, we note that it was evident that the general health of the State was excellent.

Dr. Thomas reported that the only disinfection at present was of ships from South Africa and Rio Janeiro. The Quarantine Station has been practically rebuilt and improved in every way.

Governor Heard was requested to issue the annual quarantine proclamation to become effective April 1, 1902.

The commercial exchanges of the city memorialized the board with a view to having the quarantine fees for disinfection reduced from \$130 to \$80 per vessel. As a result the board made a reduction of \$25 on each vessel.

Dr. P. E. Archinard reported that the bacteriologic department had increased its work materially, especially in the country parishes, and that every facility was afforded country physicians in the examination of specimens in suspected contagious diseases. Where indicated, reports on specimens are telegraphed.

The quarantine officers, medical inspectors and ship physicians in the quarantine service were elected by the Board, as follows:

Resident Inspectors at Fruit Ports—Dr. L. A. Wailes, Bocas del Toro; Dr. Allen Jumel, Port Limon; Dr. D. P. Albers, Port Barrios; Dr. King Holt, Bluefields; Dr. Percy Ahrens, Ceiba; Dr. T. R. Outlaw, Livingston; Dr. T. J. Dimitry, Belize.

Marine Medical Inspectors on Fruit Vessels—Drs. W. B. Robertson, D. C. Anderson, T. S. Adams, J. F. Heidingsfelder, G. H. Tichenor, Jr., G. A. Darcantel, C. A. Cobb, W. H. Reilley, E. M. Hummel.

Resident Physicians—Dr. Fred Turney, Rigolets; Dr. Elyssis Serpas, Lake Borgne; Dr. G. H. Douglas, Atchafalaya.

The President of the Board, Dr. Souchon, read a report reviewing health conditions, especially calling attention to quarantine. Speaking for the Board, the President said that the Board shall continue its work of protecting the public health on the well-established lines of safety.

The quarantine plant of the Board is at the present time more complete, and its facilities greater than ever before in the his-

tory of the service. The Board has in contemplation certain other improvements which would still further increase the capacity of the station for expediting work.

The most friendly and harmonious relations exist with the authorities of neighboring States. The Quarantine Board of Mobile Bay, during the past season, worked in perfect accord with the Board, quarantine regulations adopted, after conference, being practically the same at that port and New Orleans.

The health of the State at large continues very good. In a few parishes there have been cases of small-pox, but thanks to the prompt action of the local health authorities, the spread of the disease has been easily controlled. This is especially gratifying, in comparison with the experience of certain Western States where variola continues to prevail to an alarming extent, and thanks and credit are due to the local health officers.

In the city of New Orleans, where cases of small-pox have arrived from interior localities, the city board has managed, in the face of very considerable difficulty, to completely control the spread of infection, and is entitled to all praise.

The collection of vital statistics in the parishes has not been, as yet, complete, but the secretary of the Board reports that there is much improvement; not enough, however, to make the compilation to be published in the forthcoming biennial report of the Board of real value.

THE INTERNATIONAL CONFERENCE FOR THE PROPHYLAXIS OF SYPHILIS AND VENEREAL DISEASES is to meet in Brussels, Belgium, September 15 to 20, 1902. Those disposed to take part in this meeting are requested to communicate with the secretary, Dr. Dubois Havenith, 15 Rue Gouvernement Provisoire, Brussels.

THE AMERICAN DERMATOLOGICAL ASSOCIATION announces its next meeting for September 18, 19 and 20, 1902, at Boston. The subject for general discussion is to be Acne Vulgaris. The etiology and pathology to be presented by Dr. Gilchrist, of Baltimore; the symptoms and treatment by Dr. Fox, of New York.

THE AMERICAN CONGRESS OF TUBERCULOSIS is to hold its third annual session in New York, on May 14, 15 and 16, 1902, at the Hotel Majestic, in joint session with the New York Medico-Legal Society. There will be two sessions each day,



none at night, excepting the banquet on the 15th. In addition to miscellaneous papers there will be four symposiums:

1. *Preventative Legislation, Embracing the Social, Municipal, and State Aspects of Tuberculosis. (What Aid Should be Expected from the State in the Cure and Prevention of Tuberculosis, and how shall this be secured?)*
2. *Tuberculosis in its Pathological and Bacteriological Aspects.*
3. *The Medical and Surgical Aspects of Tuberculosis. (Embracing Sanatoria and Climatic Condition, Light and Electricity.*
4. *The Veterinary Aspects of Tuberculosis.*

The Presidents of the Central and South American Republics, and all Governments on the American Continents, have been invited to send delegates and to name suitable persons to act as Vice-Presidents, and their men of science requested to enroll and contribute to the work of the Congress, many of whom are already represented by delegates. No attempt will be made to classify and arrange these until the program can be announced, but, if thought advisable, a preliminary announcement will be made, one month before the annual meeting, of the titles of papers and names of authors.

Those who were named as delegates by the Governors of States, or medical or scientific bodies, for the session of 1901, are cordially invited to enroll for the Congress of 1902. The enrolling fee will be \$3, which will entitle the member to the Bulletin of the Congress of 1902.

All medical bodies, and scientific or legal associations, or associations of the bar, are invited to send delegates to the Congress, who will be given the rights of the floor and a vote at the session.

There will be named a local committee for the session, of strong names, who will do everything in its power to make the occasion one of great interest and pleasure to enrolled members.

The enrollment is opened to members of both professions in every State, county or province on the continents of America, in the western hemisphere, and in American waters, and papers are promised and will be solicited from all who are interested, in foreign countries.

For details and enrollment, address Clark Bell, Secretary, 39 Broadway, New York City.

DRS. O. L. POTHIER, ISAAC IVAN LEMANN and J. B. GUTHRIE have opened a clinical laboratory at 124 Baronne street, in New Orleans. In a neat circular issued their object is related, rates given, and patronage of physicians solicited. The enterprise is a worthy one in a very good field, and as all three physicians interested are well and favorably known, their effort should bear fruit.

THE NATHAN LEWIS HATFIELD PRIZE FOR ORIGINAL RESEARCH IN MEDICINE.—The College of Physicians of Philadelphia announces through its committee that the sum of five hundred dollars will be awarded to the author of the best essay in competition for the above prize.

Subject: "The Relation Between Chronic Suppurative Processes and Forms of Anemia."

Essays must be submitted on or before March 1, 1903.

Each essay must be typewritten, designated by a motto or device, and accompanied by a sealed envelope bearing the same motto or device and containing the name and address of the author. No envelope will be opened except that which accompanies the successful essay.

The committee will return the unsuccessful essays if reclaimed by their respective writers or their agents within one year.

The committee reserve the right not to make an award if no essay submitted is considered worthy of the prize.

The treatment of the subject must, in accordance with the conditions of the Trust, embody original observations or researches or original deductions.

The competition shall be open to members of the medical profession and men of science in the United States.

The original of the successful essay shall become the property of the College of Physicians.

The trustees shall have full control of the publication of the memorial essay. It shall be published in the Transactions of the College, and also when expedient as a separate issue. Address

J. C. WILSON, M. D., *Chairman,*  
*College of Physicians, 219 South Thirteenth street, Philadelphia, Pa.*

DR. LEONIDAS H. LAIDLEY has been announced as the medical director of the Louisiana Purchase Exposition. Dr. Laidley is on the professional staff of the Marion-Sims-Beaumont

College of Medicine in St. Louis, and was one of the incorporators of the projected exposition.

MARRIED.—Dr. J. A. Storck, one of New Orleans' rising physicians, was married on February 5 to Miss Minnie Edna Howell, also of New Orleans. Dr. Storck has for some years contributed to the Department of Therapeutics in the JOURNAL, and we are all the more glad to felicitate the couple and wish them the compliments as well as the blessings of marital conjugality.

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## Book Reviews and Notices.

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*A Text-Book of Medicine for Students and Practitioners.* By DR. ADOLF STRUMPELL. Third American Edition, from the 13th German Edition. D. Appleton and Company, New York.

This is a good old text-book renovated by additions between brackets by up-to-date American translators, and on that account it ranks among the many good text-books on sale at present. It would be better for those who are apt to comment on and add to old text-books of medicine to write a new book, with the stamp of originality. In many articles there is no order, as for instance, in the treatment of pneumonia; why not at once call attention to the importance of guarding the heart first of all? There is the danger—then at once lay stress on the beneficial effects of the bath and ice bag on the toxemia which afflicts the nervous system and consequently the temperature, circulation and respiration. One can give more useful information in half a page of text-book to-day than former authors who wrote years ago. Why rehash such texts because they belong to an original work which was once an authority?

DUPAQUIER.

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*Typhoid and Typhus Fevers.* NOTHNAGEL'S ENCYCLOPEDIA OF PRACTICAL MEDICINE. American Edition. W. B. Saunders & Co., Philadelphia and London, 1901.

This is a translation of Curschmann's monograph on typhoid and typhus fevers, with additions from the distinguished American editor and his staff. Thayer's and Keen's work and researches on the subject are incorporated in the translation. The original work is therefore enhanced in value for us Americans. Every practitioner should have a complete monograph on typhoid, and this is the one he should purchase and consult.

DUPAQUIER.

*Modern Surgery, General and Operative*, by JOHN CHALMERS DA COSTA; with 493 Illustrations. Third edition, enlarged and revised. W. B. Saunders & Co., Philadelphia and London.

This surgery has been brought up to date and now represents the best modern surgery. The descriptions of surgical conditions and their treatment are brief but clear, the work comprehensive, and no better guide can be recommended for the student of medicine, and the practitioner will find it of the greatest value in putting him in possession of the latest information on surgical subjects.

PARHAM.

*The Principles of Surgery*, by N. SENN, M. D., Ph. D., LL. D. Third edition thoroughly revised, with 230 illustrations. F. A. Davis Company, Philadelphia and Chicago, 1901.

It has always been a pleasure to us to read anything written by this distinguished author, but this work, as it has come into our hands in its successive editions, has been not only a pleasure but an inspiration. The chapters on repair have been particularly entertaining and instructive; they give the surgeon a new and strong impulse in his efforts to attain asepsis in surgery. The whole work can be cordially commended to all who desire a clear exposition of the principles of surgery.

PARHAM.

*Practical Surgery for the General Practitioner*, by N. SENN, with 650 illustrations, many of them in colors. W. B. Saunders & Co., Philadelphia and London, 1901.

This work, as its title page declares, is intended for the general practitioner, but the surgeon will find it a storehouse of much useful information. On the other hand, many things are treated of that can scarcely come within the province of the general practitioner, and not a few subjects might have been added with much profit to him.

Every doctor will find great assistance from this work, not only because it presents in an entertaining manner the principles and the practice of the most advanced surgery, but because the views expressed are those matured from the surgical experience of one of America's most accomplished surgeons.

PARHAM.

*Manual of Physical Diagnosis*. For the use of students and physicians, by JAMES TYSON, M. D. Fourth edition, revised and enlarged with colored and other illustrations. P. Blakiston's Son & Co., Philadelphia, 1901.

Dr. Tyson has from time to time added much to the practical teachings of medicine and the newer edition of this manual only emphasizes the importance of his work. Besides the usual arrangement of the physical examination of the viscera there are chapters devoted to Blood Examinations, Examination of Gastric Contents, the Röntgen Ray in Prognosis, and on making an autopsy. The last subject is successfully presented and with the guide indicated should impress every reader with both the

importance and necessity of post mortem examinations. The author and the book are both well known, and we can only express satisfaction that the demand has led to this acceptable edition, both useful and commendable.

DYER.

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PUBLICATIONS RECEIVED.

*Therapeutic Notes*—Parke, Davis & Co., Detroit, 1902.

*American Edition of Nothnagel's Encyclopedia*, Edited by John W. Moore, M. D.—W. B. Saunders & Co., Philadelphia and London, 1902.

*The Standard Medical Directory of North America*, 1902—G. P. Engelhard & Co., Chicago.

*The Practical Medicine Series of Year Books, Vol. III*—"The Eye, Ear, Nose and Throat", Edited by Casey A. Wood, M. D., Albert H. Andrews, M. D. and T. Melville Hardie, M. D.—The Year Book Publishers, Chicago, 1901.

*Report of the Commissioner of Education for the year 1899-1900, Vol. II*, 1901.

REPRINTS.

*Treatment of Acromegaly With Pituitary Bodies*, by Sidney Kuh, M. D.

*Mirror-Writing and the Inverted Image*, by Albert B. Hale, M. D., and Sidney Kuh, M. D.

*Tent Life and Simplicity in Therapeutics As Factors in the Treatment of Phthisis Pulmonalis*, by Wm. K. Robinson, M. D.

*The Therapeutics of Subacute and Chronic Heart Disease*, by Thomas E. Satterthwaite, M. D.

*Arguments and Appeals for the Restoration of the United States Quarantine at Tortugas, Florida*.

*Giant Sacrococcygeal Tumors, an Account of One of Which Pursued an Atrophic Course—Early Diagnosis in Carcinoma*, by Charles A. Powers, M. D.

*Is Medicine Founded on Truth?* by W. J. George, M. D.

*Anisometropia—Simultaneous Rupture of the Choroid and Paretic Mydriasis Without Paresis of Accommodation—The Diagnosis of Ocular Paralysis*, by Alexander Duane, M. D.

*Affections of the Mouth and Throat Associated With the Fusiform Bacillus and Spirillum of Vincent*, by Emil Mayer, M. D.

*The Use of Tuberculin*, by Charles Denison, M. D.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR JANUARY, 1902.

CAUSE.	White.	Colored.	Total.
Fever, Malarial .....	4	6	10
“ Yellow .....	...	...	...
“ Typhoid or Enteric.....	6	2	8
Puerperal diseases.....	...	1	1
Bronchitis .....	18	7	25
Diphtheria .....	6	...	6
Influenza .....	5	3	8
Broncho-Pneumonia .....	5	3	8
Smallpox .....	2	2	4
Pneumonia .....	47	40	87
Cancer.....	7	3	10
Consumption .....	56	40	96
Diarrhea (Enteritis).....	15	7	22
Dysentery.....	3	3	6
Gastro-Enteritis.....	...	...	...
Hepatitis.....	...	...	...
Hepatic Cirrhosis .....	6	3	9
Peritonitis.....	4	...	4
Debility, Senile .....	19	5	24
“ Infantile .....	6	4	10
Bright's Disease (Nephritis) .....	33	13	46
Heart, Diseases of.....	43	24	67
Apoplexy .....	11	6	17
Congestion of Brain } .....			
Meningitis .....	5	4	9
Trismus Nascentium.....	5	7	12
Injuries .....	16	18	34
Suicide .....	...	...	...
All Other Causes .....	56	27	83
TOTAL .....	378	228	606

Still-born Children—White, 27; colored, 22; total, 49.

Population of City (estimated)—White, 223,500; colored, 81,500; total, 305,000.

Death Rate per 1000 per annum for Month—White, 20.29; colored, 33.57; total, 23.84.

## METEOROLOGIC SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure .....	30.17
Mean temperature .....	53.4
Total precipitation .....	0.97 inches
Prevailing direction of wind, northeast.	

# NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

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No. 10.

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## Original Articles.

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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 this 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.]

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### ENURESIS.\*

BY E. M. DUPAQUIER, M. D., PROFESSOR OF CLINICAL THERAPEUTICS IN THE NEW ORLEANS POLYCLINIC, ETC., NEW ORLEANS.

Enuresis is a symptom of a primary condition which is, *as a rule*, unrecognized, and of course, *as a rule*, the results of our treatment are discouraging, unless it be through luck, when a spontaneous cure or some favorable circumstance, often a trifling one, acting as a curative, happens while the patient is under our care.

The following are the views, remarks and treatment that have impressed me.

I quote from Kauffman (*The Lancet*, June 30, 1900, and *Therapeutic Gazette*, October 15, 1900): "Excessive irritability of the spinal centre there always must be, to lead to the untimely discharge of urine during sleep, but this probably never occurs (except in gross disease of the spinal cord) without a condition of urine which must be considered as abnormal. If we exclude those cases in which there is an excessive formation of urine and those in which there is actual organic disease of the urinary passages, we shall find that the urine of children

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\* Read before the Orleans Parish Medical Society, March 8, 1902.

suffering from enuresis is generally sharply acid, often, in addition, rich in urates, more rarely depositing uric acid; sometimes an excess of oxalate of lime will be found. Such urines are scanty and concentrated rather than copious, and they indicate an error of the metabolic processes which may depend upon disease or diathesis, or upon faulty diet. In conformity with these points we generally observe that enuresis first comes on either after an illness or after a change of diet, or when, in the absence of definite illness, the child has been depressed in health. *The state of the urine* is, in fact, the index of a disordered metabolism. How the disorder comes about is shown to us by the forerunners of the enuresis, though it must be admitted that the history is often difficult to obtain. We may safely assert that the disturbance of the assimilative and dissimilative processes is never primary, but that it is invariably the result of an altered state of the blood, which in turn has its cause in the presence of toxic substances, the proceeds of microbial action or the derivatives of a faulty diet. In a few instances, nocturnal enuresis results from the direct excretion of pathogenic bacteria by way of the urine. Charged with considerable quantities of living bacteria and their derivatives, the urine naturally has an action upon the walls of the bladder irritating beyond the normal, and the result is that during the time when voluntary control is smallest, the spinal centres are apt to respond vigorously to the extraordinary irritation."

I now quote from Barbour, Professor of Diseases of Children, Hospital College of Medicine, Louisville, Ky. (*Therapeutic Gazette*, September 15, 1901):

"It is not my purpose to devote much attention to obvious causes of 'bed-wetting;' the causes, where discoverable, should, if possible, be removed. But the number of causes that have been adduced to account for enuresis is equaled only by the number of remedies which have been suggested for its relief. In the great majority of such cases, however, one is unable to discern any causal factor. The very fact that so many different conditions have been cited as producing enuresis, whereas the same conditions, when present in other children, do not produce it, should remove them from the group of exciting factors, though they may substantiate their claim to be numbered among the predisposing causes. Any predisposition should of



course be counteracted. Cases of enuresis are those which usually without any assignable reason wet the bed at night. The urine is offensive in odor and frequently alkaline in reaction. It stains the night garments or bedding brown and rots the bedding very rapidly. It is not clear, but contains floating particles, which, under the microscope, are of an undeterminable nature.

“The bacteriology has not been worked out, though the offensive odor of the urine would indicate some abnormal change in it, such as most frequently results from the growth of microorganisms. As the urine varies, from a highly acid to a highly alkaline reaction, it is hardly possible that the same organism is present in all cases. Indeed, it is highly probable that there are a number of bacteria which may produce such change in the urine as to render it highly irritant to the normal mucous membrane and which thereby induce a sensitive condition of the bladder, which is suggested as one of the explanations of the phenomenon of enuresis. The great frequency of enuresis and the absence of any observable cause of such cases, have led us to infer that the most frequent cause has not been ascertained and especially that it is not a ‘neurosis’ only.”

I now quote from Taylor and Wells’ latest edition of *Diseases of Children*: “In the largest number of cases, enuresis is a symptom of innutrition or malnutrition, or some disturbances of the equilibrium of metabolism, and symptoms of such disturbances as anemia, lithemia, rachitis or scrofulosis, are present in a large number of cases.”

Gentlemen, the view which directs our attention to a general systematic cause is very suggestive. Local causes are not the most frequent and the value of most of them is greatly exaggerated, for instance, phimosis. Starr says “he has met such cases in circumcised Jews, while half of Townsend’s cases were in girls. Furthermore, patients have been operated on without relief.” We have all seen cases like this. Almost anything, anywhere, might cause the reflex disturbance of incontinence of urine, occasionally; but, as a rule, where no special cause can be made out, as stated, the general morbid condition, bacterial, metabolic or diathetic, accounts better for the irritability of the mucous membrane of the urinary passages and for the oversensitiveness of the cord centres, which are the two essentials

for the production of enuresis. With such a view we are led out of the routine treatment with empiric drug prescriptions. This view explains the happy results obtained in obstinate cases with simple hygienic, dietetic and hydrotherapeutic measures, like in other similar general morbid conditions telling also on the nervous system, including the mind.

I record here the following notes on treatment:

From Bierhoff (*Therap. Gaz.* Oct. 15, 1900), who is of the opinion that the essential condition causing enuresis is hyperesthesia of the deep urethra or sphincter from hyperemia or inflammation; the long list of causes generally given being predisposing or remote.

The treatment which has given Bierhoff the greatest satisfaction, both in adults and children, has been the following: Where the patients were too small to admit of direct local treatment, hot sitz-baths, once or twice daily, the appropriate treatment of necessary causes, the restriction of fluids in the evening, combined with a light evening meal, were employed; at night, where possible, the child was laid so that the head was lower than usual, either by laying a pillow under the hips, or better still, by removing the pillows from under the head and raising the foot of the bed; and where local treatment was possible, applications by means of the endoscopic tube, especially directly to the sphincter itself and the mucous membrane of the trigonum vesicæ or by vesical irrigations and instillations. "In this way," says Bierhoff, "proper diagnosis and properly applied treatment will usually effect a cure in a few days to a few weeks."

From Barbour (*vide supra*): "The inefficiency of the usual treatment in ameliorating the common disease has led many to strive in an empiric way to secure some more brilliant and certain results than have obtained under any of the drugs which have been advocated for it. A large outdoor clinic has furnished me with an opportunity of trying all drugs recommended on a great number of cases, and the simple treatment which I have learned to rely upon has been gradually evolved and confirmed by most satisfactory results in over one hundred cases in private and clinical practice. A child presented itself in my clinic in October, 1896, suffering from enuresis. The examination of urine showed it to be unusually offensive and alkaline in reac-

tion. Desiring to acidify the urine and knowing that the usual organic acids would only increase the alkalinity, and that the mineral acids were very uncertain in their action upon the urine, I decided to use a saturated solution of boric acid, which has the property of making the urine acid. The results in this case were gratifying and also in the next few cases in which I tried it. For several months then we used belladonna only. During the summer and fall I again used the boric acid, but for the purpose of rendering the urine more antiseptic, salol was added to it. The results from the combination were most gratifying, and the two have been used now for several years as the routine treatment for enuresis." "I do not know any case," says Barbour, "in which it has failed after a thorough trial, and it has been employed not only by myself, but by medical friends, who have uniformly reported most favorably upon its use."

Cassidy (*Therapeutic Gazette*, July 15, 1901) reports three cases of nocturnal enuresis in boys from twelve to fourteen years of age in which other treatment had proved unavailing, successfully treated as follows:

- ℞ Citrate of iron .....160 grains.  
 Syrup of lactophosphate of lime.....  
 Aromatic syrup of cascara.....aa 2 oz.  
 M. A teaspoonful after dinner (at noon.)
- ℞ Fluid extract of rhus glabra.....320 minims.  
 Syrup.....2 oz.  
 M. Teaspoonful at bedtime.

This treatment was continued for four months. The incontinence disappeared and did not recur. The author declares that rhus glabra produced more than a temporary effect. The astringent principle acted on the irritated mucous membrane of the bladder.

From Amat (*Gould's Year Book*, 1901): When the vesical muscular fibres are too sensitive to distension. During the day, they are mastered by the will to some extent, but contract as the patient drops off to sleep. Use bromide, chloral, opium, and better still, belladonna and antipyrin. When there is hyperesthesia of the vesical and urethral mucous membrane the condition is revealed by the catheter and met by bromides, valerian, asafetida and ammoniated copper.

When the catheter can be passed through the membranous part of the urethra with ease the sphincter is not irritable, but

weak. Here strychnin, rhus aromatica and, above all, electricity are needed.

Herbsman (*Therapeutic Gazette; Semaine Médicale; Archives of Pediatrics*, 1901), treats nocturnal incontinence of urine by massage of the vesical neck, practiced through the rectum. The patient is placed in the knee-chest position, and with the index finger stroking manipulations, increasing in force, are practiced for two minutes, followed by sudden intermittent pressure and vibrations. Treatment is repeated every day, and the cure results, according to Herbsman, after three or eight treatments.

From Thiemich (*Medical Record*, August, 1901): M. Thiemich considers the nocturnal incontinence of children not as a local trouble to be grouped under the diseases of the uropoietic system, but as manifestations of hysteria. In adopting this view, it is necessary to take into consideration the fact that the hysteria of children differs from that of adults in being essentially monosymptomatic, without the presence of the usual stigmata, and the author holds that the good results following such measures, such as the removal of adenoids, injections of strychnin into the mons veneris, elevation of the pelvis, etc., are to be ascribed solely to their suggestive effect. The most efficient measure is the employment of a strong faradic current, which is not necessarily to be applied to the abdomen, but is just as efficient if one pole is placed over the sternum and the other passed over the arms. Care must be taken not to convey the impression that the treatment is a punishment, for such methods are notoriously inefficient, but is to be explained that, even although painful, the measure is certain, and that a second or third application is always successful; if tactfully conducted more than a single session is rarely required. Removal from home and isolation in this, as well as in all forms of hysteria, are the most potent of all remedies, and while usually difficult to carry out in these cases, may be reserved as a last resort. A somewhat analogous condition is that of "pollakuria," in which small quantities of urine are frequently voided through the day, and this also usually yields readily to the electrical treatment.

To mention other forms of medication of practical value very briefly (Barbour's article):

Increasing doses of belladonna, of atropin, or of hyoscinehydrobromate, are the most reliable measures.

Belladonna is still highly lauded by all eminent pediatricists. They find it to be almost universally applicable. Some prefer atropin on account of the definite strength of the alkaloid, the exactness of the dose and the certainty of its therapeutic action. But experience with it in many cases (Barbour's statement) has not been favorable. It has to be used in such large, almost toxic, doses, as to border on the danger line. The effects of such large doses are so unpleasant and often so alarming that many have been anxious to secure some drug which was less toxic and more effective. Holt recommends increasing the dose of atropin so that a child aged five may take one 1-100 of a grain of atropin at 4, 7 and 10 P. M. and in a foot note gives his experience as follows: "Twelve obstinate cases, in none of which could any local cause be found, were treated by Dr. Kerley then a resident physician in the New York Infant Asylum, in the manner indicated. After five months, seven of the cases were so much improved that incontinence rarely occurred. The atropin was, however, continued in smaller doses for four months longer, at the end of which time the cases were well. In the remaining five cases, but little improvement was seen after five months' treatment, and not until the end of the ten months could it be said that much improvement had occurred. In these cases, the drug was continued for two months longer and all treatment discontinued as the cases were cured." Prof. Holt very correctly adds that "in dispensary and private practice the want of early success would have deterred mothers from continuing the medicine." The difficult handling of hyoscin is also an objectionable feature. Strychnin is indicated in those cases in which there is a general relaxed condition of the muscles, and it is of benefit by its systemic action. It is indicated in diurnal incontinence, chiefly.

"Ergot is sometimes combined with it when the sphincter of the bladder is too weak; but it will upset digestion and is of little assistance. Iron, in the form of syrup of ferrous iodide, is of use in anemic cases especially. As regards suggestive therapeutics, it is difficult to understand how a child, as sound asleep as these children usually are when they wet the bed, can be affected mentally by suggestion."

What about punishment? In the cases of children when a morbid condition is present, punishment never does any good.

It is out of place and we must oppose it. But in growing boys, girls and youths, there are in some instances no other condition than a sort of mental sluggishness, connected with laziness, disinclination to get out of a warm bed in winter, and I know it to be a fact that in such cases threats of punishment and the actual free use of the rod and cold water buckets have had everlasting effects. The same condition exists at ten or fifteen years in such lazy fellows as in the normal child at the termination of the second year, at the time mothers begin to teach seriously the little ones how to control both their bladder and bowels, and we know this most important education is not little helped by threats of punishment and actual carrying out of a mild manual punishment, at times. Preferably to the stick or hand, as a rule, cold water does the work in those cases of purely mental character in which the child, an unusually sound sleeper, must be roused and made to micturate two or three times at night.

Summing up, I am an advocate of general treatment in the main. My attention is directed first to the examination of the urine, to the detection of some disease of the blood, from bacterial, metabolic or diathetic source, and I depend on the use of water, hygiene, diet and exercise—to ameliorate the system first, and then I think of the local treatment if the cases are persistent.

But no matter what form of treatment is used (Taylor & Wells) very often patients will temporarily improve, may seem to be cured, only to lapse again into the old condition. Starr remarks very wisely: "We should be careful about claiming results for treatment unless the patients are watched a long time, especially so if recovery occurs in the spring. Many remedies have been proposed and papers written to show the brilliant results of one or another treatment, yet the number of cases that do not improve continues large. The failure of some practitioners where others seem to succeed is due partly to hasty generalizations at the bottom of many enthusiastic papers, partly by the after history of patients being obtained for too short a period."

Finally, gentlemen, when recording histories, let us not forget that cures occasionally result from nothing more than a change of surroundings or of diet, and let us bless these times where we are all growing to be chary of giving drugs haphazard.

## WHEN NOT TO OPERATE IN ANOMALIES OF THE EXTRINSIC MUSCLES OF THE EYE.\*

BY E. A. ROBIN, M. D., ASSISTANT PROFESSOR ON DISEASES OF THE EYE IN THE NEW ORLEANS POLYCLINIC, ETC., NEW ORLEANS.

Before entering upon the consideration of this subject we desire to express our gratitude to Drs. Hansell and Reber, who in their little work on Anomalies of the Extrinsic Muscles of the Eye have not only contributed materially to our knowledge but have strengthened our belief in the propriety of a wise conservatism in the treatment of these disorders. Though firmly believing their conclusions, and their strong plea to place operative procedures the last of a long list of remedial measures, to be the offspring of a ripe experience, we feel that further discussion of this difficult subject will not be amiss. Certainly, it is fully justified in the light of its great importance, and more especially by the fact that it has not been worn threadbare and still admits of honest differences of opinion in some of its phases.

Indeed, the more experienced we become in dealing with this class of cases the more we realize how poor we are yet in laws applying to every emergency.

Though far from perfect in our methods of correcting these defects, still we have, with close study and application, established rules of practice, to deviate from which almost inevitably leads to disastrous results. Too frequently indeed do we meet patients in whom positive harm has been wrought or would have resulted had the patient followed the surgeon's unwise advice, given through ignorance of the nature and underlying causes of these anomalies, or, as is too often the case, through carelessness and slipshod methods of investigation engendered by the eagerness of early profit.

A thorough understanding of the anomalies of the extrinsic muscles presupposes an equally complete knowledge of refraction and its anomalies, for the large majority of muscular imbalances result directly from errors of refraction through faulty innervation; for we do not include in this discussion cases due to organic lesions. It should therefore be clearly understood that no case should be allowed to undergo operation before the refraction has been accurately determined, and that means

\* Read before the 1901 meeting of the Louisiana State Medical Society.

under a reliable cycloplegic; and we have never yet found any equal or superior to atropin. And further, when the patient has worn constantly the glasses correcting as closely as possible the total refractive error (*for weeks and months*) and has faithfully co-operated with the physician in the patient and persevering trial for months and years, of all the other means at our disposal without relief, then the time has come to appeal to the court of last resort, *i. e.*, an operation.

What constitutes an anomaly of the extrinsic eye-muscles?

“A condition in which the eyes have a constant tendency to deviate, or an actual deviation of the visual lines. In the former case, when there is only a tendency to deviate, we are in the presence of an insufficiency of the muscles, and diplopia is avoided by the effort of nature to secure binocular single vision through an amount of innervation over and above what would be necessary were the muscles in perfect balance.” This condition is also called latent squint, and differs only in degree from manifest squint, where no effort is made, or avails, to overcome the faulty relationship of the visual axes.

Following Stevens, we apply the generic name of heterophoria whenever there is a tendency of the eyes to deviate. Esophoria specifically denotes a tendency of the visual axes to converge. This condition is generally met with in hyperopic eyes and is brought about by the undue impulse to converge, inevitably associated with the impulse to accommodate for distinct vision; so, when we remember that the hypermetropic eye must accommodate for all distances, we realize that convergence is being constantly stimulated in a greater degree than necessary, and there follows a hyperdevelopment of the muscles of convergence. The effort of the opposing set of muscles to preserve single binocular vision gives rise to the direct symptoms of pain in the eyes, headaches, blurring of sight, and to the long train of reflex troubles such as nausea, vertigo and epilepsy.

This symptom-complex constitutes what is generally termed asthenopia, and in a given case it is not always easy to say whether the asthenopia is accommodative, or muscular, or both in its origin. The correction of the ametropia settles the question and in most cases relieves the symptoms and in time restores the equilibrium of the muscles by removing the faulty



innervation; though it is true there may still remain a low degree of esophoria of say two to six degrees. We are strongly minded to consider this rather an advantage than otherwise, for the function of convergence is one that diminishes with age and the mild esophoric is in the position of the one who has saved something for a rainy day. Nay more, our convictions coincide with those of many authors who believe that a low degree of esophoria constitutes the normal muscle balance and that orthophoria is but a phase of exophoria. Occasionally we are not successful at first in restoring the balance by the wearing of glasses which correct the refractive error on account of the return of ciliary-muscle effort and with it extra convergence, and we are called upon to induce the ciliary muscle to cease working by paralyzing it time and time again with atropin until it has become docile and learned to move in its new groove. And here we wish to say most emphatically that the road to success lies in, first and foremost, correct refraction and persistent efforts, on the part of the patient co-operating with the physician, to wear the glass that fully neutralizes the error. The following case well illustrates our meaning and bears us out strongly in our warning not to operate until we have exhausted all our other measures.

Mr. P. L., a medical student, aet. 21, came to our office on August 15, 1898, complaining of constant headache and dizziness which became so severe when he attempted to study that he was unable to continue his course unless relieved. He had consulted an oculist who prescribed this glass: R. & L.  $+1^s c + 0^{50c}$  ax.  $90^\circ$ , which corrected his manifest error. Securing no relief from those glasses he again sought the oculist, who now discovered a high degree of esophoria, and advised him to have his internal recti tenotomized. Unwilling to submit to an operation he came to us. Upon examination V in R & L  $= \frac{20}{xxx}$  poorly—Stevens' phorometer showed: esophoria  $11^\circ$  at  $20'$ ;  $30^\circ$  at  $14''$ . Javal's instrument showed: R & L 1.50 ax.  $90^\circ$ . After three examinations under atropin instilled in the eyes for three consecutive days R & L  $V = \frac{6}{cc} + 4^{50s} + 1^c$  ax.  $90^\circ = \frac{20}{xxx}$ . We ordered R & L  $+3^{50s} \div 1^c$  ax.  $90^\circ$  for constant wear.

Aug. 26—R & L V with his glasses  $= \frac{20}{xx}$  fairly—Esophoria  $= 3^\circ$  at  $20'$  and  $14''$ .

Nov. 14, 1898, with glasses, esophoria= $2\frac{1}{2}^{\circ}$  at 20' and  $1^{\circ}$  at 14". Ordered his full correction for reading. Patient feels very much improved; but a few hours' reading is followed by headache and blurring of print.

Dec. 17, with glasses, esophoria= $2\frac{1}{2}^{\circ}$  at 20'—ordered strychnin sulph. gr. 1-24 once and then twice daily.

Jan. 4, 1899—Esophoria same as last note; ordered his full correction worn constantly. Continued strychnin sulphate gr. 1-20 once and then twice daily.

Jan. 27, 1899—Reports remarkable improvement. He can now read comfortably for several hours daily. Stevens' phorometer shows, with glasses, exact orthophoria or perfect muscle balance. Patient discharged cured. When seen a few weeks ago he reported no unfavorable change in his condition. This case speaks for itself. Within a few days over five months from the date of correct refraction his muscle balance had changed from an esophoria of  $11^{\circ}$  at 20' and  $30^{\circ}$  at 14" to a condition of perfect muscle balance and a disappearance of all symptoms of asthenopia.

The operation of tenotomy of the internal recti in this case, therefore, would have been nothing short of malpractice. For let us look into what would have followed operation. First, the divided tendons under the abnormal tension of the internal recti would have slipped back into the orbit and become attached to the sclera at a point farther back than their original insertion, thus reducing their purchase on the eye ball and crippling their power of convergence, a function becoming more and more essential to man as we progress in civilization.

Secondly, no relief of the system would have resulted, for the refractive error, unscientifically measured and hence only guessed at in its correction, would have kept the accommodation and convergence in a condition of strain. And finally, this case having been shown to be primarily accommodative in character, becoming complicated with muscular imbalance on account of the excessive impulse to convergence found of this high degree of hypermetropia, would have been positively harmed, in that, while no temporary ease of the discomfort would have been secured, convergence crippled in youth would, with advancing age, have been too weak to carry the burden of binocular fixation, and have sought relief in monocular vision,

the fellow eye taking its position of rest in the orbit and becoming a constant diverging squint.

The condition called esotropia, when the visual axes actually cross, is but an exaggerated esophoria where the eyes cease to or are unable to overcome the obstacle to binocular single vision. This obstacle may be: first, the great discomfort involved in the strain; second, some difference in the visual acuity or refraction of the two eyes, or finally some peculiarity in the strength or insertion of the opposing sets of muscles. This last circumstance only will explain the cause of esotropia found in emmetropes. Those cases are so rare that in our six years' connection with the large and varied clinic of the Eye, Ear, Nose and Throat Hospital we have collected barely a half dozen in whom tenotomy was uniformly performed with good results but not before the refraction had been carefully measured under atropin.

Here is an instance of this class: Eva Carr, school girl, aet. 10, applied at the clinic on April 20, 1899. Gave history of eyes crossing for seven years, the condition being first noticed after an attack of measles. The left eye sore for two months. Examination showed; alternating esotropia and phlyctenular ophthalmia of left eye. Her general appearance and health very good. Atropin was instilled in both eyes and calomel dusted in left eye on the first day. This treatment was repeated daily, and at the end of five days the phlyctenular trouble in left eye was well. Under thorough atropinization  $R V = \frac{20}{xx}$   $L V = \frac{20}{xxx}$ ; no glass helps.

May 24, 1899—Under cocain we tenotomized the left internal rectus with a moderate estropia remaining as an immediate result.

June 10,  $R V = \frac{20}{xx}$   $L V = \frac{20}{xx}$ . Some esotropia still remains.

June 14—Tenotomized right internal rectus; immediate result; slight extropia.

June 15—Exophoria= $26^{\circ}$  at 20'. Applied two stitches drawing forward the conjunctiva and Tenon's capsule as much as possible.

June 22—Stevens' phorometer shows exophoria  $4^{\circ}$  at 20'. Stereoscope shows good binocular vision.

August 14—Stevens' phorometer shows exophoria at 14° at 20'; left hyperphoria 8° at 20'. Ordered practice with stereoscope.

August 21—Stevens; no exophoria; left hyperphoria=5° at 20'. Continued practice with stereoscope.

September 16—Stevens: exact orthophoria. Stereoscopic vision good. Patient has been entirely free from headache since June 14, the date of last tenotomy, and is now going to school. Discharged cured.

Clearly in these cases, having determined the presence of emmetropia, we are left no choice but to operate, for the muscle imbalance is here due to a disproportionate insertion of corresponding or opposite muscles into the sclera, or to a difference in their development.

But we should carefully avoid cutting or advancing any muscle in an esotropic patient with ametropia before he has been submitted to the thoroughgoing course outlined for the esophoric, the only point deserving further emphasis being the exercise of greater perseverance in our measures. Often a squint will persist for a long time in spite of a faithful correction of the ametropia in a patient with a high degree of amblyopia, and we should then bend our efforts to improve the visual acuity in the dull eye by daily exercising it while its fellow is under cover. We have a large number of instances on record of marked improvement in vision following this practice, and as binocular single vision became possible with the increase of vision in the amblyopic eye, the equilibrium of the extrinsic muscles became re-established.

This is doubted by many excellent authorities; nevertheless our researches have been so conclusive as to establish beyond doubt the correctness of our proposition. The following is one of the well authenticated cases occurring in our practice:

Nanna Shannon, aet. 10, came to us on February 24, 1898, with the history of left eye having crossed since she was three years old. Her general appearance and health very good.  $R V = \frac{20}{xx}$   $L V = \frac{20}{Lxx}$ . Refraction under atropin shows  $R V = \frac{20}{Lxx} + 2.75^s = \frac{20}{xx}$ ,  $L V = \frac{20}{c} + 3.50^s = \frac{20}{Lxx}$ . Ordered for constant wear,  $R + 2^s L + 2.50^s$ .

March 8—Eyes nearly straight with glasses. Ordered practice of L. E., with cap over R. E., three times daily.

March 18—Eyes squint perceptibly with glasses; ordered total correction worn constantly.

March 21—With glasses R  $V = \frac{20}{xx}$  L  $V = \frac{20}{l}$ .

April 11—Has been practicing, for four weeks, the left eye daily—R  $V = \frac{20}{xx}$  L  $V = \frac{20}{xxx}$ .

June 15—Practices regularly: R  $V = \frac{20}{xx}$  L  $V = \frac{20}{xx}$ ; most of slight esotropia persists. Complete tenotomy of left internal rectus performed with a moderate divergence as an immediate result. On the following day the eyes were perfectly straight.

June 24—Wearing correcting glasses constantly. With glasses, Stevens' phorometer shows: exact orthophoria; without glasses, esophoria  $2^\circ$  at  $20'$ . R and L  $V = \frac{20}{xx}$ .

Patient was last seen on November 22, 1900. V in R  $= \frac{20}{xx}$  and L  $= \frac{20}{xx}$ ; is entirely free from any asthenopia and eyes are straight.

Now when we are called to deal with the opposite error in muscle balance, namely, exophoria, where the tendency of the visual lines is to diverge, the condition being so much more complicated in its etiology, we must bring into play every faculty of the mind and the broadest of surgical principles to obtain success. In fact this condition is the stumbling block of the tyro who literally carves himself many pitfalls whenever he attempts its remedy by rushing in where angels fear to tread.

Briefly speaking, the causes of exophoria are either mechanical or psychological. When the relation between accommodation and convergence is abnormal, as in the case of the myope, or the astigmatic of low degree, we have an instance of the mechanical cause. The internal recti of the myope not receiving the stimuli essential to the amount of convergence necessary for single binocular vision, gradually become insufficient and balance is maintained only at the expense of strain. The following case shows the folly of operation before making a careful study of the patient and his refraction and the unwise choice of operation:

M. T. R., aet. 20, came to us on January 18, 1900, complaining of almost constant headaches and pain in the eyes, the symptoms becoming more severe when he attempted to read. R  $V = \frac{20}{LXX}$  L  $V = \frac{20}{C}$ . Maddox rod and Stevens' phorometer showed exophoria  $1^\circ$  at  $20'$ ,  $18^\circ$  at  $14''$ . He stated that

sixteen months prior to his coming to us he had consulted an oculist, who ordered the following glasses: R-1<sup>25c</sup> ax. 90°. L-1.50° ax. 90°. These glasses were based upon a measurement taken without the use of any cycloplegic. Failing in happy results he proceeded without any further ado to tenotomize the right external rectus. He urged tenotomy of the other external but the patient declined. Careful refraction under atropin gave the following result: R+O<sup>50c</sup> ax. 180°=—I° ax. 90°= $\frac{20}{xx}$ . L+O<sup>50c</sup> ax. 180°=—I<sup>50c</sup> ax. 90°= $\frac{20}{xx}$ .

These glasses were ordered at once for constant wear.

Feb. 7—Phorometer shows with glasses: exophoria 2° at 20', 14° at 14". Adduction 10°. Ordered 10° prism to practice with for 5 minutes twice daily.

Feb. 14—He reports complete relief of symptoms. Adduction equals 15°. Given pr. 15° to practice with.

Feb. 20—He is still comfortable. Fuses 20° with ease. Told to practice with pr. 20°.

Feb. 28—Keeps well. Fuses 32°. Told to practice with it.

March 15—He is still doing well. Fuses 40° prism with ease. Practices with same.

March 24—Fuses 47° easily. Instructed to practice with this number. He can now read comfortably for several hours.

April 27—Maddox rod and phorometer reveal exophoria  $\frac{1}{2}$ ° at 20', 6° at 14". Patient reports no unfavorable change in his condition.

September 10—Exophoria  $\frac{1}{2}$ ° at 20', none at 14". Discharged cured.

March 26, 1901—This is over six months after discharge. Examination reveals exophoria  $\frac{1}{2}$ ° at 20', none at 14". Patient can study for six hours daily without discomfort.

This case demonstrates beyond question the two points we would illustrate, namely, that it was an inexcusable mistake to operate without sufficient data as to the patient's *static* refraction, that the choice of operation, tenotomy, was illogical in so much as it is a weakening procedure and contraindicated in exophoria, which is essentially a passive condition due to relaxation of the muscles of convergence.

The sole result possible would be a diminished abduction without any proportionate strengthening of the convergence. When operation is indicated at all in exophoria we are posi-

tively of Landolt's opinion that advancement of the insufficient internal recti is the logical procedure. Occasionally, however, the cause of the imbalance resides in overstrong external recti, and when this can be demonstrated tenotomy of the external recti may be practiced.

There is still another class of exophorics, quite as important as the preceding, found most frequently among young society or college girls who after a season of gayety or close application are run down in health and their attention being drawn to the fact that their eyes form a part of their anatomy they select them as a proper scapegoat for their hysteric broodings.

These are instances of a psychologic condition resulting in defective innervation and so manifesting the lowered tone of the nervous and muscular systems. It is almost needless to state that operation in this class of patients is utterly contra-indicated, and we would not dwell upon it longer than to suggest its treatment by every means short of operation were we not reminded of just such a patient upon whom operations were perpetrated over a dozen times, without good results. We have here the histories of two cases in illustration of this class:

Miss C. B., aet. 26, consulted us on April 19, 1899, complaining of print blurring upon reading and frequent headaches. Stevens' phorometer and Maddox rod revealed  $17^\circ$  of exophoria at 20'. Tolerates  $10^\circ$ , base in. Refraction under atropin is R and L+50<sup>s</sup>.

April 26—Maddox rod=Exoph.  $11^\circ$ . Double prism= $13^\circ$ . Stevens'= $8^\circ$  at 20'. Fuses  $15^\circ$  base out. Prism practice with  $15^\circ$  ordered.

May 22—Exophoria= $6^\circ$  at 20'. Fuses  $40^\circ$  base out. No exophoria at reading distance. Suspended prism exercises and given a mild collyrium for hyperemia of the conjunctiva.

July 22—All tests show: orthophoria at all distances. Patient discharged cured.

Here we witnessed a high degree of exphoria uncomplicated with any material error of refraction, hence not traceable to a disturbed relation of the functions of accommodation and convergence, but of a purely psychologic nature. The marked discrepancy in the findings by the different tests suggested at once a pronounced hysteric element in the evolution of her condition, and to have operated in such a case would have been rank folly.

We present another instance of defective innervation in the case of Miss L. L., aet. 20, who consulted us on December 30, 1897, on account of pronounced asthenopia. She was at the middle of a college course involving severe use of the eyes with artificial light. Her total refraction was a hyperopia of  $+1^{25s}$ , which was ordered for near use only. Exophoria at  $2^\circ$  at  $16''$ , none at  $20'$ . She goes back to her studies.

January 29, 1898, a month later, she returns with asthenopia unabated. Exophoria  $6^\circ$  at  $16''$ , none at  $20'$ .

February 15—Exophoria= $8^\circ$  at  $16''$ . Ordered prisms  $3^\circ$ , bases in, to be worn in front of glasses when reading.

March 11—Exophoria  $8^\circ$  at  $20'$  and at  $16''$ . Ordered glasses worn constantly. Practice with  $18^\circ$  prism which she can just fuse.

March 18—Orthophoria at all distances, can fuse  $30^\circ$  prism. Practice kept up with a  $30^\circ$  prism.

May 28—Eyes perfectly well and painless. No headache. Advise use of her glasses without prisms for near only.

To-day, three years after her discharge, she still pursues arduous university studies without the slightest discomfort. A careful analysis of this case, as well as of the preceding one, will show that a proper estimate of the personal equation is not by any means the least important factor in restraining us from rash use of the knife or scissors.

In the latter case no hysteric element is apparent, but a clear-cut lack of innervation bringing about at first only imbalance at the near point and later on at all distances; this faulty innervation being probably due to badly nourished and exhausted centres and consequent imperfect association of convergence and accommodation. The correction of the ametropia restored the relations between the two functions and the muscle gymnastics supplied the drill which taught them to work together without a hitch.

To sum up without prolonging this paper to undue proportions, any case of muscle imbalance, be it a tendency to incorrect turning of the eye, a phoria, or be it an actual malposition, a tropia, requires, before we even dare entertain the idea of operation, a thorough study:

1. Of the patient's age (actual, not in years), employment, general health, social position, character and psychologic state, both habitual and at the time he applies for relief.



2. A careful measurement under atropin of all errors of refraction and the constant and persistent wearing of glasses correcting as nearly as possible the total amount of defect.

3. Patient and persevering endeavor in esophoria or esotropia to re-establish balance by enforced rest of the accommodation with atropin and in exophoria or exotropia by muscle gymnastics, general tonics, outdoor exercise and a suspending of all eye work at the near point.

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### EPISTAXIS: ITS CAUSATION AND TREATMENT.\*

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Epistaxis, or hemorrhage from the nasal cavities, is a subject to merit the interest and consideration of every practitioner of medicine. It is a condition with which he may be called upon to contend at any time in his daily practice, either as an intercurrent complication of some general local disease under his care or as an emergency case requiring urgent and decisive action. While in the vast majority of instances bleeding from the nose gives little cause for alarm and usually ceases spontaneously before any great quantity of blood is lost, yet it may be so profuse or prolonged under certain unfavorable conditions as to give rise to great weakness or even to fatal syncope, and it is then that the physician should be prepared to render effective and timely aid.

From an etiologic point of view, epistaxis, being a symptom, rather than a disease in itself, has a vast number of causative factors, all of which are best comprehensively classified under the following four divisions: (1) Traumatism; (2) Local nasal disease; (3) Constitutional conditions; (4) Vicarious function. Age and sex have little effect upon its occurrence, though it appears to be more frequent in males than in females, and most frequent between two years of age and puberty.

Owing to the peculiar structural form of the nose and its exposed and prominent position, it is particularly susceptible to traumatic injury, and its vascular mucous lining being closely

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in relation with the bony and cartilaginous framework, readily suffers rupture or abrasion and hemorrhagic results.

From the time the infant toddler, making his initial effort to perambulate on his awkward little legs, takes a tumble to the floor and screams with terror and dismay as the vital fluid trickles from his nose, that important organ gets more than its share of the hard knocks to come in after life. It is needless to recount these various causes of external violence; suffice it to say that any trauma upon the external nose forcible enough to rupture the mucous membrane, or any injury to the membrane itself, leads naturally to epistaxis, more or less severe.

Under the second division, there are many different disease conditions affecting the mucous membrane which predispose to or excite the occurrence of hemorrhage.

The various hyperemic conditions dependent upon catarrhal inflammations, vasomotor disturbances or interference with the nasal respiratory functions, may predispose to nasal hemorrhage. Ulcerated processes brought about by syphilis, tuberculosis, the presence of foreign bodies or malignant disease, furnish frequent explanations of the phenomenon. Again, it may occur from the presence of tumors, either malignant or benign, which increase the vascularity of the region, cause stasis from pressure, or bleed themselves as a result of sloughing or erosion. Prominent among these we may mention adenoid vegetation in the naso-pharynx of children, which not only increase the vascularity of the parts for their own blood supply, but give rise to catarrhal inflammation and interfere with the normal circulation by their obstructive effect on the nasal respiration. This latter effect I feel called upon to explain more clearly, since it is particularly the same as that produced by certain malformations or deformities of the nasal septum, such as deviations, spurs and ecchondroses, which likewise interfere with the respiratory function.

Adenoids, while they seldom cause complete occlusion of the nasal passages, so obstruct them that mouth-breathing becomes a compensatory habit and the nasal function is practically suspended. As one of the natural consequences of this suspension of function the small but important respiratory muscles which actuate the alæ of the nose undergo degeneration and atrophy from disuse.

The mechanical result of this, as can be observed readily, is that the wings of the nose, having lost their power of distension, collapse with each inspiratory effort and act as valves to further prevent the entrance of air into the nose. When the respiration is carried on through the mouth, every inspiratory current as it passes down the pharynx abstracts a certain quantity of the stationary air contained in the naso-pharynx and the nose. The obstruction anteriorly prevents its immediate replacement and a partial vacuum or a rarification of the air in the nasal cavities is produced. This naturally causes a hyperemia of the lining membrane. The same physical effect is produced in one fossa when it is obstructed by septal deviation or ecchondrosis. This is a phenomenon long recognized by the rhinologists. That epistaxis is frequent in these conditions is also a well-recognized clinical fact, and recurrence of the epistaxis is prevented by removing the obstruction to the respiration.

Under the head of constitutional causes of epistaxis, there are many interesting conditions to observe and study, and it is these forms that are usually the most difficult to prevent and are prone to induce unfavorable terminations. First, we may mention that peculiar constitutional tendency to hemorrhage which we know as hemophilia, the most frequent exhibition of which is usually the tendency on the part of the afflicted individual to frequent or prolonged attacks of nose bleeding from very trifling causes, or spontaneously.

This hemorrhagic diathesis may be hereditary or congenital, or may be acquired in the course of some other disease, such as typhoid fever.

I have had occasion to observe a case of this nature occurring in a man who was suffering a relapse of typhoid fever. I was called in to see the case by Dr. J. Laurans, the attending physician. The nose had begun to bleed a few hours previously without any apparent exciting cause, and although the nose had been firmly packed with gauze strips, a steady dripping kept up anteriorly and into the pharynx. The urine was heavily charged with blood and the stools were also bloody. The patient was markedly anemic and weak and required our closest attention for several days to keep the hemorrhage in check and support his vitality. It has been my intention to report the case in full at some other date, as I consider it one of unusual interest.

The premonitory epistaxis of typhoid fever is too well known to need further mention, and it is not infrequently observed in some of the other infectious or acute fevers, such as pneumonia, influenza, measles, parotitis, whooping cough, and diphtheria. Scurvy and purpura have epistaxis as not uncommon complication and its occurrence has been noted as a direct result of gout, emphysema, syphilis, anemia, tuberculosis, and last but not least, in Bright's disease. The high vascular tension and the degeneration of the blood vessels in chronic interstitial nephritis, predispose to epistaxis, so that we are often led to examine the urine when we have to deal with an apparently spontaneous hemorrhage from the nose in persons likely to be afflicted with renal trouble. Cardiac insufficiency by causing local stasis sometimes occasions nasal hemorrhage. Among still other cases, we may mention plethora, alcoholism and the atheroma of old age, in which it may be indicative of a future attack of apoplexy.

Lastly, as a most interesting phenomenon, epistaxis occurs at times as a vicarious function, namely, that of menstruation. As clearly illustrating this, a girl twelve years of age was brought to me a few weeks ago, with a history of three or four attacks of epistaxis, each lasting about three days, with moderate loss of blood, and occurring at intervals of about one month. Upon questioning the mother, I learned that the girl had never menstruated, but that she showed evidences of approaching puberty and that she had complained of vague pains in the lower part of the abdomen and general malaise just at the time she experienced the attacks of nose bleed. These symptoms disappeared with the spontaneous cessation of the nasal hemorrhage. I informed the mother of my opinion as to the nature of the trouble and requested her to report to her family physician and to bring the child to me if the epistaxis occurred again. At the time I examined her, the bleeding had already ceased several days before and I saw nothing of a causative nature in the nose itself.

It is claimed that bleeding may occur from the nose also when the bleeding from hemorrhoids has been suddenly checked. I have never had occasion to meet with such a case.

Thus epistaxis has many and various predisposing and existing causes and may be of diagnostic value, indicating certain diseased conditions, either local or of the general economy. In

either instance, we should determine the local lesion and then the constitutional cause, if there exists one.

For the treatment, it is always of importance to locate, if possible, by a rhinoscopic examination the exact point of hemorrhage. In the majority of cases of simple epistaxis we find near the anterior and lower portion of the cartilaginous septum a superficial network of little blood vessels, one or more of which has become eroded or ruptured. Here it is a simple procedure to check the flow temporarily by compressing the nose between the fingers and then when the flow is checked, cauterizing the point with the galvanic cautery or by the application of lunar caustic or chromic acid. Later, the daily application of an ointment containing a small proportion of one of the zinc salts and ichthyol will heal the eroded spot. If the hemorrhage is the result of traumatism or the presence of tumors or ulceration of more extensive nature, cauterization would not be so applicable and we must resort to other measures.

Packing the nasal cavity tightly with sterile gauze strips or absorbent lint may serve to check the flow until firm clotting in the ruptured vessel takes place, but care must be observed not to injure other parts of the mucous membrane in introducing the packing. If blood begins to fall into the pharynx from the posterior nose, the temporary use of the post-nasal plug may be tried. The Bellocq canula is designed for this purpose, but in the absence of one, a small rubber catheter or a filiform bougie may be passed through the nose, drawn down into the mouth, and a strong thread attached and drawn back through the nose. The procedure of the post-nasal plugging has many disadvantages and is only to be recommended in severe cases otherwise difficult to control. First it causes great discomfort to the patient and often becomes dislodged and falls down into the lower pharynx, causing gagging and choking. If the plug is left too long it may become infected and give rise to serious inflammation in the eustachian tubes and tympanic cavities.

In ordinary cases where other means of treatment are not convenient, we may check the bleeding from the nose by injection or spraying with iced water, or, on the other hand, very warm water. The cold water I find more effective, as we can not use very warm water in the nose without producing great discomfort and increased congestion of the head, and unless the

water is very hot it only aggravates the condition. Such household remedies as cold applications to the head and back of the neck, holding a piece of ice in the mouth and hot foot baths, are not without some degree of efficiency. The local injection of powerful astringents, such as the iron solution, tannic acid, alum, etc., are to be discouraged as producing disagreeable local effects and even serious injury to the delicate pituitary membrane.

Progressive therapy has supplied us now with an agent which is par excellence the most powerful and effective local and general anti-hemorrhagic remedy we have at our command. I refer to adrenalin, the active principle of the supra-renal extract. Since the discovery, only a few years ago, that one of the physiologic actions of supra-renal extract was that of a most energetic vasomotor contractor, much has been done to develop the great clinical utility of this organic preparation. The great objection to the original preparations which were given to us in the form of a powder or tablet composed of the desiccated supra-renal gland of the sheep, was that they contained much of the insoluble organic material which readily underwent decomposition and became a dangerous substance to put in contact with a mucous or raw surface. A still further improvement was then made in the form of a stable solution of the extract combined with chloretone, a mild antiseptic and local anesthetic. Finally, it was announced that the active principle of the supra-renal gland had been isolated by a chemist in the employ of the Parke-Davis Company, Takamini by name, who gave it the name of adrenalin. This drug is now put on the market either in the form of a powder, soluble in chloride of sodium solution, and in a solution of 1-1000, in one ounce vials.

The ischemic action of the adrenalin is so powerful that for local application it does not require a stronger solution than 1-1000, and even this may be diluted two or three times its volume and produce a marked effect. Applied to the mucous membrane of the nose or throat it produces within one minute almost complete blanching of the surface. So effectually does it produce anemia of the tissues, that I have frequently removed septal ridges and spurs with loss of not more than a half drachm of blood. This ischemic effect radiates over a considerable area beyond the point of application. Thus, when applied in

one fossa the other fossa becomes anemic also, to a slightly less degree. Administered internally, in doses of 10 to 30 minims of the 1-1000 solution, it acts as a powerful heart stimulant and vasomotor contractor.

To acquaint you with these few facts alone concerning its local and general properties will quite convince you of its usefulness as a hemostatic agent. Sprayed into the nasal fossæ or applied with a cotton tampon, a few drops of the adrenalin chloride solution will be sufficient to check any capillary bleeding from the mucous membrane and will even control the flow where vessels of considerable calibre furnish the hemorrhage. In our hospital practice, where we are often called upon to treat epistaxis, and in our private practice, the members of our staff have begun to rely greatly upon this means of controlling, temporarily at least, all forms of nasal hemorrhage. Our plan is to control the flow of blood and clear the field of vision in the nose by an application of the solution and then by rhinoscopic examination to locate the seat of hemorrhage and prevent further trouble by cauterizing the point with electricity, nitrate of silver, or chromic acid. If the bleeding point can not be determined or cauterization is not available, we prescribe a small quantity of the liquid to be dropped or sprayed into the nose every hour or two, until thorough clotting has taken place. It is a safe plan also to combine the internal with the local administration. The local ischemic effect usually endures for a half hour and sometimes for two or three hours. No toxic effects are produced and no impairment of the mucous membrane is caused by its local use. In severe cases, we may pack the nasal cavity with gauze strips, saturated with adrenalin solution. In the severe case I have mentioned above of hemorrhagic dyscrasia occurring in a relapse of typhoid, I succeeded in controlling the epistaxis only by packing the nasal cavities with iodoform gauze, which was kept constantly saturated with a bo-rated solution of supra-renal extract, and the tablets administered internally with ergot soon controlled the hemorrhage from bowels and kidneys. At that time the adrenalin preparation was not obtainable.

There are various other means by which epistaxis may be controlled under favorable conditions. Spraying the nasal cavities with an 8 per cent. solution of antipyrin is often very

effective where better means are not available; also the ingenious, if not always practical method of producing compression of the bleeding part by the introduction into the nose of a rubber finger cot or condom, which is inflated until it fills the cavity and then tied or secured with a clamp forceps.

In epistaxis dependent upon a constitutional condition, we must, of course, give due attention to that as well, by toning down the blood pressure in renal disease and stimulating it in hypostatic conditions from liver or heart lesions, administering tonics and hemogenic agents in anemic states, etc.

In severe and prolonged cases of epistaxis, as in other hemorrhage, where syncope threatens from too great a loss, subcutaneous injections of saline solution or saline infusion may become necessary to avert a fatal termination.

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## Clinical Report.

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### THE THYROID EXTRACT IN URTICARIA.

BY J. N. ROUSSEL, M. D., VISITING DERMATOLOGIST TO THE TOURO INFIRMARY,  
NEW ORLEANS.

Urticaria, or hives, is undoubtedly the most aggravating and generally disagreeable affliction to which a large percentage of the human race is heir, especially that variety known as chronic urticaria.

The remedies that have been recommended at various times for its cure are legion, and if my mind serves me right, none of them hold out any great hopes for success in any given case.

In the course of a comparatively short career, I have had occasion to try almost every remedy in the list, without having obtained any very marked results, except in those cases where certain articles of food excited the attack. This, as a rule, usually consists of some article of food of which the patient is quite fond, and, for ultimate success, there lies the rub! Patients are not, as a rule, disposed to carry out instructions relative to depriving them of any relish, and this induces a great many to stray from the straight and narrow path of truthfulness, unnecessarily. As a result our patients tell us that



our instructions are being rigidly followed, and in turn we are astonished and many times bewildered at the unsatisfactory progress of our efforts in the direction of a cure.

As a general proposition, we have reason to believe that taking the human organisms as a class, what is good for one is good for another, and reasoning deductively, we are equally right in believing that all organisms should behave alike in respect to varying influences. This, however, we know is not so, except in an abstract way, because, were it so, there would be a specific cause for the ailment, which we have some reasons to believe does not exist. Yet, from what will follow, it does seem that the ailment has some specific, but undetermined cause, for the reason that the same agent seems to influence all of the cases in the same way.

Of course, this is still *sub judice*; the cause must be sought out and determined, but, while this is being done, the patients are still anxiously applying for relief.

Whatever may be the *causus diaboli*; and, however little we might know about its nature and mode of action, we are fairly certain that there must be a hyperirritability of the vaso-motor centres in general, which is being kept up by this agent, and, of course, it follows, as an abstract proposition, that for its cure, an agent must be found that will perform the dual functions of removing the cause and allaying the irritability of the centres.

This seems to be performed very effectively by the thyroid extract, which I observed while using the agent for an entirely different ailment.

In the case in which I chanced to observe its marvelous effects upon the urticarial organism, so to speak, I was using it for obesity with an intercurrent condition of chronic and persistent constipation. In addition to this, the patient for several years had been a victim of urticaria which suddenly ceased to worry her. She had been treated at various times and by several very able and prominent members of the profession with no results.

She took two hundred five grain tablets of the extract at the rate of three per day, and from the third day (which has now been about eight months ago) she has not been troubled with either the constipation or the urticaria, but incidentally, I want to say that the obesity was not influenced one way or the other.

This appears to have been a case of urticaria caused by auto-intoxication, which was relieved by relieving the constipated condition of the bowels, but I want to say, in this connection, that prior to the administration of the thyroid extract, laxatives have been used very freely without having produced any marked effect upon the urticaria, and subsequent use of the agent in other cases without the element of constipation, seems to prove that it has a specific curative action in this affection.

I have used the agent in three cases of urticaria so far, and all three are apparently well. My friend Dr. Kohlman reports two cases which he believes have been cured by the thyroid extract, which he administered on my suggestion. No other drugs were administered during the treatment and the modes of living were not changed in any way, which is an important consideration.

Whether this agent will do as well in other than chronic cases of urticaria I am not prepared to say, but I am firmly of the opinion that it has not its equal for the treatment of the chronic type.

In conclusion, I want to say that I have no knowledge of this agent having ever been used before for this affection. I can find no evidences of it in the literature on the subject, but however that may be, and even though the results of others fail to bear me out in detail, I believe the agent as worthy of trial in any case as any other drug, and while I may be considered an enthusiast on the subject, I believe (to use the words of a celebrated quack) that "philosophic experts will be confounded and the skeptics will be left to wonder at the results."

# N. O. Medical and Surgical Journal.

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## Editorial Department.

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CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

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### THE TWIN EVILS OF NEW ORLEANS.

Our readers from out of town and from other States are at least indirectly concerned and our home readers are surely vitally interested in the welfare of this metropolis, hence it can not be out of place to call attention to the two main physical obstacles in the way of the comfort and health, consequently the prosperity of this city—dust and mosquitoes. Each is a cause of incalculable suffering, a producer of dangerous diseases, a source of wasteful expenditure. As both are preventable evils, it may be worth while to enlist the medical profession for a campaign of education in order that the public may be taught what harm is being done and may have proper remedial measures applied. This is obviously a good season to do it.

We have before this called attention to dust as a prolific source of disease, but the discomfort alone that it produces is sufficient to lead to a strenuous effort for its abatement. The same is true of mosquitoes; the more they are studied, the more can we realize their responsibility for the transmission of at least malaria and yellow fever; their success as instruments of torture is too often in evidence to require discussion.

As the products of one of the two, either as a mechanical irritant or a transmitter of infection, we can enumerate the following affections: Conjunctivitis, rhinitis, pharyngitis, laryngitis, tuberculosis, typhoid fever, yellow fever, and malaria, which may mean not only the different types of fever, but diarrhea, dysentery, neuralgia, etc. Certainly the array is formidable enough, even if we do not include irritability of temper, and how much harm this may do is not to be computed.

When all this in great part preventable, why not spread the information and start the corrective machinery?

When we are no longer on the eve of prosperity, but prosperity is right at our doors, why not show how to remove some of the obstructions in her path, that she may enter and may abide with us?

With a magnificent river flowing by and idle labor to clean and water the streets, why not stop the dust evil?

With wire netting and petroleum to be bought and hands enough to place them where and how they can do the most good, why not get rid of the mosquitoes?

Lay the dust and destroy the mosquitoes and there will be no pleasanter place to live in on the face of the earth than New Orleans.

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#### JUSTICE.

The New Orleans City Board of Health has been re-elected in its entirety. It looked for a brief while as if the political bug was going to exercise its baneful effect upon a city council ready to serve the devouring god of patronage. The daily press and a stronger pressure of personal protest throughout the community compelled a sense of justice. A review of the life of the incumbent Board of Health in this city must show that they deserved this recognition of their good work. In no field where the need of their effort was indicated have they been idle, and even when the stress of denied funds and maintenance threatened its proper effectiveness did the salaried officers of the Board not hesitate to step in the breach and volunteer their services gratis for the public good.

Aside from any personal equation which might lead us to grace our opinion with gentle words, we feel that New Orleans can be proud of its health officers and the Council has honored itself in honoring the Board of Health of the city of New Orleans by a continuance in office.

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#### STATE MEDICAL SOCIETIES IN GENERAL AND THE LOUISIANA STATE MEDICAL SOCIETY IN PARTICULAR.

In the preambles to most of the incorporating literature incident to the birth of medical bodies, the purposes of such organizations are set forth. Every now and then some one remembers these; most often they rest in secure and oblivious

peace as a monument to a dead desire. State medical societies in various sections of these United States serve various purposes, indifferent and good. Most of them occupy the relation to their members that the church does to its inconstant flock—it acts as a means of purging oneself of the sins of commission and omission by doing the penance of having to attend the sessions of such a state society once a year, or perhaps once occasionally. There are state medical societies which dignify themselves by actually aiming at establishing some relation with the general public, and by making ideals for their operation in the communities in which they exist. This has been, however, contrary to the ethic standard of medical conduct, for it has until now seemed that the medical profession was a guild whose chief protection consisted in an armor of secret function, weighty dignity and profound silence beyond the sancta.

From the sectarian publication of the medical society meetings, he who reads must learn that these are full of meat of discussion, debate, differences of opinion, etc., and therefore of profit. But, we want to be reflective, and, in reflection, serious withal. Are we elevating the medical profession to a higher standard in either its own eyes or in the eyes of the greater public by the *modus operandi* obtaining in most medical societies to-day?

Take our own State Medical Society. Some four hundred members are usually represented by an attendance of less than one hundred. Of these there are about twenty attend as a matter of habit; a dozen who attend as a matter of pride in the profession; a few who come because they have papers to read, and the rest belong to the general class who come one year and stay away another year, their attendance depending on a disposition governed only by their personal whim.

Why is all this? The transactions of the 1901 meeting certainly showed ample discussion, a multitude of scientific work and some of it interesting enough. Let an aggregation of business men in other walks of life get together and note how much of their time is given to the business of the meeting and how much to the social side; not necessarily social in the sense of entertainment and feasting as in the intercourse which the gathering itself brings.

The programs of state medical societies are too full of indi-

gestion. The meetings grow tiresome in discussion when these are piled up four hours deep, three times a day for three or four days! If many members of state medical societies were asked what they enjoyed most about the meeting they would tell you its adjournment!

We should seriously consider the actual purpose of medical organization into state bodies. Is it solely to discuss and present papers on medical subjects? The preamble does not say so; as a matter of fact the reading and discussion of such papers is only a part of the society's function, while the elevation of the medical *fraternity* is the main object.

The Louisiana State Medical Society has helped considerably to this end, but the future of its effectiveness must depend upon a wider interest than hitherto has existed. When the Shreveport meeting adjourns in June, the list of those in attendance should mount up and the spirit of the meeting should leaven a greater meeting for another year. The medical profession of Louisiana has much to do, as a heritage and as a task—the first to maintain and embellish a record of scientific distinction and the second a task to rid the profession of its parasites, to compel the respect of the public until charlatanism and its congeners are obliterated and until the druggist and his henchmen are made to dispense honest medicine. As the champions of such a cause and as the bearers of this sort of pride, we perhaps may yet perpetuate our preamble so that he who runs may read.

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## Abstracts, Extracts and Miscellany.

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### Department of General Surgery.

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In charge of DR. F. W. PARHAM, assisted by DR. F. LARUE, New Orleans.

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STAB WOUND OF THE CHEST.—M. Fontan in *Revue de Chirurgie*, January 10, 1902, reports the case of a soldier who received a stab wound in the left side of the chest.

The soldier was immediately brought to the hospital, and M. Fontan on close examination decided that there were signs of internal hemorrhage, not from the lung but in all probabilities from wound of the heart. Deeming an urgent intervention necessary, two hours after the accident M. Fontan under chloroform anesthesia made a thoracic flap with the base on a level with the anterior axillary line, comprising the fourth, fifth and sixth ribs. On opening the chest a gush of blood and hot air were expelled by the protruding lung in inspiration, collapsing in the costo-vertebral space during expiration.

In a few moments the lung receded completely and remained without further distending.

The diaphragm at first presented repeated convulsive movements and then its exposed portion became immobilized. No visible wound of the lung. A certain amount of blood fills the costo-diaphragmatic sinus. The pericardium showed a vertical wound whence blood foamed. A large incision is made in the pericardium. Immediately there was rapid and tumultuous beating of the heart, which presented on the ventricle a wound nearly a fifth of an inch. The wound gaped during ventricular contraction, which M. Fontan quickly closed with No. 3 catgut. The hemorrhage ceased at once; the pericardium was then closed. The thoracic flap was replaced. The operation was followed by such infections as: pleuro-pneumonia, empyema, necessitating thoracotomy, and phlebitis of the lower limb. The patient, nevertheless, recovered without presenting any sign of myocardial, endocardial or pericardial lesion.

SYPHILITIC STRICTURE OF THE LARYNX—M. Le Dentu, in *Revue de Chirurgie*, January 10, 1902, speaks of a patient æt 35 years, who had a syphilitic infected stricture of the larynx. Suppuration had produced chronic fistula of the peri-laryngeal region and of the perihyoid glands. The stricture had been treated by dilatation, by laryngeal incision, by sub-mucous resection, but with no avail. After two years' ineffectual conservative methods, and after urgent tracheotomy performed for symptoms of asphyxia, M. Jaboulay performed in March, 1900, total laryngotomy, including the epiglottis. An artificial larynx made by M. C. Martin, of Lyons, was inserted. Its vibrating reed gives to the patient a phonographic voice having always the same sound; apart from that it is very well tolerated. M.

Le Dentu gives the description of this apparatus, so skillfully made, allowing not only phonation but also articulation, deglutition and easy breathing. The patient is able to remove and replace himself the instrument, which is, of course, necessary for cleansing.

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## Department of Obstetrics and Gynecology.

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In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER.

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A NEW AND IMPROVED METHOD OF CLOSING VESICO-VAGINAL FISTULÆ.—A. Laphorn Smith (*Philadelphia Med. Journal*, Feb. 15) describes a new technic which he is employing in these cases. After disinfection of the vagina, the latter is incised across in front of the cervix and the bladder pushed off from the uterus as in the first step of hysterectomy. With the finger between the bladder and vagina, it is easy, with a few cuts with scissors to separate them from one end of the fistula to the other. This gives a raw edge and obviates the necessity of cutting away a particle either of the bladder or vagina. The long tear in the bladder in the writer's case was caught with a catgut stitch at either end, taking in only the muscular layer. While these were held on the stitch, the muscular wall was brought together with an over and over fine chromicized catgut suture going back fully an eighth of an inch on either side, but taking care not to penetrate the cavity of the bladder, or even to touch the mucous membrane. The slit in the vagina was closed with interrupted silk worm gut passed through the vagina, then through the muscular wall of the bladder, but half an inch to the right of the tear in the bladder, and then through the other side of the vagina, thus displacing the bladder half an inch to the patient's left so that the line of suturing in the two membranes was no longer in the same place as the line of the tear was. Thus the suture of the bladder was strengthened in front by half an inch of solid vagina. A catheter à demeure was left in the bladder. By this method no stitches are left in the bladder mucous membrane which could become the nucleus



of stone. The union of the edges is very firm and the catheter prevents all tension, leaving the bladder at rest.

TREATMENT OF INVERSION OF THE UTERUS.—Dr. E. W. Cushing contributes to the *Annals of Gynecology* for January, 1902, an interesting article on the above subject. No new technic is offered for relieving this very trying condition, but rather a plea for returning to the early procedure first suggested by Dr. T. G. Thomas, viz. : Laparotomy and divulsion of the uterine ring by a steel dilator. At present the most used technic is that of Kuestner, or some modification of it, by which the cul-de-sac of Douglas is opened from the vagina, the funnel dilated, if possible, and the uterus replaced, or if this can not be accomplished, the uterus is incised on its posterior aspect as far as may be necessary to accomplish its reposition and then the incision in the uterine tissue is sewed up. The operation of Thomas, which, at the time it was devised, was certainly a bold and ingenious procedure, has fallen into desuetude, which Cushing believes is unmerited. The mortality following the operation is anything but flattering. The weight of authority, as evidenced by text-books, is against the operation. Cushing selected Thomas' method in a recent case for the following reasons :

The technic has not been tried since the adoption of the Trendelenburg position, and there was reason to believe it would prove as useful as it had in hysterectomy; adhesions could be dealt with with more care and discrimination, as the ligaments would necessarily be found weak and relaxed, the uterus could be fixed in a position to avoid future trouble; and as the uterus had a tendency to bleed very freely, the patient being exsanguinated, it was clear that less blood would be lost if all manipulation could be done from above. Then, too, he thought, the chances of infection would be less. His experience in the case was in entire conformity with what he expected. He believes the Trendelenburg position is of a great advantage in Thomas' operation for inversion; that, with this modification, it becomes the operation of choice, being easier, safer, cleaner and more surgical than any other.

In the same number of the *Journal* appears a lengthy extract of an article by Dr. Oui, of Lille, dealing with the same sub-

ject, who states that the mortality of Thomas' method has been 16½ per cent. He relates quite a list of cases, all that have been reported (I infer); but it should not be lost sight of that most all were done before abdominal operations were perfected. The percentage of success so far is 58.3 per cent.

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## Department of Therapeutics.

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In charge of DR. J. A. STORCK, New Orleans.

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**BENZOATE OF MERCURY IN TREATMENT OF SYPHILIS.**—Dr. E. Gaucher described the preparation he uses in his treatment of syphilis, which is benzoate of mercury. He first of all used Stonkowenkoff's formula, which consists in a mixture of benzoate of mercury, chloride of sodium and hydrochloride of cocaine. Then he tried Bretonneau's formula, which contains benzoate of mercury, of sodium and of cocain. This preparation is made with some difficulty, on account of the excess of ammonia, so Dr. Gaucher has tried the normal saline solution. The preparation should be newly made, and the druggist must use some benzoate of mercury, prepared in the following manner:

Oxide of mercury should be treated by nitric acid, heated, then diluted and added to a solution of benzoate of soda. The result should be washed in cold water for seven or eight days. This salt can be kept two months. A one per cent. solution containing—

Benzoate of mercury.....	1 grain.
Chloride of sodium .....	0.75 grain.
Distilled water.....	100 grains.

can be employed, and it causes but slight, if any, pain. The formula indicated above is strongly recommended by Dr. Gaucher, who is one of the leading dermatologists in France.

—*Therapeutic Gazette*, Feb. 15, 1902.

THE SALTS OF CACODYLIC ACID IN SKIN DISEASES.—Edmund Saalfeld, of Berlin, (*Therapeutische Monatshefte*, vol. lxxv. No. 6, June, 1901) states that the first to propose an organic compound of arsenic for therapeutic purposes was Gautier, who employed cacodylic acid and its salts. The chemic formula of cacodyl is as  $(\text{CH}_3)_2$ . When exposed to the air it oxidizes and forms cacodylic acid, as  $(\text{C H})_2 \text{O. O H}$ . Cacodylic acid contains 53.3 per cent. of arsenic, corresponding to 72 per cent. of arsenious acid. The salt at present in most common use is sodium cacodylate (or arsycodile) because owing to its low degree of toxicity it furnishes a means of administering considerable quantities of arsenic without risk. It is well borne in considerable doses. Saalfeld uses it in pill or in solution; each pill contains 0.025 grams (about one-half grain) and of these he gives one or two at a dose, up to four a day. Much larger doses can, however, be given with impunity: 0.4 to 0.6 gram (6 to 9 grains) per day internally and up to 0.4 grain (6 grains) hypodermically. Another preparation is ferrocodile or cacodylate of iron. Of a 5 per cent. solution of sodium or iron cacodylate, from 10 to 20 drops—equivalent to 0.025 to 0.05 (say one-half to one grain) of the drug—up to 40 drops a day are given. Hypodermic injections also are used, 1 c c. of a 5 per cent. solution being injected at a dose. The chief advantages claimed for sodium cacodylate are its greater efficacy, the fact that it does not disturb digestion like other arsenic preparations, and that it permits the subcutaneous injection of large doses of arsenic almost without pain and without unfavorable local consequences. In ferrocodile or cacodylate of iron we have a remedy suitable for hypodermic injection, combining the properties of arsenic and iron, which is of the greatest advantage in treating anemic patients. The disadvantages of the salts of cacodylic acid are the disagreeable garlicky odor imparted to the breath, which is not constant, however; the extreme offensiveness of the stool; the frequent occurrence of colic and of attacks of dermatitis; and finally the danger of producing a toxic neuritis. It is recommended for all diseases in which arsenic is given, including psoriasis, lichen ruber planus, acne, Duhring's disease, lupus erythematosus, and the like. It does not prevent recurrence in psoriasis, but rather shows a tendency to lose its power when given in successive relapses of the disease. Dr.

Solomon Solis Cohen says the following: I have had excellent results from sodium cacodylate hypodermically in the various anemias, including those of malarial cachexia and pulmonary tuberculosis. It deserves trial in cases of inoperable carcinoma.

TREATMENT OF INOPERABLE CANCER.—As a result of a review of the different remedies for inoperable cancer, Cooper (*West London Medical Journal*, October, 1901) arrived at the following conclusions:

Since some cases have been cured, in cases of inoperable sarcoma, especially in the spindle-cell variety, the patient should have the option of taking Coley's fluid. In cases of inoperable cancer of the breast in women about forty years old, in whom the menopause has not occurred, oöphorectomy should be proposed, and this treatment may be combined with thyroid feeding.

In cases of inoperable rodent ulcer, and in the superficial malignant ulceration in other parts, the Röntgen rays give a good hope of improvement.

In cases where these methods are declined, or are inapplicable, the internal administration of celandine is worthy of trial, and when the case appears quite hopeless, morphin should be administered without hesitation.

The parenchymatous injections of acetic acid are also worthy of trial.—*The Therapeutic Gazette*, Feb. 15, 1902.

PYRAMIDON AND ITS SALTS.—L. Bertherand, after a therapeutic study of pyramidon, the acid pyramidon camphorate and pyramidon salicylate, draws the following conclusions: Pyramidon is an excellent analgesic and antipyretic. As an antipyretic it has the great advantage over antipyrin in that it causes an increase in oxidation, and as a result does not cause the formation of toxic substances in the organism. Pyramidon is more efficacious than antipyrin; its action is more rapid and more prolonged. Irritation of the stomach is not caused by its ingestion, and no eruption nor any unfavorable action on the heart or kidneys follows its use, as is seen at times after the administration of antipyrin. Under the form of acid pyramidon camphorate the dose is from 5 to 10 grains, never over 15 grains, in the fever and sweats of tuberculosis. Under its influence fever is lowered and sweating is completely controlled.

It is much superior to antipyrin, salicylic acid, aspirin, which lower the temperature but cause profuse sweats. It is also of value in the treatment of fever occurring during grip and in typhoid fever. In facial and intercostal neuralgia, sciatica, crises of locomotor ataxia, etc., it appears to produce very good results. It has given unvarying results in migrain if used from the beginning of the attack in the average dose of 6 grains; in such a case pyramidon itself may be employed. In generalized acute articular rheumatism the use of pyramidon or pyramidon salicylate can not be compared to the action of sodium salicylate, which remains the specific remedy for acute articular rheumatism. In subacute or chronic rheumatism its action is variable, but it does not appear inferior to other remedies. In two cases it lowered temperature. Pyramidon should not be used in diabetes, phosphaturia, etc.—*American Medicine*, March, 1902.

INJECTIONS FOR LEUCORRHEA.—Lutaud (*Bulletin Général de Thérapeutique*) gives the following:

Potassium chlorate.....	1½ ounces.
Tincture of opium.....	1 ounce.
Tar water .....	1 quart.

One-half glass in one quart of water to be used as an injection morning and night.—*Ibid.*

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## Department of the Ear, Nose and Throat.

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IN charge of DR. A. W. DEROALDES and DR. GORDON KING,  
New Orleans.

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THE LOCAL TREATMENT OF ATROPHIC RHINITIS.—Chas. H. Knight, of New York, in treating of this subject, calls attention, first, to the importance of investigating, and if possible, correcting the underlying constitutional disorder. Syphilis, struma and alcoholism are perhaps the most frequent predisposing causes of intra-nasal atrophy and should merit due consideration in the treatment of that malady.

In the local treatment preliminary and thorough cleansing of the mucous membrane is essential for the effective application of local remedies. For this purpose the author finds nothing better than a normal salt solution used as a coarse spray or douche, or snuffed into the nose. Four drugs are recommended as being useful for topical applications. These are menthol, formaldehyde, ichthyol and gomenol. The first is used in solution in liquid albolene as strong as can be borne by the patient, usually 5 grains to the ounce. It has the effect of improving the quality of secretion and diminishes its quantity. Formaldehyde in strength of 1 to 5000 is an effective deodorant and antiseptic, but is sometimes irritating to the delicate pituitary membrane. Formalin, boro-formalin and borolyptol are among the best preparations containing formaldehyde.

Ichthyol has given gratifying results in a large number of cases. It is used in 2 per cent. to 5 per cent. solutions in petroleum, its only objectionable feature being its unpleasant odor. Gomenol is a product of the distillation of the leaves of a tree growing in New Caledonia. It is used in solutions of from 2 to 5 parts in 1000.

Favorable results may be expected when the lesion is recognized in its early stages and treated on these lines.—*Laryngoscope*, May, 1900.

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### Miscellaneous.

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TULANE MEDICAL DEPARTMENT.—*The Medical News* of March 15, 1902, publishes an unsigned article giving some interesting biographic sketches in connection with the story of our *Alma Mater*, the Medical Department of Tulane University.

The writer attributes the early existence of the college to Dr. Thomas Hunt and Dr. Warren Stone, who gravitated to New Orleans during the cholera epidemics in the early thirties. "Sickness was the reward of Dr. Hunt's efforts and poverty the result of Dr. Stone's journey."

Associated with these two was Dr. John H. Harrison. "The condition of medical education in the United States was at that

time in need of improvement. The great majority of its physicians had no better medical education than that gained as pupils in a doctor's office, and American medical colleges originated as substitutes for this very inadequate apprentice system. The maintenance of these colleges, including the salaries of the self-appointed professors, was wholly dependent upon the number of students and the amount of their fees.

“The Medical College of Louisiana was just such a joint stock company and was the outcome of Dr. Hunt's enthusiasm and energy. He delivered the introductory lecture in September, 1834, and was appointed professor of anatomy and physiology and elected dean. His associates were Dr. Charles A. Luzenburg, Dr. J. M. Mackie, Dr. T. R. Ingalls, Dr. A. H. Cenas, Dr. E. B. Smith and Dr. Warren Stone, who was given the demonstratorship of anatomy in the place of Dr. Harrison, who was deterred from serving on account of ill-health.”

Eleven students were graduated the first session but with easy requirements. This number increased through the good work of the faculty. Until 1868 the examinations were hasty, oral, and usually required about an hour and a half to each student. Various changes were made in the arrangement of the faculty, Dr. Harrison finally taking the chair of physiology and pathology. He became one of the first editors of the *NEW ORLEANS MEDICAL AND SURGICAL JOURNAL* in 1845, and was in the prime of his professional activity when he died in 1849, at the age of 40 years.

“Dr. Warren Stone was a huge, rugged man, with strong features and striking in physical appearance. Advanced from the teaching of anatomy to the professorship of surgery in 1839, he held this chair until his death in 1872. Contemporary reminiscence of Dr. Stone from Dr. Charles J. Bickham, now deceased, gives us some knowledge of his work: He was methodical and industrious, quick in perception, prompt in the execution of what he perceived to be his duty. His resources were unbounded. He never seemed to be taken unawares. His knowledge, tact and ingenuity were equal to the occasion, and he never appeared so cool, self-possessed and grand in his whole nature, physical, mental and moral, as in the midst of alarming emergencies in surgery. In the midst of the most complicated and difficult operations, cool, calm and collected, he would

promptly do his duty, at the same time lecturing and explaining to those present the minutest practical details of the case. In truth, every visit to the hospital was an ovation to him, which he acknowledged with becoming modesty, but which served doubly to inspire him. In his surgical clinics he taught the principles of drainage in suppurative arthritis, in hepatic abscess, and in pyothorax. In the surgery of arteries he was an expert and was among the first to cure aneurism of the vertebral artery. In November, 1849, he operated successfully on a case of traumatic aneurism of the vertebral by incising the sac, turning out the coagulum, and controlling the artery by a graduated compress. For fourteen years at the Charity Hospital he operated without an anesthetic; but although the NEW ORLEANS JOURNAL, as well as others in the country, decried the use of ether, with its toxic power and its patent, Dr. Stone welcomed it and showed his independence in February 25, 1847, by amputating the thigh of a man under ether. When chloroform was introduced, however, it became his favorite anesthetic and it is largely due to his professional teaching that it is the preferred anesthetic of Southern practitioners.

“The ‘Maison de Santé,’ one of the earliest private hospitals in America, was founded by Dr. Stone in connection with Dr. Wm. E. Kennedy, in 1839, and twenty years later became Stone’s Infirmary, where he continued his extensive work in general surgery. Although it was a private hospital, it was the established rule of the house never to refuse professional services on the score of poverty, and the charity dispensed by Dr. Stone at the ‘Maison de Santé,’ according to one of his colleagues, ‘was of itself sufficient to elevate its author to that high rank among philanthropists which his well known abilities had long since commanded in his profession.’ ”

He was thirty-eight years in the Medical Department. Dr. Stone made his more important contributions to the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL, and was noted for his wit and wisdom. When he died, on December 5, 1872, the District Courts were adjourned as a mark of respect, the flags of the shipping stood at half-mast and many of the stores on the main street were closed at the time of the funeral.

Dr. Hunt, to whom the growth of the Medical College was his greatest interest, threw himself into the work of placing it



on a solid foundation as a permanent State institution, giving up much of his large practice for that purpose. In 1845 he accomplished his end. When the new constitution for the State was adopted a clause was put into it establishing a State University and constituting the "Medical College of Louisiana," as then established as the Medical Department of the University. In 1847 Louisiana permitted the medical faculty to erect the first building it ever owned on a lot belonging to the State, on two conditions, first, that the members of the faculty should give their service to the Charity Hospital without pay, instead of being paid therefor, as had previously been the case; and second, that one beneficiary student from every parish should be admitted annually for the next ten years, and this was extended in 1853 to ten years more. The first condition has always been fulfilled, and the second condition was fulfilled for at least twenty years. The number of students increased from 38 in 1843 to 100 in 1846.

"In 1844 a large amphitheatre for surgical operations and for lectures was erected in the Charity Hospital at an expense of \$5,000, half of which was contributed by the faculty. Various endowments and grants, besides the use of the lot and buildings, had contributed by 1859 about \$88,500; the number of students had increased from 100 in 1846 to 276 in 1858, and this increase would have been greater but for the fact that during these eleven years there occurred five of the worst epidemics of yellow fever that ever desolated New Orleans. In 1863 the Medical School had matriculated 4,119 students and had at the session of 1860-1 over 400 students. But when New Orleans was captured in 1862 by the United States Navy and Army, the Medical Department was obliged to suspend until the session of 1865-6.

"Dr. Hunt, whose fortunes were shattered and whose health was feeble, left New Orleans for a time and went to Havana, where his reputation brought him a large practice, despite the fact that at fifty-four years of age he was obliged to learn a new language, and where he received a degree in the name of the Royal University of Havana.

"In 1865 the Medical Department re-opened its doors. The building had been occupied by the United States military, and one wing used for a colored school in charge of the Freedman's

Bureau was terribly dilapidated; the library and apparatus were damaged and the treasury was empty. But on his return from Havana Dr. Hunt interested himself in obtaining from the Legislature of 1866 a new appropriation of \$25,000 for the immediate needs of the College, and devoted himself to repairing the fortunes of the institution. The students came back, the faculty was reorganized, but Dr. Hunt's efforts were terminated by his death March 20, 1867. The Medical College lost a man who had unselfishly devoted his energies to the practical advancement of medical science. He was an attractive lecturer; but his fame as an orator is only traditional as he published little, and the address which he delivered on 'The Utility of Science,' when he became dean, was one of the few that were printed.

"Those who were chiefly instrumental in founding and in maintaining the college were Drs. Hunt, Luzenburg, Cenas, Harrison and Stone, aided as early as 1836 by Drs. James Jones and J. L. Riddell.

"The longest active services were those of Dr. Stone, thirty-eight years; Dr. James Jones, thirty-seven years; Dr. Riddell, twenty-nine years, and Dr. Cenas, twenty-seven years.

"Dr. J. L. Riddell, who held the chair of chemistry until his death in 1865, was born in 1807, and came of a family that traced its lineage back through Scottish and Irish descent to the eighteenth century. He was not merely a professor of credit to his university, but also a naturalist of international fame. He was engaged in a scientific exploration of Texas when he wrote a 'Symposium of the Flora of the Western States.' He discovered many new species of plants and a new genus bears his name, *Ridellia*. He was an expert microscopist in the day of the instrument's development, and as the inventor of the binocular microscope is given due tribute in that literary mausoleum of the world's workers, the 'Encyclopedia Britannica.'

"Dr. C. A. Luzenburg, though dying when a young man, was unquestionably a man of genius. He came to New Orleans at the gloomiest time of its medical history, a poor and friendless youth, and struggled ardently to bring to life a spirit of medical interest at a time when the medical societies of the city were lying dormant. Owing to his indefatigable efforts a new

society was formed, the Medico-Chirurgical Society of Louisiana. It held brilliant meetings at which the French and English physicians of the State met to exchange views, and it was undoubtedly the spirit of these meetings that caused a college building to be erected for the medical school, and that started the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL. So it was indirectly from Dr. Luzenburg and his brisk though soon spent energy that the men who outlived him received their impetus to found this medical school, which later formed the nucleus for the University of Louisiana.

“The revivication of the Medical Department in 1865 was due to Dr. Richardson, who then became dean, aided by Drs. Stone, James Jones, Cenas and Hunt, and soon thereafter reinforced by Drs. Bemiss, Chaillé, Joseph Jones, Hawthorn, Mallet (now of University of Virginia), Lewis and Elliott.

“Joseph Jones, M. D. LL. D., was born in Liberty County, Ga., in 1833, and was graduated as doctor of medicine from the University of Pennsylvania, in 1855. He entered practice in Savannah, Georgia, and it was not long before he was elected professor of chemistry of the Medical College of that city. Almost four years later he was elected to the same chair in the Medical College of Georgia. During the war he served as full surgeon in the Confederate Army. Dr. Joseph Jones, a professor of chemistry, in Nashville, Tennessee, was in 1868 asked to take the chair of chemistry to which clinical medicine was subsequently added at his request. He served for twenty-eight years, forming close friendships with the students and writing profusely. Three years before his death he was relieved at his request of the clinical teaching in the Charity Hospital, but continued his work and his practice in spite of failing health until his death in 1896. He strengthened the reputation of the medical department as a center of learning by his profound, erudite and vast contributions to the literature of medicine.

“Dr. Samuel Merrifield Bemiss, who held the chair of theory and practice of medicine from June 15, 1866, to the day of his sudden death from apoplexy, November 17, 1884, was not only a celebrated physician, but a man of culture, refinement and great literary ability. He was the seventh son of Dr. John Bemiss, a great physician and a great theologian. Born in 1821 at Bloomfield, Ky., he grew up in the open country and laid,

through his outdoor sports, a splendid foundation of health and vigor. His early education was superintended by his father, and his medical education was obtained from his uncle, then from the University of New York, from which he received his doctor's degree in 1845. From 1853 to 1863 Dr. Bemiss lived in Louisville, where he had a lucrative practice. From 1863 to the day of Lee's surrender in April, 1865, he served in various appointments as a Confederate surgeon in charge of hospitals. When he returned to Louisville he was elected professor of physiology and pathology in the University and entered again on a large practice. In the spring of 1866, however, he accepted a call to the chair of theory and practice of medicine and clinical medicine in the University of Louisiana. The affection and esteem of the citizens he left were replaced by those of the students and friends whom he made in New Orleans. He was an impressive, careful and interesting lecturer. As a clinical lecturer he was punctual in his wards and took the greatest pains with his students in teaching them the art of diagnosis, in which his superiority was very notable, and in making them self-reliant. In 1868 he became senior editor of the *NEW ORLEANS MEDICAL AND SURGICAL JOURNAL*, and enriched the medical literature of the South by his contributions, his style and his medical perception. One of his greatest and most ardent undertakings was in the great yellow fever epidemic of 1878; he was appointed chairman of the commission for investigating its origin and spread, and was connected with the evolution of the National Board of Health and was a member thereof. His sudden death from apoplexy, November 17, 1884, cut him off at the age of sixty-three in the midst of his professional and editorial work.

“Dr. T. J. Richardson gave to the Medical Department of Tulane University twenty-eight years of active service as professor and twenty of these years as dean; during his service all the debts of the Medical Department were paid; he enriched its museum with the products of his own skillful labor; he guided the college safely through the darkest period of its history, and he greatly increased its usefulness and reputation. While administrator of the University he secured for the medical department and therefore for medical education and the profession very valuable benefits. While president of the American Medical

Association he ably maintained professional reputation and dignity. He was the most influential founder of the State and Parish Medical Societies; and as a member of many other societies gave to them all greater influence and reputation. For seven years he edited medical journals and for many more years contributed to medical literature, always to the benefit of his profession. For twenty-eight years he was one of the visiting surgeons to the great Charity Hospital and no one did more than he to heal the many ills and assuage the many sorrows that always fill it. During forty years he practiced surgery and medicine and inspired thousands of laymen with greater confidence in the medical profession as well as with respect for it.

“ Under the direction of these men and with the determination born of undaunted courage, the Medical Department made great strides to keep abreast of the advancing methods of the day. In 1887 by the valuable aid of the Tulane administrators and of Professor Ordway there was added a laboratory of practical pharmacy, with attendance therein obligatory on pharmacy students only; in 1889 the faculty established a microscopical laboratory for medical students, but a course therein was not obligatory until 1893. In this year not only were the anatomical and microscopical laboratories very much improved, but two new laboratories of chemistry and of operative surgery were established, and attendance at these laboratories was made obligatory. Comparing past and present in the above particulars, it is found that, while formerly only nine different branches were taught and special courses given in two laboratories, now sixteen different studies are taught and courses are given in five laboratories. Formerly there were only eight or ten teachers, now there are forty-one, and yet more teachers are needed to teach other specialties.

“ The Civil War, the results of politics, influenced prosperity far more than any other cause. From 1834 to 1859 the number of students increased from 11 to 276 by normal growth. There then occurred during the next three years an abnormal increase to 404 students in 1861, due to the political and sectional hostility that induced Southern students to abandon Northern colleges. War came, and patriotic students became soldiers in such numbers that the 404 students of 1861 were reduced to only 94 in 1862. The doors were then closed until 1865, for, during

the three intervening years, all of the students and all of their teachers, not too old for service, were Confederate soldiers. From 1865 to 1885 the number of students ranged from 230 to as few as 105 in 1875, about which time culminated the tyrannical and monstrous evils of the 'reconstruction government,' based on the negro, the carpetbagger and the scalawag and upheld by the victors for the spoliation and humiliation of the vanquished South. A patriot, who lost in the battles of the South both a leg and an arm, had, none the less, enough of him still left to lead those who were determined at every risk to supplant a most vicious with a decent government. This was at last accomplished, and the people of this State, the young as well as the old, should never forget the immense debt of gratitude due to their leader, Francis T. Nicholls, who, in 1876, became the governor, and is now chief justice of Louisiana. Despair was soon replaced by hope, and prosperity began to return to the State and to the Medical Department.

“ From 1875 to 1901 the number of students gradually increased from 105 to 426, but it required twenty-eight years to recover from the abnormal conditions resulting from war and politics, for it was not until 1886 that the college had fairly regained the number of students that had attended in 1858. During the many very trying years that the very existence of this college was at stake, the members of its faculty gave to it devoted and skilled labor for the remuneration usually paid to very ordinary clerks.

“ In 1845 a constitutional convention, influenced chiefly by members of the medical faculty, ordained the University of Louisiana, and adopted as its medical department the Medical College of Louisiana, the parent of the present college. Not until 1847 did the Legislature execute the convention's decree to organize the University. This began its career with the college as its sole department. The medical faculty surrendered its building to the law department, then first organized, and was given a much larger building on a contingent lot, where now stand the Crescent and Tulane Theatres. This building cost the State \$40,000, and, in addition, the State gave to the Medical Department, from 1850 to 1858, \$43,500 for museum, apparatus and repairs. Of the \$80,500 thus contributed by the State war and time have left nothing except the lot, now the property

of Tulane University, and the museum still the property of the Medical Department.

“The Tulane University of Louisiana derives its name from the following facts: Paul Tulane, of Huguenot descent, a resident of New Jersey, accumulated in New Orleans a large fortune as a merchant of clothing. Having experienced the need of better education, he, unmarried, childless, and advanced in years, donated in 1882 over a million dollars for the higher education of “the white young persons in the City of New Orleans,” provided that the laws of Louisiana should be so changed that the property donated (real estate in New Orleans) should be exempt from taxation. This was finally accomplished, but with delay and many legal difficulties, and, to accomplish it, it was deemed best to transfer to the Tulane administrators the University of Louisiana and thus to found the Tulane University of Louisiana. This was done in 1884 by the Legislature of the state, and this law was ratified in 1887 by vote of the people and confirmed by the State Constitution of 1898. In 1884 the University of Louisiana became the Tulane University of Louisiana. Since then the administrators have contributed in many ways to the welfare of the Medical Department, and if they have failed to do far more than might well have been done, this has been due to the imperative need of all of their inadequate income to establish an efficient collegiate department.

“Since 1886 the medical faculty, besides paying all of the constantly increasing expenses, has appropriated to improvements \$17,500, derived from fees that, in less fortunate years, were all used to remunerate inadequately the members of the faculty.

“In 1894 Dr. A. B. Miles bequeathed to the Medical Department \$10,000, a pathetic reminder of his devotion to his Alma Mater, and a very sad and inadequate substitute for his valuable services that death deprived him of the power to confer as a most efficient and popular professor of surgery.

“The fifth and only other financial aid given to the college was by far the most important ever contributed. Without it the educational progress that has been and will yet be made would have been impossible.

“May 9, 1891, the wife of Dr. T. G. Richardson, valued professor, 1858 to 1889, honored dean, 1865 to 1885, donated a

sum sufficient to erect a new building, greatly superior in all respects to the old one, and especially in providing all the laboratories that have become indispensable to medical education and that the old building could not supply. A sufficient sum to equip these admirable laboratories was also given. The administrators took possession of the lot assigned by the State in 1847 to the Medical Department, and in its place, provided, at an expense of \$35,000, a much ampler and better site for the new building. This was completed and occupied in 1893, and will continue for very many years to come to be exceptionally well adapted to its purpose. From this donation of Mrs. Richardson will very surely result the inestimable benefits of a better education to thousands of medical students, and through them, relief to millions of those whom the anguish of disease afflicts and the shadow of death menaces."

[We can not conclude our abstract of this sketch without a personal note born of the affection and regard which those of the present day and generation hold for the incumbent dean of the Medical Department of Tulane University. The unsigned article and the fair review of his former associates all point to the authorship of the sketch, as it might to many of the works of Dean Chaillé since his assumption of the office to which he was elected some time before Dr. Richardson's death. As a teacher and as a sympathetic member of the faculty, Stanford E. Chaillé has at all times deserved the respect and consideration of the men who have passed under his yoke of office into the broader life, and of those who have served with him as privates in the ranks of a profession only too slow to follow such a leader as he has been in the art and science of medicine.—EDS.]

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## Society Proceedings.

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ORLEANS PARISH MEDICAL SOCIETY.

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MEETING OF FEBRUARY 22, 1902.

DR. GRANER presided.

DR. R. J. MAINEGRA read a paper on "*Erysipelas; Its Treatment.*"



DISCUSSION.—DR. E. J. HUHNER had used tincture of chloride of iron. It did not irritate mucous membrane of stomach and intestines. It was absorbed during the thermic stage.

DR. F. W. PARHAM: Tinct. ferri chloridi had been in use since 1851. Its advocates who used large doses (1 drachm every 2-3 hours) claimed that unsatisfactory results were due to insufficient doses. However, others who used nothing at all obtained good results. His own experience with the remedy was not satisfactory. He considered that some germicidal agent was needed. Seneca D. Powell had advocated the local application of pure carbolic acid, subsequently neutralized by 95 per cent. alcohol. Dr. R. Matas had spoken of remarkable results obtained in a series of cases by the use of guaiacol in conjunction with Ungt. Crédé.

DR. A. PETTIT had found the iron treatment satisfactory. Had combined it with glycerin and spirits of camphor and had noticed no gastric irritation. Locally he had used cold applications of carbolic solution (3 drachms to one quart).

DR. NELKEN said that the authorities differed as to the fate of iron in the economy. Inorganic iron, according to Wood, is never absorbed in the intestines. Iron given in sufficient quantity to color the stools was being given in too large doses. The journals have been writing of the combined use of tincture of iodine and ichthyol, which was employed by "ringing" the erysipelatous area with the iodine and then applying compresses of a watery solution of ichthyol.

DR. PERKINS asked what the character of the temperature curve was in Dr. Mainegra's case and when the redness appeared.

DR. J. LAZARD—The routine treatment at the Charity Hospital had been quinin and tr. ferri chlor. internally, 40 per cent. watery solution ichthyol locally. All cases of superficial erysipelas got well; perhaps would have recovered in any event. But cases of phlegmonous erysipelas, in spite of incision and free drainage, never recovered. He suggested the use of the anti-streptococcic serum.

DR. PERKINS disagreed with Dr. Lazard as to his experience with phlegmonous erysipelas in Charity Hospital. He had seen many such cases recover under multiple incision and drainage and the usual treatment. He had never seen one good effect from the iron.

DR. MAINEGRA said that in his case the temperature had been remittent in character, and that the swelling and redness did not appear until his second visit. The blackening of stools by iron was not due to quantity, but to quality. Iron was absorbed by villi and lymphatics of the large as well as those of the small intestines, *but only when iron was needed by the economy*. He had been unable to prevent the spread of erysipelas by any agent. Irritants were bad, while cold applications were agreeable and comforting.

DR. MATAS (who had just come in) was asked to give his experience with guaiacol.

He said that mixed infections were very difficult to control. Epidermal applications gave good results, but especially in erysipelas of the "pure," superficial, migratory type. His experience with iron, quinin, carbolic solution, ichthyol, Ungt. Cr  d  , mercurial ointment, etc., had not been altogether satisfactory. In some cases the methods of Kraske—circling the erysipelatous area by lattice-work incisions and then applying bichloride solution—had given good result; but this was not applicable to facial erysipelas. He had been well impressed by the suggestion of Dr. S. D. Powell to the use of pure carbolic acid and then alcohol and would try it. The most reliable agent he had found so far was guaiacol, used locally by inunctions. He had first employed it in a case of extensive erysipelas following hysterectomy where a typhoid state was present, due to the terrible sepsis which had developed. He had applied the guaiacol in Ungt. Cr  d   as a menstruum all over the erysipelatous area, especially along the lines of advance. This not only reduced the high temperature, but caused the redness to disappear. He now had a series of eight cases in which the progress of the disease had been absolutely checked by guaiacol. Guaiacol was antithermic and specific, a constitutional as well as a local remedy. It had great penetrating power and to this as well as to its antiseptic qualities, it owed its efficiency. It had a prompt effect on the temperature and caused the eruption to disappear within two or three days. The Ungt. Cr  d  , he did not believe, had any special value, nor had the anti-streptococcic serum, though both these had been used in conjunction with the guaiacol in some of his cases. The serum was very irregular in its action, sometimes it really aggravated the condition

of the patient. He had never seen a case of erysipelas cured by it alone.

DR. PETTIT asked whether any bad effects had been observed from the use of guaiacol.

DR. MATAS replied that he had seen bad effects from guaiacol in the early stages of its use, but in the doses now employed (five drops, repeated cautiously—as often as every two hours) no alarming symptoms would be caused. Five drops would spread over a comparatively large surface if an ointment were applied first and the guaiacol then painted over by means of a camel's hair brush.

DR. MATAS read a paper on "*The Treatment of Renal Fistula.*"

DISCUSSION.—DR. CHASSAIGNAC called attention to two points of interest:

1st. Diagnosis as to the seat of the trouble. A large amount of urine passed through the fistula (in the case reported, virtually the entire amount) pointed to the existence of an obstruction in the ureter. When the fistula was due to failure of kidney tissue to heal, the amount of urine was not so large and tended to diminish, though not to disappear altogether.

2nd. Cause of the obstruction in case reported. It had occurred suddenly and was probably caused by an organized clot or by an exudate due to the inflammation produced by the necessary manipulation at the operation. The precautionary passing of an uteral catheter after nephrotomy first advocated by Albarran, indicated the great advance made by the inauguration of the era of asepsis.

DR. PARHAM suggested that the trouble subsequent to the nephrotomy might have been avoided either by Albarran's method or by exploring the kidney when exposed. He had once passed an ordinary male catheter into ureter through the lumbar wound and had demonstrated that it was in the ureter by injecting weak permanganated solution and then drawing this out of the urinary bladder.

DR. MATAS replied to Dr. Parham's suggestion of exploring the kidney, that the kidney in this case when cut down upon was not tense, but became so only after forty-eight hours after the infection had taken place.

## MEETING OF MARCH 8, 1902.

DR. GESSNER presided.

DR. I. I. LEMANN read a paper on "*The Differential Diagnosis of Malarial and Typhoid Fevers and the Occurrence of Both Diseases in the Same Patient.*"

DISCUSSION.—DR. DUPAQUIER said that typhoid might simulate malaria by chills, gastric disturbances, etc. On the other hand malaria aped typhoid as noted in the paper read. In some cases of double infection the malarial symptoms were apparent only at the beginning and at the end of the attack, being dwarfed during the course of the disease. Widal's test and the search for plasmodia were great aids, but in some cases the greatest reliance must be placed in the therapeutic (quinin) test. This test should not extend over more than three days and the break in the temperature caused by the quinin should be marked, *i. e.*, should approach normal in order that the diagnosis of malaria should be considered as certain. The test was better carried out by the hypodermic exhibition of quinin than by its use by the mouth.

DR. STORCK asked whether the administration of quinin caused the Widal test to be positive. He knew of cases where the test was not positive until after the administration of quinin. The administration of quinin by rectum was sometimes more effective than its exhibition per os. All malarial cases do not yield to quinin, hence the therapeutic test was not entirely reliable; in those cases arsenic sometimes is more effective.

DR. POTHIER said that the fact that the Widal reaction became positive after the administration of quinin was only a coincidence. Quinin might kill bacilli, but could not cause the agglutination.

DR. LAZARD asked whether Dr. Lemann meant to imply that albumin in the urine was a diagnostic point in favor of typhoid. He referred to Thayer's statement that albuminuria occurred in 60 per cent. of all malarial cases.

DR. LEMANN, in reply to Dr. Lazard, said that it was not his intention to imply that albuminuria was diagnostic of typhoid. Albuminuria might occur in any febrile condition of whatever nature.

DR. E. M. DUPAQUIER read a paper on "*Enuresis.*" (See page 641 of this JOURNAL.)

DISCUSSION.—DR. DABNEY—In idiotic children, nothing would do good. In normal children, the regulation of diet would be greatly beneficial. The urine should be examined in all cases, and particular attention should be paid to the reaction. Acidity of urine was often due to indulgence in sweets and the eating of fruits, such as bananas. Banana eaters, in his experience, were difficult of cure. Sweets and bananas should be interdicted and the patients should be directed to drink an abundance of water. The only drug which gave satisfaction in his hands is belladonna in the form of atropin. This he pushed to the extreme physiologic limit.

DR. CHASSAIGNAC—Enuresis was simply a symptom. The cause should be sought and removed. Enuresis was constant or paroxysmal just as the source of the irritation, whether local or at a distance from the bladder, acted constantly or only occasionally. A phimosed prepuce and the consequent balanitis was a frequent cause; so was the bacterial infection of the urine causing decomposition. In the latter kind of cases the urine was very offensive. They were cured, in his experience, by the administration of urotropin.

DR. PARHAM wished to emphasize the importance of the exercise of discipline and of moral and physical influence on the part of the parents. He cited the case of a young man who suffered from enuresis, and the resulting mortification up to the time of his entrance into West Point. Thereafter he had no more trouble. Evidently the fear of wetting the bed under the new circumstances had acted as a preventive and had brought about a cure where all measures had failed. Circumcision had been performed previously without avail. Although it had probably removed the original causal factor; the habit still remained. Dr. Parham wished to insist on the necessity of waking children at regular intervals for the purpose of voiding urine, no matter what the cause of the trouble and no matter what line of treatment was adopted.

DR. CHASSAIGNAC said we should not forget the elements of habit—habit not only of the individual, but also of the bladder. This factor accounted for the fact that after the real cause of the enuresis had been removed, the improvement was not always immediate, but often gradual.

## Louisiana State Medical Society Notes.

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Next meeting in Shreveport, June 3, 4 and 5, 1902. Dr. T. E. Schumpert, President, Shreveport; Vice-President, Dr. F. A. Larue, 1st Congressional District, New Orleans; Dr. E. D. Martin, 2nd Congressional District, New Orleans; Dr. G. W. Remage, 3rd Congressional District, Jennings; Dr. J. M. Callaway, 4th Congressional District, Shreveport; Dr. J. M. Barrier, 5th Congressional District, Delhi; Dr. A. F. Barrow, 6th Congressional District, St. Francisville; Dr. Hermann B. Gessner, Recording Secretary, 124 Baronne Street, New Orleans; Dr. A. G. Friedrichs, Corresponding Secretary, 641 St. Charles Street, New Orleans; Dr. H. S. Cocram, Treasurer, 124 Baronne Street, New Orleans; Dr. Oscar Dowling, Shreveport, Chairman of committee of Arrangements.

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MEMBERS OF THE SOCIETY are urged to remember the dates of the meeting and to make arrangements to attend. The Shreveport fraternity is anxious to do everything to make the meeting a success and every member should help to this end. Already the president has issued a circular notice and the arrangement committee have solicited papers and the programs of chairman of sections. A few of these have responded, but it is time now for all to take the interest necessary to make a successful scientific meeting. We would urge this point upon all sections. Below are given the names of sections with their chairmen and openers of discussion, and where already supplied, the titles of subjects for discussion.

It would be well to advise Dr. Oscar Dowling, at Shreveport, of the intention to attend, as soon as each member has so decided, in order that he may be facilitated in his arrangements for railroad rates as well as in the provisions for social entertainment.

The departure from the usual custom of holding meetings in New Orleans was largely ventured in the hope of making the interest in the Society greater, and of affording many of the men in the upper parishes the opportunity of attending the meeting and of creating that interest in medical organization which should result in an increased membership from that section.

The JOURNAL believes that the successful gatherings of the past few years point to a repetition of the good work in Shreve-

port, and we hope that every member will cherish the same belief to the point of coming in June to see.

THE COMMITTEE OF ARRANGEMENTS is anxious to issue a preliminary program, so every member who has a paper and every chairman should at once send titles of these to Dr. Dowling.

REDUCED RAILROAD RATES will be assured as soon as the requisite number of physicians attending is known. Every one buying a ticket should ask for an agent's excursion receipt in order to avail of the rates arranged. Full fare will probably be required in going.

LIST OF SECTIONS WITH SUBJECTS were announced, together with names of chairman and those to open discussion:

GENERAL MEDICINE—Chairman, Dr. Whyte Glendower Owen, White Castle. To open discussion, Drs. F. M. Thornhill, Arcadia, and J. M. Barrier, Delhi.

*A Symposium of Tuberculosis in Louisiana:*

(1) Vital Statistics of Tuberculosis in Louisiana, Dr. G. Farrar Patton—Orleans Parish.

(2) The Transmission of Tuberculosis, Dr. Whyte Glendower Owen—Iberville Parish.

(3) Education of People as a Factor in the Prevention of Tuberculosis, Dr. Fred. M. Thornhill—Bienville Parish.

(4) Climatic Treatment of Tuberculosis Afforded in Louisiana, Dr. P. E. Archinard—Orleans Parish.

(5) Medical Treatment of Tuberculosis and Its results, Dr. Charles McVea—East Baton Rouge Parish.

(6) Tuberculosis Among Our Negroes, Dr. John M. Barrier—Richland Parish.

(7) General Discussion by the Society.

SURGERY—Chairman, Dr. J. D. Bloom, New Orleans. To open discussion, Drs. R. Matas and F. W. Parham, New Orleans. *Subject not announced.*

NEUROLOGY, INCLUDING MENTAL DISEASES—Chairman, Dr. G. A. B. Hays, Jackson. To open discussion, Dr. P. E. Archinard, New Orleans. *What can be done to prevent the increase of degenerates?*

MATERIA MEDICA AND THERAPEUTICS—Chairman, Dr. H. C. Coty, Shreveport. To open discussion, Dr. W. L. Dickson, Shreveport. *Subject not announced.*

DISEASES OF CHILDREN—Chairman, Dr. J. F. Oechsner, New Orleans. To open discussion, Drs. John Callan and G. F. Patton, New Orleans. *Subject not announced.*

OBSTETRICS AND GYNECOLOGY—Chairman, Dr. R. A. Gray, Shreveport. To open discussion, Drs. J. M. Callaway, Shreveport, and R. F. Harvell, Ruston. *Subject not announced.*

OPHTHALMOLOGY—Chairman, Dr. H. D. Bruns, New Orleans. To open discussion—Drs. E. W. Jones and P. L. Reiss, New Orleans. *Control of Suppuration in Anterior Portion of the Eye.*

OTOLOGY, LARYNGOLOGY AND RHINOLOGY—Chairman, Dr. W. Scheppegrell, New Orleans. To open discussion—Drs. Gordon King and C. J. Landfried, New Orleans. *Syphilis of the Nose.*

MEDICAL JURISPRUDENCE—Chairman, Dr. S. L. Théard, New Orleans. To open discussion—Dr. F. J. Kearny, Plaquemine. *An Open Letter to the Members of the Society from the Chairman of the Section on Medical Jurisprudence:*

DEAR DOCTOR—It is my sincere wish to revive interest in the rather neglected Section on Medical Jurisprudence by securing for our next meeting a number of papers on that important subject. Should you feel inclined to contribute to the Section, I would be pleased to learn at an early day the subject of your paper.

The selection of the Subject for General Discussion will depend largely upon the response of the members to this appeal for a contribution, and will be announced in the next issue of the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL, the official organ of our society.

Very truly yours,

(Signed) SIDNEY L. THÉARD, M. D.,  
Chairman Section on Medical Jurisprudence,  
840 Canal street, New Orleans, La.

DERMATOLOGY—Chairman, Dr. Isadore Dyer, New Orleans. To open discussion, Dr. J. N. Roussel, New Orleans.

*The Importance of Diagnosis in Skin Diseases. Considered generally and as applied to particular Diseases.*

The chairman of this section earnestly solicits the assistance of members and especially begs contributions of papers relating to the occurrence of skin diseases in country districts, particularly referring to leprosy, types of syphilis, the eruptive fevers, impetigo ("Indian Fire"), rhus poisoning, summer eruptions on the feet and hands, etc. Points in diagnosis and the statement as to numerical frequency are of importance.

QUARANTINE—Chairman, Dr. J. C. Egan, Shreveport. To open discussion, Drs. A. Nolte, New Orleans, and J. S. Stephens, Jr., Natchitoches. *Quarantine.*



BACTERIOLOGY—Chairman, Dr. O. L. Pothier, New Orleans. To open discussion, Dr. John J. Archinard, New Orleans. *The Pneumococcus and Its Infections.*

ANATOMY AND PHYSIOLOGY—Chairman, Dr. T. G. Ford, Shreveport. To open discussion, Drs. N. M. Hébert, Covington, and W. E. Barker, Plaquemine. *Subject not announced.*

GENITO-URINARY SURGERY—Chairman, Dr. Chas. Chassaig-nac. To open discussion, Drs. W. K. Sutherlin and R. Hunt, Shreveport. *Varicocele.*

SANITARY SCIENCE—Chairman, Dr. Edmond Souchon, New Orleans. To open discussion, Dr. S. R. Olliphant, New Orleans; Dr. N. K. Vance, Shreveport; Dr. J. S. Alison, Swaitz. *The Defences of Louisiana Against the Introduction of Yellow Fever. The Value of Co-operation in the Sanitary Control of Our Periodic Epizootics of Anthrax*, M. H. Dalrymple, M. R. C. V. S., Baton Rouge.

ORAL SURGERY—Chairman, Dr. A. G. Friedrichs, New Orleans. To open discussion, Dr. Geo. J. Friedrichs, New Orleans. *The Care of Children's Teeth.*

HYGIENE—Chairman, Dr. F. J. Mayer, Opelousas. To open discussion, Dr. W. A. Holloway, Plaquemine.

(1) *Farm Drainage in its Relation to Health.* (2) *Hygiene of the Rice Fields.* (3) *Relation of the New Discovered Oil Fields to the Hygiene of the State.* (4) *Hygienic-Dietetic Treatment of Tuberculosis.* (5) *Mosquitoes.*

THE CHAIRMAN OF THE COMMITTEE OF ARRANGEMENTS HAS ISSUED THE FOLLOWING: The State Medical Society will meet in Shreveport June 3-5. Every member of the Society and every doctor in the State who can possibly leave his practice should attend and assist in making this one of the best sessions since the organization of the Society.

Besides the regular program there will be considerable time given to the social features and we hope the physicians will bring their wives. A number of entertainments and receptions are being arranged which will be enjoyed by all the doctors who attend.

We have pleasure in announcing that a one and one-third rate, on the certificate plan, will be given the doctors and their wives. We had hoped to get a one rate fare for the round trip and it may be possible, though hardly probable, that the rate

sought will be granted after the general passenger agents debate the matter among themselves.

Shreveport will take special pleasure in extending the doctors of Louisiana a most cordial welcome, and we look forward with great pleasure to entertaining the busy practitioners who may honor us with their presence. Come expecting to have a jolly good time.

Cordially yours,

OSCAR DOWLING, M. D.,  
Chairman Entertainment Committee.

#### REPORT OF COMMITTEE ON REVISION OF CONSTITUTION AND BY-LAWS.

*To the Officers and Members of the Louisiana State Medical Society:*

GENTLEMEN—Under the language of the motion calling for a revision of the Constitution and By-Laws of this Society, the Committee in charge of the work is required to give notice of all contemplated changes two months in advance in the official organ of the Society—THE NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

While the individual members of the Committee may not stand agreed upon the desirability of each of the changes recommended, the following suggestions and alterations or amendments are respectfully submitted:

#### CONSTITUTION.

##### PREAMBLE, TITLE AND OBJECTS.

In *Section 2*, in place of the words: "Public Institutions for the Sick and the Infirm," insert the words: "Public Institutions for the *Indigent* Sick and Infirm."

##### ARTICLE I.

*Section 2* to read: "Any suspension or alteration of the Constitution shall require a two-thirds vote of the members registered at any meeting, unless proposed in writing at a previous meeting, in which case a vote of two-thirds of the voting members present at any session of any meeting shall be sufficient; provided, etc."

##### ARTICLE II.

*Section 1.* (Qualifications.) Add: "(5) and must have complied with the law regulating the practice of Medicine in Louisiana at the time of his graduation."

In *Section 2*, relative to the possible election as *members* of men of worth and culture in other pursuits of life, insert the words "*honorary*" members.

*Section 9*. To read as follows: "The number of Honorary members in this Society shall not exceed twenty, and in no case shall any one be elected an Honorary member except he be present at the annual session at which his name is proposed and in some way contributing to its success; provided also that a vote of three-fourths of the members present shall be required for his election."

#### ARTICLE III.

*Section 1* to read as follows: "The officers of this Society shall be one President, one First, Second and Third Vice-President, one Recording Secretary, one Corresponding Secretary, one Treasurer and one Librarian."

*Section 2* to read: "All the officers of this Society must be chosen from the members in attendance at the annual session."

#### ARTICLE V.

Re-enact this article, stricken out at the session of 1898.

#### ARTICLE VI.

*Section 1* to read: "This Society shall elect annually to the American Medical Association, or other medical societies and organizations to which it may be entitled to, or desire, representation, one delegate for every two hundred members or fraction thereof contained in this Society; the expenses of said delegates to be paid out of the funds of the Society on a voucher drawn by the President and countersigned by the Recording Secretary."

#### BY-LAWS.

##### ARTICLE I.

*Section 1* (quorum) to read: "Twenty-five members entitled to vote shall constitute a quorum."

##### ARTICLE II.

Strike out *Section 8*, recognizing and providing for *temporary* members.

##### ARTICLE III.

In *Section 2*, relative to vice presidents and their order of number, strike out in line 5 of paragraph 1 the words "*by Congressional Districts.*" In paragraph 2, line 5, strike out the words "his district," and in place thereof insert the words "the State." Strike out paragraphs 3, 4 and 5.

*Section 5.* Make the heading "Treasurer," instead of "Treasurer and Librarian;" paragraphs 4 and 5 to become paragraphs 1 and 2 of a special added section, to be known as *Section 6*, to be headed: "Librarian," and to contain the further provision: "3. He shall at each session report the condition of the library, showing the total number of volumes therein and the special books added thereto by donation or purchase during the year, and the amount turned over to the Treasurer for sale of copies of the Annual Transactions."

Make paragraphs 7, 8 and 9, paragraphs 5, 6 and 7 of *Section 5*.

In paragraph 8, relative to the security to be furnished by the treasurer, strike out the words "whenever this Society shall judge this requisite," and in place thereof insert the words "in such sum as may be specified by the Society at the time of his election."

In paragraph 9 omit in lines 1 and 2 the words "the library and of."

#### ARTICLE IV.

*Section 6.* Paragraph to read: "The committee on publication shall consist of not less than five members, etc."

Paragraph 2 of the same section 6 to read: "(h) All scientific essays, reports and original papers referred to it by the Committee on Scientific Essays and Reports."

Strike out paragraphs 3 and 4 of the same section, relative to "experts;" paragraphs 5, 6 and 7 to become paragraphs 3, 4 and 5; the last one to read: "This committee shall submit an annual report to the society, and present an estimate of expenses for the ensuing year."

*Section 7.* Strike out the printed recommendations made to the Society by the Judiciary Committee in 1895.

In paragraph 3, relative to the manner of preferring charges against members, omit any reference to the *Vice-Presidents* of the Society.

#### ARTICLE V.

Re-enact this Article, providing for an Annual Orator.

Favorable action is recommended on the following resolution of Dr. Souchon offered at the last meeting of the Society and referred to this Committee: "that the Special Section on Sanitary Science be done away with and a Special Section on Sanitary Science and Quarantine substituted for it."

The Committee believes that recommendations likely to affect affiliated societies had better emanate from these societies themselves.

Respectfully submitted,

SIDNEY L. THÉARD, M. D., *Chairman, New Orleans.*

F. M. THORNHILL, M. D., *Arcadia.*

CHAS. McVEA, M. D., *Baton Rouge.*

## Medical News Items.

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THE ORLEANS PARISH MEDICAL SOCIETY has issued the first volume of its monthly proceedings. This appears in a neat pamphlet in the form of a monthly issue containing papers read and the discussions of these. In the first number there are several articles of interest and value.

THE CLEVELAND MEDICAL JOURNAL appeared in January as the amalgamation of the *Cleveland Medical Gazette* and the *Cleveland Journal of Medicine*. The new journal makes its appearance under a new cover which daintily suggests the general ethical tone of the present management.

THE WESTERN OPHTHALMOLOGIC AND OTO-LARYNGOLOGIC ASSOCIATION holds its seventh annual meeting in Chicago, April 10, 11, 12, 1902, under the presidency of Dr. C. R. Holmes, of Cincinnati, Ohio.

THE JOURNAL OF GYNECOLOGY AND ABDOMINAL SURGERY projects organizing and incorporating along the same lines as *American Medicine*. The company is to capitalize at \$50,000. The stock is to be divided as follows: Founders' shares at \$50, with life-time subscription and perpetual share in the profits; preferred shares with 6 per cent. dividend on net earnings; common stock at \$10, with three years' subscription, and common stock at \$5, with one year's subscription, the last two earning dividend after the preferred and founders' shares have paid out. The subscription for the journal is to be placed at \$4, payable in advance.

The names of Drs. Jewett, Cleveland, Janvrin, Boldt, Mallet, Mann and Edgar in connection with the scheme should invite the earnest co-operation of all who may be interested in the subjects embraced in the plan.

PHARMACY BOARD RESULTS.—Of thirty-six students examined by the State Board of Pharmacy twenty-five were successful. Seventeen were awarded certificates as registered pharmacists. These are: J. W. Peyton, K. Lee, C. E. Schaum-

berg, of Donalsonville; A. W. Stone, E. K. Bernstein, A. W. Smith, Shreveport; W. J. Casertie, F. A. Falls, C. A. Humard. A. B. Pecou, Joseph Gross, C. O. Green, E. J. Levi, J. H. Dunn, L. V. Lowe, J. J. Grasser, E. A. Sigurt, Samuel Addis, of New Orleans. The following received certificates as qualified assistants: H. H. Lavigne, L. F. Magruder, E. C. Vocks, R. L. McHenry, Charles Nicaud, F. J. Mouton and H. F. Bienvenue, of New Orleans.

DISINFECTION EXTRAORDINARY.—On March 1 the pest house at Lake Charles was completely burned, with all its contents. Two negroes and one white were in the building at the time, but managed to escape. The newspaper notice intimates that the fire was accidental.

PERSONAL.—Dr. Geo. Kreeger of this city has located at Lake Charles, La.

NEW ORLEANS CITY BOARD OF HEALTH.—We are glad to notice the re-election of the existing City Board of Health by the New Orleans Council and to express our own high appreciation of this recognition of their good work since they have been in office.

THE PASSING SHOW.—An exchange furnished the following tombstone efforts—a miller is thus remembered: “In Christian memory of H., who departed this life without human assistance.”

Another, auto-epitaph evidently: “Here rests in God, E. K. He lived 26 years as a man and 37 years as a husband.”

Again, a wail of a desolate husband: “Tears cannot bring thee back to life, therefore, I weep.”

THE PHILADELPHIA MEDICAL JOURNAL has raised its subscription from \$3 to \$5 a year. This does not apply to present subscribers who from now on pay their subscriptions in advance.

THE WOMAN'S MEDICAL JOURNAL begins its 12th volume with a change in its general style, at present appearing in quarto and resembling in its make up the current weeklies. We must compliment the improvement and extend our good wishes in the venture.

AN AMERICAN HOSPITAL IN PARIS is to be begun in the spring, according to the *Medical Record*. Mr. Edward Tuck, formerly of Boston and New York, and twenty-five years in Paris, is the benefactor. The hospital is to be named the Franklin Hospital and is to be built on the latest American model. The staff is physicians and nurses, and Mr. Tuck is to install the hospital and provide sufficient funds for its permanent maintenance.

INTERNATIONAL ASSOCIATION OF THE MEDICAL PRESS.—This association is to meet April 7 at Monte Carlo, Italy. It will be composed of delegates appointed in each country by the press associations. The national delegates will discuss regulations and a plan regarding literary ownership in scientific publications. A permanent international bureau will also be discussed, designed to receive authors' abstracts of medical writings throughout the world to be furnished to the journals belonging to the International Association. The provisional secretary is R. Blondel, Paris.

THE TEXAS STATE MEDICAL ASSOCIATION has changed its date and place of meeting to Dallas, May 6 to 9, instead of El Paso, April 22 to 25. The change was brought about by the desire of the Western members of the Association to have a representative meeting from all sections, which was impossible at a point so remote as El Paso.

THE NEW ORLEANS POLYCLINIC registered the following physicians since February 1: *Mississippi*—, Drs. G. J. Caraway, Mt. Olive, J. A. Harper, Hattiesburg, W. N. Blount, Collins, J. E. Oakley, Spring Hill, W. G. Austin, Utica, J. W. Walker, Natchez, W. R. Ward, Weathersby, C. A. Barber, Brookhaven; *Missouri*—, Dr. E. T. Bowers, Kansas City; *Louisiana*—, Drs. C. W. Hilton, Monroe, E. R. Gandy, Victoria, J. T. Keator, Bermuda, F. W. E. Truly, Marthaville, W. T. Williams, Natchitoches, H. C. Milburn, Whiteville, G. W. Seranton, Youngsville, G. L. Drouin, Mansura; *Ohio*—, Dr. J. C. Dignan, Columbus; *Texas*—, Drs. W. T. Brown, Wallis, G. E. Huddle, Rogers, J. W. Blasdell, Reedville, B. A. Dillard, Rainsville, W. E. York, Giddings, F. W. Lawson, Courtney, J. D. Magee, Mt. Sylvan, T. K. Proctor, Sulphur Springs, L. Faulk, Rily Springs, W. W. Long, Sul-

phur Springs, R. E. L. LaBauve, Edna, J. M. Pyburn, Armour; *Alabama*—, Dr. J. M. Brown, Sellers; *Georgia*—, F. W. Taylor, Gabbettville; *West Virginia*—, Dr. C. J. Scott, Parkersburg; *Virginia*—, R. H. Davis, Charlottesville; *Arkansas*—, J. R. Cunning, Lonoke, W. F. Robbins, Ozan, E. K. Williams, Arkadelphia, T. E. Rhine, Thornton.

NEW OFFICERS OF THE SHREVEPORT MEDICAL SOCIETY: On March 4, 1902, the following officers were unanimously elected: President, Dr. G. C. Chandler; Vice President, Dr. J. F. O'Leary; Recording Secretary, Dr. Louis Abramson; Corresponding Secretary, Dr. F. S. Furman; Treasurer, Dr. J. J. Scott.

THE TULANE MEDICAL COLLEGE COMMENCEMENT will take place April 30, present year. There are 433 students and probably 50 graduates, the least of the latter for a number of years, due to the fact that this is the first class to graduate under the four year rule.

THE LOUISIANA STATE BOARD OF MEDICAL EXAMINERS will hold their next meeting in New Orleans, May 1 and 2, at 9 A. M., Tulane Medical College, Canal street.

THE AMERICAN ASSOCIATION OF UROLOGISTS was organized on February 22, 1902, essentially for the purpose of further development of the study of the urinary organs and their diseases. The Association consists of active, corresponding and honorary members, and is in great measure modelled upon the plan of the Société Française d'Urologie, modified to suit American circumstances and conditions. The annual meeting of the American Association of Urologists will be held on the last day and the day following the annual meeting of the American Medical Association. The officers of the Association are; Ramón Guiteras, M. D., President; Wm. K. Otis, M. D., Vice President; John Van der Poel, M. D., Treasurer; Fred. C. Valentine, M. D., Secretary; A. D. Mabie, M. D., Assistant Secretary.

THE GEORGIA JOURNAL OF MEDICINE AND SURGERY has changed hands. Dr. W. E. Fitch, the former proprietor and editor, has transferred his interest to Dr. St. J. B. Graham, to whom the JOURNAL extends best wishes.



ST. LUKE'S HOSPITAL OF NILES, MICHIGAN, is the latest fake diploma factory coming to our notice. Only \$5.00 is charged for a diploma in either Latin or English—*Facilis Descensus Averni!*

THE ASSOCIATION OF MEDICAL OFFICERS OF THE ARMY AND NAVY OF THE CONFEDERACY will meet in the Judicial Room of the City Hall in Dallas, Texas, corner of Akard and Commerce streets, on Tuesday, April 22, 1902, at 12 m.

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## Book Reviews and Notices.

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*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

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*Water and Water Supplies*, by JOHN C. THRESH, D. SC. (London); M. D. (Victoria); D. P. H. (Cambridge). Third edition, revised and enlarged; 12mo., 527 pages. P. Blakiston's Son & Co., Philadelphia, 1901.

This work must prove both interesting and of service to anyone who has some desire to know the needs of community sanitation from the water standpoint. Sources of supply, methods of presentation, filtration and the sanitary phases of water are considered in the detail which characterizes a careful writer; mechanical devices are fully illustrated and discussed. The relation of pure water to the public health is also reviewed.

DYER.

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*Photographic Atlas of Diseases of the Skin*. By GEORGE HENRY FOX, A. M., M. D. Parts VI and VII. J. P. Lippincott Company, Philadelphia and London, 1901.

Among the American atlases on skin diseases, this must stand first for several reasons: In the successful presentation of the diseases themselves as they appear on the individual, because the plates are photographs colored after nature; in popularity, because of the practical way in which the text is written, and because of the price, which puts the atlas within the reach of all (16 parts at \$1.50 a part).

The present parts (VI and VII) carry excellent studies of impetigo, lupus, syphiloderms, purpura, eczema, fibroma, pityriasis, psoriasis, chromophytosis and seborrheic dermatitis (called here pityriasis seborrheica by the author).

DYER.

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*A Treatise on the Acute, Infectious Exanthemata*, by WILLIAM THOMAS CORLETT, M. D., L. R. C. P. (London). Illustrated. The F. A. Davis Co., Philadelphia, 1901.

We confess to much gratification at having so timely a work. No pains have been spared to make it complete. After an interesting historical summary of the Exanthemata, the author takes up Variola, Vaccinia, Varicella, Scarlatina, Rubeola and Rubella, in the order named. Careful detail characterizes the book, and the particular characteristics, the morphologic evolution of each eruption, is graphically differentiated. The plates are especially fine, and those illustrative of the varieties and stages of small-pox are the best we have ever seen.

In the pages devoted to Variola, the subject is exhaustively reviewed from every point and the treatment is presented in full detail.

In the chapter on Vaccinia, of especial importance are the enumerated complications and sequellae of vaccination. The method for vaccinating as related is quite up to date.

Varicella is considered and dismissed with less space and detail than variola, and altogether the points of difference and resemblance are hardly well enough defined.

Of particular value in the discussion of scarlet fever are the irregular types related and described and the study of the complications. The bacteriology of scarlatina is thoroughly reviewed, without committing the author to its acceptance of any specific organism as responsible for the disease, although he is avowedly open to conviction. The paragraphs directed at the management of the disease are especially filled with valuable suggestions and practical methods.

The varieties of measles receive equally serious and conscientious handling.

Every practitioner of medicine should have Dr. Corlett's work, particularly in this time of small-pox epidemics, in large part due to failure in recognizing the milder types.

DYER.

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*Saunders' Question Compend—Essentials of Physiology*. By SIDNEY P. BUDGETT, M. D. 16mo., 233 pages. W. B. Saunders & Co., Philadelphia and London, 1901.

Compend occupies their own place in the practical work of the student and in such catalogue the series issued by Messrs. Saunders & Co. have always had a deserved place. In the present work the endeavor has been to make the work as briefly comprehensive as consistent with good teaching. Each chapter carries a series of questions at the conclusion reviewing the text preceding. We have never seen a more practical presentation of the nervous system in so small a space. The illustrations are well placed.

DYER.

## PUBLICATIONS RECEIVED.

*Sulphur Dioxide as a Germicidal Agent*, by H. D. Geddings, Passed Assistant Surgeon, U. S. Marine Hospital Service, Washington, D. C., 1902.

*A System of Physiologic Therapeutics*, edited by Solomon Solis Cohen, M. D.

*Vol. VI. Dietotherapy and Food in Health*, by Nathan S. Davis, Jr., M. D.—P. Blakiston's Son & Co., Philadelphia, 1902.

*Transactions of the American Orthopedic Association, Fifteenth Session*—June, 1901.

*Photographic Atlas of the Diseases of the Skin*, by Geo. H. Fox, M. D.—*Part VIII and IX.*—J. B. Lippincott Co., Philadelphia and London, 1901.

*Handbook of Bacteriological Diagnosis for Practitioners*, by W. D'Este Emery, M. D.—P. Blakiston's Son & Co., Philadelphia, 1902.

*The American Year Book of Medicine and Surgery for 1902.*—*Vol. I. Medicine, Vol. II. Surgery.* Edited by Geo. M. Gould, M. D.—W. B. Saunders & Co., Philadelphia and London.

*Monthly Report of the Board of Health for the Philippine Islands and City of Manilla*, December, 1901.

*Syphilis, A Symposium.*—E. B. Treat & Co., New York, 1902.

*Compound of General Pathology*, by Alfred Edward Thayer, M. D.—P. Blakiston's Son & Co., Philadelphia, 1902.

## REPRINTS.

*The Management of the Tendency of the Upper Fragment to Tilt Forward in Fractures of the Upper Third of the Femur*, by Russel A. Hibbs, M. D.

*Alcoholism and Crime—How We Should Deal With the Criminal Alcoholic*, by Heinrich Stern, M. D.

*Migrated Ovarian and Parovarian Tumors—On Bandages for Nephroptosis—Is the Kraske Operation Justifiable in Women? Panhysterokolpectomy: A New Prolapsus Operation—The Cure of Chronic Bright's Disease by Operation—The Technic of Nephropexy, as an Operation per se, and as Modified by Combination with Lumbar Appendicectomy and Lumbar Exploration of the Bile Passages*, by Geo. M. Edebohls, M. D.

*Carcinoma of the Female Urethra: Report of Cases*, by C. Jeff Miller, M. D.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)

FOR FEBRUARY, 1902.

CAUSE.	White.	Colored.	Total.
Fever, Malarial (unclassified).....	....	....	....
“ “ Intermittent.....	1	2	3
“ “ Remittent.....	....	....	....
“ “ Congestive.....	....	....	....
“ “ Typho.....	....	....	....
“ Scarlet.....	3	....	3
“ Typhoid or Enteric.....	1	3	4
“ Puerperal Diseases.....	4	1	5
Bronchitis.....	9	7	16
Diphtheria.....	3	....	3
Influenza.....	13	5	18
Diabetes.....	3	....	3
Broncho-Pneumonia.....	7	2	9
Pneumonia.....	48	32	80
Cancer.....	8	7	15
Tuberculosis.....	54	36	90
Diarrhea (Enteritis).....	10	7	17
Dysentery.....	2	....	2
Appendicitis.....	2	....	2
Congenital Malformations.....	5	1	6
Hepatic Cirrhosis.....	7	1	8
Peritonitis.....	1	2	3
Inanition.....	8	2	10
Debility, Senile.....	18	7	25
“ Infantile.....	5	4	9
Bright's Disease (Nephritis).....	30	15	45
Paralysis.....	11	1	12
Heart, Diseases of.....	44	21	65
Apoplexy.....	....	....	....
Congestion of Brain }.....	14	8	22
Meningitis.....	6	1	7
Convulsions, Infantile.....	3	4	7
Congestion of Lungs.....	3	....	3
Tri-nu-scentium.....	4	8	12
Injuries.....	11	10	21
Suicide.....	4	1	5
All Other Causes.....	36	24	60
TOTAL.....	378	212	590

Still-born Children—White, 18; colored, 9; total, 27.

Population of City (estimated)—White, 223,500; colored, 81,500; total, 305,000.

Death Rate per 1000 per annum for Month—White, 20.29; colored, 31.21; total, 23.21.

## METEOROLOGIC SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure..... 30.00  
 Mean temperature..... 50.  
 Total precipitation..... 3.83 inches  
 Prevailing direction of wind, north.

# NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

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No. 11.

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## Original Articles.

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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.]

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### REPORT OF EXPERIMENTS WITH YELLOW FEVER FOMITES AT LAS ANIMAS HOSPITAL, HAVANA, CUBA, SEPTEMBER-NOVEMBER, 1901.\*

BY SURGEON JOHN W. ROSS, U. S. NAVY, DIRECTOR OF LAS ANIMAS HOSPITAL.

September 11, 1901, I made official application to the Military Governor of the island for an appropriation of \$500 to conduct a series of experiments at Las Animas Hospital, with the object of acquiring additional evidence bearing upon the possible role played by supposedly infected fomites in the transmission of yellow fever.

General Wood, with his invariable appreciation and liberality in a good cause, promptly granted the desired appropriation. The work was begun and conducted under the observation and with the hearty co-operation of Colonel Havard, U. S. Army, Chief Surgeon of the department of Cuba, and Major Gorgas, U. S. Army, Chief Sanitary Officer of the city of Havana, together with the able assistance of Drs. Miguel Biada and R. M. Kirby-Smith, House Physicians at Las Animas.

Two rooms were selected in buildings constructed of masonry, about 150 meters apart, both within the hospital enclosure.

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\*Read before the International Sanitary Congress, Havana, February 19, 1902.

These rooms were thoroughly renovated, provided with doors and windows of wire gauze—mosquito proof—being further protected by vestibules of the same material. All the cracks and rough places in the walls, ceilings and floors were smoothly sealed; and abundance of pyrethrum powder burned in the rooms, in order to preclude the possibility of the presence of any mosquitoes. One of these rooms was called the observation room and the other the experimental room.

The observation room was fitted out with furniture, utensils, bedding and clothing which had been thoroughly disinfected, so that there could be no suspicion of extraneous contamination.

In the experimental room were placed numerous bundles containing clothing, bed clothes and bedding which had recently been used in the sick rooms and on the persons of patients ill with yellow fever; much of it badly soiled with discharges and excreta of said patients. These articles had been used by Ventura Trillo Ramos and Juan Lago at the private hospital "La Benefica," Havana, and by patients in the hospital at Columbia Barracks, Quemados, Cuba. All these cases had been diagnosed as yellow fever in their respective hospitals and confirmed as such by the Yellow Fever Commission at Havana. The cases of Juan Lago and Vicente Real were fatal, the latter having presented during its course and at the autopsy unmistakable appearances of malignant yellow fever.

Eight men, newly arrived on the island, 5 Spanish, 2 Italian and 1 English, all healthy, by no possibility immune, were procured from the immigration station, Tricornia, across the bay from Havana, as subjects for our experimentation.

Two of these men were placed in the observation room on September 27, and confined there for more than a week. At the end of that period they were transferred to the experimental room, where they were kept for seven days. They were then released and given light work in the hospital grounds. When they were removed from the observation room, two others of the subjects were placed therein for seven days—afterwards taking their turn in the experimental room for the same length of time. In this way all eight of the men, after rigid physical examination, went through the observation and experimental rooms, two by two, emerging therefrom in good health, and remaining so until all possibility of having contracted yellow fever had passed away.

While in the experimental room the subjects used, upon their persons for sleeping, the night shirts, pajamas, bedding, bed clothes, &c., above described, soiled with fecal dejections, black vomit and blood. From time to time other packages, containing similarly soiled fomites, were introduced and the subject required to frequently shake them within the room. While in the observation room the men were not allowed to leave it, except for necessary exercise, and then under guard. While in the experimental room they were not allowed outside under any condition. Their food was carried to them and there were guards over them night and day.

A careful clinical record was kept of each man during the fourteen days he was kept in the observation and experimentation rooms. The temperature, pulse, respiration, appetite, &c., of all eight continued practically normal throughout.

At the beginning of those proceedings written invitations were sent to the physicians of Havana, requesting them to visit Las Animas at their pleasure, and observe the progress of the experiments.

I beg leave to call especial attention to the following facts in connection with those experiments, viz:—

1. They were conducted in the city of Havana itself, within whose beautiful limits, until recently, Cuba's yellow sorrow had run riot continuously for 139 years.

2. They were conducted in buildings, similar in construction and material (mamposteria) to those occupied by people of the poorer classes of the city, damp, poorly lighted, badly ventilated, floors on the level of the ground.

3. They were conducted at the season of the year when, in this latitude, the dreaded scourge is at its worst and does its most deadly work.

The facts obtained from the procedures detailed above should be taken in conjunction with, and considered as supplementary to the admirable and convincing experiments conducted by the distinguished Yellow Fever Commission of 1900, presided over by Major Walter C. Reed, U. S. Army.

I earnestly hope that the evidence derived from our work at Las Animas, given above, may have some weight in stimulating the profession generally, and health quarantine authorities

particularly, to accept and act upon the conclusion of the Commission referred to above; that,

“*Yellow fever is not conveyed by fomites, and hence disinfection of articles of clothing, bedding or merchandise, supposedly contaminated by contact with those sick with this disease, is unnecessary.*”

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### THE HISTORY OF THE LOUISIANA LEPER HOME.

BY ISADORE DYER, PH. B., M. D. COLLABORATOR *Leprosy Bibliotheca Internationalis*;  
PROFESSOR ON DISEASES OF THE SKIN, IN THE NEW ORLEANS POLYCLINIC, ETC.,  
NEW ORLEANS.

In 1884, a bill was introduced at the Louisiana State Legislature embodying a provision for lepers in the State. This bill contained only a suggested arrangement for a contract with some physician who should assume charge of the lepers committed under a previous law, for the consideration of \$10,000 a year, which was to cover the expenses incident to the contract, the physician's pay as well.

At the time there were ten lepers housed at the New Orleans pest-house, under conditions of almost neglect and in ordinary cabin rooms into which it rained and in which it was impossible to have due warmth. The food supply was largely speculative.

At this time, such lepers were cared for (?) at the expense of the City of New Orleans or of the parish from which they had come.

The bill evidently was inspired by the contractor then in office, Dr. J. C. Beard. A member of the Legislature at that time, Capt. Allen Jumel (largely through his knowledge of the conditions at the pest-house, derived from one of the inmates whom he had known for many years) used all means to defeat the bill and to this end solicited the aid of Dr. Jos. Holt, of New Orleans. As a sanitarian, Dr. Holt has always been held in high esteem in the State, and his word carried weight when uttered in condemnation of a contract system.

Because of the burning question of leprosy, the Orleans Parish Medical Society took up the subject of leprosy at its meeting of June 9, 1894. The writer read a paper which had been requested and prepared for the occasion. In this 25 cases were reported at large in New Orleans and argument was made



for the need of legislative provision along humane lines. After a full discussion the following was adopted :

“At a regular monthly meeting of the Orleans Parish Medical Society, held Saturday, June 9, Dr. Isadore Dyer, for the Committee on Scientific Essays, read a *Report on the Leprosy Question in Louisiana*, with resolutions presented for adoption by the Society. The paper was received by the Society and endorsed, as the following extract from the minutes of the Society proceedings will show :

“ ‘It was moved: First—That the Society accepts, as the expression of its opinion, the paper read by Dr. Dyer and the resolutions suggested therewith.

“ ‘Second—That the entire subject matter be referred back to the committee for the purpose of having same published, after eliminating therefrom anything which it is deemed best should not be presented to the general public; and

“ ‘Third—That the committee, after having same published in pamphlet form, should distribute copies thereof to the members of the Legislature, to the press and to the medical journals.’

“The conclusions embodied in the above paper follow :

‘Living, as we do, in a community so afflicted with the disease, it seems only proper that our Parish Society should adopt some resolution as expressive of our views on this subject, with the double purpose of letting our convictions be heard, and of offering some guidance to our legislators for their intelligent consideration of this question. At the suggestion, therefore, of the chairman of the Committee on Scientific Essays, I have to present the following for your consideration :

‘WHEREAS, 1. Leprosy is of frequent occurrence in Louisiana in all of its types.

2. It occurs in various sections of the State and indiscriminately of apparent sources of contagion.

3. It has rapidly increased in the past decade when its slow incubation is considered.

4. It is undoubtedly endemic in this State.

5. It is a menace to the entire population of this and neighboring States.

6. There is at present a worse than inefficient protection offered to the community.

‘*Be it resolved*, That it is the sentiment of this Society :

1. That the public health is the first consideration.

2. That suitable legislation for community interests is demanded, *now*.

3. That this legislation should be based on these lines :

- a. The absolute isolation of all lepers.
- b. The prevention of intermarriage.
- c. That no discrimination be made against race.
- d. The registration of all lepers, and their immediate relatives, where possible.
- e. Their proper hygienic and medical care.
- f. That this be done under the supervision of qualified medical skill, under the direction of a higher board of control, appointed for that purpose by the State.

g. That the place of detention be based upon the highest humanitarian plane; that comfort, and all that can conduce to ameliorate the condition of the unfortunate afflicted be considered; and finally, that the place of isolation be made, as far as possible, an asylum of refuge, rather than one of horror and reproach.

(Signed)

ISADORE DYER, M. D.

*Medical Building, June 9, 1894.*

Approved :

(Signed)

R. MATAS, M. D., Chairman,

For the Committee on Scientific Essays of the Orleans Parish Medical Society.' "

The effect on the Legislature was prompt and adequate, as the original bill was side-tracked and the following act was passed (Act No. 80, 1894) :

“An Act to provide for the appointment of a Board of Control for the Leper Home, and to provide for the care and treatment of persons so afflicted with leprosy.

“SECTION 1. Be it enacted by the General Assembly of the State of Louisiana, That a Board of Control for the Leper Home, consisting of seven members, to be appointed by the Governor of the State, by and with the advice and consent of the Senate, whose duty it shall be to provide for the proper care, treatment and maintenance of all persons in the State of Louisiana, and for that purpose they shall be authorized to arrange with any responsible physician skilled in the care and treatment of such disease, for the care, treatment and maintenance of all such persons so afflicted; that said board shall have power to remove for cause said contracting physician, and annul his contract and enter into a new contract with any other physician in accordance with act No. 85 of the session of 1892.

“SEC. 2. Be it further enacted, etc., That the sum of five thousand dollars be and the same is hereby set apart for the purposes of repairing or constructing and improving such buildings as may be necessary for the purposes of said institute.

“SEC. 3. Be it further enacted, etc., That the sum of ten thousand dollars per annum be and the same is hereby appropriated for the purpose aforesaid, and the Auditor is hereby authorized to warrant monthly for the said amounts on the order of the president of said board, countersigned by the secretary of the same.

“SEC. 4. Be it further enacted, etc., That as soon as practicable after the appointment of said board they shall meet and organize by electing a president and a secretary whose duties shall be prescribed by said board; all vacancies, whether by death, resignation or otherwise, on said board, shall be filled by the Governor.

“SEC. 5. Be it further enacted, etc., That the amount of appropriation provided for herein shall take effect and be available from and after the organization and appointment of said board, and after the election of said physician having been certified to by the Secretary of State.

“SEC. 6. Be it further enacted, etc., That all laws in conflict herewith be and the same are hereby repealed.”

The Act was promulgated in August, 1894.

The governor appointed as members of this board: Drs. E. M. Hooper of Wilson, C. J. Edwards of Abbeville, Henry J. Sherck and Isadore Dyer of New Orleans, and Messrs. A. A. Woods, Allen Jumel and Albert G. Phelps of New Orleans.

The Board organized in September, 1894, with Dr. Dyer as president, Dr. Hooper, vice-president and Dr. Sherck as secretary.

Dr. Dyer accepted office qualifying his acceptance with the statement that only on condition that no revenue was derived from salary or otherwise by him or other members of the board would he accept. Subsequently Dr. Sherck resigned as secretary at his own instance and Mr. A. C. Phelps, not a member of the board, was elected to the office.

What was accomplished from the time of organization up to the next legislature is told in that report of the Board to the Governor and members of the State Legislature.

“Gentlemen:—The State Board of Control of the Leper Home, created and appointed under your direction, begs to submit its first annual report for your consideration.

Leprosy has steadily increased in the State of Louisiana since its introduction by the French Acadians in the latter part of the eighteenth century.

Louisiana was yet a colony when attempts were made to check the spread of this dread malady. Successive governments have from time to time made shifts at this same purpose.

It remained for the present administration to direct more tangible effort toward effecting the eradication of such a blot on the fair name of Louisiana.

In 1894, responding to a series of popular exclamations, manifested through the daily press and medical bodies of the State, the Legislature, then in session, passed an act creating a Board of Control, whose office provided for a home for lepers and its subsequent care. In August, 1894, this board was appointed, and in September was organized after due promulgation of the act.

At every hand obstacles were thrown in the way of the Board's efforts to fulfill the high duty imposed upon them. When a desirable site was found and almost secured, the New Orleans City Council, through a misguided judgment, refused to sanction the erection of the asylum for these unfortunate victims of leprosy, while for years they had been allowed to travel on the street cars, eat at public restaurants, beg on the public thoroughfares, and otherwise expose an unguarded public.

A site was finally secured by lease for five years in Iberville Parish. This was the old "Indian Camp" plantation, desirable in every way for the home of the charges of the Board, except from point of accessibility.

On the last day of November, the first contingent of lepers were transported from New Orleans, by night, to their present home.

This was accomplished with the greatest difficulty, on a coal barge, towed by a tug. The details of the trip in all their awfulness have been depicted in the daily press.

For a time the existence of the home was threatened by the inhabitants of Iberville parish.

A rational judgment, however, supplanted an early and misguided prejudice, and the poor sufferers were only pitied the more because they wished for themselves an isolation which the law compelled.

Every effort was made to obtain reliable information concerning the number of lepers at large in the State.

Communications were addressed to the coroners in each and every parish. This was barren of result, and even of acknowledgment, save in two or three instances.

The Board proclaimed, in the public press, the fulfillment of the one provision of the act, the selection and arrangement of a home. A circular letter was sent to every sheriff of the State, begging assistance in locating lepers. This appeal met with no response.

By personal persuasion, through individual voluntary inclination, and, in some instances, by legal action, the number of lepers transported to the home has been increased to thirty-one.

The then mayor of the city of New Orleans, John Fitzpatrick, in every way showed his willingness to assist the Board in conveying patients to the home, and at least four of the inmates were sent through his influence and at his expense.

Appeals were made to the State Board of Health and to the local health officers of New Orleans for aid in the investigation and commitment of lepers. These were met with the plea that no legislative act empowered such procedure on their part.\*

Notwithstanding all obstacles, the condition of the home has steadily improved. The cabins found on the old plantation leased by the Board were put in repair and made weather-tight.

Comfortable iron beds, furniture and such necessities as the exchequer could afford were supplied; a resident physician, Dr. L. A. Wailes, who has served faithfully and well, even at the risk of personal exposure, and at times when he was not only physician, but nurse, priest and servant.†

The home to-day stands ready for your investigation, and we feel that what has been done has been done well.

Realizing the isolation of the patients and the lack of domestic care and of proper nursing, removed as they are from all civilization, the Board of Control has seen fit to arrange with the Order of the Sisters of Charity for the services of a sufficient number of their community to undertake these duties.

[COPY OF CONTRACT MADE WITH SISTERS OF CHARITY.]

The State Board of Control of the Leper Home of Louisiana agree to furnish sleeping and living apartments for the Sisters of Charity who shall be designated for the work; to arrange a room or rooms for a chapel for these; to arrange for the services of a priest, who shall either be resident (or conveniently near) upon the grounds of the Home; to pay the sum of one hundred dollars per annum to each Sister of Charity engaged in the work, for clothing and other incidental expenses. It is further agreed that the Sister Superior in charge shall be held accountable to the Board alone for their management, and that they shall have full charge of the domestic management appertaining to the servants, kitchen, household and detail of nursing, which last shall be at all times under the direction of the resident physician.

The Order of the Sisters of Charity agrees to furnish members of its community who shall be responsible for the domestic management, and all this entails; who shall supervise the household, culinary and laundry arrangement, who shall attend to the nursing of the patients resident in the Home, for which last they shall be responsible to the resident physician, and through him to the Board.

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\* The opposite obtains now under the new Boards, City and State.

† Dr. Wailes resigned in April, 1896, to accept a Board of Health position in Central America. Dr. E. M. Hooper of Wilson, La., was elected to fill the vacancy.

This contract cannot be annulled, except by mutual agreement between the State Board of Control of the Leper Home and the Order of the Sisters of Charity.

(Signed)

ISADORE DYER, M. D.,  
President, for the State Board of Control.  
SISTER MARIANA,  
For the Order of the Sisters of Charity.

We are glad to state that due provision has been made, and four of the Order of Sisters of Charity are now in charge of the nursing and domestic departments of the Home.

The comparative administration of this order in similar public institutions in this and other States promises a consequent usefulness in the morale and economy of the institution under our care.

The distance of the Leper Home from New Orleans and from other centres of supply has necessarily increased the expenses of the institution accordingly. Every attempt has been made at economic management, however, while the inmates have been spared no care which could be given them.

The officers of the board, among its members, have foregone such recompense as the act provides in the hope and desire that the public would appreciate their work as a pure charity for the public good.

The list of cases will indicate the progress and service of the institution from a medical standpoint.

We can not conclude our report without the proffer of certain recommendations which we deem opportune.

I. 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 a 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 the 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.

II. 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.

III. It is our opinion that influence should be brought to bear upon neighboring states, with a view to creation of legislation

directed at leprosy, to protect themselves and to prevent lepers from Louisiana emigrating, in their desire to escape the law.

IV. All efforts 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—

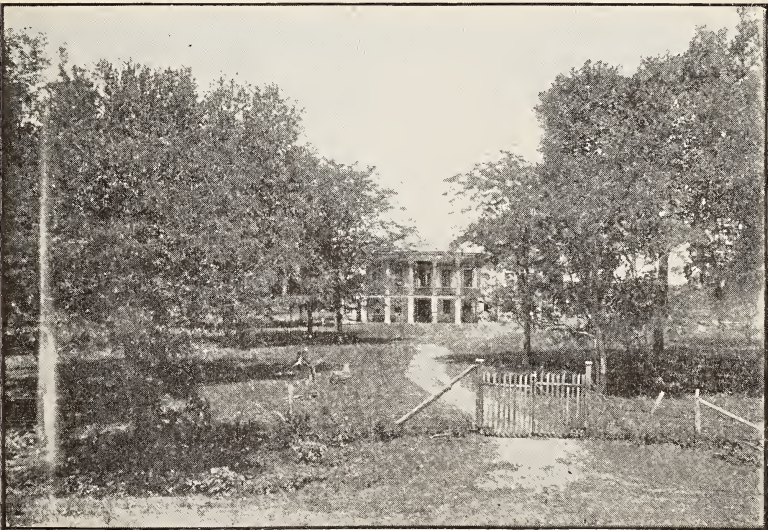
V. POLICE AUTHORITY should be given the Leper Board as a body and as individuals, so that lepers can be apprehended, investigated and committed without the delay now entailed. As this is not practicable in all instances—

VI. 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.



LEPER HOME—RESIDENCE OF SISTERS OF CHARITY.

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 successful blows, directed at an apathetic public, a disinterested coronery 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.

Respectfully,

(Signed)

ISADORE DYER, M. D.,"

*President Louisiana State Board of Control of the Leper Home. New Orleans, May 1, 1896.*

The administration of the home as a hospital on modern lines was the policy of the incumbent president and the Sisters of Charity to be delegated to the nursing and domestic departments. While hitherto no friction in the board had occurred, the effort to restrict the domestic care to a subsidiary position seemed to react upon some of the members of the board and the president promptly resigned, followed by Dr. Sherck and Mr. A. A. Woods, with the resignation of the physician in charge to follow. Up to this time the medical scheme of the home was fully adequate.

When the Legislature of 1896 adjourned there had been very little endeavor to continue the home on the newer plan proposed, because of the overruling spirit in the Board that the institution should be conducted as an asylum.

The same allowance of funds was made, but no provision for scientific care or research.

In the places of Dr. Dyer, Dr. Sherck and Capt. A. A. Woods, who all resigned, the governor appointed Messrs M. D. Lagan, Frank McGloin and John Ponder, all of New Orleans, with Dr. A. A. Carruth, of Wilson, to take the place of Dr. E. M. Hooper who had recently died.

Mr. Lagan became president, with Judge Frank McGloin as vice president.

From May, 1896, to May, 1898, the home pursued a policy of inaction with a president bound to the idea of not taking legal process, and holding that the interpretation of the law did not intend that the Board of Control should do more than superintend the management.

In the first report to the Legislature thirty-one patients were enumerated; in the 1898 report the total had been raised to thirty-five, four patients in two years! The medical management of the home was in charge of a local country physician, who came at intervals or when emergency demanded his medical



services; no attempt was made to treat the disease. Dr. G. Willard Jones, of Whitecastle, to whom we refer, made the specific statement to the writer that during his term of office as visiting physician to the home he "*had never pretended to treat leprosy, as he knew nothing about it.*" His own sad ending was large evidence of this confession, burdened with the fear of the disease he did not know.

The 1898 report to the legislature is interesting for its broadness in interpretation of the law, which in large words indicates that a physician shall be employed "skilled" in the treatment of this disease.

The report in abstract follows:

"The culinary, laundry and other domestic arrangements are satisfactory, and the details of the peaceful colony are well ordered and systematic.

[There is no doubt of the most excellent *domestic* care by the worthy and devoted Sisters of Charity.—DYER.]

"No one is allowed inside the inner leper inclosure except the Sisters, the Doctor, the members of the Board and authorized visitors, who are always accompanied by the Sister Superior.

"All money handled by the lepers is soaked in bi-chloride of mercury solution or fumigated with the strongest disinfectants before being paid out for their account. Peddlers are not allowed to have direct dealings with lepers, nor, in fact, to go within the leper's inclosure at all.

"A relic of the past, at Indian Camp, is the old time plantation mansion, an immense brick building, which, though very much dilapidated, has been repaired enough to be occupied by the Sisters of Charity, their employees, and for the storage of general supplies. A stable for the necessary teams, and some other outbuildings complete the temporary quarters of the 'Louisiana Leper Home.'

"Indian Camp is healthy, very much isolated and an ideal location for a lepers' home, except for its inaccessibility.

"It is five and seven miles away from the nearest railroad stations on the same side of the river. It is so far away from New Orleans that it is inconvenient to the Board and many kind friends in the city who want it nearer; and, perhaps, some lepers in New Orleans, as well as in southwest Louisiana, are kept away from the Home who would apply for admission if it were nearer and more accessible.

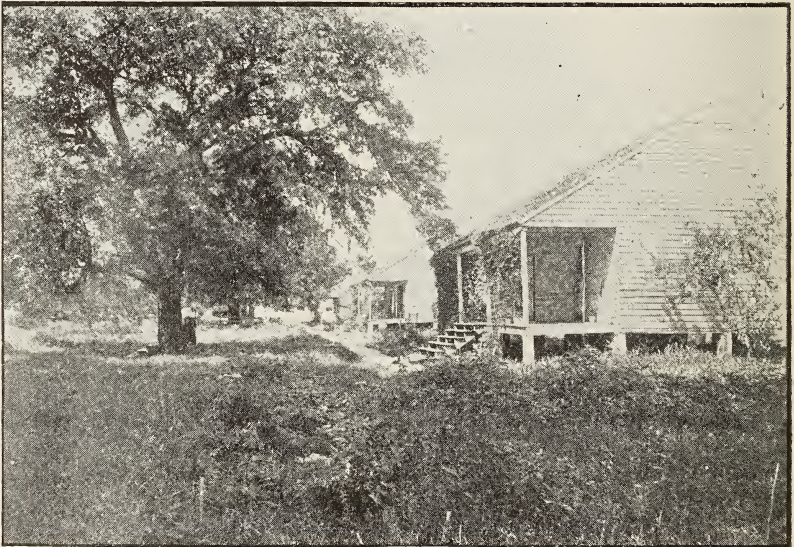
"Lepers are timid and their relatives are extremely cautious and want to know all about the Home before committing themselves; for these reasons and the fact that the premises are not

owned by the State, but are held under a lease, which will expire before the next session of the Legislature, we have made as few improvements as possible of a permanent character. At the same time many necessary improvements, though temporary and not entirely satisfactory, have added materially to the expenses.

“The present home is capable of receiving twice as many patients as we now have. All the inmates of the Home are there voluntarily and not *through any coercion on the part of the officers of the law.*—(Italics ours.—D.)

[This is not so, and most likely an unwitting statement for at least 5 of the then inmates were sent (3) by the Coroner of New Orleans and (2) by the Health Officer of St. John Parish, after legal process, to my personal knowledge.—DYER.]

“Since the establishment of the home, 35 patients in all have been received; and of these, 21 were males and 14 females. The deaths included 9 males and 1 female.



LEPER HOME—CABINS FOR LEPERS.  
(FRONT VIEW.)

“One unruly young man, with leprosy in mild form, deserted the Home more than a year ago, and wrote back from San Francisco that he was going to the Sandwich Islands, where there was more scope for his adventurous disposition.

“There are now remaining in the Home 24 patients, 11 males and 13 females. We believe we would have many more appli-

cations for admission to the Home, if lepers at large and their relatives were assured of the permanency of the Home.

“ We have endeavored to do the best we could for the lepers in our charge, to make them comfortable, at least, and the present condition of the Home is as good as circumstances permit.

“ We have at all times pursued the policy of providing well for all their wants, and many kind friends have contributed even luxuries.

\* \* \* \* \*

“ It is with the greatest pleasure we refer to the fact that our duties are lightened and our anxieties diminished by the knowledge that our plans and regulations are always faithfully executed by the Sister Superior in charge, and three others of that noble order, the Sisters of Charity.

“ They have had entire charge of the nursing and of the domestic affairs of the Home, including the selection and purchasing of all ordinary supplies for the past two years.

“ We cannot say enough in praise of our four devoted and heroic Sisters of Charity, who are giving their lives to this cause without other recompense than a modest allowance for clothing and incidentals. The world outside knows but little of the difficulties of their undertaking. Without ostentation, they have the courage to conquer the dreariness of the situation and find contentment in catering to the wants, alleviating the sufferings and devising ways of making the lepers committed to their care as happy as it is given such unfortunates to be.

“ After the death of our resident physician and lamented friend, Dr. E. M. Hooper, we realized that our *limited appropriation* would *no longer justify a resident physician's salary*, and were indeed fortunate in securing the services of a capable and reliable visiting physician. [Italics ours.—D.]

“ Dr. G. Willard Jones, of White Castle, came to our relief at a time when he was most needed, and we are pleased to report that we have had the benefit of his services ever since. *Our contract with him embraces regular medical attention* as well as *prompt response to all emergencies.* [Sic!—D.]

“ The report of our visiting physician is herewith submitted. The general health requires some practical legislation for the detection, isolation and gradual extinction of leprosy. [Better still, the enforcement of existing laws.—D.]

“ Our lease of the premises at Indian Camp will expire next year. We urge you to authorize the Governor to purchase a tract of land suitably located and large enough to admit of the complete isolation of a centre enclosure for a fully equipped leper home.

“ Once established on a permanent basis, future donations and appropriations will produce incalculable results.

“ Respectfully submitted,

M. D. LAGAN, *President.*”

## THE REPORT OF THE VISITING PHYSICIAN.

As to case No. 1, I can say that for the year past he has pretty well "held his own," and the disease has not made very much ravage upon him. He takes "chaunmoogra oil" occasionally and it seems to benefit him; besides, tonics of iron, strychnin and quinin, that seem to keep his general system in good order.

No 2. Is dead.

No. 3. Is also dead.

As to No. 4, I can say his general health has been good for the past thirteen months; his eyes have given him and me no little trouble, and while I have succeeded in relieving him, he still suffers from a severe inflammation of the eyelids; otherwise he is all right.

As to No. 5. He is about "*in statu quo*" all the time, now and then a little fever, which is soon remedied.

No. 6. Is dead.

No. 7. Gets along remarkably well when we take into consideration the disease is far advanced on her. She is seldom "sick" in bed, however, and is always cheerful.

No. 8. Left the Home long since, and his present condition is unknown.

No. 9. Is dead.

No. 10. Is dead.

No. 11. His general health is good, but he suffers much from his eyes, as a result of the disease, and there is no remedy that we know of that will do him any permanent good.

No. 12. Is dead.

No. 13. The disease is quite well advanced on him and we keep him up on tonics, etc., and he gets about all right.

No. 14. Is dead.

No. 15. Is a fine, and, generally speaking, healthy looking girl of twenty summers. If it were not for the deformity of her fingers no one would ever know she had anything like leprosy. Her general health is of the best, and she looks in the face as fair as anyone could wish to see.

No. 16. Is dead.

No. 17. Does a day's work of manual labor every day in the way of making garden, etc. He suffers a little with bronchial troubles, but we manage to keep him up and at work, for he is unhappy if he can't work.

No. 18. Is getting along fairly well and he does many a day's work in fixing up things about the place.

No. 19. Since the past twelve months has improved to a wonderful degree. When I first started to treat her she had a convulsion every day; now if she has one in a month she is surprised

No. 20. Is doing fairly well, but the disease is working on her all the time.

No. 21. Is about the same as No. 20. The disease is progressing fast upon her.

No. 22. Remains the same; has not been sick in bed for fifteen months, and the disease does not seem to increase at all.

No. 23. Is dead.

No. 24. The disease is well advanced on her, but her general health is good, and she is up and out with the other youngsters every day.

No. 25. Had quite a severe attack of nervous prostration the other day, but has recovered entirely, and is "herself again," save, of course, the disease itself.

No. 26. Is as chipper as a lark and general health is good.

No. 27. Is a stout, healthy boy, apparently, and does not seem to know that he has a disease at all.

No. 28. Is in good condition generally, though the disease is somewhat advanced on him.

No. 29. Dead.

No. 30. Dead.

No. 31. Has improved a great deal since he came to the home. When he reached here he was helpless as a child; now he can walk about and help himself in various ways.

No. 32. Dead.

No. 33. Is a bright and apparently healthy child, never an "ache nor a pain," and looks the prime of health.

No. 34. Is a bright, stout boy, the picture of health, save the discoloration of the skin that denotes the fatal disease.

No. 35. A bright healthy girl; other than the marks of leprosy, full of life and fun and joy as any child of her age would be who had never seen leprosy.

As a general tonic for the patients I use either a combination of strychnin, iron, arsenic and quinin, or syrup of hypophosphites that contain strychnin, etc., and it seems to do them much good.

As to the general condition and surroundings of the patients I consider them as good as could possibly be awarded them under the circumstances.

As to their food, they have an abundance of vegetables grown right on the place, and that is one of the essentials of their diet according to high authorities. Taking the situation, "all in all," I don't know how the Board of Control could improve on the advantages they have furnished the unfortunate inmates of the home with the limited means at their disposal.

(Signed) Respectfully and truly, G. WILLARD JONES, M. D.

[Which analyzed shows but one case under any specific treatment.—DYER.]

TABLE OF CASES:

NO.	SEX.	AGE.	Duration of Disease.	Date of Admission.	Type of Disease.	Place of Birth.	
1	Male.	43	13 years.	Dec. 1894.	Mixed.	Louisiana.	Dead
2	Male.	35	.....	Dec. 1894.	Mixed.	Louisiana.	Dead
3	Male.	25	10 years.	Dec. 1894.	Mixed.	Louisiana.	Dead
4	Male.	28	9 years.	Dec. 1894.	Mixed.	Louisiana.	.....
5	Male.	52	7 years.	Dec. 1894.	Anesthetic.	Louisiana.	.....
6	Female	43	13 years.	Dec. 1894.	Mixed.	Louisiana.	Dead
7	Female	24	15 years.	Dec. 1894.	Mixed.	France.	Dead
8	Male.	29	26 years.	Dec. 1894.	Anesthetic.	Louisiana.	Left
9	Male.	25	20 years.	Jan. 1895.	Mixed.	Louisiana.	.....
10	Male	65	.....	Jan. 1895.	Anesthetic.	France.	Dead
11	Male.	35	.....	Jan. 1895.	Mixed.	Louisiana.	.....
12	Male.	50	18 years.	Feb. 1895.	Mixed.	Louisiana.	Dead
13	Male.	24	14 years.	Feb. 1895.	Mixed.	Louisiana.	.....
14	Male.	35	10 years.	Feb. 1895.	Mixed.	Louisiana.	Dead
15	Female	16	3 years.	Mar. 1895.	Anesthetic.	Louisiana.	.....
16	Female	52	7 years.	Apr. 1895.	Anesthetic.	Mississippi.	.....
17	Male.	44	.....	Apr. 1895.	Anesthetic.	France.	.....
18	Male.	38	.....	May 1895.	Mixed.	Louisiana.	.....
19	Female	41	6 years.	Aug. 1895.	Anesthetic.	Louisiana.	.....
20	Female	47	6 years.	Aug. 1895.	Mixed.	Louisiana.	.....
21	Female	25	5 years.	Aug. 1895.	Mixed.	Louisiana.	.....
22	Female	30	.....	Nov. 1895.	Mixed.	Louisiana.	.....
23	Female	25	.....	Nov. 1895.	Mixed.	Louisiana.	.....
24	Female	20	15 years.	Nov. 1895.	Mixed.	Louisiana.	.....
25	Female	40	.....	Nov. 1895.	Mixed.	New York.	.....
26	Female	14	4 years.	Nov. 1895.	Mixed.	Louisiana.	.....
27	Male.	10	.....	Mar. 1896.	Tubercular.	Louisiana.	.....
28	Male.	30	8 years.	Mar. 1896.	Anesthetic.	Louisiana.	Dead
29	Male.	60	.....	Apr. 1896.	Tubercular.	Germany.	Dead
30	Male.	28	.....	.....	Mixed.	.....	.....
31	Male.	50	20 years.	Jan. 1897.	Anesthetic.	Louisiana.	.....
32	Male.	50	.....	Feb. 1897.	Mixed.	Germany.	.....
33	Female	11	4 years.	May, 1897.	Anesthetic.	Louisiana.	.....
34	Male.	12	5 years.	May, 1897.	Mixed.	Louisiana.	.....
35	Female	13	.....	May, 1897.	Anesthetic.	Louisiana.	.....

G. WILLARD JONES, M. D.

[1 to 31 admitted from December, 1894, to May 1, 1896; 32 to 35 admitted from May, 1896, to May, 1898.—DYER.]

The 1900 report shows that in the wisdom of the State authorities the interest of the home was observed by increasing the membership of the Board to nine with the following personnel:

M. D. Lagan, president.....	New Orleans.
Albert G. Phelps .....	New Orleans.
John Ponder.....	New Orleans.
C. J. Edwards, M. D.....	Abbeville.
A. A. Carruth, M. D.....	Wilson.
C. Jeff Miller, M. D .....	New Orleans.
Lawrence Fabacher.....	New Orleans.
Jules A. Gauche .....	New Orleans.
Theo. H. Lyons .....	New Orleans.

In 1898, an appropriation of \$20,000 had been made for a new site and home.

The status of the conditions of the home are best expressed by the report to the Legislature itself:

“ The position of the Board has been one of *helplessness and difficulty*. We are continually begged to establish the home where better results can be obtained, but our hands are tied until you, gentlemen of the Legislature, put it in our power to do justice to the cause.

“ *The well known existence of many cases of leprosy and the danger of the spreading of this terrible disease makes the question one of the greatest importance.* (Italics ours.—D.)

“ It is with regret that the members of this Board are forced to admit that circumstances have delayed so long the fulfillment of our hopes and carrying out of our plans for an efficient and permanent Leper home; but, after all, it may be for the best that the selection of a new site has been thus postponed until this session of your honorable body, so that more ample provision can be made towards the accomplishing of the purpose of the State to procure isolation, proper treatment and final eradication of leprosy within its borders. This appropriation of \$20,000.00 should be doubled, and even then every dollar would be needed to pay for the large tract of land necessary and the many buildings required for the proper separation of the various stages of the disease, sexes and colors, and in anticipation of rapid increase in the number of patients when the home is once permanently established on a good footing. We cannot urge too earnestly the necessity for the most liberal appropriation that can be granted.

“ Our original five years' lease of Indian Camp Plantation, the site now occupied by the home, expired last November, and we were obliged to renew the lease for one year more. Let us move before next November.

“ The State should own and make permanent this institution.

Ample appropriation is imperatively needed to render the home attractive, to erect comfortable and sanitary buildings in a location accessible to friends and kindred of the patients, and within reach of the co-operation of the medical profession of New Orleans, so that the lepers may be offered every possible hope which medical science can suggest.

*“The board has already used its utmost efforts along this line. No suggestion has been overlooked that seemed to offer cure or palliation of the disease. A trial is at present being made of a remedy prepared from the bark of the red mangrove, suggested by Mr. P. Guichard, of Key West, Fla. Mr. Guichard not only furnished us with his prescription, but most kindly sent us fifty pounds of the bark. For the past three months the remedy has been faithfully administered to eight selected cases and extremely favorable result have been obtained from its use upon the skin and mucous membrane, as mentioned in our physician’s report, though it is yet too early to judge whether there have been any constitutional effects. [Italics ours. Meantime recognized treatment in any systematic way was overlooked.—DYER.] Whatever the board is able to give in the way of comfort, amusement or treatment is freely furnished, but further assistance from the State and kind-hearted citizens is required to make its efforts completely successful.*

“Among the lepers scattered about among the people are many who are a menace to the health of their families and to the public, some who are destitute or almost destitute of means of support or treatment. All such cases should be in the home. The intent of existing laws upon the subject is defeated by the responsibility of their enforcement not having been fixed upon persons definitely commissioned for that purpose. The sheriffs of the parishes are authorized and instructed to send lepers to the home; but the law can be and is easily disregarded by the parish authorities. The Board has addressed circular letters to the coroners and sheriffs of all the parishes, but in only two instances have patients been sent by these officers—both of these within the last year. Authority should be given to the Board of Health, or a special commission, to investigate all reported cases and to send all true cases to the home. The responsibility and duty should be fixed and concentrated and the laws enforced. Moreover, neighboring States should look into the matter and enact laws to prevent the spread of leprosy by the migration of lepers from State to State.

“The chief credit of what is being done at the Leper Home is due to the Sister Superior Beatrice and the three other Sisters of Charity in charge, who relieve us so entirely of all the details of management of domestic affairs, the nursing and providing for the comfort of the patients. What we may all do for the Leper Home is nothing compared to their unostentatious work.

“Since our last report there have been only ten admissions of patients to the home. There will be ten times as many admissions within the next two years if the Leper Home is permanently established in the right place. The present number of patients now living at the home is thirty. Their general condition is as good as can be expected, and the affairs of the home, thanks to the watchfulness and patience of the Sisters, run smoothly. The work that remains yet to be done, however, the important task of freeing the State from disease, and in an effectual and decisive manner coping with the difficult question, depends largely for its success upon your honorable body. Initiative action on the part of the Legislature is imperative to arouse the public to a sense of the high seriousness of the question and to provide means whereby the evils may be cured in time.

“Very respectfully submitted,

M. D. LAGAN,

*President Board of Control for Leper Home.*”



LEPER HOME—CABINS FOR LEPEERS.

(REAR VIEW.)

The report of the visiting physician follows :

Gentlemen:—I assumed the medical directorship of the Leper's Home last June, since which time five new patients have been admitted, four of them being in the first stages of the disease. The fifth has been afflicted for ten years with the anæsthetic form, hands and feet drawn and misshapen. He staid about six weeks and took his departure one night, and we have neither seen nor heard of him since. We have had two deaths, one from gastritis and old age (the patient being 82), the other from



bronchitis, aged 30. The rest of the patients, on the whole, have enjoyed excellent health, and are happy and contented as possible under the solicitous and sympathetic care of the Sisters, who wash and dress their sores, administer their medicine and nourishment when sick, providing for their amusements, giving daily readings to those who wish it, and instructing the young in the primary branches of learning. For the past three months I have had eight of the patients on the red mangrove treatment, recommended by Mr. Guichard, of Florida. *As yet, I can see no constitutional benefit, but as a healing agent for the ulcerated condition of the skin and buccal cavity it is a remedy* (italics ours.—D.) “*par excellence.*” Below I give a tabulated statement of the patients received at the Home since its inception,\* giving sex, age, type of disease, etc.

I feel that I would be derelict in my duty in giving this report, did I not urge upon you the imperative necessity of establishing a crematory in connection with the Home, whereby the dead may be effectually disposed of without subjecting the living to a possible source of contagion from this dreaded malady.

Very respectfully,

E. A. PIERCE, M. D.

TABLE OF CASES MAY 1898 TO MAY 1900.

37	Female	15	8 years	June 1898	Mixed	Louisiana	.....
38	Female	80	3 years	July 1898	Anesthetic	Ireland	Dead
39	Male	62	10 years	Oct. 1898	Anesthetic	Germany	.....
40	Female	24	10 years	July 1899	Mixed	Louisiana	Dead
41	Male	19	8 years	Oct. 1899	Anesthetic	Louisiana	.....
42	Male	22	7 years	Dec. 1899	Tubercular	Louisiana	.....
43	Male	36	10 years	Dec. 1899	Anesthetic	Louisiana	Left
44	Female	50	1 years	Spt. 1899	Mixed	Louisiana	.....
45	Male	24	1 years	Spt. 1899	Mixed	Louisiana	.....

The story of the Leper Home in Louisiana must appeal to every one who has read the story. The self-isolation has been too rare to argue opinion. Most of the cases which have totalled the number admitted have either been taken from a worse state (*e. g.*, the first ten cases there), or have been persuaded or forced into the Home.

Since its first year and a half of operation no pretense was made of curing or trying to cure the disease, and this fact as much as any other has militated against the success of the institution in its object of saving Louisiana from the bane of a dread disease spreading seditiously and with a silence the more horrible when broken. Nowhere has leprosy been checked or controlled except under hospital provision, where the “care and treatment” are paramount. Louisiana has had the supreme chance of demonstrating the possibilities of the control of leprosy, of evidencing the chances of amelioration or of cure—for if leprosy can be cured under irregular attention, how much more so under conditions of intelligent, daily, systematic care.

\* Previous cases not repeated.—DYER.

Since the adjournment of the Legislature in 1900, the story of the Home has been largely told in the daily news. A site was purchased in Jefferson parish, opposite the city of New Orleans. The local inhabitants raised a violent protest. A meeting of landholders, doctors, sheriff and citizens was arranged with the Leper Board. Opinions were weighed and convictions advanced—all resolving into a calm statement that the Leper Home would not be permitted in Jefferson parish. A few nights after a building, unoccupied, on the newly purchased site was burned, most likely by incendiaries. The board took the warning, still hold the property, and the Home has not moved from Iberville parish.

The Home as at present administered is hardly known outside of Louisiana as its work has been solely routine and domestic and of no scientific value. It has served very little purpose in the accomplishments of the law which created it. Beyond the first two years, the Board has made no real effort to get lepers into the Home and for most of these years since then the policy of the Board has been contrary to such an effort. With insane persons, there is a rapid gravitation towards a state asylum; with lepers a natural gravitation perhaps, but by no means rapid, for the leper resists immolation to the last moment—Why? Because the most of them are firmly persuaded that they leave hope behind when they enter the present home. And so the Board and the Home have failed under existing conditions.

Its redemption must depend on an active rehabilitation of its object; upon demonstrating the existence of the disease outside the Home; in establishing a modern institution; equipped for the *treatment* AND the care of the lepers who come and then they will want to come for the treatment when they would not come for the care—even the best, for death always comes the same way under silken coverlet, or on a straw pallet.

The report of the Marine Hospital Service to the United States Congress during the month of March, 1902, plainly showed Louisiana the only proven endemic centre of leprosy in the United States, and the data furnished showed a majority of all lepers in the United States to be in Louisiana.

Within the past six months Dr. Ralph Hopkins, of New Orleans, has been appointed visiting physician to the home. Dr. Hopkins as assistant to the writer in hospital and college

work in skin diseases is qualified at least to treat leprosy under approved methods.

The present status of the home is little different from that related in the several reports from time to time made by the board.

The cabins are still standing, with the old plantation house as the residence of the Sisters of Charity nursing staff. A resident priest adds to the spiritual comfort of the inmates of the home.

The total number of admissions since December 1, 1894, has been raised to 64. Of these 39 are now living at the home



LEPER HOME—A CABIN.

and when able to take treatment have been placed under systematic medication by Dr. Hopkins, who now visits the home every Friday. The hope is entertained that the Legislature may provide some means to secure a site nearer New Orleans before the present home needs to be abandoned or expanded to meet the needs of an increasing colony.

The present city health officer, Dr. Quitman Kohnke, and the efficient secretary of the City Board of Health, Dr. Sidney L. Théard are leaving nothing undone to have New Orleans rid of leprosy. Within the year two or three cases have been

legally committed and the burden of detention and examination has been even sought as well as carried by them.

Dr. Hopkins supplies the following table of cases at the home, giving a list of present inmates and supplementing those which have been above enumerated (for these read from 29-39). The present treatment is also given, together with information regarding family, etc., as it could be had.

LIST OF CASES NOW LIVING AT LEPER HOME.

[*Creole refers to native born of French, or mixed French and Spanish descent.*—DYER.]

- No. 1—Male, age 51, Creole, parentage Acadian, residence Iberville Parish, duration of disease 21 years, type mixed, family history one brother, one son, one cousin, admitted to Home December 1, 1894, present condition advanced, treatment chaulmoogra oil.
- No. 2—Male, age 33, New Orleans, residence Orleans Parish, duration of disease 23 years, type mixed, family history negative, admitted to Home December 1, 1894, present condition advanced, treatment potass. chlorat.
- No. 3—Male, age 36, Creole, parentage German and Creole, residence Orleans Parish, duration of disease 16 years, type mixed, family history —, admitted to Home December 1, 1894, present condition terminal, no regular treatment.
- No. 4—Female, age 32, New Orleans, residence Orleans Parish, duration of disease since childhood, type mixed, family history —, admitted to Home December 1, 1894, present condition terminal, treatment chaulmoogra oil.
- No. 5—Female, age 24, New Orleans, parentage German, residence Orleans Parish, duration of disease 14 years, type anesthetic, family history—, admitted to Home March 26, 1895, present condition advanced, treatment strychnin and pot. chlorat.
- No. 6—Male, age 52, France, parentage French, residence Orleans Parish, duration of disease 9 years, type anesthetic, family history negative, admitted to Home April 20, 1895, present condition terminal, treatment mangrove bark.
- No. 7—Female, age 48, Creole parentage French, residence Terrebonne Parish, duration of disease 9 years, type anesthetic, family history negative, admitted to Home August 15, 1895, present condition advanced, treatment potass. chlorat.
- No. 8—Female (colored), age 32, New Orleans, parentage Negro, residence Orleans Parish, duration of disease 12 years, type mixed, family history mother, admitted to Home August 15, 1895, present condition advanced, no treatment.
- No. 9—Female, age 37, Louisiana, parentage French, residence Orleans Parish, duration of disease 17 years, type mixed, family history three sisters, admitted to Home November 9, 1895, present condition advanced, treatment chaulmoogra oil.

- No. 10—Female, age 27, Louisiana, parentage Creole, residence Orleans Parish, duration of disease since childhood, type mixed, family history three sisters, admitted to Home November 9, 1895, present condition terminal, treatment chlorat. potass.
- No. 11—Female, age 20, Louisiana, parentage Creole, residence Orleans Parish, duration of disease 11 years, type anesthetic, family history three sisters, admitted to Home November 28, 1895, present condition advanced, treatment chaulmoogra oil.
- No. 12—Male, age 16, residence East Feliciana Parish, duration of disease 7 years, type tubercular, family history grandparents and two aunts, admitted to Home March 3, 1896, present condition advanced, treatment chaulmoogra oil.
- No. 13—Male, age 36, Native, parentage Creole, residence Arcadia Parish, duration of disease 14 years, type anesthetic, family history four cousins, admitted to Home March 4, 1896, present condition advanced, treatment normal horse serum.
- No. 14—Male (colored), age 55, Native, parentage native, residence Orleans Parish, duration of disease 25 years, type anesthetic, family history negative, admitted to Home January 29, 1897, present condition advanced, treatment potass. chlorat.
- No. 15—Female, age 16, Native, parentage native, residence St. Martin Parish, duration of disease 9 years, type mixed, family history negative, admitted to Home, May, 1897, present condition incipient, treatment same.
- No. 16—Male, age 17, Native, parentage native, residence Orleans Parish, duration of disease ten years, type mixed, family history negative, admitted to Home May 16, 1897, present condition incipient, treatment same.
- No. 17—Female, age 17, Louisiana, parentage Creole, residence St. Bernard Parish, duration of disease 6 years, type mixed, family history father, admitted to Home May, 1897, present condition advanced, treatment normal horse serum.
- No. 18—Female, age 16, Native, parentage native, residence Orleans Parish, duration of disease 11 years, type mixed, family history mother, one brother, admitted to Home June, 1898, present condition advanced treatment, potass. chlorat.
- No. 19—Male, age 63, German, parentage German, residence Orleans Parish, duration of disease 11 years, type anesthetic, family history negative, admitted to Home October 11, 1898, present condition advanced, treatment same and strychnin.
- No. 20—Male, age 21, Native, parentage native, residence St. Charles Parish, duration of disease 10 years, type mixed, family history negative, admitted to Home October 24, 1898, present condition advanced, treatment chaulmoogra oil.
- No. 21—Male, age 23, Native, parentage French, residence St. John Parish, duration of disease, 9 years, type tubercular, family history negative, admitted to Home February, 1899, present condition incipient, treatment normal horse serum.

- No. 22—Female, age 50, Native, parentage native, residence St. Mary Parish, duration of disease 3 years, type anesthetic, family history son, two cousins, admitted to Home August 10, 1899, present condition incipient, treatment chaulmoogra oil.
- No. 23—Male, age 24, Native, parentage native, residence St. Mary Parish, duration of disease 3 years, type mixed, family history two cousins and mother, admitted to Home August 10, 1899, present condition incipient, treatment chaulmoogra oil.
- No. 24—Male, age 33, Native, parentage French, residence St. Mary Parish, duration of disease 9 years, type anesthetic, family history negative, admitted to Home August 26, 1899, present condition incipient, treatment chaulmoogra oil.
- No. 25\*—Male, age 50, Irish, parentage Irish, residence Orleans Parish, duration of disease 11 years, type anesthetic, family history negative, admitted to Home May 10, 1900, present condition advanced, treatment chaulmoogra oil.
- No. 26\*—Male (colored), age 56, Native, parentage Virginia, residence Orleans Parish, duration of disease 2 years, type mixed, family history negative, admitted to Home November 30, 1900, present condition terminal, treatment mangrove bark.
- No. 27\*—Male, age 29, Germany, parentage Russian, residence Orleans Parish, duration of disease 5 years, type tubercular, family history negative, admitted to Home April 29, 1901, present condition incipient, treatment chaulmoogra oil.
- No. 28\*—Male, age 15, Native, parentage Creole, residence St. Martin Parish, duration of disease 7 years, type anesthetic, family history mother and sister, admitted to Home June 21, 1901, present condition advanced, treatment chaulmoogra oil.
- No. 29\*—Female, age 19, Native, parentage Creole, residence St. Martin Parish, duration of disease 9 years, type mixed, family history mother, brother and niece, admitted to Home June 21, 1901, present condition advanced, treatment chaulmoogra oil.
- No. 30\*—Female (colored), age 54, Louisiana, residence St. Martin Parish, duration of disease 18 years, type anesthetic, family history negative, admitted to Home June 21, 1901, present condition advanced, treatment chaulmoogra oil.
- No. 31\*—Female (colored), age 20, Native, parentage Creole, residence St. Martin Parish, duration of disease 6 years, type mixed, family history one aunt, admitted to Home June 21, 1901, present condition incipient, treatment chaulmoogra oil.
- No. 32\*—Female (colored), age 50, Native, parentage slave, residence Orleans Parish, duration of disease 13 years, type anesthetic, family history negative, admitted to Home August 22, 1901, present condition advanced, treatment chaulmoogra oil.
- No. 33\*—Male, age 16, Native, parentage Russian, residence St. Martin Parish, duration of disease 2 years, type tubercular, family history

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\*These cases are not included in previous lists.—DYER.

- negative, admitted to Home October 3, 1901, present condition incipient, treatment n. h. s.
- No. 34\*—Male, age 28, Native, parentage German, residence Orleans Parish, duration of disease 3 years, type tubercular, family history negative, admitted to Home November 20, 1901, present condition advanced, treatment chaulmoogra oil.
- No. 35\*—Female, age 50, Irish, parentage Irish, residence Orleans Parish, type anesthetic, family history negative, admitted to Home November 30, 1901, present condition incipient, refuses treatment.
- No. 36\*—Male, age 33, Native, parentage native, residence Orleans Parish, duration of disease 1 year, type mixed, family history negative, admitted to Home February 13, 1902, present condition incipient, treatment chaulmoogra oil.
- No. 37\*—Male, age 37, Native, parentage Swiss, residence Orleans Parish, duration of disease 3 years, type tubercular, family history negative, admitted to Home February 23, 1902, present condition advanced, treatment normal horse serum.
- No. 38\*—Female, Native, parentage Creole, residence St. Mary Parish, type tubercular, family history lived with leper several years, admitted to Home March 11, 1902, present condition incipient, treatment chlorat, potass.
- No. 39\*—Male, age 39, Native, parentage German, residence Orleans Parish, duration of disease 4 years, type tubercular, family history negative, admitted to Home March 7, 1902, present condition incipient, treatment chaulmoogra oil and strychnin.

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## Clinical Reports.

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### SENILE CHOREA.

BY A. M. LEONARD, M. D., PHILADELPHIA.

In 1884 Saunby published a series of cases of this disease occurring in old people, the oldest cases on record. It was known that this was a disease occasionally of adult life as pointed out by Huntingdon, characterized by three salient points, the hereditary nature, the association with psychic troubles and late onset between the thirtieth and fortieth years. But Saunby's fourteen cases were those of old age.

The symptoms are very characteristic: irregular movements are seen, usually first in the hands, and the patient has difficulty in writing or the precise use of the hand. As these develop it

is not the sharp movements of Sydenham's chorea that are seen, but rather those of the drunken man, slow, involuntary, disorderly motions. The speech is slow and difficult and mental impairment follows.

The following case I wish to report: R. H. B., an American, 61 years old, came under my care.

His previous life history had been good, except that as a young man he had gonorrhœa and inflammatory rheumatism, but for years his habits had been good and health excellent. There was no family history, either, to throw light on his ailment. This was unusual, for heredity generally plays a prominent part. He attributed his disease to a severe cold that he caught from exposure. He developed speedily afterwards irregular, fidgety movements, which finally stopped his work. In these attacks there are irregular contractions of the muscles of the trunk, together with jerking of the head with the curiously characteristic jerky grimaces—shortness of breath, also, develops in these attacks and becomes a prominent symptom. He can not sleep well, yet his appetite and general health are fairly good. His heart's action is quick and irritable, the pulse ranging from 110 to 120 per minute; no evidences of organic valvular disease could be found. Neither are there any symptoms present pointing to any nervous trouble other than the chorea. There is no sign of dementia, or failing mind as yet.

The patient was given a mixture of quinia, iron and strychnia, as recommended by many; also 10 grains of bromide of potassium were administered every three hours for the attacks. This treatment was continued for three weeks without special benefit. Arsenic, administered by the gastro-intestinal route, proved of no value, as did also antifebrin. During the attacks, hypodermic injections of morphia afforded relief, producing sleep. Mitchell suggests the hydrobromate of hyoscin, which seemed to have a beneficial effect when first used, but had the unhappy faculty of losing its effect.

The treatment of this case was apparently of no avail, which tallies with Charcot's view that chorea in the aged is incurable. There has been reported a case that recovered at the expiration of three months, however, from the use of sulphate of zinc.

Sinkler has reported two cases, one of which recovered in four months; King also reports some cases. Still another



case, first seen by Dr. Saunby, when the patient was fifty years of age, suffering from left-sided chorea of an intermittent form, again fell under his observation when sixty-six years old, at which time it was almost cured.

The emotional theory of senile chorea was championed by Charcot in his famous lecture bearing the caption, "Chorea in Old People." This view according to Anders must, in the light of facts more recently observed, be abandoned. The two cases reported by Davis, and still another by M. Bacon, in which instance the patient has chronic mania. Thus, in a total of thirteen recorded cases, in all of which the mental condition was noted, four were demented—less than one-third.

Dr. Saunby saw three patients suffering from this disease, all of whom had advanced degeneration of the arteries. This observer believes "that it will be found that the pathology of this disease is some actual structural change, such as small hemorrhages in the corpus striatum, and that it is not merely a functional derangement."

The influence of sex may be shown to be considerable, since in eleven of the thirteen cases reported the sex has been noted, and of these eight were males, three females—too small a number for judgment, however. This would appear to be an exact reversal of the influence of sex in chorea occurring among children, for in the latter, according to statistics, and others, the ratio is about three to one in favor of the girls. Of the thirteen cases, only three were associated with heart disease, a fact showing but a feeble, if any, connection between senile chorea and cardiac affections. Not more than two of the total number gave a history of previous rheumatism.

The pathology of senile chorea is yet obscure, although pathologists has been busy in the matter. Cerebral pachymeningitis have been found in several cases and hematomata in others. The cerebral arteries have been found atheromatous, while generally the spinal cord has been normal. There seems to be nothing found as yet pathognomonic of this disease, although many believe that there is a predisposition to affect the motor convolutions and underlying strands and the motor portions of the basal ganglia. The lesions are grosser than in Sydenham's chorea.

## A CASE OF CARBOLIC ACID POISONING—RECOVERY.

BY A. C. KING, M. D., ALGIERS, LA.

Called hastily about 3 P. M. to see a lady, age 33, who had taken carbolic acid a few moments previously. Domestic trouble brought on a desire to commit suicide. She had eaten nothing for two days, had had one or two hysterical attacks, and was quite despondent. I had seen her the morning previous in an hysterical spell.

Responded promptly, probably within three or four minutes after the acid had been swallowed. Gave  $\frac{1}{60}$  gr. atropin quickly, then introduced stomach syphon, pouring down half pint alcohol, added some water and syphoned the stomach empty, put in more alcohol, more water and syphoned out. Filled stomach with water and emptied it, then introduced three ounces of alcohol and withdrew the tube.

Condition—Pulse 130, dilated pupils, respiration 24; semi-comatose. Awaited developments. Improvement steady, and in four hours my patient was out of danger and fighting mad because she wasn't dead. She had taken half an ounce of acid, the druggist of whom she had purchased the drug verifying her statement as to the quantity.

I believe the alcohol saved this woman's life.

## ECTHOL IN SCARLET FEVER.

BY JOHN M. TURK, M. D., OF CANTON, GA.

I feel called upon to say something plain and practical in regard to the usefulness of ecthol in the above disease. I have used ecthol for one year in an epidemic of scarlet fever, and I must say that it has more than met my most sanguine expectations. It has accomplished more than any agent I have ever used in a practice of forty-three years. Ecthol robs scarlet fever of all the distressing sequels, such as nephritis, ear complications, adenitis, membranous angina, etc., if the remedy is given early enough and as often as every two or three hours, in bad cases, until desquamation is over, then not so often. A great many of my cases were malignant and quite a number ushered in with convulsions.

In some of my malignant cases I gave double the prescribed dose. It prevents in a large degree the disintegration of cellular tissue, and will not disappoint any who may use it in scarlet fever.

# N. O. Medical and Surgical Journal.

## Editorial Department.

CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

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### A NEW SENSES HOSPITAL.

On April 16 the annual meeting of the Eye, Ear, Nose and Throat Hospital of New Orleans was held. The Chief Surgeon, Dr. A. W. DeRoaldes, presented a most interesting report showing the work done during the year of 1901.

5098 patients were treated, with a total consultation of 37,863, an average of nearly 125 each day; 1149 patients were from outside the parish of Orleans.

Attention was particularly directed at the lack of facilities for pathologic work and to the need for improved apparatus for electric equipment.

Of much more importance and interest to the general reader in connection with the above figures is the financial status of the hospital. Mr. Geo. L'Hote, chairman of the house committee, very clearly puts the statement within the intelligence of every reader.

During the year but one legacy, of \$500, was received. Since the incorporation of the institution a total of 13,447 indigent poor from the parishes outside of New Orleans have been treated; notwithstanding this fact and although repeated appeals were made to police juries throughout the State during the year, only nine of fifty-nine parishes have responded to requests for assistance in return for the services rendered. A total of only \$675 was received from these, a sum in nowise commensurate with the services rendered.

Neighboring States advantage themselves of the hospital and make no pretense of requiting such attention; Mississippi alone is recorded as having had about 3000 consultations during 1901, nearly one-ninth of the hospital's work.

The institution has needed repair for some time, but so much so that to meet these needs the maintenance of the hospital would be jeopardized in diverting funds to improvements and repairs.

Strong argument is advanced by Mr. L'Hote for new quarters in a new building.

In consonance with the sentiment of the reports of the surgeon in chief and the chairman of the house committee, the Board of Trustees of the Eye, Ear, Nose and Throat Hospital directed a special committee on ways and means to look into the question of a new building.

The JOURNAL has several times adverted to the Senses Hospital and its needs, but now more than ever before it seems to us that some strong word should be uttered in its behalf.

It is just about thirteen years now since the spirit of a few men originated this necessary addition to the hospital facilities in New Orleans. From a small beginning it has gradually grown into a greater and greater importance until now its usefulness extends over the entire State of Louisiana and over the adjacent States as well, while its name has spread over this whole broad land. Aside from the great service rendered to the poor, the Eye, Ear, Nose and Throat Hospital has served as a school of education for a large number of medical men who have been qualified in this Southern country to go out and relieve their immediate field.

Because of the modest pretension and quiet, unostentatious charity daily rendered to all who are deserving of it, and because of the unselfish labor of the staff and of its chief especially, the people of the City of New Orleans and the people of the State of Louisiana have hardly known what a great work has been carried on all these years. It was this Hospital which took up the diphtheria antitoxin, which advanced intelligent methods of treating the special diseases coming in its scope, and which remained satisfied with that recompense which the spirit of high purpose always bears with it.

But the people of this State now owe something to this institution and there can be no champions more conscious of the cause than the medical men who avail themselves of the convenience of this same senses hospital.

The daily press can devote columns to the needs of an orphan asylum which appeals to a public by its own weight; it can foster a subscription to some other cause of more evident importance, but until now the New Orleans papers have spent little of their space in trying to put this worthy institution on its feet.

Now is the time to begin. Anyone who takes the trouble to read between the lines must see the outcome of the present conditions of the Senses Hospital, unless something is done to help it out, to renew its life and to put it in a new modern home. Look at other cities of our own size, or at the greater cities with four, five and a half dozen hospitals of this special nature fulfilling the public needs. 37,863 consultations and an income of about \$3,800 to satisfy this demand upon such a charity!

Charity Hospital in 1901 treated a total of 28,889 patients in indoor and outdoor departments, and had \$124,863 to do it with. Is it adequate that the Senses Hospital should treat 5,098 patients with \$3,800, one-sixth the number of patients and one thirty-fifth the amount of money of Charity Hospital? When the comparison in the work accomplished at the two institutions is made, the Ear, Eye, Nose and Throat Hospital will be found not wanting.

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#### THE STATE MEDICAL SOCIETY MEETING.

We understand that Shreveport is ready to receive the medical fraternity with open arms on the dates of the State Society meeting, June 3, 4 and 5.

Now is the time to make preparations to attend what promises to be a most interesting meeting, both from its scientific and social sides.

It has been a long time since the Society has been awakened to the advantages of these gatherings, and it ought to need only the reminder of the dates to insure an adequate attendance. At the New Orleans meetings in the past nine or ten years the Society has been represented by a majority of the local profession, with some few country members; this year the country parishes should make the effort to show that the change of meeting place has been appreciated by them and that they can evidence the proper sort of enthusiasm.

The program is full of new and instructive material; presenting interesting discussions and offering an opportunity for debate which should encourage all to take the floor.

We have argued the need of these meetings, also their importance in molding the progress of the State medical profession into higher aims. Let our words bear fruit. Come to the

Shreveport meeting in such numbers that this year we may hang our hats in the more exalted hall of intellect, advance and fraternity.

Don't forget the dates, June 3, 4 and 5, 1902.

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#### THE MEDICAL EXPERT.

We were once privileged to listen to a peripatetic minstrel who delivered a disquisition on "Doctors," and in the course of his remarks he related his experience on what almost proved to be his deathbed. Among a number of consultants, no two agreed and compromise was out of the question, so he recovered because he was relieved of treatment. His way of putting it was jocose, even coarsely so, but the *motif*, if we can use the translated musical expression, is quite evident. In the diversity of opinion in questions which should be matters of fact, "the man in the street" can only see the vaporings of negations.

Such is the analysis of most records of court proceedings associated with medical witnesses. Harassed by a querulous lawyer, who has trained himself to a quasi-knowledge of the subject in hand, unskilled in the duelling with words in which those pettifoggers or luminaries are expert, modest often, precocious at times, uncertain as often because experienced in speculative methods, empiric even on occasions, the average practitioner of medicine passes out of the witness box with a shattered halo and humiliated even in his own esteem.

Daily press reports are full of these incidents, and we are more and more struck with the failure of legislative bodies to provide against such weakness in the structure of legal procedure. Not that the question of improvement has not been raised, for in every journal standing for medical progress the medical expert has received his share of dissection and discussion, and where medical jurists come together, as in the New York Medico-Legal Society, the matter has been extensively ventilated. The question should stay agitated, however, until some adequate provision is made to overcome the warranted public opinion which condemns medical expert testimony as at present derived.

Where the testimony is laboratory work the exactness of

method precludes everything but dishonesty; but with the testimony involving the slightest controversial opinion, every license is afforded to stretch and twist the facts.

It boots little, however, to discuss even with the best intent the inadequacy of a method without offering the remedy.

Lack of education is primarily the fault with most medical men who testify. While medical jurisprudence finds a sturdy place in the curriculum of the law school, it finds no place or small place in medical colleges. *Pro forma* purely the chair of medical jurisprudence is attached to that of the professor on one of the elemental branches and he dismisses the matter with a group of a few lectures dealing with the more commonplace subjects relating to poisons, their gross signs, rape and the evidences, wounds, and the like. Meanwhile little importance is attached to the branch upon which the student is seldom if ever examined.

The argument may be, and has been, advanced that experts are men specially trained; yet it is not every community which can either afford or is willing to import an expert in the technic sense of the word.

If the administration of the law is to be based upon the administration of justice, the legislatures of States should pass laws aimed at protecting the prisoner as well as the public. These should be directed at requiring medical colleges to teach legal medicine adequately and under qualified instructors, who should issue certificates for evidence of proficiency. Such certificates would allow a medical man to qualify in court. Where matters of ordinary medical testimony are involved such motion could not apply. Unfortunately, in the latter instance, it would be very difficult to find a tribunal at which to pass upon the due merits of much of that kind of testimony.

With rule, instead of trickery, applied to medical expert testimony, the public, even though ignorant, would be relieved of the spectacle of an honored profession put up to ridicule, as is so often the case in the modern court.

## Abstracts, Extracts and Miscellany.

### Department of General Surgery.

In charge of DR. F. W. PARHAM, assisted by DR. F. LARUE, New Orleans.

ON THE TEMPORARY CLOSURE FOR PROLONGED PERIODS OF ONE OR BOTH COMMON CAROTID ARTERIES AS A PROPHYLACTIC MEASURE IN OPERATIONS UPON THE HEAD AND NECK.—George Crile, of Cleveland, publishes (*Annals of Surgery*, April, 1902,) a brief synopsis of his work on the closure of the carotid arteries for prolonged operations. To his experimental work he adds reports of a number of cases in which the suggestion of experiment has been carried out on man with satisfactory results. The formal statement of these results is in our opinion so important, establishing as they do the value of the procedure, that we believe our readers will appreciate a brief review of the method and Crile's conclusion.

His experimental work was carried out on nineteen dogs, and the specimens were examined at varying intervals to determine the histologic changes. Duration and tightness of clamping were the most important factors. "Some specimens clamped too tightly, for four or six hours showed marked degeneration of the middle coat with edema and a thickening and disarrangement of the intima, with loss of endothelium and a very perceptible narrowing of the lumen; others were thrombosed, some were necrotic. In those carotids in which care was taken to adjust the clamps so as to exert only sufficient pressure on the artery to close the lumen, the histologic changes were unimportant. A clamp adjusted too tightly caused pressure necrosis in a few hours, while other carotids were clamped from twenty-four to forty-eight hours without notable damage to the arterial walls. The intima and elastic membrane were but slightly affected, though the media showed some evidence of degeneration. The adventitia was but slightly altered." The presence of infection was of the greatest importance.

The physiologic effects were not important. There was temporary increase of blood pressure, which quickly returned to normal, and the respiratory effects were of little consequence.



As to after effects, there was no clotting, the circulation was quickly re-established and autopsy showed no emboli or thrombi and no effects upon the nutrition of the brain.

*Technic*—Twenty minutes before operations likely to involve the vagi or their superior laryngeal branches, he injects one hundredth of a grain of atropin to prevent possible inhibitory action on the heart. The carotid arteries may be caught by the clamps through very small incisions. These clamps are small with long blades covered with thin rubber tubing, one blade being turned up slightly so as to prevent the artery from slipping out. Closure is made by a thumb screw, permitting exact approximation of vessel walls without too great pressure. In operations in which blood may enter the pulmonary tract the patient is to be placed in the Trendelenburg posture, which, too, partially compensates the lowered cerebral blood-pressure resulting from the closure of the carotids.

The control of hemorrhage is absolute, except in cases where there is direct collateral pressure from the vertebral arteries.

*Clinical Summary*—One or more carotid arteries were closed in 18 cases, both common in 10, one common in 5, one external in 3. The ages ranged from 7 months to 69 years.

There were no appreciable local effects and none upon the circulation, and there were no later cerebral effects. Less anesthetic was necessary and the operating time was much diminished, since the field of operation was quite free from blood. Altogether, both experimental and clinical experience unite in justifying and commending the method.

Senn in his *Practical Surgery*, just published, writes:

“The exclusion of blood from a limited segment of an artery for a short time is not incompatible with the patency of the lumen of the vessel at the point of temporary constriction, provided the intima is not injured.” His experiments on animals demonstrated that a double ligature half an inch apart can remain for twenty-four hours without interfering with the subsequent complete restoration of its function. In operations on the pharynx, parotid and submaxillary regions it has been his practice for many years, he remarks, to expose the common carotid and surround it with a catgut ligature which is to be used as a temporary or permanent ligature, as necessity may demand. “Such provision

against hemorrhage is a great comfort to the surgeon, and in the event of sudden profuse hemorrhage, constitutes a prompt and efficient aid in controlling or arresting it." He refers to the use of the temporary ligature as a prophylactic hemostatic as having received recently much favor in the practice of Schoenborn, Senger and Riese, but does not mention the work of Crile.

The old experiments of Jones with the temporary ligature showed that in many instances the artery might become thoroughly occluded although the ligature was immediately removed, and many experiments were carried out to apply temporary constriction without the use of the ligature, in order to get rid of the foreign body. Such were the pressure-forceps of Deschamps, Desault, Percy, Billroth, Richardson, Crampton and Spier and the acu-pressure methods of Middledorpf and Von Langenbeck. The elaborate work of Jones gave the incentive to all these experiments and the matter was pursued still further by Travers, who concluded from his experiments that the longest time the ligature had to remain for definite closure was six hours. He further determined that this closure was accomplished *after* the ligature was removed. He found, however, that the circulation subsequently returned in some cases of ligation of large arteries for aneurism, but von Bruns employed his method of filo-pressure for six years with satisfaction in all cases requiring ligation. Arteries of radial size require only eighteen hours while larger required from one to three days for definite closure. The introduction of the animal ligature did away with the temporary ligature employed for the purpose of effecting permanent closure of vessels. The study of these cases is interesting in view of the great advantages of the prophylactic ligation as these are now becoming since the time of Rivington. There are important differences between the old method of Jones, Travers and others and that of Rivington, Senn, Crile and others of the present day. The most important difference is that in the former the attempt was made deliberately to rupture the intima, in the latter the greatest care is to be observed not to injure it. It is strange that this prophylactic ligature has not been resorted to more generally seeing the good effects of the constriction of a whole limb for prophylaxis against hemorrhage. Years ago Senn made sixteen

experiments on dogs to determine the length of time this circular constriction might be maintained. The time varied from two and a half to twenty-six hours. "Only in one case did the experiment result in gangrene," but other serious effects resulted from much shorter constriction than the maximum mentioned, due either to nerve or to muscle injury. Undoubtedly, the injury inflicted by a degree of constriction required for a whole limb is much more severe than that resulting from the isolated compression of a single vessel, especially when the integrity of the vessel is so carefully conserved as in the method of Crile. Even the loop method of Rivington is calculated to disrupt more the relations of the vessel than this gentle clamp pressure, which requires less dissection and smaller incision.

The method is founded on the true surgical basis and has our heartiest commendation. Scarcely could a stronger argument be adduced in favor of vivisectional experiments than the valuable work of Senn, Crile and others in establishing this procedure firmly in surgery.

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## Department of Obstetrics and Gynecology.

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In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER,  
New Orleans.

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THE INDICATIONS FOR RAPID INDUCTION OF LABOR.—*The American Journal of Obstetrics* contains an abstract of a paper by G. Fieux, which was contributed to the *Rev. Mens. de Gyn. et Ped. de Bordeaux* on the above subject. In the case of hemorrhage he limits it to accidental hemorrhage, rarely employing it in that due to placenta previa. As regards severe dyspnea, the operation is not indicated if it be due to some mechanical condition, such as pneumonia, pleurisy, or ascites, and in these cases treatment should be directed to the cause. When of cardiac origin medical measures should first be tried to relieve the heart, and, these failing, rapid induction of labor is favored. Intra uterine putrefaction of the fetus of course demands the

operation with rapidity. In eclampsia labor is usually initiated by the convulsions, and in 10 per cent. of the cases in which this does not occur rapidly induced labor not only produces no ill effect, but often greatly improves the mother's condition. The fatal mortality of 80 per cent. in cases in which labor does not rapidly follow the convulsion attacks is reduced by the operation to 20 per cent. In case of the apparent death of the mother near term a Cesarean section should be done with all the usual precautions, as death has occasionally been found to be only apparent. If the fetus is in bad condition and the mother not so, partial dilatation of the cervix and insertion of the Champetier de Ribe's bags may suffice; if not, rapid induction of labor is demanded. In cases of maternal anthrax he does not favor this operation, and in hydrophobia advises its use only after the onset of symptoms. He is uncertain as to the indications in tetanus. Among its contraindications he includes a general sclerotic condition of the cervix, large fibroids or cancer of the cervix or lower uterine segment.

LACERATION OF THE PERINEUM.—Dr. Wesley Bovee (*American Journal of Obstetrics*, March), describes some points in the technic of operations for perineal lacerations that are quite unique and interesting. He claims nothing new for the suggestions, but merely a combination of interesting points, all taken from the work and recommendations of various surgeons. It embodies largely the principles of Emmet, the ideas of Tait of putting the sutures through the sub-dermal structures only and of employing buried absorbable material, kangaroo tendon and Ristini's modification in complete laceration—the result being that all important sutures are buried and none whatever need removal, that the wound is well protected against subsequent infection, and that the results are very satisfactory. The operation in incomplete laceration is done as follows: Grasping the lowest myrtiform caruncle on either side, the tongue of mucous membrane in the posterior wall and the upper end of the sulcus which represents the laceration, on one or both sides as may be necessary, the mucous membrane is removed as usually done by Emmet, though in some cases the plan of Tait in this respect is followed. If the Emmet denudation is done, the mucous membrane on the two sides of the denuded triangle is partially or completely approximated with continuous over and over cat-

gut sutures. When partially approximated the suture is placed, but not drawn taut until the deeper structures are approximated. When this is finished the forceps are removed from the points high in the vagina. While sufficient traction is made upon the middle tongue of tissue in the posterior wall to bring it forward and upward to the position it formerly occupied, a continuous suture of kangaroo tendon is used to close the lateral triangular spaces in the sulcus representing the original tear. This suturing is brought to about one inch from the perineal skin and tied. The sutures do not enter the rectal or vaginal mucosa. The remainder of the perineal wound is now closed precisely as by Tait, except that kangaroo tendon is employed and the ends cut off close to the knot. The skin closes over, leaving them unexposed. For complete laceration the surfaces are denuded as described by Ristini, which causes a flap to be dropped downward, covering the rectum in front. Then a row of continuous catgut or fine kangaroo tendon, beginning at the upper end of the crater and close to the base of the flap and ending at the sphincter and muscle, is placed to approximate structures just immediately above or in front of the flap. The ends of this torn muscle are dissected out and united by two to four interrupted sutures of catgut or tendon after carefully stretching it. The suturing of the vaginal mucosa is now placed, and following this comes the insertion of the deep sutures, three or four in number, as in the operation for incomplete laceration. Particular care is necessary to include the whole septum down to the rectal flap, and in all cases that the sutures pass sufficiently deep laterally to make the opposed surfaces between the bottom of the wound and the skin surface as long as possible. The after treatment consists in keeping the skin side of the perineum covered with bichloride gauze, the bowels emptied daily, catheterization for a few days and liquid diet for the first five days. The patient is allowed out of bed in two weeks.

ANTERO-LATERAL COLPOCELIOTOMY.—The paper, by Dührssen (*Berl. Klin. Woch.* No. 44) describes an operation which is practically an anterior vaginal celiotomy with complete division of one broad ligament. He claims that when the broad ligament is divided without opening the peritoneum in front of and behind the uterus, abscesses of the parametrium and purulent collections in the appendages can be freely opened extraperitoneally

and treated conservatively. Division of the broad ligament gives as free access to the appendages as total vaginal extirpation, as the uterus remains attached only by one lateral ligament, and like the appendages of the divided side, can be drawn out through the vulva. If the stump of the appendages is infected it can be sutured into the lateral vaginal wall, making it extraperitoneal. The operation gives as free drainage of the pelvic cavity as total hysterectomy. The paper describes several cases and includes a list of indications for the procedure in whole or part.—*American Journal of Obstetrics*.

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## Department of General Medicine.

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In charge of DR. E. M. DUPAQUIER, New Orleans.

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**PERNICIOUS ANEMIA.**—Th. Rumpf's researches were mainly confined to the chemical changes in the blood and in the various body organs in a case of pernicious anemia that came under his care. Besides the well known deposit of iron in the liver and spleen, he found that the tissues of the body generally were unusually rich in sodium chloride, while they showed still more plainly a marked diminution in the potassium salts. An exactly similar condition as regards the potash salts was present in a case described by Erben, and the writer is of opinion that it will be found to be a constant characteristic of the disease. His most important suggestion is that the administration of a readily absorbable potash salt may exercise a beneficial effect on the disease, and he records several cases in which great improvement has followed on treatment along these lines. Potassium chloride and nitrate were the salts mostly employed, in doses of 10 to 15 grains in the day, combined with iron preparations, but with no arsenic. One case that came under treatment in an apparently moribund condition, was brought round by intra-areolar injection of 500 *c. c.* of 1 per cent. potassium carbonate solutions, followed by smaller injections over the course of several days.—*The Medical Chronicle*, Nov., 1901.

CAUTION NECESSARY IN THE TREATMENT OF MEASLES IN TENEMENTS.—Measles is regarded by many mothers who live in tenements as a very mild disease. They consider that warmth and exclusion of light are all that is required and that the services of a doctor are superfluous. The result is that the patient is often put in a dark inside room which is overheated and insufficiently ventilated. His resistance is so much the more lowered and he becomes specially liable to some secondary infection, most frequently bronchopneumonia, diphtheria, or tuberculosis. A patient with bronchopneumonia following measles, who, in addition, contracts diphtheria is in a wellnigh hopeless condition. Yet this sequence does occur. We are cognizant of four intubations performed within the past two months for laryngeal diphtheria following measles. In each of the four cases the doctor who was called in when the symptoms of croup became marked, attributed the condition to catarrhal laryngitis complicating measles, and did not administer antitoxin, or even make a culture until the severity of the symptoms made operative intervention imperative: It should be kept in mind that symptoms of croup occurring during measles may not be due to catarrhal laryngitis, but to diphtheria. If the symptoms are at all severe a large dose of antitoxin will certainly be on the side of safety.—*Pediatrics*, March 1, 1902.

THE MALNUTRITION OF TUBERCULOSIS.—The summary of a very interesting paper on this subject read by Floyd M. Crandall, M. D., before the Section on Pediatrics, New York Academy of Medicine, December 12, 1901, is given here.

*First.* Wasting, anemia and other evidences of malnutrition are constant accompaniments of tuberculosis in children.

*Second.* These symptoms may occur in infants long before local disease can be detected and occasionally no local signs whatever are manifest before death.

*Third.* In infants tuberculosis shows a special tendency to be disseminated or to conceal itself in the deep tissues, as the lymph nodes. The disease may then run a course identical with simple marasmus.

*Fourth.* In some cases a period of anemia and wasting is followed by a stage of irregular fever, after which local lesions appear, usually in the lungs.

*Fifth.* In other cases tuberculosis in children begins with well

marked local manifestations, particularly pneumonia. In these evidences of malnutrition appear promptly and are usually progressive.

*Sixth.* The anemia of tuberculosis, whether it appears before or after the occurrence of other symptoms, is a usually simple anemia and presents nothing characteristic.

*Seventh.* A diagnosis of tuberculosis cannot be made alone from the character of the anemia or the malnutrition. However, persistent and increasing malnutrition in a child without discernible cause is always suggestive of tuberculosis.

*Eighth.* Anemia in adolescents should receive prompt and active attention, for it vastly increases the danger of tubercular invasion, which is particularly common at that period of life.

—*Archives of Pediatrics*, January, 1902.

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## Department of Therapeutics.

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In charge of DR. J. A. STORCK, New Orleans.

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TREATMENT OF RICKETS WITH SUPRARENAL GLAND.—Hönigsberger (*Münchener Medicinische Wochenschrift*) can not confirm Stoeltzner's estimate of the value of suprarenal gland in the treatment of rickets. A daily dose of as many centigrams as the child weighed in kilograms was given at first and increased to twice the amount or more. No specific effect was noticed, although the general health was sometimes improved by its action on the circulation and the respiratory centre; but this result is obtainable with many cheaper drugs.—*American Medicine*, March, 1902.

TREATMENT OF CHRONIC EMPHYSEMATOUS BRONCHITIS IN CHILDREN.—Saint Phillipe (*Bulletin Général de Thérapeutique*) recommends the following:

Arsenic iodid .....	4.5 grains.
Distilled water.....	1½ ounces.

Dissolve cold. The initial dose of this solution is five drops in water, wine or milk after the two principal meals, to be in-



creased by one drop morning and evening until 10 to 20 drops have been added, according to the age and tolerance of the patient. The maximum dose is maintained for about one month, then it is progressively decreased until 5 drops are being taken. The child is given this dose for eight or ten days, when the same treatment is repeated.—*Ibid.*

REMOVAL OF INTUBATION TUBES BY MEANS OF THE ELECTRO-MAGNET.—Collet (*Lyon Médical*, July, 1901) describes the process of removing intubation tubes with the electromagnet. The instrument consists of a long, thin coil, which may easily be held between the thumb and forefinger. Two armatures should accompany the instrument, the longer to be used for adults. These are curved, in order to enter the larynx, and the ends are blunt so that they will make perfect contact with the upper extremity of the tube. Before using the instrument, the circuit should be completed and the jaws fixed open. The curved extremity of the magnet is then introduced into the pharynx and passed behind the base of the tongue toward the larynx until it is brought in contact with the tube; it is then necessary only to withdraw the magnet with the tube attached. The procedure is instantaneous and extremely easy. No special knowledge is required by the operator. Collet considers it especially serviceable in case of sudden obstruction of the tube when there is danger of death from asphyxia. The metallic part of the instrument can easily be sterilized, the coil should be protected by a rubber covering which can also be sterilized.—*American Medicine*, March, 1902.

THE TREATMENT OF CHRONIC BRONCHITIS IN THE ELDERLY AND AGED.—Henry Campbell, in the *British Medical Journal* of October 12, 1901, briefly sums up the chief points of a paper by him on this topic:

On treating chronic bronchitis in those past middle life the toxicity of the blood should be kept as low as possible.

The air breathed should be pure and nasal breathing insisted on.

The diet should be a bare sufficiency, and alcohol indulged in sparingly, or not at all.

Every ounce of superfluous fat should be got rid of.

The general health should be maintained at the highest possible level.

A vigorous circulation should be maintained. Every precaution should be taken against breathlessness.

Breathing exercises should be resorted to in order (among other things) to preserve the mobility of the thorax.—*Therapeutic Gazette*, February 15, 1902.

TO GUARD AGAINST THE BITE OF THE MOSQUITO.—McIntosh recommends an application for this purpose, in the *Medical Record* of November 16, 1901, which he has used for some years when out fishing or hunting in swamps where mosquitoes are prevalent, and in the evenings when sitting out-of-doors, and which he has found to be most excellent and efficient; it is the oil of citronella (oil verbena, Indian melissa oil). It has a very pleasant odor and is not expensive. The oil should be rubbed into the exposed parts and repeated occasionally, or the following is quite as efficient:

℞ Oil citronella..... ʒj.  
Alcohol ..... ʒj.

S: Apply freely to face, neck, hands and ankles to prevent mosquitoes from biting.

This is colored with something to make it slightly green.

—*Ibid.*

THE PASSING OF THE CORSET.—Something has happened that physicians had hardly dared to hope for—that is to say, it has virtually happened, for the “Greek girdle,” now largely worn, is so narrow that it cannot be injuriously tightened without causing the person to bulge so above it as to make the appearance of the individual ridiculous, and we may trust women to avoid that. We physicians do not flatter ourselves that our arguments have contributed materially to bring about this auspicious change; fashion has done it, and we hope the present fashion will hold sway long enough to convince women that they are more comfortable and more shapely under it than when they were girt with short stays.—*N. Y. Medical Journal*.

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## Department of the Ear, Nose and Throat.

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IN charge of DR. A. W. DEROLDES and DR. GORDON KING.

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VERTIGO OF NASAL ORIGIN.—An interesting clinical history is recorded by Collet, of Lyons, in the February number of the *Annales des Malades de l'Oreille, du Larynx*, etc., of a man

about 32 years of age who experienced a pricking sensation in the nose which caused him to sneeze violently. This was quickly followed by a severe pain in the nuchial region, at the onset of which he suddenly lost his equilibrium and fell forward on his face without losing consciousness. A period of mental and physical depression then supervened and lasted for several hours. This attack was repeated a few days later and was accompanied by convulsive twitchings of the fore arm and fingers. Examination of the nasal fossæ revealed the presence of a septal spur on the left side impinging on the lateral wall, and with an area of hyperesthesia of the mucosa at that point. The author concludes that this is the cause of the sudden attacks of vertigo, through the influence of peripheral irritation of the second division of the trigeminus. He does not state, however, that an attack might be brought on by pressure upon the sensitive area with a probe. He calls attention to some of the points of similarity between this phenomenon and that of ictus laryngis.

**NASAL VERTIGO AND EPILEPSY.**—Jousset, of Lille, considers such cases as the one reported by Collet to be true epilepsy with nasal aura, and reports two cases of somewhat similar nature but with distinct epileptic symptoms. The first was a man 26 years of age, who complained of embarrassed nasal respiration with occasional pricking sensation in the nose, which ushered in a mild epileptic attack with loss of consciousness for several seconds. This was followed by a period of depression, as in Collet's case. A well-marked septal deviation was found to be the cause of the nasal stenosis, and correction of this condition had the effect of greatly diminishing the frequency and severity of the attacks.

The second case was a woman 30 years of age, who had suffered for a long time from occasional epileptic seizures, and in whom the cause was apparently a unilateral hypertrophic rhinitis. Application of galvano-cautery to the enlarged turbinates and the use of a nasal douche gave complete relief to the epilepsy.—*Revue Hebdomadaire de Laryngologie, etc.*, March 15, 1902.

**THE TREATMENT OF ENLARGED THYROID BY BORIC ACID.**—D. Braden Kyle gives an account of 11 cases of thyroid enlargement which he treated with excellent results by the internal ad-

ministration of boric acid. In every case there was either a noticeable diminution in the size of the goitre, or a return of the gland to its normal size.

The author claims a selective action for boric acid upon the thyroid gland, basing his experiments upon analysis of the urine, as in each case there was an excessive amount of indican and considerable cholesterin. This disappeared upon the administration of boric acid. From ten to fifteen grains were given in capsules every three hours with a full glass of water. This treatment merits further trial.—*American Medicine*, Feb. 8, 1902.

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## Society Proceedings.

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### ORLEANS PARISH MEDICAL SOCIETY.

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MEETING MARCH 22, 1902.

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DR. GESSNER presided.

DR. QUITMAN KOHNKE read a paper on *What Shall We Do About the Mosquito?*

#### DISCUSSION.

DR. DABNEY thought that there was nothing of more importance accomplished in medicine in recent years than the work done correlating cause and effect in the matter of the mosquito and yellow fever. The matter concerned us most intimately, especially as our commerce had in the past been oppressed by unjust quarantine regulations. He hoped that if the members were convinced of the guilt of the mosquito, the Society would adopt strong resolutions, addressed to the City Council, and in this way help Dr. Kohnke in his campaign.

DR. VEAZIE was heartily in accord with every movement looking to the extermination of the mosquito. He was convinced of its being the disseminator of yellow fever and malaria. We could, at any rate, diminish the nuisance if we could not immediately abolish it. Screening of cisterns, flushing of

gutters and oiling of stagnant pools were temporary measures to be adopted until we could get rid of cisterns and of gutters. He had found the drainage canals in the rear of the city to be great breeding places for mosquitoes. Putting oil into the gutters emptying into these canals would destroy these mosquitoes. He urged citizens to assist in every way the Board of Health.

DR. STORCK thought with Dr. Kohnke that a committee should be appointed to appear before the City Council. Each physician should use his influence with the laity in behalf of the mosquito-extminating campaign.

DR. GRANER—The medical profession should endorse Dr. Kohnke's paper. Oiling the cisterns was not practicable, but screening was the thing. A difficult matter to combat would be the introduction of the mosquito by winds.

DR. GESSNER asked whether any tests had been made of the efficiency of screening.

DR. KOHNKE replied that the use of the mosquito bar proved this.

DR. STORCK asked how we could prevent larvæ being washed into the cisterns from the roof.

DR. LEMANN said that even if the larvæ were washed in and were hatched in the cistern the adult mosquitoes would not be able to get out through the meshes of the screening.

DR. MARTIN suggested that a valve could be arranged to prevent the egress of mosquitoes hatched inside the cistern through the water inlet. He suggested also the sprinkling of the streets with oil and the placing of fish in the gutters.

DR. HUHNER asked Dr. Kohnke what he proposed to do about the swamp mosquito?

DR. ASHER asked what was the value of potassium permanganate as a larvicide, and what was the true mode of action of oil?

DR. KOHNKE said that steps had been taken looking to measures to be adopted against mosquitoes introduced into the city by cars and ships. We should at present concentrate our efforts on *Stegomyia*; *Anopheles* would meet attention later. As to larvæ being washed into cisterns, this would be due to badly constructed roof gutter, allowing stagnant water to accumulate. Besides, the pipe entering into a cistern was about twenty feet long, hence chances of the egress of mosquitoes would be small.

He did not think that we should urge the passage of any particular ordinance but should advise in a general way the passage of an ordinance looking to the extermination of the mosquito. The use of oil had proved impracticable, because so many people had a prejudice, due to imagination. Screening did not meet the same prejudice. As to fish in the gutters, he had seen them often, but in some cases larvæ were swept in the gutters in such overwhelming numbers that the fish could not devour them all. Potassium permanganate had never been tested officially as a larvicide in this city; however, to make an efficient larvicide potassium permanganate had to be used in stronger solution than could be done without making the water unfit for drinking purposes.

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MEETING OF APRIL 12, 1902.

DR. GESSNER presided.

DR. E. D. MARTIN read a paper on *The Treatment of Wounds*.  
(To appear in the JOURNAL.)

DISCUSSION.

DR. PERKINS—There was greater need of asepsis in minor cases; in major cases, the technic was already well observed. In minor cases at the patient's house carbolic acid was preferable to bichloride, because it served for all purposes—for instruments, etc., as well as for hands. Tinct. iodine was of great service in treating small infected wounds; it checked suppuration and tended to remove inflammatory product around the edges of wounds. Many men were careless in their aseptic technic in handling of old infected wounds; we should not forget that we can re-infect such wounds, and should be as careful as to our asepsis in treating an old suppurating wound as in dealing with a fresh incised wound. Temperature was not an absolute guide to the formation of pus; compound fractures sometimes suppurated when there was no rise of temperature to indicate such a condition. Wet dressings were excellent for getting rid of all necrotic tissue on the surface of wounds. Such poultices were allowable only when there was dead tissue or tissue bound to slough, but were contra-indicated when there was a clean granulating surface. He was of the opinion that drips and baths were used far too little. Dr. Parham was using the chlorinated lime method with good results.

DR. LAZARD—Formerly the attempt to sterilize the hands of the surgeon gave the most concern, but since the advent of gloves the sterilization of the skin of the patient was the most difficult problem. Even while gloves were used the hands should be previously thoroughly sterilized, because if the gloves should become punctured there would exude a saturated solution of bacteria. The pendulum of Listerianism was swinging back; large quantities of water and strong solutions harm the tissues. Saline solutions were better for large surfaces. Iodoform was of no use in fresh wounds made by the surgeon under aseptic conditions.

DR. BRUNS—In removing foreign bodies from the cornea, only instruments previously sterilized by heating in an alcohol flame should be used. After the foreign body is removed, the eye should be flooded with an antiseptic solution and an antiseptic dressing applied to remain for twenty-four hours. Lack of such aseptic care has caused the loss of many eyes. Perfectly fresh Labarraque's solution, 1 to 50, or enzymol, 50 per cent. solution, were the best antiseptics for the eye. Rooms in which operations were constantly done should be constructed in such a way that they could be rendered absolutely sterile from time to time, or they should be of such temporary nature that they might be from time to time destroyed. He believed that the era of permanent hospital buildings was passing and that in the future we would have for hospital purposes buildings of a temporary character as indicated above.

DR. STORCK asked as to formic aldehyde, 1st, its value in the disinfection of wounds; 2nd, its value in the disinfection of instruments; 3rd, whether it interfered with healing; 4th, in what strength it was used.

DR. LARUE—The brush should not be used on scrotum, groin or neck; gauze should be used instead. Alcohol cannot be used in all regions, it sometimes caused dermatitis, particularly in the scrotum and in the delicate skin of women. In uncleanly persons simple mechanical cleansing will not suffice and antiseptic solutions must be employed. After operation wound must be thoroughly dry and all bleeding must be entirely checked. Care must be exercised in the use of iodoform gauze, especially the moist variety. It sometimes cause dermatitis. Immobilization and compression were important antiphlogistic measures

—*e. g.*, after opening a bone felon we should apply a splint and use compression to prevent ascending teno-synovitis. Compression also promoted absorption of inflammatory products. The drip is good where the wound is smaller. Hot antiseptic baths, preferably with running water, are better to combat extensive infection. The application of powder should be discarded as absolutely useless. Gloves were the best means at hand to protect ourselves and our patients. For putting on gloves, soap was the best lubricating agent.

DR. SEXTON preferred carbolic acid to bichloride. In many cases mechanical cleansing sufficed. He reported two cases of minor surgery where no antiseptic solution was used, only soap and water for hands and skin and aseptic dressings were applied. Wounds healed by first intention. He objected to strong solutions of carbolic and bichloride, because they caused the hands of the surgeon to crack, and thus opened a source for infection. Moreover, bichloride in strong solution (1-1000) would coagulate the tissue and reduce the probability of healing by first intention. Edges of granulated wounds must be scraped to get rid of horny superabundant granulations.

DR. MAINEGRA—Solutions employed were sometimes too strong; sometimes too weak. We should not discard measures which experience has taught us to be of value, but should continue the use of antiseptic solutions and of dry absorbent powders. He was in the habit of employing with entirely satisfactory results, bichloride for irrigating wounds and after checking all bleeding and suturing, application of a dry absorbent powder, such as aristol or euophen.

DR. E. J. HUHNER called attention to the use of calcium hydrosulphide for removing hair in the neighborhood of wounds. It produces no irritation and a perfectly smooth skin results.

DR. PERKINS wished attention to be called to the fact that the first local surgeon to use sterilized dressings and sterilized instruments was Dr. Parham.

DR. MARTIN had long since given up irrigating fresh wounds. He used the knife, curette and gauze to cleanse wounds. Best solution for irrigation was normal saline solution. There was no greater source of infection than instruments, especially those of the pocket case, which were used carelessly and thoughtlessly without previous sterilization. Formaldehyde had been used



successfully for flushing out the abdomen, which can be filled with solution as strong as 1 to 1000. Strong solutions of formaldehyde were extremely irritating, 1-500 and 1-300 were stinging to the nostrils and made the eyes water. Solutions of carbolic acid less than 5 per cent. were useless as antiseptics; even 90 per cent. could be used if followed by alcohol. The day of powders had passed. They acted mechanically and were inert. The use of chemicals to remove hair was good; the razor was better.

DR. SEXTON related a case of screw worm in a lady's neck. The patient, a cleanly person from Central America, had on the back of the neck a protuberance in which there was a hole, from which a reddish secretion exuded. Under cocain anesthesia a crucial insertion was made and a worm as large as a finger was extracted. The wound was cauterized with carbolic acid and collodion dressing applied. There was uninterrupted recovery. Previous history was that there had been a pimple two to four months previous, which the patient had scratched. Perhaps a fly had lighted and deposited the egg of the worm. This was his first experience of this kind.

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## Louisiana State Medical Society Notes.

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Next meeting in Shreveport, June 3, 4 and 5, 1902. Dr. T. E. Schumpert, President, Shreveport; Vice-President, Dr. F. A. Larue, 1st Congressional District, New Orleans; Dr. E. D. Martin, 2nd Congressional District, New Orleans; Dr. G. W. Remage, 3rd Congressional District, Jennings; Dr. J. M. Callaway, 4th Congressional District, Shreveport; Dr. J. M. Barrier, 5th Congressional District, Delhi; Dr. A. F. Barrow, 6th Congressional District, St. Francisville; Dr. Herman B. Gessner, Recording Secretary, 124 Baronne Street, New Orleans; Dr. A. G. Friedrichs, Corresponding Secretary, 641 St. Charles Street, New Orleans; Dr. H. S. Cocram, Treasurer, 124 Baronne Street, New Orleans; Dr. Oscar Dowling, Shreveport, Chairman of committee of Arrangements.

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THE CHAIRMAN OF THE COMMITTEE OF ARRANGEMENTS HAS ISSUED THE FOLLOWING: The State Medical Society will meet in Shreveport, June 3-5. Every member of the Society and

every doctor in the State who can possibly leave his practice should attend and assist in making this one of the best sessions since the organization of the Society.

Besides the regular program there will be considerable time given to the social features and we hope the physicians will bring their wives. A number of entertainments and receptions are being arranged which will be enjoyed by all the doctors who attend.

We have pleasure in announcing that a one and one-third rate, on the certificate plan, will be given the doctors and their wives. We had hoped to get a one-rate fare for the round trip and it may be possible, though hardly probable, that the rate sought will be granted after the general passenger agents debate the matter among themselves.

Shreveport will take special pleasure in extending the doctors of Louisiana a most cordial welcome, and we look forward with great pleasure to entertaining the busy practitioners who may honor us with their presence. Come expecting to have a jolly good time.

Cordially yours,

OSCAR DOWLING, M. D.,

*Chairman Entertainment Committee.*

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#### LIST OF SUBJECTS, CHAIRMEN, ETC.

GENERAL MEDICINE—Chairman, Dr. Whyte Glendower Owen, White Castle. To open discussion, Drs. F. M. Thornhill, Arcadia, and J. M. Barrier, Delhi.

*A Symposium of Tuberculosis in Louisiana:*

(1) Vital Statistics of Tuberculosis in Louisiana, Dr. G. Farrar Patton—Orleans Parish.

(2) The Transmission of Tuberculosis, Dr. Whyte Glendower Owen—Iberville Parish.

(3) Education of People as a Factor in the Prevention of Tuberculosis, Dr. Fred. M. Thornhill—Bienville Parish.

(4) Climatic Treatment of Tuberculosis afforded in Louisiana, Dr. P. E. Archinard—Orleans Parish.

(5) Medical Treatment of Tuberculosis and Its results, Dr. Charles McVea—East Baton Rouge Parish.

(6) Tuberculosis Among Our Negroes, Dr. John M. Barrier—Richland Parish.

(7) General Discussion by the Society.

DERMATOLOGY—Chairman, Dr. Isadore Dyer, New Orleans. To open discussion, Dr. J. N. Roussel, New Orleans.

*The Importance of Diagnosis in Skin Diseases. Considered generally and as applied to particular Diseases.*

The chairman of this section earnestly solicits the assistance of members and especially begs contributions of papers relating to the occurrence of skin diseases in country districts, particularly referring to leprosy, types of syphilis, the eruptive fevers, impetigo ("Indian Fire"), rhus poisoning, summer eruptions on the feet and hands, etc. Points in diagnosis and the statement as to numerical frequency are of importance.

NEUROLOGY, INCLUDING MENTAL DISEASES—Chairman, Dr. G. A. B. Hays, Jackson. To open discussion, Dr. P. E. Archinard, New Orleans. *What can be done to prevent the increase of degenerates?*

GENITO-URINARY SURGERY—Chairman, Dr. Chas. Chassaig-nac. To open discussion, Drs. W. K. Sutherlin and R. Hunt, Shreveport. *Varicocele.*

SANITARY SCIENCE—Chairman, Dr. Edmond Souchon, New Orleans. To open discussion, Dr. S. R. Olliphant, New Orleans; Dr. N. K. Vance, Shreveport; Dr. J. S. Alison, Swartz. *The Defences of Louisiana Against the Introduction of Yellow Fever. The Value of Co-operation in the Sanitary Control of Our Periodic Epizootics of Anthrax*, M. H. Dalrymple, M. R. C. V. S., Baton Rouge.

ORAL SURGERY—Chairman, Dr. A. G. Friedrichs, New Orleans. To open discussion, Dr. Geo. J. Friedrichs, New Orleans. *The Care of Children's Teeth.*

HYGIENE—Chairman, Dr. F. J. Mayer, Opelousas. To open discussion, Dr. W. A. Holloway, Plaquemine.

(1) *Farm Drainage in its Relation to Health.* (2) *Hygiene of the Rice Fields.* (3) *Relation of the New Discovered Oil Fields to the Hygiene of the State.* (4) *Hygienic-Dietetic Treatment of Tuberculosis.* (5) *Mosquitoes.*

OPHTHALMOLOGY—Chairman, Dr. H. D. Bruns, New Orleans. To open discussion—Drs. E. W. Jones and P. L. Reiss, New Orleans. *Control of Suppuration in Anterior Portion of the Eye.*

OTOLOGY, LARYNGOLOGY AND RHINOLOGY—Chairman, Dr. W. Scheppegrell, New Orleans. To open discussion—Drs. Gordon

King and C. J. Landfried, New Orleans. *Syphilis of the Nose.*

MEDICAL JURISPRUDENCE—Chairman, Dr. S. L. Théard, New Orleans. To open discussion—Dr. F. J. Kearny, Plaquemine. *The Responsibility of Persons Affected with Delirium Tremens.*

Miscellaneous papers in this section—*The Age of Consent.*—Dr. Isadore Dyer, New Orleans. *The Ear from the Medicolegal Standpoint.* Dr. W. Scheppegrell, New Orleans.

BACTERIOLOGY—Chairman, Dr. O. L. Pothier, New Orleans. To open discussion, Dr. John J. Archinard, New Orleans. *The Pneumococcus and Its Infections.*

QUARANTINE—Chairman, Dr. J. C. Egan, Shreveport. To open discussion—Drs. A. Nolte, New Orleans, and J. S. Stephens, Jr., Natchitoches. *Quarantine.*

DISEASES OF CHILDREN—Chairman, Dr. J. F. Oeeshner, New Orleans. To open discussion, Drs. John Callan and G. F. Patton, New Orleans. *Surgery of the Child.*

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#### REPORT OF THE COMMITTEE ON THE PROPER ORGANIZATION OF THE LOUISIANA STATE MEDICAL SOCIETY.

At the last meeting of the Louisiana State Medical Society the president, Dr. F. W. Parham, recommended in his executive address that a special committee on the proper organization of the Society be appointed. The succeeding president, Dr. T. E. Schumpert, appointed on this committee the retiring president, Dr. F. W. Parham, Dr. John B. Elliott, Dr. Rudolph Matas, Dr. P. E. Archinard, Dr. G. A. B. Hays, and Dr. W. Glen dower Owen, all ex-Presidents of the Society. At a meeting of this committee the salient points were brought out in a thorough discussion of the whole matter and the following report has been drawn up to embody the views of the Committee. It was considered by the Committee of the highest importance that any changes in our present regulations should make our organization conform as far as local conditions would permit to the plan as suggested by the Committee on Reorganization of the American Medical Association at the last meeting of the Association in June, 1901. This conclusion has been carried out in the Constitution as here drawn up. A copy of these recommendations has been handed over to the Chairman of the Committee on Revision of the Constitution and By-Laws also ap-

pointed at the last meeting of the State Society, and has received his approval. As soon as may be practicable he will discuss the whole matter with his Committee and prepare a draft of the Charter and By-Laws and have same published in the June number of the JOURNAL.\* The Constitution is published now in advance of the report of the Committee on Revision for the reason that it embodies the essential features of the new plan of organization, which, being such a radical departure from that under which we have been for so many years working, deserves the most careful consideration of each individual member, to the end that, when the Society convenes in Shreveport in June, all may be fully prepared to vote without unnecessary loss of time. Argument in favor of the adoption of the report will be presented as part of this Committee's report at the meeting, but it seems in the opinion of the Committee unnecessary to the present purpose to present that now.

#### RECOMMENDATIONS OF THE COMMITTEE ON THE PROPER ORGANIZATION OF THE LOUISIANA STATE MEDICAL SOCIETY.

1. The Society shall be regularly chartered under the laws of the State.

2. The charter should contain the essential points in the following CONSTITUTION:

ARTICLE I. *Title of the Society:* LOUISIANA STATE MEDICAL SOCIETY.

ARTICLE II. *Objects.* The object of this Society shall be to federate into one compact organization the medical profession of the State of Louisiana, for the purpose of fostering the growth and diffusion of medical knowledge, of promoting friendly intercourse among Louisiana physicians, of safeguarding the material interests of the medical profession, of elevating the standard of medical education, of securing the enactment and enforcement of medical laws, of enlightening and directing public opinion in regard to the broad problems of State medicine, and of representing to the world the practical accomplishments of scientific medicine.

ARTICLE III. *Composition of the Society.* Delegates, Permanent Members, Members by Invitation, Honorary Members and Associate Members.

SEC. 2. Permanent Members shall consist of those who shall have complied with all the requirements of the old regulations at the time the new regulations are adopted, but they shall not

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\*See April number.

be eligible as delegates from Parish Societies until they shall have become members in good standing of such societies.

SEC. 3. Members by Invitation shall consist of physicians in good standing of other States and foreign countries invited by the Society.

SEC. 4. Honorary members shall be physicians of other States or foreign countries who have risen to pre-eminence in the profession of medicine.

SEC. 5. Associate Members: Representative teachers and students of the allied sciences, though not physicians, may be elected by vote of the House of Delegates associate members.

SEC. 6. Delegates to the Society shall be those properly accredited representatives of parish societies organized under the regulations of the State Society.

ARTICLE IV. *Division of the Work of the Society.* The work of the society shall be divided into Scientific Proceedings and Legislative Business.

SEC. 2. *The House of Delegates.* The House of Delegates shall be, so far as the act of incorporation shall permit, the fiscal and legislative body of the society under the regulations to be specified in the by-laws.

SEC. 3. The House of Delegates shall consist of delegate members and of the officers of the society.

SEC. 4. *The Scientific Body.* This shall consist of the delegates, the permanent members, the members by invitation, the honorary members and the associate members. The work of the body shall be divided into sections; but the society, as a whole, will, as heretofore, carry out the scientific programme until it shall otherwise provide for the division of the membership into sections.

ARTICLE V. *Affiliated Societies.*—SEC. 1. After the adoption of this constitution no one shall become an active member of this society until he shall have become a member in good standing of a parish society, and this local society shall have complied with all the requirements of the State society.

SEC. 2. The State Society, through the House of Delegates, may appoint an organizer, whose duty it shall be to go through the State or such parishes as it may seem expedient to visit to organize or to assist in organizing parish societies under regulations to be prescribed in the by-laws.

SEC. 3. Funds may be appropriated for the expenses of the Organizer by the society on the recommendation of the House of Delegates.

ARTICLE VI. *Branches.* Whenever it shall be deemed advisable by the House of Delegates, the Society may be divided into District Branches, to conform to the limits of Congressional Districts or otherwise, as it may direct.

ARTICLE VII. *Meetings.* The regular meetings of the Society shall be held annually. The place of meeting shall be deter-

mined with the time of meeting for each next successive year, by vote of the House of Delegates.

ARTICLE VIII. *Officers.* SECTION 1. The officers of this Society shall be a president, not less than four Vice-Presidents, a Secretary, a Treasurer and nine Trustees.

SEC. 2. The officers of this Society shall be elected by the House of Delegates.

SEC. 3. Each officer, with the exception of the Secretary and the Board of Trustees, shall hold office for one year, or until his successor is elected and installed. Three trustees shall be elected annually by the House of Delegates for a term of three years.

SEC. 4. No member of the House of Delegates shall be eligible to any of the offices mentioned in the foregoing sections of this article.

ARTICLE IX. *Funds and Appropriations.* Funds for meeting its current expenses and awards from year to year shall be raised by the Society by an equal assessment of not more than ten dollars annually on each of the permanent members; by voluntary contributions for specific objects; and from the profits of its publications. Funds may be appropriated by the House of Delegates in accordance with the Articles of Incorporation, for defraying the expense of the annual meetings; for publications; for enabling standing committees to fulfill their respective duties, conduct their correspondence and procure materials necessary for the completion of their stated annual reports; for the encouragement of scientific investigations by prizes and awards of merit; and for defraying the expenses incidental to specific investigation.

ARTICLE X. *Referendum.* SECTION 1. The Society shall have the right to discuss questions referred to it by the House of Delegates, and it may, by a two-thirds vote, order a general referendum on any question pending before the House of Delegates.

SEC. 2. The House of Delegates shall, upon a two-thirds vote of its own members, or upon a two-thirds vote of the Society, submit any question, either through its official journal or by mail, to the general membership for a final vote; and if the persons voting shall comprise a majority of the members, the majority of such votes cast shall determine the question, and shall be binding upon the House of Delegates.

ARTICLE XI. *Amendments.* The House of Delegates shall have authority to amend any article of this Constitution by a three-fourths vote of all the members composing the House of Delegates, *provided*, that such amendment shall have been proposed in open meeting of the House of Delegates one year previous to being acted upon, shall have been published at least

three times in the official journal of the Society during the interim, and shall have been officially transmitted to each affiliated Parish or District Society for consideration at their annual meetings.

ARTICLE XII. *The By-Laws.* The By-laws may contain any provision calculated to carry out the purpose and intent of this constitution, and in no way in conflict therewith, and may be amended by a two-thirds vote of the House of Delegates, subject, however, to the referendum provided for in Article X of this Constitution.

The above recommendations have been approved by five of the six members of the committee; the sixth has not as yet expressed his views.

(Signed)

F. W. PARHAM, M. D.,  
*Chairman.*

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## Medical News Items.

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THE LOUISIANA STATE MEDICAL SOCIETY will meet in Shreveport June 3 to 5. The medical profession of the State and at large is cordially invited.

THE LOUISIANA STATE BOARD OF MEDICAL EXAMINERS will hold examinations Thursday and Friday, May 1 and 2, at the Medical College, Canal and Villeré streets.

THE NEW INTERNES OF CHARITY HOSPITAL qualified in April. These are Messrs. C. W. Groetsch, F. H. Lewis, L. A. Mereaux, M. S. Kahn, C. L. Eshleman, Gamble, R. W. Collins, L. R. DeBuys and E. M. Williams.

LINCOLN PARISH RECENTLY ORGANIZED A PARISH MEDICAL ASSOCIATION with the election of the following officers: President, Dr. R. Roberts; vice president, Dr. L. P. Smith; secretary, Dr. S. L. White; treasurer, Dr. G. E. Harrell.

THE MEDICAL ASSOCIATION OF MISSOURI has issued a preliminary program for its 45th annual session to be held at St. Joseph, Mo., May 20-22, 1902. A number of interest-



ing papers are announced which should inspire a very good attendance.

THE PALISADE MANUFACTURING COMPANY has issued a Syllabus of Bacteriology, which is gotten up with a high degree of care both as to the methods and illustration. While intended as an advertisement it deserves this considerate notice. The plates illustrate most of the commoner bacilli and micro-organisms of the contagious and infectious diseases so far as they are known.

THE COMMITTEE ON PATHOLOGIC EXHIBIT, of the American Medical Association, are anxious to secure material for the coming session at Saratoga. It is also desired to secure exhibits of new apparatus, charts, etc. This exhibit has already become a permanent feature of the annual sessions of the American Medical Association and the committee is desirous of securing its list of exhibits as early as possible, and to this end asks those having desirable materials to communicate with any member of the committee. To contribute to the value of the work it is suggested that as far as possible each contributor select materials illustrative of one classification and by such specialization enhance the usefulness of the display. Those lending their materials may feel assured that good care will be given their exhibits while in the hands of the committee and due credit will be given in the published reports.

THE INTERNATIONAL JOURNAL OF SURGERY Company announce a work on Regional Minor Surgery, by Dr. Geo. G. Van Schaick. The work is to be thoroughly practical and profusely illustrated.

MISSISSIPPI STATE MEDICAL ASSOCIATION met at Jackson, April 16, 17, 18. The following officers were elected for the coming year: President, H. L. Sutherland; First Vice President, J. H. Roby; Second Vice President, J. T. Beeberry; Secretary, C. H. Trotter; Assistant Secretary, B. L. Cully; Corresponding Secretary, D. S. Humphreys; Treasurer, J. F. Hunter.

PERSONAL.—Dr. J. E. Siess has moved from Lincecum to Winnfield, La.

DR. J. J. KINYOUN, some time in the Marine Hospital Service, has resigned to accept a position with the H. K. Mulford Company in their Biological Laboratories. Messrs. Mulford Company are to be congratulated upon securing so able a man as Dr. Kinyoun, who has identified himself prominently with the experimental work of the Marine Hospital Service in Washington, San Francisco and elsewhere. Dr. Kinyoun, himself, deserves this recognition of his demonstrated ability.

THE GEORGIA PASTEUR INSTITUTE at an annual meeting at Atlanta, April 1, related a total of 39 cases treated from the opening of the Institution to date. The successful results in these cases promise a continued usefulness for this Institution.

THE MEDICAL SOCIETY OF THE MISSOURI VALLEY held its semi-annual meeting at Lincoln, on March 20, with a large and representative attendance, Dr. Richard C. Moore, of Omaha, presiding. The next annual meeting will be held in Sioux City, Iowa, September 18, 1902.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.—The Chairman of the Committee of Arrangements for the Twenty-eighth Annual Meeting of the Mississippi Valley Medical Association, Dr. A. H. Cordier, has announced the dates of the next meeting in Kansas City, Mo., as October 15, 16, 17, 1902.

The President, Dr. S. P. Collings, of Hot Springs, Ark., has announced the orators for the meeting, Dr. C. B. Parker, of Cleveland, Ohio, to deliver the address in Surgery, and Dr. Hugh T. Patrick, of Chicago, the address in Medicine, selections which will meet with the approval of every physician in the Mississippi Valley.

A cordial invitation is extended every physician in the United States, but especially of the Valley, to attend this meeting and take part in its proceedings. Titles of papers should be sent the Secretary, Dr. Henry Enos Tuley, 111 W. Kentucky street, Louisville, Ky., at as early a date as possible to obtain a favorable place on the program.

## Book Reviews and Notices.

*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

*Saunders' Medical Hand Atlases—Atlas and Epitome of Labor and Operative Obstetrics.* By DR. O. SHAFFER, of Heidelberg. From the Fifth Revised German Edition. Edited by J. CLIFTON EDGAR, M. D. W. B. Saunders & Co., Philadelphia and London, 1901.

This book is a very valuable guide in surgical obstetrics. The different operations from the simplest to the most complicated are illustrated with a clearness rarely seen, with just enough text attached to assist the student along in understanding his subject. He who has worried himself trying to comprehend certain obstetric operations as described in his text-books will here find a friend indeed.

From an artistic point of view this volume must be considered a masterpiece.

MICHINARD.

*Anatomical Atlas of Obstetrics with Special Reference to Diagnosis and Treatment.* By Dr. OSKAR SHAEFFER, of University of Heidelberg, authorized translation from the German, with 122 figures on 56 lithographic plates and 38 other illustrations. W. B. Saunders & Co., Philadelphia and London, 1901.

This work is more in the nature of a short text-book on obstetrics than of an atlas. The various conditions of obstetrics are discussed to a fair extent, and finely executed illustrations and diagrams assist the text. To be appreciated this book should be studied in conjunction with its companion, the Atlas and Epitome of Labor and Operative Obstetrics.

MICHINARD.

*Photographic Atlas of Diseases of the Skin.* By GEO. HENRY FOX, A. M. M. D. Parts vii and viii. J. B. Lippincott Company, Philadelphia and London, 1901.

These parts of Dr. Fox's atlas are admirably illustrated with plates on Herpes, Ichthyosis, Lupus, Tubercular Syphilis and Keloid, Chloasma, Psoriasis, Lichen Planus, etc. As each section of his work appears we feel that it more and more fills a long-felt want.

DYER.

*Thornton's Dose-Book and Manual of Prescription Writing;* with a list of the Official Drugs and Preparations, and the more important Newer Remedies. By E. I. THORNTON, M. D. Octavo, 362 pages, illustrated. W. B. SAUNDERS & Co., Philadelphia and London, 1902.

This handy, well-bound volume is one of the best of its class. While intended more for the undergraduate and beginner in practice it has

much to commend it to the busy practitioner. The writer is particularly successful in his explanations and illustrations of the metric system, and the chapter on incompatibilities, therapeutic and chemical, is well worth careful study. Many references are introduced regarding the newer sera, organic extracts and synthetic compounds, and a valuable appendix dealing with synonyms and poisons and their antidotes.

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*The Medical News Pocket Formulary for 1902.* By E. IRVIN THORNTON, M. D. Fourth edition, revised. Lea Brothers and Co., Philadelphia and New York.

A carefully edited pocket formulary in which the editor has introduced such of the newer remedies as have been found by practical experience to be valuable. Many of the older drugs appear in new combinations which have been found to possess marked therapeutic efficacy in particular conditions.

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*Operative and Inoperative Tumors of the Urinary Bladder,* by E. HARRY FENWICK, F. R. C. S. J. & A. Churchill, London, and P. Blakiston's Son & Co., Philadelphia, 1901.

In a book of a little over one hundred pages, Fenwick gives a brief *exposé* of his experience with tumors of the bladder during fifteen years. He is a warm advocate of the cystoscope as a means of prognosis as well as diagnosis and expounds good rules to observe in the use of the instrument. The work is clinical in character, interesting mainly to surgeons who give special attention to urinary troubles, and is full of valuable advice. The illustrations are thirty-nine in number and clear.

C. C.

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*The Students' Manual of Venereal Diseases,* by F. R. STURGIS, M. D. Seventh edition. P. Blakiston's Son & Co., Philadelphia, 1901.

It is what the title implies, useful to students when studying venereal diseases. This edition has been revised and in part rewritten, such portions as treat of chancroid and syphilis by the author himself, those on gonorrhœa by Dr. F. Cabot, Jr. It is in twelve chapters: two on chancroid, seven on syphilis, and three on gonorrhœa.

C. C.

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*Urinary Diagnosis and Treatment,* by J. W. WAINWRIGHT, M. D. G. R. Englehard & Co., Chicago.

In addition to an explanation of usual methods of urinary examination, this little volume includes a discussion of the significance of the findings and their application to treatment. A useful work of reference.

C. C.

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*Atlas of Syphilis and the Venereal Diseases,* by DR. FRANZ MRACEK, edited by L. BOLTON BANGS, M. D. W. B. Saunders, Philadelphia.

Composed of seventy-one colored plates with descriptive text, there are in addition about a hundred pages devoted to the treatment of syphilis.

The plates are well executed, beautifully colored, and are reproduced from actual specimens, hence are practical as well as artistic. They give to this work its chief value as a manual for the use of the practitioner.

C. C.

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*Venereal Diseases*, by JAMES R. HAYDEN, M. D. Lea Bros. & Co., Philadelphia and New York.

This is a third and revised edition. We have already twice noticed this work, the repeated publication of which sufficiently testifies to its popularity. It is one of the best of the manuals on this subject, which has been brought up to date. New sections on Vegetations and Herpes progeneralis have been added as well as some illustrations. Students must not be deceived by the term "pocket text-book" attached to it. It consists of 300 pages and is complete. It would require to hold it a larger pocket than students or practitioners ever need. We hope to greet further editions at short intervals.

C. C.

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*Kirkes' Handbook of Physiology*. By W. D. HALLIBURTON, M. D., F. R. S. Seventeenth edition, with 681 illustrations. P. Blakiston's Son & Co., Philadelphia, 1901.

The arrangement of this text bears evidence of a matured plan and it succeeds in presenting the subject of physiology in not only an instructive but also in an interesting way. Of particular note is the method of illustrating employed. The book is enriched with drawings and plates showing histologic structure, a point so often overlooked in texts. The style is dissertative, but not colored too much with the author's manner to affect its value as a text book. Throughout the work are examples of applied physiology in diseased conditions, a striking method of emphasizing the appreciation of an obscure function, as for instance those of the nervous system often prove to be.

Among the many recent publications on the subject of physiology this one must take its rank with the best.

DYER.

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*Saunders' Question Compend. Essentials of Physiology*. By SIDNEY P. BUDGETT, M. D. W. B. Saunders & Company, Philadelphia and London, 1901.

This little book seems to have been prepared for a special set of students who think of physiology along the same lines as the author and not for the usual student of so vast a subject as physiology itself. What there is reflects a careful preparation, but it appears to us that the text is meagre in comprehensiveness, no matter how excellent its style.

DYER.

*A Laboratory Handbook of Physiologic Chemistry and Urine-Examination.*  
By CHARLES G. L. WOLF, M. D. W. B. Saunders & Co., Philadelphia and London, 1901.

Methods of easy application in the examination of the various excretions and secretions are here related. Of particular notice is the excellent table of prominent characteristics of various diseases as expressed in the urine. Wherever technic is referred to, the author makes himself quite clear in this detail.

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DYER.

*Syphilis, a Symposium.* Contributed by seventeen distinguished authorities. E. B. Treat & Co., New York, 1902.

In about 120 pages there are presented short essays by different medical writers, selected for their relation to syphilography, on the different questions commonly arising with reference to the etiology, diagnosis, history and treatment of the disease syphilis.

A careful perusal of the book does not seem to us to have shown any information not carried in the usual text-book, and except as reflecting the opinions of certain eminent syphilologists the book has attained little purpose.

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DYER.

*Morphinism and Narcomanias from Other Drugs.* By T. D. CROTHERS, M. D. W. B. Saunders & Co., Philadelphia and London, 1902.

The medical profession has been waiting for the sort of exposition contained in the pages of this work. It offers a large amount of suggestion in the method of studying these cases which come under the observation of the practitioner of medicine with more and more frequency in the mad stress of modern civilization. Dr. Crothers has presented an admirable discursive story of the drug habit in its phases of development, course and sequellæ. He has related the story of opium and its banefulness and has found the way of overcoming its harms. Stress is laid with due emphasis upon the practice among physicians of administering this class of drugs without due reflection and of the lack of judgment in their personal use of such poisons.

An excellent chapter appears on the medico-legal aspects of drug habitues and another on the treatment of these cases.

Besides opium and its derivatives, the author discusses cocain, chloral, ether, chloroform, cologne, Jamaica ginger, arsenic and some of the extraordinary habits to which neuropathics, or psychopathics are addicted, Among this class of narcotic poisons producing nerve disturbances the author classes coffee, tea and tobacco and inveighs against the habit of each, indicating his belief in the ultimate effect upon the nervous system. His deductions are logical and where in his judgment needed are backed by additional authorities.

Altogether this work is an addition of note to the literature of the cognated subjects, and as such must and should find place in the working library of the physician who is anxious to keep in the line of practice demanded to-day.

DYER.

*A Practical Manual for Insanity.* By DANIEL R. BROWER, A. M., M. D., LL. D., and HENRY M. BANNISTER, A. M., M. D. W. B. Saunders & Co., Philadelphia and London, 1902.

The borderland of the disordered mind is always as fascinating as it is fearsome, and because of the awe which the loss of balance in the human brain incites, most medical men dread even to think about insanity let alone exercise direction in such matters. This class of conditions are usually relegated to the scope of the special student and to the alienist who deals in the abstruseness of this field.

The latter day, however, has seen much advance along the lines of study directed at insanity, and since Savage wrote his brochure text, in so admirable a way for the general medical reader, many volumes have appeared which have hardly helped as much as his, because of their technic handling.

The law administers the insane, and this has relieved the plain every doctor of both thought and of concern in such patients. But again we urge that the borderland is so ill defined that the step from genius to crime is short and the relation of psychologic states to states of inco-ordination is close enough for every medical man to take advantage of a text offered when it is adequate to his needs and not above his own mentality.

"Insanity is a more or less permanent disease or derangement of the brain, producing disordered action of the mind in such a way as to put the subject in a condition varying from his normal self, and out of relation with his environment in such a way as to render him dangerous or inconvenient to himself or others."

Such is the definition in the text before us, from which is drawn enough material to fill a volume of over 400 pages.

Civilization, heredity, moral causes, shock, domestic troubles, religious excitement, traumatism, drugs, are among the factors related as favoring the development of insanity. The text carries you in secure logical sequence into a discussion of the microscopic changes which are responsible for insanity, and, while this field is yet new, speculation is laid aside for accepted opinions.

The development of the types of insanity in their degrees and intensity is brought out clearly and the differentiations are excellent. Of especial note are the chapters on Moral and on Confusional Insanity.

The work concludes with a presentation of the method of examining patients and with a chapter on the ethics of insanity. This last is one of the best chapters in the book from our standpoint, as it takes up the relation of the physician to the insane patient. His advice, secrecy, judgment as to disposition of the case, and as to the care in making a diagnosis, the concluding paragraph is also to the point: "The public needs educating as to the true nature of some of the dangerous insanities that are too much at large, and which are only called to its attention in the domestic or public tragedies that are from time to time occurring."

This very point taken makes it excusable in us to remark upon the absence in this text of any reference to perversion, which is, perhaps, in itself, a frequent cause for the tragedies referred to, and which is almost

always left out of consideration in any excepting works out of the reach of the general medical reader.

Altogether, this work is comprehensive in its presentation of the study of insanity in its various phases, and is so written that it will prove of value and of instruction to the practitioner who is desirous of being informed on this neglected subject.

DYER.

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PUBLICATIONS RECEIVED.

*Atlas and Epitome of Operative Surgery*, by Dr. Otto Zuckeraudl. Edited by J. Chalmers DaCosta, M. D.—W. B. Saunders & Co., Philadelphia and London, 1902.

*Report of Vital Statistics of Havana and Guanabacoa*, February, 1902.

*Diseases of Women: A Manual of Gynecology*, by F. H. Davenport, M. D.—Lea Brothers & Co., Philadelphia and New York, 1902.

*A Manual of the Diagnosis and Treatment of the Diseases of the Eye*, by Edward Jackson, M. D.—W. B. Saunders & Co., Philadelphia, 1900.

*Diseases of the Intestines*, by John C. Hemmeter, M. D.—P. Blakiston's Son & Co., Philadelphia, 1902.

*Report of the State Board of Health of Pennsylvania, Vols. I and II*.—William Stanley Ray, Philadelphia, 1901.

*Progressive Medicine*, Edited by Hobart Amory Hare, M. D., assisted by H. R. M. Landis, M. D.—Vol. 1. Lea Bros. & Co., Philadelphia and New York, 1902.

*A Handbook of Appendicitis*, by A. J. Ochsner, M. D.—G. P. Engelhard & Co., Chicago, 1902.

*Drug Habits and Their Treatment*, by T. D. Crothers, M. D. G. P. Engelhard & Co., Chicago, 1902.

*The International Medical Annual*.—E. B. Treat & Co., New York and Chicago, 1902.

*Genito-Urinary Diseases and Syphilis*, by Henry H. Morton, M. D.—F. A. Davis Company, Philadelphia, 1902.

*Manual of Childbed Nursing with Notes on Infant Feeding*, by Charles Jewett, M. D.—E. B. Treat & Co., New York, 1902.

*The United States Army General Hospital, Presidio, Cal., during the years of 1900 and 1901*, Lieut. Col. Alfred C. Girard.

*An Ephemeris of Materia Medica*, January, 1902, by E. H. Squibb, M. D.



*Monthly Report of the Board of Health for the Philippine Islands*, January, 1902.

*The Practical Medicine Series of Year Books*, edited by Gustavus P. Head, M. D. *Volume IV, Gynecology*, edited by Emilius C. Dudley, M. D.—The Year Book Publishers, Chicago, 1902.

*The Fifty-third Annual Report of the Board of the Central Indiana Hospital for Insane*, 1901.

*A Practical Manual of Insanity*, by Daniel R. Brower, M. D.—W. B. Saunders & Co., Philadelphia and London, 1902.

*Morphinism and Narcomania*, by T. D. Crothers, M. D.—W. B. Saunders & Co., Philadelphia and London, 1902.

*Report of the New York State Hospital for Crippled and Deformed Children*, 1901.

*Atlas and Epitome of Otology*, by Gustav Bruhl, M. D., and Professor Dr. A. Politzer. Edited by S. Macuen Smith, M. D.—W. B. Saunders & Co., Philadelphia and London, 1902.

#### REPRINTS.

*Appendicitis, a Symposium by the Guyahoga County Medical Society*, 1900.

*The Therapeutics of Cutaneous Diseases*, by Albert E. Carrier, M. D.

*Treatment of Vessels from Yellow Fever Ports—On the Transmission of Yellow Fever by Vessels and Its Bearing Upon Quarantine Regulations*, by Edmond Souchon, M. D.

*The Transmission and Prevention of Yellow Fever*, by Lieut. Col. V. Havard.

*Prevention of Small Pox*, Board of Health of the State of New Jersey.

*On the Decadence of the American Race*, by John W. Kyger, M. D.

*Optic Neuritis in the Young, with Report of Five Cases*, by William Cheatham, M. D.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)  
FOR MARCH, 1902.

CAUSE.	White.	Colored.	Total.
Fever, Malarial (unclassified).....	.....	.....	.....
“ “ Intermittent.....	2	4	6
“ “ Remittent.....	.....	.....	.....
“ “ Congestive.....	.....	.....	.....
“ “ Typho.....	.....	.....	.....
“ Scarlet.....	2	.....	2
“ Typhoid or Enteric.....	5	5	10
“ Puerperal Diseases.....	6	5	11
Bronchitis.....	7	6	13
Diphtheria and Croup.....	3	1	4
Influenza.....	18	4	22
Broncho-Pneumonia.....	4	.....	4
Whooping Cough.....	.....	1	1
Pneumonia.....	49	35	84
Cancer.....	9	8	17
Tuberculosis.....	46	32	78
Diarrhea (Enteritis).....	8	11	19
Dysentery.....	5	.....	5
Gastro-Enteritis.....	.....	.....	.....
Other Diseases of the Liver.....	6	4	10
Hepatic Cirrhosis.....	8	2	10
Peritonitis.....	3	1	4
Debility, General.....	.....	.....	.....
“ Senile.....	17	7	24
“ Infantile.....	10	1	11
Bright's Disease (Nephritis).....	27	18	45
Uremia.....	.....	.....	.....
Heart, Diseases of.....	29	21	50
Apoplexy.....	.....	.....	.....
Congestion of Brain }.....	21	5	26
Meningitis.....	5	2	7
Tetanus, Idiopathic.....	.....	.....	.....
“ Traumatic.....	.....	.....	.....
Trismus Nascentium.....	1	4	5
Injuries.....	23	12	35
Suicide.....	2	.....	2
All Other Causes.....	50	8	58
TOTAL.....	366	197	563

Still-born Children—White, 19; colored, 6; total, 25.

Population of City (estimated)—White, 223,500; colored, 81,500; total, 305,000.

Death Rate per 1000 per annum for Month—White, 19.65; colored, 29.00; total, 22.11.

## METEOROLOGIC SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure..... 63.  
Mean temperature..... 29.99  
Total precipitation..... 4.07 inches  
Prevailing direction of wind, southwest.

# NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

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## Original Articles.

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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.]

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### THE RATIONAL TREATMENT OF TYPHOID FEVER. AN ADDRESS DELIVERED BY REQUEST TO THE CHARITY HOSPITAL ALUMNI ASSOCIATION, APRIL 29, 1902.

BY LUCIEN F. SALOMON, M. D., OF NEW ORLEANS, LA.

I have been requested by the President of the Association to make a few remarks or give you a talk upon the treatment of typhoid fever. Perhaps I can better secure your attention by a few practical suggestions than by occupying your time and patience with a lengthy disquisition upon the etiology, pathology, literature, etc., of the disease, for I take it that upon these points you are sufficiently familiar.

Before entering upon a discussion of the main topic, it may be interesting to you to know how the disease has increased in New Orleans in the past twenty years, as shown by the following tabulated statement:

From 1880 to 1889 the total number of deaths in New Orleans from typhoid fever and so-called typho-malarial fever was almost uniformly about seventy-five annually. Since that time the records show the following number of deaths from the disease.

Year.	Typhoid Fever.	Typho-Malarial Fever.	Total
1890 .....	50	60	110
1891 .....	59	64	123
1892 .....	51	74	125
1893 .....	39	38	77
1894 .....	76	72	148
1895 .....	113	58	171
1896 .....	90	44	134
1897 .....	141	49	190
1898 .....	184	49	233
1899 .....	155	49	204
1900 .....	114	29	143
1901 .....	141	....	141
	1,213	586	1,799

or a total in twelve years of nearly eighteen hundred deaths from a disease which I believe to be curable.

Why the disease should have increased as shown by the foregoing figures is foreign to the specific aspect of the subject under consideration, and, therefore, I shall pass it over without an opinion, leaving that problem for our health authorities to solve and remedy.

Prior to 1880 typhoid fever was almost unknown here, and while an occasional case would come under the care of the physician, so little was known of the disease, from personal experience, and cases so rare comparatively, that no particular attention was given to it. Even cases of so-called continued malarial fever (now acknowledged to be typhoid) were of infrequent occurrence. Of late years, however, so many cases are coming under the notice of our physicians, and the disease is consequently more easily recognized or diagnosed, both by its clinical aspects and the microscope that we must needs seek that method of treatment which gives the best results.

There have been and still are several methods which may be styled expectant or symptomatic, that is, symptoms are watched for, and as they arise are attempted to be met and subdued without regard to the causative condition which may give rise to each. In other words, effort is directed solely to assisting the patient to resist the disease instead of adopting the more rational plan of removing the cause and thereby curing the disease, or curing the morbid condition which gives rise to the individual symptoms or groups of symptoms. And this leads to the title of the subject of my talk to-day, which is the natural corollary of what I have just said.

THE RATIONAL TREATMENT OF TYPHOID FEVER.—You may ask why I specify the treatment as “rational.” Because it is founded upon the reasonable proposition that inasmuch as the only rational method of overcoming an effect is to remove the cause, the only rational method of treating a disease is to direct our treatment to the pathologic condition and not waste time or effort in attempting to treat symptoms, which are but the outward manifestation of the cause which gives rise to them. The main object in the treatment of all pathologic conditions is to get rid of the cause. If you have a case of malarial fever under treatment, you do not direct your attention to the removal of the fever by cold baths or the use of antipyretics. You will use quinia, and give it because it is a well known and admitted fact that quinin will destroy the malarial plasmodium; and in thus getting rid of the cause of malarial fever, you thereby cure your patient of the disease. In a case of septic fever, you would not attempt to relieve the patient of the fever by directing your attention to that symptom alone, but you would treat the wound which is the cause of the trouble, relieving the patient thereby of his septic condition and in that way cure his fever. It is unnecessary to draw further parallels.

The condition in typhoid fever might be compared to a double culmination of general sepsis or toxemia and a local traumatism in the intestinal canal; that is, the always present inflammation of Peyer’s patches.

Now in seeking for an agent to cure the disease under consideration, we must select one which acts practically upon existing conditions, just as in other conditions the treatment is based upon the known action of remedial agents. It is my firm conviction based upon experience and observation in 27 successive cases that we possess this agent in the arsenite of copper.

As long ago as 1838 Dr. John Aulde, of Philadelphia, called attention to the efficacy of this drug in a number of varied conditions. Singular to say, the results obtained by Dr. Aulde and published by him have not received the general attention which they deserve.

Some years ago I accidentally came upon an article, in the course of my reading, by Dr. Aulde on this subject. I was struck with the appropriateness from a rational standpoint of the use

of arsenite of copper in typhoid fever, and determined to try its efficacy.

The action of the drug is two-fold. In the first place, it is a well known fact that arsenic is one of the most powerful, if not the most powerful germicide of all known chemicals, and it is still more powerful as a germicide and antiseptic when combined with copper. When the drug is administered to a person affected with typhoid fever, it has a direct influence upon and destroys the toxins generated by the typhoid bacillus. In addition to this general systemic effect, it has a direct local action upon the inflamed acuminated glands, because of the fact that when taken into the system, being a foreign substance or poison in the blood, it is eliminated, and in its process of elimination the intestinal tract becomes the agent for this purpose. It is a well known fact that different drugs have each their point of selection through particular organs for being eliminated from the human economy. For instance, if you give carbonate of ammonia, you give it because you know that carbonate of ammonia is eliminated through the lungs, and thereby has its local effect upon the morbid condition. Other drugs are eliminated through the skin, through the kidneys and so on, each seeking its own particular organ of elimination. The arsenite of copper, while being taken through the intestinal wall, for the purpose of being thrown off, has its direct effect upon the local diseased condition.

The charts which I present to you for inspection will show the beneficial effects of the arsenite of copper on the disease under consideration. I do not give detailed histories of individual cases, because in all of my cases the histories are uneventful, being but a simple record of improvement and gradual decline of temperature, but shall content myself and save your time by giving a general description of the course of the disease under the treatment described. My experience has been in all cases, with rare exception, that within seventy-two hours (and very rarely is a longer period required after the administration of the drug) its effects begin to be shown. No matter how high the temperature may be at the beginning, it is observed that within the time specified, there will be a reduction. The temperature will drop two or three degrees and will continue for a period varying from eight to ten days following the

regular course as observed in typhoid fever, but after a period varying from three to eight days from the beginning of the administration of the drug, there will begin a regular decline, and so regular is this decline that one is able to predict or foretell with almost absolute confidence the day upon which the patient will be free of fever. You will observe that the final decline begins with the evening rise. You will find the evening temperature the same as the morning temperature. The following day the morning temperature will be one-half or one degree lower than the evening before, and the evening temperature of that day the same as the morning, and so it will continue dropping regularly as in the beginning so that you can calculate just how many days it will take for the temperature to reach the normal point. In this connection it may be well to direct your attention to the fact that with this rapid decline of fever the temperature will frequently become subnormal, dropping to 98 or 97½. In such event you will find caffeine the ideal stimulant, and under its influence the thermometer will in a short time show a normal temperature.

Aulde says in speaking of the effects of arsenite of copper:

“It will produce a favorable change in typhoid fever, given at any period, with the exception, of course, of complications such as intestinal perforation and hypostatic pneumonia.

“Its continued use in small doses enables us to maintain a moderately low temperature, a good pulse rate, comparative freedom from abdominal pain and tympanites, and lessens materially the number of stools, while it greatly improves their character and consistency.

“Typhoid fever can be conducted to a successful termination by the continued employment of this remedy as the principal treatment.

“Complications rarely occur.”

Even when ulceration exists, “the detergent properties of copper arsenite must be something remarkable, as scabs have been observed in the feces, supposed to have been torn from the intestinal ulcers without a single blood streak showing in the stools.”

This has been my experience in all cases in which I have used it. In no single instance have I observed any complication whatever.

Now as to the administration of the drug under consideration.

This is a matter deserving of careful attention and one which at first gave me much concern. The tablets or tablet triturates usually found in stock in the drug stores are not always to be depended upon for reliability and certainty in effect; at least such was my experience. Therefore, I determined to use the pure salt, and find that I invariably get good results by using Merck's chemically pure arsenite of copper, suspended in distilled water. My directions to the druggist are that it shall be well triturated in a mortar before being mixed. I generally prescribe one-half grain to six ounces of distilled water, which gives a 1-96-grain to the teaspoonful dose. This is given every three hours.

The mixture is to be well shaken before given because the salt will be found in the form of a flocculent deposit, which, however, on shaking remains in suspension long enough to be susceptible of equal division.

Of course the administration of arsenite of copper does not constitute the sole treatment of disease. It is only the agent which removes the cause, and other details require as much if not more care than the simple administration of the drug.

In other words, the proper management of each individual case is as necessary as the routine giving of medicine, and will do much towards securing a rapid and favorable termination of the case.

Daily flushing of the colon is essential for the removal of toxins and prevention of auto-intoxication from poisonous material held in the bowel.

By giving attention to this important factor in treatment it will be observed that there is no delirium, and a marked absence of that hebetude and mental dullness which is no unusual concomitant of typhoid fever. The intellect remains clear and the patient's intelligence is unimpaired. A word now about the febrile manifestation. Do not worry about temperature. Under existing methods of treating the disease, or to put it more forcibly, the patient, the main object appears to be the reduction of high temperature without regard, or sufficient effort being directed, to its causative factor. A temperature varying between 103 and 104 degrees for three or four days should cause no alarm, and will do no particular harm to the patient, but should it be considered advisable to attempt a reduction, by all means



avoid the use of the so-called antipyretics. In the light of our present day knowledge of the various synthetic preparations now flooding the pharmacists' shelves and a proper appreciation of their mode of action, they need only to be mentioned to be condemned, if only because of their depressing effect upon the heart and the whole sympathetic nervous system.

The object sought can better be obtained, if at all necessary, by the use of the wet pack and the ice cap applied to the head; or if the temperature is not too high, careful sponging under the bed clothes with a mixture of water and bay rum at a temperature of about 100 deg. will keep the patient comfortable and have a soothing, restful effect.

I have never used and have always condemned the tub bath. In addition to the distress and the repeated moving of the patient, who almost invariably anticipates with horror and fear the proceeding, I can best give the most potent reason for its condemnation by quoting from an article by Lester L. Roos, M. D., of New York, in the *Philadelphia Medical Journal* of March 1, 1902:

“It has been demonstrated by autopsy by some of our most prominent pathologists, that at more than 90 per cent. of the necropsies performed in cases of this character, there have been found definite pulmonary lesions showing conclusively that the typhoid alone did not cause death, but that the presence of pneumonia has really been the prime cause of death by its action on the heart.

“Why do we have pneumonia so frequently with our typhoid cases, not only in private practice, but in the best equipped hospitals?

“In both private practice and in hospitals where do we find a room or ward in which there is no draught? In my investigation of the matter, I have not been able to find such a room or ward. A patient is prepared for a tub, and has up to that time been lying in a bed well covered and protected. He is suddenly deprived of these coverings and allowed to be exposed to these draughts, sometimes only for a few seconds, but long enough, however, for the draught to accomplish its injurious effect.”

Also by the use of the pack, “we do away with the sudden shock and rough handling of the tub or sponge bath.”

“Furthermore, we have hemorrhage and perforation to consider. In the largest number of cases the fatal hemorrhage and perforation have occurred within a short time after the application of the tub or sponge baths. Is it not the most natural thing in the world that an abdominal cavity full of intestines whose walls have been subjected to the ravages of the bacillus typhosus should give way after a rubbing and shaking of the body such as we see given every day?

“The harsh treatment ought to be relegated to the past, and should be given up by advanced practitioners of medicine.”

If at any time the heart's action shows signs of weakness, the condition can always be easily combated by the use of a heart stimulant. The question naturally suggests itself, what is the best heart stimulant? I say unhesitatingly, digitalis. Strychnin, so often used for this purpose, I believe more often harmful than beneficial. You have to deal with a heart weakened by the existing temperature. The use of strychnin, under these circumstances, is like to the whipping of a jaded horse. If you have a horse tired from too rapid action or carrying a heavy load, you surely would not apply the whip. Rather would you have him go slowly, rest and get a breathing spell between his efforts. Digitalis has this effect upon a tired heart. Besides being a tonic to the muscles of the heart, it slows its action, gives it some rest between beats and assists it to regain its force.

I do not condemn the use of strychnin altogether, however. In small doses you will find it an excellent systemic tonic, aiding your patient in maintaining his strength until the disease has been controlled.

As to the administration of digitalis, do not expect much from the doses usually given or as laid down in the text-books. My experience with the drug is that to get its beneficial effects enough must be given. Small doses are only a waste of material and will prove a disappointment. I do not hesitate to give from twenty to forty minims of a reliable tincture, or one twenty-fifth or even larger doses of digitalin, repeated until a decided effect is obtained. Given in this way and its effects carefully watched, it will never be productive of harm.

One of the most, if not the most important desideratum in the treatment of typhoid fever is the securing of absolute intes-

tinal rest. Above all things avoid giving work to do to the small intestines; which subject leads us to the consideration of the diet of the patient. Even milk and broth will often disagree, and to be certain that absolute intestinal rest is secured while my patient is at the same time being nourished, I give nothing in the way of nutriment but liquid peptonoids. I find that a half-ounce or one ounce given every two hours will sufficiently feed and sustain the patient until such time as other food may be taken. Under no circumstances do I allow any other food as long as there is the least elevation of temperature.

I may add by the way of caution, parenthetically, that solid food should never be allowed until ten days or two weeks after the fever has subsided. It will hardly be necessary to say that the imbibition of large quantities of water, preferably seltzer, and the allowance of cracked ice freely will be of much benefit. The necessity for the close and rigid adherence to liquid diet will be appreciated when it is considered that any detritus of food or particles of undigested food passing over and coming in contact with the inflamed portions of the intestines will irritate and prevent their healing, just as the rubbing of any inflamed or denuded surface would do in any surgical case under your observation.

Should delirium, restlessness or insomnia occur, this condition is best met with opium given in sufficient dose to have a decided effect. I have found that in such cases one good dose of Battley's sedative would produce a long sleep from which the patient would awake refreshed and rational.

Before concluding, it is but just to Dr. Aulde, from whose writings on arsenite of copper I was led to use that drug in the treatment of typhoid fever, to mention that he strongly advocates the use of "nuclein solution" in conjunction with the arsenite, and claims equally as brilliant results from its administration.

Whether there be any positive virtue in animal extracts may be open to doubt; but be that as it may, I have found the copper arsenite to do the work equally as well alone as when used in conjunction therewith. In several cases I have used Aulde's nuclein solution and also proto-nuclein, but can not say that I have achieved any better results than with the arsenite alone.

And now, gentlemen, I have but added one more to your list

of perplexities in the treatment of typhoid fever, but when you will have compared the treatment as herein outlined with Liebermeister's treatment with its heroic doses of quinin and iced baths, the Brand treatment which consists only in treating the symptomatic fever, the Woodbridge treatment which is violently opposed to the cardinal principle of intestinal rest, I think you will agree with me that my treatment has at least the merit of being the most rational, as it has been the most eminently and universally successful in my hands.

Under its use I have yet to record a fatal case or a complicated case, or a case which lasted more than fourteen days, with one exception in which the fever lasted, though with very low temperature towards the last, for seventeen days.

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#### THE TREATMENT OF WOUNDS.\*

BY E. D. MARTIN, M. D., PROFESSOR ON MINOR AND CLINICAL SURGERY IN THE NEW ORLEANS POLYCLINIC; VISITING SURGEON TO CHARITY HOSPITAL, NEW ORLEANS.

Few or very few treat wounds as they should be treated. This fact is not due so much to ignorance on the subject of asepsis—for what physician of to-day does not believe in it?—but to a lack of experience.

It is only by the closest study in our clinics and the comparison between the proper and improper methods that the truth is forcibly brought to light. In 1889-90, it was my good fortune, while an interne at the Charity Hospital, to be assigned for duty in the surgical ward when the first work under the new régime of aseptic surgery was done. The surgeon (Dr. F. W. Parham) in charge had just returned from a trip to Europe, where his time had been spent studying the Listerian methods. He returned, not to theorize, but to put into actual practice that which he knew gave the best results.

The start was modest—an Arnold sterilizer did the work for the ward. With this humble beginning was laid the foundation for aseptic surgery in the Charity Hospital.

So convincing was the proof of the good work accomplished that I had little difficulty a few months later in persuading the house surgeon to allow me to have a sterilizer made for the pay

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\*Read before the Orleans Parish Medical Society, April 12, 1902.

ward to which I had been assigned. Until that time any interne would have made a good pipeman at a fire, for all were expert with the hose. Wounds healed by granulation and pus formed a free coating for the surface. It was the custom to flush the surface of the wound with some antiseptic solution, usually prepared by a convalescent patient with water from the spigot, poured into a dust-covered receptacle; this was pumped on the wound until the granulations were freely exposed. The surface was then dressed with lint fibres picked by the convalescent patients. A liberal supply of the same material was used to dress the wound and a bandage applied. With such results, as were to be expected under the circumstances, and with my first training, you can well imagine my disgust when I was asked to wash my hands before dressing a wound and being forced to sterilize dressings before applying them. I confess my interest in the work was rather doubtful, but my conversion was unexpected and complete. In the fall of 1889 a patient presented himself in the ward with a large lipoma over the left clavicle. This was to be removed under the most aseptic precautions. The dressings, cut from cheese cloth, the catgut prepared from some of Werlein's best fiddle strings, instruments, etc., were all asepticized in that little sterilizer. The patient was scrubbed until the epidermis was almost removed. All being in readiness, our hands were prepared and the operation performed. The dressing was applied, and notwithstanding my protestations, was left *in situ* for a week. You may imagine my surprise and gratification to find when it was finally removed that the wound had healed primarily. From that time this miracle became an every day occurrence. It was not many months before the little Arnold sterilizer had served its purpose; the demands were too great for its capacity and it was superseded by larger and better instruments. To-day the aseptic methods in vogue should be so carefully observed in all hospitals and sanitariums and the principles involved so thoroughly taught that a paper on the modern methods of treating wounds ought to be superfluous. And yet there is not a surgeon who can not relate the grossest violations of the laws of asepsis by practitioners who should know better. In the pre-aseptic age assistants were of minor importance. This work was usually considered beneath the dignity of a

graduated physician and was usually done by students. To-day every surgeon has his corps of trained assistants upon whom he feels that he can rely for the strictest observance of asepsis.

It is not my purpose here to discuss the question of wound infection, but rather its prevention and to throw out such hints as I hope may prove of value to the general practitioner and possibly to some who practice surgery.

Paré had almost solved the question, when, having run out of oil to dress the wounds of the French soldiers, he discovered that those which had been simply dressed, did best; unfortunately he did not go far enough with his experiments. It is reported that wounds dressed with oil of puppies did well; may it not be due to the fact this was usually applied fresh and was sterile at the time, protecting the wound to some extent from infection? To Sir Joseph Lister, the credit for our modern method of treatment is due. It is through his teachings, confirmed by the experiments of Koch and Pasteur that we have to-day attained the high degree of success that is so manifest in every line of surgery. In the pre-aseptic age Naussbaum reports that 80 per cent. of the patients in his clinics were attacked by hospital gangrene, whereas erysipelas was the order of the day, and as late as 1880 one-third of all major amputations died. The death rate in compound fractures was from 40 per cent. to 70 per cent. Compare this with a report made several years ago by Dennis of 1000 cases, with a death rate of 1-7 of 1 per cent. and it seems almost incredible.

If we will bear in mind that danger of infection is always greater from contact than exposure; that air is not the breeding surface of minute organisms, but merely the conveyor—we can more readily appreciate the great importance of cleansing the surrounding surfaces of wounds and the absolute necessity of the sterilization of the hands and instruments. Whereas it is true that some wounds will suppurate more readily than others, owing to the physical condition of the patient and environments, yet it is the surgeon's duty to take every precaution in his power to prevent further infection.

That infection and disease are conveyed through contact is absolutely certain. Especially is this danger great in hospitals and large clinics, and in no place should a stricter regard be given to the question of asepsis. No clinic is properly equipped

without a sterilizer and at least two sets of instruments. One set should be sterilizing, while the other is in use. No surgeon's office is properly equipped unless it is furnished with a sterilizer. It may be a covered pan, provided it answers the purpose.

What then are the great essentials in the treatment of wounds? Absolute asepsis, and every means should be directed to that end.

What are the greatest sources of danger?

First, the skin itself and infection from the clothing and other foreign substances which come in contact with the wound; second, the hands of the operator; third, the instruments used in dressing the wound; fourth, the dressings.

The first step would be to free the wound absolutely from contact and then to prepare it for dressing. To do the latter thoroughly is not an easy matter. Experiments in this field of surgery have clearly proven that even in cleanly persons, the skin is swarming with bacilli, fungi and cocci. The condition of the skin, generally, does not favor bacteria, but these abound where moisture prevails, as under the nails, in the axilla, groin, etc. Mittman reports 78 species of bacteria of the skin; Preindlesberger, 32; Maggiora, 29 (Dennis' Surgery). Nor is it an easy matter to eradicate them from the surface. It is a recognized fact that mechanical appliances, that is, scrubbing and shaving, are not sufficient, but recourse must be had to chemical agents as well, such as the application of alcohol, bichloride, carbolic acid and other germicidal agents.

Let us turn our attention to the hands of the operator. This is a most exhaustive subject and it is not my purpose to discuss it here. Haegler has written a book on this important question. The experiments of Furbringer, Krönig, Blumberg and others (*Progressive Medicine*, June, 1901) are most interesting and prove both the necessity of thorough disinfection as well as the difficulty of accomplishing it. The hands should first be scrubbed with a nail brush for ten minutes, the subungual spaces carefully cleaned, then scrubbed for five minutes longer and further disinfected with alcohol, permanganate of potash and oxalic acid solution or with chloride of lime and carbonate of soda. Gloves offer even greater protection, both to surgeon and patient, but the disinfection of the hands should not be less thorough when these are used.

Instruments are best aseptized by scrubbing with soap and brush and boiling from five to twenty minutes in 1 per cent. solution of cooking soda, which will prevent rusting.

The dressings used in clinics are most reliable when recently sterilized. The goods put up by reliable firms do well in office practice where we can be more certain of our asepsis, but for large clinics, I believe, the best form of dressing is sterile gauze, which can be impregnated at the time it is used with such antiseptics as the operator may deem best.

In regard to the wound, its character, the best method of disinfection and the line of treatment, I would briefly suggest the following :

1. In incised wounds, when the edges are smooth and there has been no traumatism, the wound should be protected, as far as possible, by packing with sterile or antiseptic gauze. The skin soaped and scrubbed with a brush (preferably of vegetable fabric, as these are not so easily destroyed by sterilization), shaved and then washed off with a one to one thousand bichloride solution. The wound is filled with peroxide and scrubbed out with a piece of sterile gauze. If it is reasonably certain that all infection has been destroyed, the edges are brought in contact with sutures or sterile strips of plaster, or gauze held with collodion; if there is fear of infection, pack, or drain from the bottom.

In lacerated and contused wounds, after disinfecting, remove as much of the injured tissue as possible, with knife or scissors, as these shreds will slough and prevent primary union. Such wounds are best treated by packing or dressing until covered with granulated tissue. The edges can then be coaptated and union hastened. Infected wounds and wounds filled with necrotic tissue, should be thoroughly cleansed by scrubbing the area, with a brush, if necessary, and all dead tissue removed with curette, knife or scissors. Drainage should be thorough, preferably with antiseptic or sterile gauze. Very frequently scrubbing does not suffice to cleanse the surface and sloughing is so extensive that it is necessary to resort to soap poultices and immersion in hot water or the use of a hot drip. In aseptic cases, dressings may not be removed for a week, unless stained by secretions from the wound. This is always a signal for a change of dressing, as there is great danger of infection by



capillary attraction. In suppurating wounds, much will depend upon the extent of infection, the location of the wound, etc. To heal rapidly, wounds must have absolute rest; if, therefore, they are near the hands, fingers or joints, splints should be applied to immobilize the parts. Frequently wounds heal slowly. Such are usually covered with flabby pale granulations. These are best stimulated with nitrate of silver and not infrequently a coating of tincture of iodine will prove a valuable aid.

In conclusion, we might sum up the treatment of wounds as follows:

1st. Cleanse the hands by washing with soap (soap manufactured by process of boiling is the only soap free from germs) and scrubbing with brush for ten minutes; then cleanse sub-ungual spaces, scrub again for five minutes, wash or scrub in alcohol one minute, wash in permanganate and oxalic acid solution or solution of chlorine for five minutes. These solutions are not necessary for the ordinary handling of wounds and can be substituted by the use of alcohol and bichloride 1-1000, and afterwards rinsing in sterilized water.

2d. Prepare the skin by scrubbing with soap and brush, five minutes or more, cleanse with alcohol and wash off with bichloride 1 to 1000. Cleanse wound with peroxide and antiseptic solutions; dress according to character of wound.

3d. Instruments are best prepared by scrubbing with soap and water and sterilizing in a 1 per cent. solution of cooking soda for at least five minutes.

4th. Towels, dressings, etc., prepared for sterilizing for at least twenty or thirty minutes. Moist heat (steam) is best, as it is more penetrating. A large package of dressings will necessarily take longer than a small package.

A disregard for such or similar rules in the treatment of wounds may mean not only a staphylococcal or streptococcal infection, but inoculation with syphilitic or other virus, which is, as you all know, unfortunately too frequent among members of our profession. I believe, if it were possible, and it should be made so, to render all cases aseptic when they first made their appearance and keep them so afterwards, that our hospital clinics would be run at a greatly reduced cost. It is true it would entail more work on the surgeon at first, but it would lighten the labor in the end. If necessary, increase the corps

of assistants to three in each clinic, one to remove dressings and apply bandages, another to prepare the cases for dressing, and a third to put on the finishing touches and apply the dressings.

Let us hope that as the past decade has done so much for us, in our operative cases, that the next may see as great an improvement in the treatment of minor injuries. Let me beg you to join in the crusade against infection, and whenever and wherever you see the laws of asepsis violated raise your voice in opposition. If by calling this subject to your attention I have impressed upon your minds the great value of asepsis, not only while you are listening to me, but every time you dress a wound or see a patient prepared for operation, and if it will cause you to recall the dangers of infection by contact and the great truths which are being thundered out from every surgical amphitheatre, I shall be fully compensated for to-night's labor.

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THE ANNUAL REPORT OF 1902 TO EDWIN A. ALDERMAN, LL.D., PRESIDENT OF THE TULANE UNIVERSITY OF LOUISIANA; AT THE ANNUAL COMMENCEMENT OF THE MEDICAL DEPARTMENT, APRIL 30, 1902.

BY PROF. STANFORD E. CHAILLÉ, A. M., M. D., LL.D., DEAN.

*Mr. President*—Sense of duty prompted me to occupy so much more time at the last commencement than I desired, that my present report shall be as brief as may be consistent with its chief purpose, which is to record facts likely to contribute to the history of the Medical Department.

This year closes the sixty-eighth year's existence of our college and our graduates will number 3894, viz.: 3564 in medicine and 330 in pharmacy.

Experience has painfully taught me that one of the most frequent causes of bitter disappointment and disaster in all the practical affairs of life is the overestimate of receipts and the underestimate of expenses. Striving always to avoid this common cause of life's failure to gain happiness and success, very good reasons were given at our last commencement for fearing that fewer students would attend the present session, and, in truth, not more than 380 were expected. The result has been one of the

most gratifying failures, in my capacity as prophet, that I have experienced during the forty-four years of my official service. Instead of fewer students, 424 have attended, ten more than at the last session and only two less than the maximum number that ever were present, viz. : 426 in 1900.

The miscalculation was due chiefly to the following facts :

All students entering a medical college for the first time prior to January, 1899, were permitted to become candidates for graduation after three years attendance, and all thereafter only after four years attendance. Hence the last full class of three-year students was graduated in 1901; however, all such students were given permission to be graduated as late as 1903. The number of these students who did not avail themselves of their privilege to be graduated in 1901, but deferred their graduation until the present session, has proved much greater than was expected, hence the underestimate.

At the next session there will be fewer of these students of the three-year course and at the following session there will be none, since every graduate in 1904 must have attended four annual sessions. Thus far the number of students attending the four-year course is less than previously. For these reasons fewer students should be expected to attend the next two sessions. Not until the session of 1903-4 will the full effect of the increased requirement for graduation of from three to four annual sessions be experienced. Whether the inevitable losses will be compensated for, by the increasing reputation of our college, by the advancing prosperity of the Southwest and by the improving sanitary condition of New Orleans, is a question that must be left to the future to decide.

In the meantime new medical colleges will continue to be inaugurated in the Southwest, and these will probably become notable chiefly for deplorably increasing the present too ample supply of inefficient colleges; inefficient because of their lack, not only of hospital advantages—the greatest of all the essentials to prepare a student for the practice of medicine—but also of other educational resources; colleges notable for the insufficiency of their fees to defray the unavoidable expenses of efficient courses of instruction; colleges that owe the continuance of their existence to their personal solicitation, capture and retention of students by inadequate fees and inadequate require-

ments for admission and graduation. Such colleges constitute the greatest obstacle to the greater progress and prosperity of our college, the college in the South that charges the highest fees and supplies in return the greatest educational advantages. English and the very best American medical colleges, those that represent the investment of a million dollars and more have found it necessary to charge the student for every annual session \$200 in order to maintain their superior educational advantages and to insufficiently remunerate the highly skilled labor employed; and yet there are numerous American colleges, without endowment and wholly dependent on the fees of students, that profess to supply all needful advantages for one-half and even one-quarter of the amount found to be indispensable by the best colleges; and even these cheap rates are readily dispensed with, if thereby a reluctant student can be persuaded to add apparent strength to conceal real weakness. The evil results of such colleges are discouraging to the greater prosperity of the most deserving colleges and to the universal progress of medical education.

Most of the States now have medical examining boards as their agents to protect the public from *unqualified* physicians, why should these boards not be empowered to make such inspections of and to enforce such regulations upon all medical colleges as may be indispensable to provide the public with properly *qualified* practitioners of medicine? It is questionable whether even one-third of the 153 medical colleges in the United States possess the educational advantages requisite for the instruction of *qualified* physicians; and it is my firm conviction that both the public and the medical profession would be benefited if many colleges now existing were suppressed.

Although our students at this outnumber those at the last session, yet in 1901 there were 124 graduates, while there are only 53 this day—the least number since 1881, and fewer than will probably ever again occur. The cause is manifest; our last full class of three-year students was graduated in 1901, and our first full class of four-year students will not be graduated until 1903, so that the graduates of 1902 constitute an exceptional class, composed partly of students who gained one year of advanced standing, partly of students unable to complete at the last session the three annual sessions required, and partly

of students who wisely deferred their graduation in order to avail themselves of the great hospital advantages of New Orleans.

The present session is specially notable for excelling every one of its numerous predecessors in the greater number and the greater thoroughness of the examinations, and also in the greater number of courses. To teach sixteen different branches or specialties in medicine, not less than forty-three different courses have been given. There were seventeen courses of didactic lectures and nine laboratory courses in the college; and in the great Charity Hospital, with its 30,000 patients annually, there were five courses of lectures in its amphitheatre on selected cases of disease and injury, and twelve clinical courses at the bedside of the patients. More than one-half of the instruction has been strictly practical, either in the laboratories or in the presence of the diseased and injured, thus giving unquestionable proof that our college is one of the best in our country for the *practical* instruction essential for the education of qualified practitioners of medicine.

In conclusion of this report, the medical faculty is fully justified in claiming, with greatest gratification and confidence, that the present session has surpassed every one of its predecessors by the most numerous, efficient and satisfactory courses of instruction ever given; and it is the determination of the faculty that every succeeding session shall excel its immediate predecessors in educational advantages.

GRADUATES OF 1902.—Your commencement is the first one held in the Tulane Theatre, which is located on part of the ground occupied by the Medical Department during the forty-six years, 1847-1893. You will, therefore, receive your diplomas where I labored, as student and teacher, for thirty-four years, and where many hundreds of your predecessors gained the knowledge that entitled them to their degrees.

Your satisfactory examinations entitle you to the cordial congratulations of your faculty, and, though your *number* is exceptionally small, it is hoped and believed that your careers will prove that your *merits* are exceptionally great. By hereafter sustaining your faculty and college you can increase their power to promote not only medical education, but also your own reputation and welfare. And to give you a clearer and broader view

of the very grave duties and responsibilities that this day imposes upon you, a copy of the Code of Ethics is enclosed in the diploma of every one of you. May each of you gain from it a stronger determination faithfully to discharge your professional duties, especially to the public, and may you always keep in mind that, notwithstanding the selfishness and the commercialism that the ever increasing struggle for existence is begetting, he who best serves others best serves himself.

The dean owes to every one of you grateful thanks for conduct so commendable that during all of the past session not one breach of decorum has marred his satisfaction or added to the burden of his anxieties. In return for your exemplary conduct the dean will present to you a few words of advice, in spite of his knowledge that advice differs from all other things of value in that every one is willing to give *it* away even for nothing and few or none will take it even on these liberal terms. This final advice, on this the day of our parting, is that, whenever you cast longing eyes on *your* very fairest of the fair, whether she be in this audience or elsewhere, it would be well to keep always in mind, that one of the very broadest and most frequented roads to failure, even in love and marriage, is to overestimate what you should receive and to underestimate what you *should give*. Blessed are they who expect but little for they shall not be disappointed, and may gain some agreeable surprises!

Every member of your faculty tenders you heartfelt regard and cordial good wishes for the happiness and success not only of yourselves, but of the loving wives and of the happy children who are yet to confer on you the greatest happiness and to impose on you the gravest responsibilities of manhood. When every boy and every girl you have fathered has attained the collegiate age, you will find it impossible to discharge your duty better than by committing every one of them to the Tulane University of Louisiana.

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#### STERILITY IN THE FEMALE AND ITS CURABILITY.

By S. L. KISTLER, M. D., LOS ANGELES, CAL.

The slight attention paid to this subject is possibly due to lack of information as to value of treatment, and partly because of disinclination for the burden of maternity.

In this paper I shall avoid prolixity, as the subject is one which admits of great extension. Therefore, I shall of necessity treat the subject in a casual way only.

The conditions may be either acquired or congenital, and in taking the matter up I will consider the term "sterility," or "barrenness," to apply to women, who, under favorable circumstances, fail to procreate.

I might be more exact, but to do so would only confuse and my excuse for presenting this paper is to call attention to a subject of much importance to all practitioners, as it is fast becoming more and more widespread and it behooves the doctor to use his best efforts to remedy the defect when called upon.

The causes of sterility may be enumerated as follows:

1. I believe that many cases of this condition as well as of uterine disease in general are the result of loss of sympathetic nerve force, the effect of disease, or injury arising from sexual demands;
2. An indefinite number of cases are undoubtedly the result of imperfect participation of the uterus in the sexual organism and the consequent lessened respiratory action of the uterus;
3. Inactive ovaries;
4. Inactive condition of uterine mucosa;
5. Congenital deficiencies, anomalies of the hymen and malformation of the congenital tract;
6. Arrested development of ovaries and tubes;
7. Excessive acid reaction of secretion of vaginal mucus membrane and catarrhal changes in the mucous membrane of the uterus and tubes;
8. Vaginismus, neurasthenia, exhaustion, physical decadence, nymphomania;
9. Amenorrhea, dysmenorrhea, narrow internal and external os;
10. Flexions, versions;
11. Laceration of cervix, profuse leucorrhea, endometritis;
12. Gonorrhoea, especially with involvement of adnexa;
13. Constitutional diseases and conditions;
14. Neoplasms, myomas, malignant growths, hypertrophy;
15. Ingestion of certain articles of diet and medicines;
16. Obesity;
17. Incompatibility;
18. Higher education.

TREATMENT.—When a case applies for treatment for sterility, we must bear in mind the fact that not all cases are imputable to women. Indeed, Dr. Vedder, who carefully examined 300 married women and their husbands who were childless, proved in effect that 70 per cent. of his particular cases were due to the man, either directly in consequence of functional impotence or absence of spermatozoa, or indirectly by infection of the woman by gonococci; in 30 per cent. of his cases the cause was due to the woman and most generally owing to neoplasms or atrophy of the uterus. Regarding the above quotation, will say, that I believe the reverse holds true in this part of the country.

If treatment, therefore, either indicated or tentative does not yield results within a reasonable time, we should proceed to investigate the husband's condition before we carry treatment further.

It behooves us to search diligently till we find the cause, and, if found incurable, the patient may be so informed, but I would advise all to go slowly on this point, as our patient may, on the other hand, become *enceinte*, much to our chagrin and discomfiture. So, as before noted, search diligently for the cause. Get as complete a history of the case as possible, for many factors may enter in, and heredity cut a wide swath in helping us to arrive at a conclusion, and the poet who said, "Every man is an omnibus in which ride all his ancestors," may have spoken concerning the very case you have in hand.

Slight or minor diseases of the ovaries or tubes are said more often to cause the condition under consideration than more severe troubles. And this because of the intricate and difficult adjustment of the pavilion of tubes to ovaries, as this relationship may be set aside by the most trivial vice or structure or disease.

Arrest of development or disease of ovaries seldom cause sterility, as both are rarely diseased at the same time. Likewise many women readily conceive in whom orgasm is deficient or absent.

General treatment embraces remedies from borax down to *Key-Tsi-Ching*, a famous Japanese remedy, and on down to *Lawsonia Inermis*, a celebrated Arabian cure. Probably our most beneficial remedies are belladonna, the auric salts and electricity, combined with such local treatment as is indicated. Tone up



nervous system and prohibit frequent coitus. Tone up uterine mucosa—for conception may occur and result be blighted early if condition of mucosa is unfavorable.

For inactive ovaries and atrophy, we have valuable aids in electricity, protonuclein, ovarine, thyroids, sabal serrulata, ignatia and such other agents as are indicated and tend to develop and bring to maturity.

In congenital deficiencies, anomalies of hymen and malformation of tract, the help of the surgeon must be had, when he will remedy the condition if possible. Likewise we must call the surgeon in cases of laceration, neoplasms and malignant growths and, if thought necessary, in cases presenting myomas, however, it is supposed that they very seldom cause the condition.

Excessive acid reaction of vaginal secretion may be often corrected by use of suitable alkaline douches; further treatment will consist in toning up the mucous membrane.

Catarrhal conditions of not too severe type may be treated by applying solutions of argentic nitrate or iodized phenol, and in cases presenting marked hurt in endometrium the above is profitable, used before applying the curette.

Of course all malposition must be corrected as soon as possible. Graily Hewett reports thirty cases dependent upon flexions and versions cured by remedying the abnormality.

Vaginismus, neurastheniæ, exhaustion, physical decadence, nymphomania and all neuroses appearing demand careful investigation in order that the source of trouble may be discovered, and if possible, remedied.

AMENORRHEA, MENORRHAGIA.—Since the days of Marion Sims we have been taught that the chief reason for sterility, attributable to the woman, is narrowness or flexions of the uterine canal. But when it is remembered that the narrowest pin hole os will admit a sound on careful manipulation, which is many times larger than the self-propelling spermatozoid, it will be seen that this reasoning is scarcely satisfactory, and it is doubtless due to operative furor that the popularity of the stenosis and atresia theory of sterility continues, and since the time of Sims and Simpson, practically no form of treatment has been employed save some method for opening or enlarging the canal, a procedure which not only has been, as a rule, ineffective, but has been followed by morbidity and mortality, especially when slitting the cervix has been done.

Being satisfied with the effect of electric currents and accepting the evidence offered, we believe that we have in it a treatment far and away in advance of any other means known at the present time. Sims' assertion that sterility can only be cured by surgical interference is untenable; rather use medication that raises the nutrition of the entire organism.

Now we are told "to feed or starve the woman according as we wish male or female progeny."

Constitutional diseases and conditions call for such measures as their respective types indicate.

In case of very large vagina recourse may be had to artificial fecundation. Avoid use of articles containing tannin, also forego use of antiseptics.

In case of absence of ovaries, Knauer has reported "successful pregnancy following transplantation of ovarian tissue."

Obesity produces sterility by mechanical pressure and by excess of fat in the blood and thus causes amenorrhea, and ripening and bursting of Graefian follicle is thus prevented. The treatment is obvious. Always bear in mind that such cases may be the result of senile decay.

If gonorrhoea has sealed up the ends of tubes, their restoration *ad integrum* is scarcely possible. However, as a *dernier resort*, an explorative incision will show if the condition be possibly remediable.

A noted American gynecologist has said "he never knew a woman to bear a child after having had gonorrhoea." This statement none of us believe.

Finally, in the treatment of sterility, we should bear in mind the fact that each case is a law unto itself, and we should study it as though it were the only case, remembering the great number of cases dependent upon slight causes.

CONCLUSIONS.—1. The great majority of cases of sterility are dependent upon slight causes.

2. The greater number of cases are curable.

3. Many apparently hopeless cases are curable.

4. Length of time a case has persisted is no bar to treatment, providing organic change has not obtained that precludes possibility of cure.

5. Treatment used must always depend upon the case in hand.

## Clinical Report.

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### A CASE OF LARYNGEAL DIPHTHERIA TREATED WITH MASSIVE DOSES OF ANTI-TOXIN.\*

BY L. G. LEBEUF, M. D., VISITING PHYSICIAN TO CHARITY HOSPITAL, NEW ORLEANS.

This case, though it covers no new points, is related to emphasize the fact that in desperate cases of diphtheria, and specially laryngeal diphtheria, we should have no fear of using, first, a good preparation of serum, and, secondly, using it frequently and in large doses, until the anti-toxin has apparently neutralized the effect of the poison in the subject.

John Streck, aet. 3 years, white male child, well nourished, in vigorous health previously, was seen by me Wednesday, March 5, for the first time. It was his third day of illness. He had been treated by another physician before I was called and a diagnosis, I believe, of spasmodic croup and plain bronchitis had been made. The little patient, at the time of my first visit, was suffering with a dreadful cavernous cough, his respiration came as a stridulous whistle and each paroxysm of cough seemed to exhaust him still more, in his vain efforts to regain his breath. His throat was a mass of thick, adherent whitish membranes—they covered the tonsils—posterior pillars, velum palati, and seemed to extend down the larynx as far as my superficial examination without laryngeal mirror would allow me to see.

The exudate appeared adherent and thick, apparently dipping well into the mucosa beneath and was of a whitish-gray appearance. A cotton swab applied locally and a strong spray of peroxide did not seem to affect or disturb this pseudo-membrane in the least. The child was in profound dyspnea. Inspiration and expiration both loud and labored, and with each inspiratory movement the epigastrium would sink way under the xiphoid cartilage, and all the intercostal muscles and the accessory muscles of respiration seemed to be brought violently into play. Child's voice was husky and his cough a dry, cavernous, croupy cough. His face was anxious, and after each paroxysm he seemed prostrated, or in a restless, tossing sleep.

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\* Read before the Orleans Parish Medical Society, April 26, 1902.

His pulse was 144, temperature 100 deg., and respiration 32. I immediately made a culture of membranes, and as this visit was late at night, I ordered P. D. & Co.'s anti-diphtheritic serum, 3000 units, for use next day. In the interval, I used very hot turpentin stupes around neck, strychnin dosimetric granules,  $\frac{1}{2}$  milligram every four hours, and a preparation containing tincture of digitalis, bromide of potash and syrup pruni Virginiani.

Next day, March 6, when seen again, patient was not better. I injected him in lumbar region with 3000 units. Pulse 140, temperature (per rectum) 101.4 deg., respiration 28. The *tirage* of the abdominal muscles at that time was intense; he seemed to have to bring into play every accessory muscle of respiration. He was dull at that time and inclined to sleep; still, as his color was good, it was judged better to wait for intubation until his condition became more desperate. He was seen that night by a competent laryngologist, who had been summoned in haste with the view to intubation if the condition appeared to be aggravated enough to justify it. This first injection (March 6) was performed at 4 P. M. Other sustaining treatment was continued with spraying of peroxide, and internal administration of milk, milk punches and Ducro's elixir every hour.

March 7 found child very much in the same condition, pulse ranging between 132 and 148; temperature (per rectum) 100 deg. to 99 deg.; respiration 24 to 28. The abdominal *tirage* was a little less, but pulse was quite bad, at times markedly irregular and compressible. The child had a diaphanous perspiration and all this day seemed on the verge of death. He was drowsy and semi-unconscious. The appearance of the membranes was just the same. The lymphatics of the neck became involved and his neck was quite swollen. His breathing all that day was very labored and could be heard in the yard as you went up to the house. On this day I injected him three times more, using each time 3000 units of No. X, P. D. & Co.'s, antitoxin, always boiling my needle first and thoroughly disinfecting and scrubbing parts. I alternated first one side and then the next, being very careful to go well through skin into loose alveolar cellular tissue. At no time was there the least unpleasant reaction or the least erythema or any kind of disturbance caused by the serum.

March 7, I injected child at 3:10 P. M., at 7 P. M., three hours and fifty minutes' interval, and at 10:45 P. M. that night, making, together with injection of previous day, a total of 12,000 units in less than thirty-two hours. During this time child was apparently in extremis and frequent injections were given as a *dernier ressort*. During his coughing spells and when sprayed he began, towards evening of March 7, expectorating shreds of the exudate, but still the mass of the pseudo-membrane was tenaciously adherent. *Tirage* became a little less and cough was a little softer; still, child was very croupy. I received that day a positive report of the culture from the Board of Health bacteriologist, Dr. P. E. Archinard. On morning of March eighth child was certainly much better and expectorated, after a most violent strangulation fit of coughing, nearly a perfect cast of his pharynx and larynx with three long flat grayish digitations at the bottom, no doubt part of some larger bronchi casts also.

This cast, as we may certainly call it a cast, was, as far as I could see from the piece preserved by the nurse for my inspection, peculiarly shriveled and burnt-like on the edges. I wish I could better describe this. It seemed to be entirely dried up, coagulated like, if I may use the expression, and the edges shriveled and dark yellowish. I have no doubt that this appearance was due to the action of the serum on the exudate.

The child also swallowed a large piece of these membranes. Immediately after this his entire condition improved, though at times his pulse was still a little irregular. An examination of the throat showed that it was entirely free of exudate, except at the angles of the tonsils. As the child had stood the anti-toxin so well, I decided to again inject him with the serum, to be positive of getting every particle of exudate out of his throat and run no risk of later autoinfection or of post diphtheritic myocarditis and paralysis. So I injected him again at 7:30 that night (March 8), making a total of 15,000 units altogether in a little over 48 hours in a child less than three years of age. After membranes were all cleaned out of throat, I changed peroxide to weak solution of bichloride of mercury, 1 to 3000, instructing the nurse to mop every four hours.

The only reaction which seemed to take place in this case, after all this heroic dosage, was a profuse diaphoresis which

appeared to weaken our little patient a little, but which answered to sponging and stimulants.

All through this day and preceding day I gave him small doses of calomel, of 1-10 of a grain, for catharsis and also as an intestinal antiseptis. Pulse after diaphoresis reached to 111, temperature 100 4-10 deg., respiration 22.

March 9, child doing very well, cough still a little croupy. Lungs examined; no pulmonary lesion. Throat entirely clear. Even accumulations on tonsils of day before entirely gone. Pulse ranging from 98 to 126. Temperature (per rectum) 99 deg., respiration 19. Pulse irregular at times.

March 10, child began to nourish quite well and was allowed bouillon (chicken broth) and milk and whisky. All that day and night perspiration still free. Pulse 108, temperature 99 4-10 deg., respiration 20. Intermission of pulse not so pronounced. Croupy cough not entirely gone, but child had regained color and is considered out of danger.

March 11, pulse still intermittent, but strong and full, not compressible. Child awake and bright; called for food and wanted to get up. Pulse ranged from 80 to 100, temperature 98 4-10 deg.; respiration 18.

All during March 11 and 12 child had still quite an intermittent heart; when most intermittent it was much faster. When not intermittent, pulse about 84, temperature and respiration normal. After this date intermission disappeared entirely, and on March 15 child was convalescent and taken out of room so as to allow disinfection of premises. He subsequently recovered completely.

REMARKS.—It seems that our former administration of this most potent agent has practically been revolutionized within the last four or five years. As first used by Von Behring and others, it was administered only in 500 units, or 3000 units at the most. And it was very rare that a case was injected a second time. To-day the experience taught by my case shows conclusively that if heroic doses had not been used, and used repeatedly, that I would have lost my case. Undoubtedly, when aseptic methods are used in its administration and a good serum is used, we have an agent which causes very little reaction and seems to work the greatest good when administered most fearlessly. It is believed, to explain this benignity, that

antitoxin enters directly into combination with the specific toxin it is to neutralize. Hence it is made to combat it without danger to the patient, because probably a neutral salt is formed in the system. It is alleged that there is more danger of unpleasant effects and of causing reaction when an injection has been in a case which was not truly diphtheria. We can easily believe this, if Behring and others are right regarding this chemie action. In spite of such splendid results and in spite of the great reduction of the mortality rate since the use of the horse serum, we must not abandon our other treatment, both local and constitutional. Outside of cases which can always be traced to a bad serum (like the tetanus-infected serum of St. Louis), we rarely even have disagreeable results from the most excessive use of the antitoxin. I think that it is admitted that the only real change taking place in the system is the diminution of the red blood cells in the blood. Though our textbooks recommend only from 1 to 6000 units, we see by the Gould's Year Book that McCallum, in Boston, has repeated 4000 units until 80,000 and 100,000 have been given, specially in the infantile paralysis following diphtheria.

A. Zamboni reports two serious cases of laryngeal croup cured by intravenous injections of antitoxin. Since my recent experience with this I may say nearly desperate case of laryngeal diphtheria I have been especially impressed by an article in Osler's "Practice of Medicine," in which he quotes J. H. McCallum, of Boston, who advises to go on using it until the characteristic effects are produced, whether you use 4000 or 70,000 units. In severe cases of diphtheria, he does not believe that there is any way of estimating the amount of toxins generated by the exudate, hence his conclusion is to go on administering it until the membranes are shriveled and the improvement of the patient tells when to stop.

*Bibliography.*—Gould's Year Book of Medicine; Osler's Practice of Medicine.

# N. O. Medical and Surgical Journal.

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## Editorial Department.

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CHAS. CHASSAIGNAC, M. D.

ISADORE DYER, M. D.

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### PROSTITUTION OF THE PRESS.

Our readers must be by this time well aware of our opinion of medical publications which contaminate their columns with unethical or improper advertisements. This time we wish to speak of and to the lay press. That many of its respectable members allow their pages to be used to entice people into immoral practices or into being swindled can be demonstrated by picking up almost any Sunday newspaper, the "home edition." That the managers know what is printed in their paper cannot be doubted without questioning their efficiency and integrity. That they are aware of the baleful nature of these advertisements cannot be questioned without insulting their intelligence. That the money consideration overrules all others follows without debate.

The Academy of Medicine of Kansas City has recently noticed one type of these advertisements, those of "nostrums intended to cut short pregnancy," and, in a set of powerful resolutions, calls for a censorship of the press and requests the Postoffice Department of the United States to prohibit the distribution of the offending publications through the mail.

While joining heartily in condemning the press for its venality, we do not approve the remedies proposed by the Kansas City Academy. In this free country censorship will not be tolerated and it would be dangerous probably to leave to any single official the right to decide whether an advertisement is moral or not. We still hope that agitation of this question by the medical press, by medical societies, still more by individual physicians, may lead to the enlightenment and conversion of at first a few of the highest class papers; then that the



good example, assisted by continued and patient agitation, may cause more and more to fall into line until only a few and otherwise disreputable publications will consent to accept the corrupting advertisements.

Should all suasion fail, what little legal lore we possess leads us to think the courts could be appealed to: if A's business is immoral and illegal, it must be illegal, hence open to prevention, to publish an ad. of A's business; witness the lottery ads. in the papers and their exclusion from the United States mail; the only point to settle would be who would prosecute and prove the nature of A's business. It may be the Postoffice Department is endowed already with sufficient authority. We read a few days ago in one of our leading local newspapers an editorial about "swindling concerns" that are "using the mails and advertising in the reputable newspapers, offering vast profits upon methods that are impossible of fulfillment." The editorial also conveyed the information that "the mails are to be closed against them," the swindling concerns, not the reputable newspapers!

The respectable newspaper above referred to ridicules those who are taken in by the fraudulent concerns and is redolent of virtue throughout that page. Turn the latter and we find among a number of the same ilk: "Up to 50 per cent. monthly; safest, strongest money-maker known; weekly dividends greatly exceed yearly dividends of savings bank with equal safety to principal, which will be returned on demand." Further comment is unnecessary. Is it surprising that on the same page is the ad. of a "monthly regulator" that never fails to relieve, no matter from what cause or "how long suppressed?"

## Abstracts, Extracts and Miscellany.

### Department of General Surgery.

In charge of DR. F. W. PARHAM, assisted by DR. F. LARUE, New Orleans.

CARGILE OR ANIMAL MEMBRANE EMPLOYED TO PREVENT ADHESION IN THE PERITONEAL CAVITY AND ELSEWHERE.—Dr. Robert Morris gives in the *Medical Record* of May 17, 1902, a report of some experiments made with sterilized animal membrane to prevent adhesion in the abdominal cavity. The membrane experimented with was a particularly thin gold beater's skin made from the peritoneum of the ox and sterilized by the cumol method. The membrane was sent by Dr. Charles H. Cargile, of Bentonville, Ark., and called, therefore, by Dr. Morris after him Cargile membrane. The experiments were made by Morris at the Physiological Laboratory of the College of Physicians and Surgeons of New York. They were made on rabbits, twelve in number. Morris makes the following remarks as a result of these experiments:

Cargile membrane seems to resist absorption in the peritoneal cavity for more than ten days and less than thirty days. The membrane seems to cause very little disturbance to the peritoneum, it does not furnish a good culture medium for bacteria, and it protects areas of peritoneal surface, that have suffered injury to their endothelial covering, until new endothelial cells have repaired the injury without involving neighboring peritoneum. It is not necessary to suture the membrane in place, as it becomes instantly adherent to moist surfaces, and is not readily dislodged afterward.

In addition to the experiments in the peritoneal cavity, he has applied the membrane for a variety of purposes in wound treatment. It seems to be particularly agreeable to the tissues of open wounds. It is not impervious to moisture and so possesses advantages over gutta-percha tissue and silver foil. In brain surgery the membrane adheres closely to brain tissue and makes a very good temporary *dura mater*. It can be used to keep severed and sutured tendons from uniting *en masse*. He has had

no opportunity to employ it in plastic eye surgery, but he thinks it offers some advantages in this special field.

#### MANUAL OF REDUCTION OF DISLOCATIONS WITHOUT NARCOSIS.

—Boloff, in *Centr. für Chir.*, April 19, relates how, incited by Stimson, he has succeeded, with a slight modification of this plan, in reducing certain dislocations. Hofmeister, as is well known, has worked out after Stimson's plan a method which has given him a series of successful results.

This method is the *pendel method*, and consists in lifting by the injured member the patient's body as it lies upon the floor. Stimson's method had the patient on an elevated canvas cot with the injured arm through a hole in the canvas, a weight hanging to the wrist furnishing the extending force. Stimson speaks approvingly of this method in his third edition and states that he has succeeded in this way with a number of cases.

Boloff's modification is to be observed in the following description of the plan pursued by him:

The patient is laid on his back on the floor; the surgeon, standing on the injured side, takes hold of the member and begins slowly to extend it. This extension is very gradual and is begun with the arm by the side, then abduction is slowly done until the arm passes upward into a vertical position parallel with the patient's body, the head of the bone being gradually pushed by the hand towards the glenoid. This is really nothing new and only differs from other well known methods in using very little force.

These methods all succeed in many cases and usually in from three to ten minutes; but the least to be commended of them all, in our opinion, is the last, which increases the risk of damage to the vessels and nerves of the axilla.

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### Department of Obstetrics and Gynecology.

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In charge of DR. P. MICHINARD, assisted by DR. C. J. MILLER,  
New Orleans.

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COLPOTOMY, THE OPERATION OF SELECTION IN THE TREATMENT OF PYOSALPINX.—(Hector Treub: *Rev. de Gynecol. et de Chirurg. Abdom.*, February, 1902.) Since September, 1899, Treub has

treated every case of pyosalpinx and hydrosalpinx that has come under his care by means of colpotomy. His procedure is as follows: The cervix uteri is drawn down to the vaginal orifice by means of volsella forceps; a transverse incision is made with scalpel or scissors through the posterior vaginal wall into Douglas's pouch; two fingers are passed through the opening, and one of them is thrust through the wall of the tubal cyst, and any septa found therein are broken down. The contents of the cyst having escaped, the cavity is irrigated with boracic solution and then packed with iodoform gauze. If the cyst wall resists the pressure of the finger, it is perforated with forceps which are opened as they are withdrawn. The gauze is removed in five or six days, the cavity irrigated and again packed for four or five days, after which irrigation is generally sufficient to effect a cure. The size or situation of the tumor, the quality of its contents, the presence or absence of adhesions, make no difference in the method of operation. Sixty-five cases of pyosalpinx and thirteen of hydrosalpinx have been thus treated. The danger of the operation is slight. Two cases of pyosalpinx died after operation, but they were desperately ill before, and the operation had probably little to do with the fatal result. Twice the intestine was wounded at the time of operation and in several other cases fecal fistulæ appeared some days later. These fistulæ healed spontaneously in all but one case. Forty-four cases of pyosalpinx were cured without relapse; ten cured after one relapse or more. Four of the cases which were not cured were tubercular in nature. Ten cases of hydrosalpinx were cured without relapse. Treub draws the following conclusions:

1. Where operation is necessary for tubal cyst colpotomy should always be chosen.
2. Where the tumor after operation refills, colpotomy should again be performed.
3. If repeated colpotomy fails to cure pyosalpinx, vaginal hysterectomy is indicated.
4. Tubercular pyosalpinx should be treated by vaginal hysterectomy unless the general condition of the patient forbids it.
5. When a hydrosalpinx relapses after colpotomy, the advisability of some conservative abdominal operation should be considered.—*The Journal of Obstetrics and Gynecology of the British Empire.*

CARDIAC DISEASES IN PREGNANCY AND PARTURITION.—Dr. Robt. Jardine contributes to *The Journal of Obstetrics and Gynecology of the British Empire* an article on this subject to which is appended well arranged histories of thirteen cases.

The seriousness of this complication of pregnancy may be gauged from the very high death rate given by most authorities. Something like 50 per cent. are said to die. If the patients are seen soon enough, and means taken to strengthen the heart for the strain of labor, and proper treatment adopted during labor, the vast majority of them should safely be carried through. Pure mitral stenosis is said to be the most deadly lesion. The blood is dammed back into the lungs, which become engorged and edematous, and finally the right side of the heart becomes dilated. With the completion of labor the uterine vessels are so cut out of the circulation, and if there has not been hemorrhage during the third stage of labor, a large amount of blood must necessarily be returned to the right side of the heart which may become engorged and paralyzed. Next in seriousness to mitral stenosis comes aortic incompetence. Mitral incompetence is not so serious unless it is very marked. As a rule, bad symptoms do not begin to show themselves until after the mid-term of pregnancy. Breathlessness, palpitation, cough and edema will be present in varying degrees. Albumin will often appear in the urine. The patient will probably not be able to lie down.

*Heart Disease and Marriage.*—If a woman has heart disease should she marry? How are we to answer such a question? If the woman has suffered from failure of compensation at any time, no matter what the lesion is, or if the lesion is mitral stenosis, aortic incompetence, or incompetence and stenosis combined, the answer should be decidedly negative.

*Treatment.*—The patient must be kept at rest and every effort made to strengthen and relieve the heart. Strophantus is probably more useful than digitalis.

If the patient is not relieved, the question of induction of premature labor arises. In bad cases premature labor is apt to occur of itself. The results of induction are so bad that he questions the propriety of it. The risk is exceedingly great. In a bad case it should be done before the fourth month, *i. e.*, before the extra strain has told on the heart; but in the later months he would be loath to interfere.

When labor begins a large dose of strophantus or digitalis should be given. As soon as the os is fully dilated labor should be terminated. The patient should not be allowed to bear down. If cardiac embarrassment begins to manifest itself before the os dilates, dilatation and delivery should be effected at once. Such patients take chloroform well, and it should always be used in bad cases. During the third stage of labor the uterus should be allowed to relax and bleeding should be encouraged, ergot is therefore contra-indicated. If the patient should show marked cardiac embarrassment and very little blood be lost post partum, he would not hesitate to open a vein in her arm. During the puerperium the cardiac tonic must be continued along with free stimulation. As a rule, if the patient passes safely through the strain of labor, all will go well, but occasionally acute edema of the lungs and cardiac failure supervene a few days later. Nursing should be prohibited, as lactation has been found to have a bad effect upon the damaged heart.

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### Department of General Medicine.

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In charge of DR. E. M. DUPAQUIER, New Orleans.

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**SUBCUTANEOUS INJECTIONS OF THE YOLK OF EGG (LECITHIN) IN TUBERCULOSIS.**—The various preparations of lecithin, which are costly and, at times, less effective than one expected, may often be replaced to advantage by the yolk of egg in its natural state.

Chs. Bayle, M. D., (Cannes) injected the yolk of egg under the skin and deep into the muscles in cases of pulmonary tuberculosis, and claims that a marked invigoration of the whole system followed promptly. Two injections of four cubic centimetres each were made weekly. From analysis, the amount of lecithin in each injection was 0,29 centigrams.

The yolk is so thick that, only with considerable force, is it made to pass, yet very slowly, through an ordinary hypodermic needle. Bayle, therefore, used a Roux antitoxin syringe with a needle of medium caliber adjusted to the syringe, without the

interposition of the small piece of rubber tubing, of course after carefully sterilizing, each time, the whole outfit and the site of the injection.

He took a very fresh egg, the yolk of which in the shell is practically aseptic, broke the latter with caution, and immediately dropped the yolk in a sterilized recipient, since it is essential to avoid contamination of the yolk. He made the injection under the skin on the posterior aspect of the arm or deeply into the deltoid; but it could be made in other sites, viz., the buttocks, the thigh, etc. The yolk can be mixed with equal parts of a table salt solution in sterilized water, 7 in 1000, thus increasing the fluidity of the injection, its availability for quick absorption and permitting the use of a larger quantity of the active substance. As when injecting oils, it is important, firstly to insert the needle alone, thus making sure that no blood escapes; then the syringe is connected and emptied, very slowly.

The injections made with all these precautions were never followed by any abscess formation. They were painless, except in one case which was injected with seven cubic centimetres at one sitting. Marked swelling and pain followed but disappeared after twenty-four hours without further complications. Consequently, the hypodermatic and intramuscular injections of the yolk of egg is the best method for administering pure lecithin in large quantities.—*Journal de Médecine et de Chirurgie Pratiques*, April 25, 1902.

APPARENT TUMOR OF THE ABDOMEN.—Among 6045 patients treated during the last ten years Einhorn (*Berlin Klinische Wochenschrift*) found in forty-two cases apparent tumors thirty-four times in women and eight times in men. By inspection and palpation he could find a resistance located between the ensiform process and umbilicus mostly in the median line, and in most cases with a pretty smooth surface, often pulsating and the size of a hen's egg or a man's fist. This condition has been diagnosed by physicians and the patients themselves as suspicious of carcinoma. The patient would mostly complain of pains in the region of the stomach, either immediately or some time after eating, eructation, loss of appetite and constipation, general debility and loss of flesh. The examination always showed in a poorly nourished patient, anemia, hyperacidity and enteroptosis. Suitable and abundant food,

regulation of the bowels and distraction of the patient's attention to the apparent tumor, would soon make the symptoms disappear and increase in weight would take place.

Concerning the apparent tumor itself, he thinks that it might be produced or simulated by a prolapsed left lobe of the liver, thickening of and a freely exposed aorta, a hypertrophic condition of the muscles of the abdomen or perhaps by adhesions in the neighborhood of the lesser curvature of the stomach. Of great value as an accessory diagnostic agent is the period of time over which the trouble extends.—VIERREGGE in *The St. Paul Medical Journal*, May, 1902.

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## Department of the Ear, Nose and Throat.

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IN charge of DR. A. W. DEROALDES, M. D., and DR. GORDON KING, M. D., NEW ORLEANS.

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### THE USE OF THE ICE-COIL IN ABORTING ACUTE MASTOIDITIS.

-Dr. E. B. Dench, of New York, gives expression to his valued opinion on this subject in the Report of the Eye and Ear Infirmary, January, 1902.

In a close observation of a long series of cases of threatened acute mastoid inflammation in which cold applications were used as an abortive treatment, the author answered at the conclusion that cold as a therapeutic agent has a very limited field of usefulness in such cases. He believes that the local application of cold only serves to mask the symptoms and leads to dangerous delay in surgical intervention; delay that may give time for extensive involvement of the bone to take place and favors intracranial complications.

It was formerly his practice, when mastoid tenderness and pain supervened in the course of otitis media, to establish free drainage from the middle ear by paracentesis and apply the Leiter coil or an ice pack for forty-eight hours, and if these symptoms persisted, to open the mastoid. He now advises, however, to avoid the use of the cold application and depend upon rest in



bed, free incision of the tympanic membrane and frequent antiseptic irrigations. If tenderness and pain over the mastoid persist after forty-eight hours, the mastoid antrum should be opened. In such cases he has seldom failed to find involvement of the bone, and often far more extensive than the symptoms indicated.

He reports two cases of cerebral abscess which he considers were caused by use of the ice-coil.

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## Department of Ophthalmology.

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In Charge of DRs. BRUNS and ROBIN, New Orleans.

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TETANY AND CATARACT.—Two years ago Peters (*Zeitsch. f. Aughkkud.*, February, 1901) stated that there was a connection between cataract and convulsions, and lately has gone into the subject exhaustively, and calls attention to the frequency of zonular cataract and rickets. He also gives statistics and thinks that these cataracts are more often due to tetany than to rickets. He reports four cases of tetany associated with this form of cataract. Forty per cent. of all the cases of tetany that he has seen had also cataractous changes in the lens. As to how these changes are due he maintains a discreet silence.—*Boston Medical and Surgical Journal*, October 17, 1901.

[Arth, Homer & May von Aig called attention to these facts many years ago. See *The Crystalline Lens System*, Louis Stricker, Cincinnati, O., 1899, p. 189.—B. & R.]

RUPTURE OF THE EYEBALL.—In the *Medical News* for January 25, 1902, Dr. W. Whitehead Gilfillan, of New York, records "A Case of Spontaneous Rupture of the Eyeball," an occurrence so rare that its possibility should be widely made known.

The remarkable feature of the case was that though cataract and large opacities of the cornea existed, there was no ulceration, or other active process, or any staphylomatous bulging of the coats of the eye present. One afternoon shortly after a visit to the water-closet the patient complained suddenly of a sharp pain and by the time the physician reached her there had been a large hemorrhage from the eyeball, the lens was lying on her

cheek, much vitreous had escaped and a portion of the iris had prolapsed. On examination next day Dr. Gilfillan found an opening in the centre of the cornea, horizontal, with rough edges and only just large enough for the lens to pass through. The size of the eyeball was not diminished. The wound closed slowly during six weeks. The patient was in very bad health, eighty-seven years old, with pronounced arterio-sclerosis. The doctor supposes that straining at stool ruptured one of the intraocular vessels, and that the escape of a large amount of blood into the eye caused the rupture, a supposition that appears to us entirely probable.

FLY MAGGOTS IN THE ANTERIOR CHAMBER OF THE EYE.—The patient, a girl aged 5, complained of photophobia, occasional pain, injection of the ciliary region, cloudiness of the cornea and had a sluggish iris. Resting in the lower part of the anterior chamber was a semi-transparent, cylindrical, segmented body about 1 mm. long, which was thought to be a larva. The chamber also contained some brown serum, with the appearance of a hypopion. Fundus reflex poor, exudate in pupil, and vision poor. The larva was extracted through a corneal incision, the wound healed and the eye seemed better. But in a week another larva had developed in the same place, which it was not possible to remove. It was destroyed however, and an iridectomy done. The eye was afterward accidentally injured before the corneal wound was firmly healed, there was prolapse of the iris, staphyloma and cloudiness of the cornea, and very poor vision. The case is of interest, mainly because it is an exceedingly rare condition. Krautner reported a similar case (*Zeitschrift für Augenheilkunde*) 1900, claiming the case to be the only one on record. The larvæ in both cases proved to be those of the "Hypoderma Bovis," the fly whose larvæ are found in, or under, the skin of cattle in the spring of the year.—DR. K. STALBERG, Jonkoping; *Hygeia*, Feb., 1902.

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## Miscellaneous.

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ERYSIPELAS IN LEPROSY.—Under the above heading we note in the *Gaceta Medica*, the official organ of the National Academy

of Medicine of Mexico, (December 16, 1901) a report of two important clinical cases in his practice by Dr. S. Patron, of Merida (Yucatan). The results therein observed are in the reporter's opinion sufficiently conclusive and suggestive of experimental efforts that might lead to a curative serum of leprosy.

The first case is one of a well known and distinguished citizen of Merida afflicted with leprosy for a few years only, in whom a slight but neglected erosion of an interdigital brought on severe erysipelas, with its unmistakable cortége of symptoms. Fever ran very high and in spite of most active treatment the disease progressed upwards, invading the arm, neck and dorsum of the afflicted side, and finally spread with intermittent recurrence including the patient's entire body.

The erysipelatous complication, in this case, was not only severe in intensity, but also prolonged and refractory to treatment. Scarcely had convalescence set in, when lo! to both patient's and physician's surprise, the leprous dermatitis was seen to have undergone some process of retrocession. The skin had reassumed its natural color and softness, lepromes had disappeared, and furze and hair here and there over the body would reappear in their wonted sites. So notable and unmistakable had been the improvement in this case, and so great the relief thereby afforded, that when, a few months later, leprosy had anew regained its former sway over the unfortunate patient, the latter would be often heard most fervently to invoke the welcome recurrence of his preceding erysipelatous complication.

Case second was that of a female, also a native of Merida and patient of Dr. S. Patron, many years a leper, having contracted the affection, she asserts, through contagion, although family history shows leprosy in collaterals on her mother's side. March, 1897, she was suddenly taken with a severe chill followed by high temperature (104 deg. F.), burning heat and redness in the right ear, vomiting and subdelirium; in fact, all the unmistakable symptoms and signs of erysipelas were present. The dermatitis rapidly invaded not only the whole ear, but also the temporal, frontal, parietal regions on the same side and also the neck. After active treatment convalescence took place on the twelfth day. As in the preceding case, a similar surprising sequence of the erysipelatous dermatitis was the complete dis-

appearance of leprosy in the parts it had occupied; nay more, general improvement manifested itself in the leprosy condition of the entire body. The important results observed in these two clinical cases have led the reporter to deduce the following corollaries which from their relevancy are entitled to reproduction.

That immunity to a virus can not only be procured by the same, yet attenuated, virus, but also by another distinct one, is borne out by the following facts:

The *prodigiosus*, the *proteus* and the *coli* bacilli together with Finkler's spirillæ are known to afford immunity against Asiatic cholera, and likewise Eberth's bacillus.

Duschmann has observed that the blood of animals made immune to symptomatic charbon affords effective protection against acute septicemia.

Antidiphtheritic serum attenuates the venom of the snake-bite, as also does the blood of the hedge-hog.

The anti-streptococcic is also anti-staphylococcic.

Lastly, small-pox and vaccine afford an additional illustration in the present order of facts.

The curative results obtained through erysipelas are, however, not altogether new. Since the time when Fernarina sought to cure acne rosacea by inducing erysipelas until a later period when Sprunck, Coley, Friederich and Roger experimentally injected its toxins, either alone or mixed with the bacillus *prodigiosus*, in several affections, results have been so encouraging as to confirm the beneficial action of erysipelas, although its study has not as yet reached definite results and practical application.

It is however fitting, ere we dismiss this subject, to recall the following facts:

Ricord recognized its beneficial action upon phagadenic forms of syphilis.

Bazin, Kaposi, Wolkman have witnessed its attenuating influence upon certain cases of lupus, and also does Langenbecker report a cure of a case of multiple sarcoma of the skin after its invasion by a migratory erysipelas.

W. Coley has inoculated with various results a virulent culture of the erysipelas coccus in ten cases, in some cases with marked improvement, while in others he failed to induce ery-

sipelas. Walthel and Schæfer respectively report two cases of tuberculosis cured by facial erysipelas. Muir, likewise, reports a case of tubercular osteitis of the arm rapidly cured under the influence of erysipelas. The diagnosis of this case, which dated fifteen years, and had been given up as hopeless, was positively confirmed by a bacteriologic examination.

Numerous other cases of nervous or infectious diseases whose cure could undeniably be ascribed to the influence of erysipelas could be here cited were it not for want of space. Whatever be the reasons adduced to account for such capital results, whether, as some would have it, they are due to the pathogenic microbe of erysipelas, or according to Roger, to the organic reaction which it provokes, the facts that have been so sedulously observed and confirmed by so many pathologists are nevertheless undeniably true.

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## Society Proceedings.

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### ORLEANS PARISH MEDICAL SOCIETY.

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MEETING APRIL 26, 1902.

DR. GESSNER presided.

DR. LEBEUF read a paper on *Malignant Case of Membranous Croup (Laryngeal Diphtheria) Successfully Treated by Massive Doses of Antitoxin*. See page 805 this JOURNAL.

DISCUSSION.—DR. PARHAM asked how long after the antitoxin was administered in the last case the myocarditis made itself evident.

DR. LEBEUF said that in this case three doses of 3000 units each were given in four days. On the ninth day, through the fault of the nurse, patient was given a banana to eat. The patient had an attack of indigestion and dyspnea and died suddenly—apparently from the severe strain put upon the weakened heart. There were no signs of paralysis of the voluntary muscles. He did not consider that the myocarditis was in any way connected with the administration of the antitoxin.

DR. GUTHRIE asked whether the most concentrated of the P. D. serum had been used.

DR. LEBEUF replied that the solution used was the single X.

DR. DABNEY reported that he had seen in the past six days a number of cases of r $\ddot{o}$ theln (spurious measles) in the various parts of the city. The diagnostic characteristic was the enlargement of the cervical glands behind the ears. The eruption was like that of true measles. The patient recovered within two or three days.

RELATION OF CASES.—DR. DYER reported a series of *three cases of feigned eruption*. All three eruptions were caused by applications of carbolic acid made by the patients for the purpose of exciting sympathy.

The first case was that of a girl of about seventeen. Her physician had reported that the little finger of her left hand was rapidly becoming gangrenous, but as the girl was in good health, he could not account for the condition. When the patient was seen by Dr. Dyer one-half of the finger was atrophied, shriveled and mummified. It had the appearance of meat salted and smoked—"jerked meat," as they call it in Texas; but there was no gangrene evident. The odor led to the suspicion of the local use of carbolic acid and an investigation proved the truth of the suspicion. The girl—an hysterical subject—had resorted to this method of exciting sympathy.

The second patient was a girl of fourteen, whose menstrual epoch had just been established. With the same purpose in view as the first patient, she had burnt one side of her face in five or six places with the cork from a carbolic acid bottle. Diagnosis was made easily because the blisters caused by carbolic acid were not like those of any disease or of any other burn, except perhaps those caused by a strong solution of chloral.

The third patient was a woman who had been operated upon for uterine cancer. The physician in charge of the case, who called Dr. Dyer in consultation stated that for several months, at intervals, an irregular eruption had appeared on all those portions of the body that she could reach with her hands. The lesions were of sizes varying from that of a nickel to that of the palm of the hand. The long duration of the trouble and the acuteness of the eruption when it did appear, simulated a neuro-

sis. The diagnosis was made from the lesions themselves, particularly from a peculiar streak extending from some of the lesions and indicating where the excess of acid had run. The trouble ceased when carbolic acid was put beyond the reach of the patient.

Dr. Dyer related another case of feigned eruption of a different character, that of an old negress who complained that she was awakened at night by insects coming out of her skin. She said she crushed them between her fingers. They never left any spots however, nor was there any indication of the existence of such insects as she described. The condition was purely psychic. Such patients should never be told that their troubles are purely imaginary, but should receive local treatment while being assured that their trouble would be soon relieved. In this patient a cure was promptly effected by applying nitric acid to those places where the insects were supposed to crawl out.

DR. WALET said that the patient who had had a carbolic acid eruption some time after he had performed a vaginal hysterectomy for cancer was the one referred by him to Dr. Dyer. The patient was an hysterical and nervous woman. The eruption had appeared several weeks after the operation. At first macules appeared, which afterward became copper-colored. Later the condition impressed him as somewhat resembling pemphigus, after the blister had been punctured. He had thought that possibly some trophic disturbance existed. The streak mentioned by Dr. Dyer was very characteristic.

The patient subsequently developed a new phase. She lost all appetite and ate practically nothing. At first it was thought that she ate between meals, but there was evident loss of weight. Finally the patient herself asked for a tonic. Dr. Walet thought she had abstained from eating for the purpose of exciting sympathy and was now seeking an excuse to return to her former dietary. He, therefore, looked for good results from his tonic.

DR. LEBEUF asked whether such an hysterical condition did not often follow hysterectomy and oophorectomy.

DR. MARTIN recalled such a case, but the condition pre-existed the operation. Hastening the menopause might cause such a condition.

He related a case of hysteria in a young lady thought to be exhausted by social duties, whom he had advised to go across the lake for rest and recreation. Several weeks later he was informed that she was desperately ill and was requested to call at the house on arrival of the train. On reaching the house he was informed by her family that she had become addicted to the use of morphin, and was having fainting spells every few minutes. She was having one just then. On entering the room he noticed the eyelids moving. As soon as the opportunity presented itself, he told her that he recognized that she was only hysterical, but if she promised to stop fainting and would help him out in his treatment, he would not tell her family. She was an old acquaintance and good friend and took his advice. Her recovery was uneventful and rapid.

Dr. Martin related a second case, a young girl supposed to be suffering from ovaritis. The best skill in a neighboring city had failed to relieve her. She had been terribly blistered and the abdomen was greatly distended. She had become addicted to the use of cocain. When he entered the room the first time she was immediately seized with a convulsion. He walked up to the bedside, sent the nurse for some ammonia and leaning over the patient told her that he knew her secret (meaning that he recognized that she was feigning) and would divulge it. She immediately opened her eyes and promised to do better if he would say nothing. It developed that she had a secret, that she had committed a minor offense and believed that if it were known she would be arrested. In one month the patient was sent home, completely restored in health, much to the delight and gratification of her parents.

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#### MEETING OF MAY 10, 1902.

DR. E. J. GRANER presided.

DR. S. P. DELAUP read a paper on *Total Excision of the Scapula with Preservation of the Arm*, and exhibited the patient.

DISCUSSION—DR. PARHAM: The result in Dr. Delaup's case was admirable, far better than a more extensive operation involving the head of the humerus would have yielded. He had no experience with total extirpation of the scapula, but had had three cases of extensive partial removal of the scapula. The



mortality was nil and the results good. The case reported showed what good results total extirpation of bones would give. He had seen a case where the os calcis had been entirely removed and there was perfect functional results with regard to the ankle joint. He remarked also on the perfect functional results after the extirpation of the pectoral muscles in malignant disease of the breast. In cases such as the present one, our aim should be to do a radical operation and secondarily to endeavor to obtain as good a functional result as possible.

DR. PERKINS said that this was one of the best results he had ever seen after an extensive operation on a large joint.

DR. PARHAM asked what technical steps had been taken to prevent the infection of the new joint with tuberculous material and how the joint had been closed.

DR. DELAUP replied that he had anchored the upper portion of the free margin of the capsular ligament to the acromial end of the clavicle, and the remaining portion of the free margin of the capsular ligament he had sutured to the soft parts between the clavicle. There had been some infection of the joint, but this subsided after irrigation.

DR. MARTIN reported a case of *excision of the elbow joint*.

DISCUSSION.—DR. PERKINS said he had been an interne in the ward when this woman was operated upon by Dr. Martin. Her arm had been put up in a heavy plaster cast, which anchored the forearm but allowed the arm to play up and down. This heavy weight would have confined the patient to her bed and kept her in one position had it not been for the swinging apparatus devised by Dr. Martin, which was worthy of report. By means of this apparatus the arm could be swung back and forth and raised and lowered. The patient was even able to get out of bed and sit at the bedside with her arm suspended and also to return to the bed when she chose.

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CHARITY HOSPITAL OF LOUISIANA ALUMNI ASSOCIATION.  
EIGHTH ANNUAL MEETING.

The session began on April 29, with an excellent paper, read in the Miles' amphitheatre at the Charity Hospital by Dr. L. F. Salomon on "*Rational Treatment of Typhoid Fever.*" (See p. 782 this JOURNAL.)

On April 30, Dr. F. W. Parham gave in the amphitheatre a most comprehensive lecture on *The Present Status of the Roentgen Rays as a Therapeutic Measure*. This lecture proved to be most interesting because of the wide field of experimentation by Dr. Parham, and as he was able to give the result from his own cases.

The regular meeting was held at the Orleans Parish Medical Society rooms on University Place.

The president, Dr. L. G. LeBeuf, read his annual report. He spoke of the high standard attained by the hospital staff and resident students, and the outlook for even better service as evidenced by recent examinations, of the influence of the alumni on the hospital, and the necessity of the alumni always having at heart the improvement and broadening of the sphere of usefulness of the hospital.

He quoted a distinguished alumnus in a Northern city, who said that nowhere had he met as good advantages to the undergraduate as well as the post-graduate as are offered right at our own Charity Hospital in New Orleans. He quoted the famous names of Warren Stone, A. W. Smythe, T. G. Richardson, Albert B. Miles and C. J. Bickham as examples to follow.

He referred to the crying need at the Charity Hospital along the lines of prophylaxis. The establishment of the modern outdoor pavilion system was urged, as established in St. Tammany, for the treatment and segregation of the unfortunate tuberculous. He said:

“With all the efficiency of our splendid hospital staff, the mortality of those suffering from consumption admitted to the medical wards in the main building, is something perfectly frightful. The line of the Inferno could well be written for those unfortunates over the front door of that building: ‘All hope abandon, ye who enter here.’ And how can it be otherwise, with low, thick, damp brick walls? The sunlight only comes through windows in front; an improved ventilation, but still not the ventilation needed for the proper treatment of such cases. And then the danger to the hundreds of other patients? This is not said in criticism at all, because, on the contrary, the staff invariably informs those patients at the time of their admission of the danger they run in remaining in crowded wards, thereby saving many of these poor unfortunates.

“If any of our alumni feels able to do so, or, if he does not, if he can influence some wealthy patient to do so, and he wishes to do a real service to humanity—a service which will be a grander monument than the building of a school or the founding of some memorial of some kind or other—let him study out the plans of some up-to-date pavilion system, and endow our Charity Hospital with a fund large enough to secure a few acres in the health-giving pine belt across the lake, where a few plain-built frame buildings, or even tents, could be erected at nearly no cost and give the benefit of the pure ozone air to these poor sufferers. Give them a chance to fill their diseased, broken-down lungs with the odor of the creosote-laden air, or let their appetites be sharpened by the smell of the new pine burr, and this in a continuous bath of sunlight and outdoor life. If this could be done, it could be run most economically as a separate department of the hospital, with a corps of one or two students and a visiting physician. Such a noble work, such an achievement should only be named to have it to crystallize into *un fait accompli*.

“We have been nearly dazzled lately by the Napoleonic endowments of Cecil Rhodes to his alma mater. Can we not find one such in our own southland city, where brotherhood is so dear to us and where human charity is so well understood?

“The long-talked-of infectious disease ward to be built in the back of the present hospital grounds will be a great addition also. The authorities, I believe, met with opposition at the time they desired to construct this building. It is still quite a necessity, even if it were used only as a place for temporary segregation, where the suspicious cases could be kept until determined diagnosis could be made. I have no doubt that many other lines of improvement could be found, and anyone with a philanthropic inclination will only have to consult Dr. Bloom to be able to direct his purpose to some useful endowment. The bacteriologic department, which is doing such good work, needs more resources to be able to extend its field of usefulness in the line of experimental work as well as in vivisection to the great benefit of the undergraduate classes especially. Let us then try and keep up our organization and let us not be discouraged if apparently our work and our banding together has not yet borne any fruit. We may have built in the future without knowing it.

“ One way in which this body could be placed in immediate touch with the administrative department would be if the governor of our State could see fit to appoint one or two of our number on the board of administrators itself. With representation on the board we should be able to accomplish all the good which a more intimate knowledge of the inner working of the institution would allow.”

A committee on the tenure of assistant house surgeons at the Charity Hospital reported the following suggestions:

“ In the future vacancies occurring in the positions of the assistant house surgeons shall be filled by competitive examination. Applicants must be of good moral character, must have been practicing physicians for at least two years, and citizens of the State of Louisiana. Their tenure of office shall be limited to four years.”

These were adopted. The committee was composed of Dr. E. D. Martin, Dr. John Callan and Dr. W. M. Perkins.

Hon. E. B. Kruttschnitt delivered the address on *The Medical Expert as a Witness*. The speaker began by referring to the inroads made upon the legal profession by science. At first unwelcome and comparatively unimportant, they were followed rapidly by others which gradually and practically usurped the functions of jurors in deciding upon the weight of evidence of the presence of poison in the human body, of hand-writing, and of insanity. Stranger innovations are pending. An affidavit has already been made by telephone, and other inroads will be made in the course of time.

Despite such rapid advances in the application of science, both courts and laymen have formed a low estimate of expert testimony. But, however much the doctor and the lawyer may complain of each other in the department of medico-legal investigation, the two professions cannot be divorced. There have been too many half-educated doctors on the witness stand, and too many half-educated lawyers at the bar, who, without any just conception of the heavy responsibility or the moral obligation imposed, assume to disclose scientific facts which are to them unknown, to describe functions of which they are ignorant, to impart knowledge which they do not possess, and to formulate verdicts which deprive fellow-beings of life, liberty or property.

That criticism of expert scientific advice is well founded cannot be denied. Is there any remedy? In some branches, no; as to the medical profession, yes.

The chief cause of the unsatisfactory character of this evidence is given by Dr. Wharton (*Criminal Evidence*, section 420), where he refers to scientific men being retained by one of the sides in the case. A retainer, consultation about and a participation in the preparation of a cause do not conduce to that state of perfect mental equilibrium so desirable in a witness. Solidarity of interest soon springs up between the scientist and the lawyer. The victory or defeat is a joint one, but the lawyer has been spared the subjection to the unfair test of being both advocate and witness. The physician alone is the member of the partnership subject to this intolerable ordeal.

The remedy is to be found largely outside of Anglo-Saxon communities, among those continental peoples whose laws of evidence, as gathered from the Dreyfus trial and from Balzac's and other novels, is so incomprehensive to all English-speaking lawyers and the subject of so much ridicule. The speaker then reviewed the French method of procedure. When a case occurs the proper judicial officer goes accompanied by one of two doctors of medicine or surgeons. These furnish the officer any expert information he may require, being placed under oath. Before the courts the evidence is adduced in the form of a "consultation," which is but little different from a report intended to enlighten the courts upon the value of reports already made, etc.

It would be difficult to introduce so radical a reform as to prohibit entirely the present use of experts; but would it be possible to get the best out of the French system without impairing the rights of litigants to avail themselves of the services of any expert witness whom they may choose to employ? Suppose the courts would adopt a panel of physicians recommended by recognized medical authority as experts in the special line of inquiry requiring investigation, the right being allowed each litigant to strike off names alternately until the total be reduced to three, these to constitute a board of experts, to whom should be referred the ascertainment of medico-legal facts of the case, after hearing the parties and even their medical witnesses, if desired.

The speaker closed his address by mentioning several facts which indicate the importance of competent and unbiased scientific evidence.

The association then elected the following officers:

President, Dr. E. D. Martin;

Vice president, Dr. John Laurans;

Secretary, Dr. S. M. D. Clark;

Treasurer, Dr. Jules Lazard;

Executive Committee, Dr. A. C. King, Dr. W. E. Kittredge and Dr. L. Perilliat.

The banquet followed at Lamothe's and the feast lasted until a late hour.

## Louisiana State Medical Society Notes.

Next meeting in Shreveport, June 3, 4 and 5, 1902. Dr. T. E. Schumpert, President, Shreveport; Vice-President, Dr. F. A. Larue, 1st Congressional District, New Orleans; Dr. E. D. Martin, 2nd Congressional District, New Orleans; Dr. G. W. Remage, 3rd Congressional District, Jennings; Dr. J. M. Callaway, 4th Congressional District, Shreveport; Dr. J. M. Barrier, 5th Congressional District, Delhi; Dr. A. F. Barrow, 6th Congressional District, St. Francisville; Dr. Hermann B. Gessner, Recording Secretary, 124 Baronne Street, New Orleans; Dr. A. G. Friedrichs, Corresponding Secretary, 641 St. Charles Street, New Orleans; Dr. H. S. Cocram, Treasurer, 124 Baronne Street, New Orleans; Dr. Oscar Dowling, Shreveport, Chairman of Committee of Arrangements.

### LIST OF SUBJECTS, CHAIRMEN, ETC.

GENERAL MEDICINE—Chairman, Dr. Whyte Glendower Owen, White Castle. To open discussion, Drs. F. M. Thornhill, Arcadia, and J. M. Barrier, Delhi.

#### *A Symposium of Tuberculosis in Louisiana:*

(1) Vital Statistics of Tuberculosis in Louisiana, Dr. G. Far-rar Patton—Orleans Parish.

(2) The Transmission of Tuberculosis, Dr. Whyte Glendower Owen—Iberville Parish.

(3) Education of People as a Factor in the Prevention of Tuberculosis. Dr. Fred. M. Thornhill—Bienville Parish.

(4) Climatic Treatment of Tuberculosis afforded in Louisiana, Dr. P. E. Archinard—Orleans Parish.

(5) Medical Treatment of Tuberculosis and Its Results, Dr. Charles McVea—East Baton Rouge Parish.

(6) Tuberculosis Among Our Negroes, Dr. John M. Barrier—Delhi.

(7) General Discussion by the Society.

NEUROLOGY, INCLUDING MENTAL DISEASES—Chairman, Dr. G. A. B. Hays, Jackson. To open discussion, Dr. P. E. Archinard, New Orleans. *What can be done to prevent the increase of degenerates?*

SANITARY SCIENCE—Chairman, Dr. Edmond Souchon, New Orleans. To open discussion, Dr. S. R. Olliphant, New Orleans; Dr. N. K. Vance, Shreveport; Dr. J. S. Alison, Swartz. *Transportation of Mosquitoes by Vessels.*

GENITO-URINARY SURGERY—Chairman, Dr. Chas. Chassaig-nac. To open discussion, Drs. W. K. Sutherlin and R. Hunt, Shreveport. *Varicocele.*

OPHTHALMOLOGY—Chairman, Dr. H. D. Bruns, New Orleans. To open discussion, Drs. E. W. Jones and P. L. Reiss, New Orleans. *Control of Suppuration in Anterior Portion of the Eye.*

OTOLOGY, LARYNGOLOGY AND RHINOLOGY—Chairman, Dr. W. Scheppe-grell, New Orleans. To open discussion, Drs. Gordon King and C. J. Landfried, New Orleans. *Syphilis of Nose.*

ORAL SURGERY—Chairman, Dr. A. G. Friedrichs, New Orleans. To open discussion, Dr. Geo. J. Friedrichs, New Orleans. *The Care of Children's Teeth.*

HYGIENE—Chairman, Dr. F. J. Mayer, Opelousas. To open discussion, Dr. W. A. Holloway, Plaquemine.

*Hygienic Education of the Masses.*

MEDICAL JURISPRUDENCE—Chairman, Dr. S. L. Théard, New Orleans. To open discussion, Dr. F. J. Kearny, Plaquemine. *The Responsibility of Persons Affected with Delirium Tremens.*

BACTERIOLOGY—Chairman, Dr. O. L. Pothier, New Orleans. To open discussion, Dr. John J. Archinard, New Orleans. *The Pneumococcus and Its Infections.*

QUARANTINE—Chairman, Dr. J. C. Egan, Shreveport. To open discussion, Drs. A. Nolte, New Orleans, and J. S. Stephens, Jr., Natchitoches. *Quarantine.*

DISEASES OF CHILDREN—Chairman, Dr. J. F. Oechsner, New Orleans. To open discussion, Drs. John Callan and G. F. Pat-ton, New Orleans. *Surgery of the Child.*

DERMATOLOGY—Chairman, Dr. Isadore Dyer, New Orleans. To open discussion, Dr. J. N. Roussel, New Orleans. *The Importance of Diagnosis in Skin Diseases. Considered generally and as applied to particular Diseases.*

SURGERY—Chairman, Dr. J. D. Bloom, New Orleans, to open discussion. Subject for discussion, *Treatment of Patella Fractures.*

Miscellaneous papers announced by chairman of this Section:

*Two Hundred Accidental Injuries*—Dr. R. W. Seay, Litcher.

*How Shall Exstrophy of the Bladder with Epispadias be Corrected*—Dr. S. L. Théard, New Orleans.

*Spinal Analgesia*—Dr. W. M. Perkins, New Orleans.

*Circumcision for the Cure of Chancroids, with Phimosis, and as a Sanitary Means in the Relief of Herpes, with a Report of Twenty Selected Cases*—Dr. P. L. Bellenger, Waterproof.

*Significant Facts in Alexander's Operation*—Dr. P. Michinard, New Orleans.

*Carcinoma of the Breast*—Dr. E. D. Martin, New Orleans.

*Epispadias*—Dr. E. D. Fenner, New Orleans.

*Herniotomy*—Dr. J. M. Batchelor, New Orleans.

*Case of Excision of Tibia Following Railroad Injury, with Complete New Formation of Bone*—Drs. E. Denegre Martin and Louis G. LeBeuf, New Orleans.

OBSTETRICS AND GYNECOLOGY—Chairman, Dr. R. A. Gray, to open discussion. Subject for discussion, *Postpartum Hemorrhage*—Dr. Gray.

*Tubal and Abdominal Pregnancy*—Dr. L. Perilliat, New Orleans.

*The Procedure of Suspension in Uterine Prolapse*—Dr. H. S. Cocram, New Orleans.

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MISCELLANEOUS PAPERS, ARRANGED ACCORDING TO SECTION:

SANITARY SCIENCE—*The Value of Co-operation in the Sanitary Control of Our Periodic Epizootics of Anthrax*—W. H. Dalrymple, M. R. C. V. S., Baton Rouge.

HYGIENE—*Drainage, Its Relation to Health*—Dr. M. Dunn, Colfax.

OBSTETRICS AND GYNECOLOGY—*Operation for Pyo-Salpinx, with Rupture into the Bladder; Septic Peritonitis; Recovery*—Dr. W. G. Graham, New Orleans.



*Minor Gynecology*—Dr. J. V. Bonnette, Pollock.

GENERAL MEDICINE—*The Tongue as a Diagnostic Factor in Disease*—Dr. L. G. LeBeuf, New Orleans.

*Malarial Hematuria*—Dr. L. Lazare, Washington.

*Positive Typhoid Fever in Nurselings with Symptoms of Tuberculosis, Complicated by Tuberculosis During Convalescence; Report of a Case*—Dr. E. M. Dupaquier, New Orleans.

MEDICAL JURISPRUDENCE—*The Ear from the Medico-Legal Standpoint*—Dr. W. Scheppegrell, New Orleans.

*The Age of Consent*—Dr. Isadore Dyer, New Orleans.

OPHTHALMOLOGY—*Spontaneous Rupture of the Eyeball in Influenza*—Dr. L. G. LeBeuf, New Orleans.

GENITO-URINARY SURGERY—*Report of a Case of an Hermaphrodite*—Dr. C. L. Hope, Oak Ridge.

MISCELLANEOUS—*Reciprocity of State Medical Examiners*—Dr. E. L. McGehee, New Orleans.

*Modern Empiricisms which Infest our State, and Especially in the Parish of Livingston*—Dr. G. W. Jones, Magnolia.

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## Medical News Items.

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THE MEDICAL DEPARTMENT OF TULANE UNIVERSITY held its Annual Commencement at Tulane Theatre, New Orleans, on April 30, 1902. The exercises were interesting, and the graduating class of 53 marked the beginning of a four years diploma.

THE NEW ORLEANS COLLEGE OF DENTISTRY, at its commencement exercises, on May 6, 1902, graduated a class of seventeen.

THE NEW ORLEANS COLLEGE OF PHARMACY graduated its second class of students, of four, at the Atheneum, New Orleans, May 14.

AT THE HOTEL DIEU TRAINING SCHOOL exercises on May 14, held at Tulane Hall, seven nurses were graduated. This increases the Training Schools in New Orleans granting diplomas to four, organized in the order following:

The New Orleans Sanitarium Training School (in 1889); the Charity Hospital Training School; the Touro Infirmary and the Hotel Dieu. The Wheatley Sanitarium (colored) has also a training school, now about three years old.

THE LOUISIANA PHARMACEUTICAL ASSOCIATION held its Twentieth Annual Session May 8 and 9. Very little of general interest transpired.

THE U. S. MARINE HOSPITAL SERVICE now provides for the wearing of Khaki uniforms by its corps at some of its stations. This uniform is to take the place of its fatigue uniform.

THE SOUTHWESTERN LOUISIANA INDUSTRIAL INSTITUTE held its closing exercises for the first session at Lafayette, La.

GLASS VACCINE POINTS have been introduced by the Messrs. Mulford Co. The advantages claimed are thorough cleanliness, easy scarification and uniform preparation.

OBITUARY.—Dr. James Francis Finney died in New Orleans on Friday, May 2, 1902. Dr. Finney, born in New Orleans in 1848, was always identified with the public service in medicine, and as coroner and expert on the Board of Health he rendered valued services.

Dr. Thomas D. Isom, of Oxford, Miss., died at that place May 4, 1902, in his 87th year. Dr. Isom was well and favorably known in Mississippi.

As we go to press we learn with sadness of the death, in Detroit, of Dr. W. H. Watkins, of this city. We shall notice it at greater length in our next issue.

THE AMERICAN ORTHOPEDIC ASSOCIATION meets June 5, 6 and 7, 1902, at the Hotel Walton, in Philadelphia. An unusually interesting program has been arranged.

THE COLORADO STATE MEDICAL SOCIETY offers a prize of \$25 for the best essay, for circulation among the laity, upon the dangers of self-drugging with proprietary medicines. The competition is open to all. Essays must be type-written in the English language, must contain not more than 3000 words, and must be submitted before June 15, 1902. Each essay must be

designated by a motto, and accompanied by a sealed envelope bearing the same motto and enclosing the name and address of the author. The essay receiving the prize will become the property of the Society for publication. Others will be returned to their authors. Essays should be sent to the Literary Committee. Dr. C. A. Graham, Secretary, Stedman Block, Denver, Colorado.

**THE KYGER RESOLUTIONS FOR THE ABOLITION OF THE NEWSPAPER PUBLICATION OF PERSONAL MEDICAL ADVERTISEMENTS.**—In a paper read by Dr. J. W. Kyger before the Kansas City Academy of Medicine on "The Decadence of the American Race," it was deemed of sufficient importance to appoint a committee to draft resolutions expressing the feeling of the regular medical profession in regard to the abatement of one of the causes of this condition, and also asking for the co-operation of the profession throughout the United States.

WHEREAS, it can and has been shown, by ample statistics, that the American race is rapidly decreasing in its birth rate, thereby threatening ultimate and complete decadence of the race, and

WHEREAS, such decadence has become so apparent that it should claim the serious attention of those of influence and power to in any degree lessen this evil, and

WHEREAS, without a special effort to investigate, it must have been observed by the most indifferent with what flagrant violation of all sense of delicacy the public press gives place to advertisements of nostrums and means intended to prevent or cut short pregnancy; these advertisements appearing in a column of the paper set apart for such purpose under the name of "PERSONAL MEDICAL ADVERTISEMENTS," and referred to as "Guarantees," "Sure Relief," "Sure Prevention," etc., occupying in some Sunday editions of reputable papers as much as two columns destined to fall into the hands of all classes, and

WHEREAS, we recognize the press as a most potent factor in the education of the masses: be it

*Resolved*, by the Academy of Medicine of Kansas City, Mo., that we respectfully recommend that a censorship over the public press should be exercised to the end of correcting such practice of publishing advertisements as those referred to in our whereases. Be it further

*Resolved*, that it should be deemed of sufficient moment for the attention of the Post Office Department of the United States of America restricting or prohibiting the distribution of such papers, periodicals or magazines through the United States mail if they continue to so prostitute their columns with such matter. And be it further

*Resolved*, that a copy of these resolutions be sent every State Medical Association in the United States urging their co-operation in this movement by the adoption of these resolutions.

*Resolved*, that we request the Secretary of every State Medical Association adopting these resolutions to forward two copies, one to the American Medical Association and the other to the Post Master General petitioning for relief from this destructive influence.

JOHN W. KYGER, M. D.,  
H. C. CROWELL, M. D.,  
B. H. ZWART,  
*Committee.*

THE AMERICAN ACADEMY OF MEDICINE will hold its twenty-seventh annual meeting at the Kensington, Saratoga, June 7 to 9, 1902.

THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES will meet at Saratoga, Monday, June 9, 1902. Among other features of the program arranged will be a discussion of the requirement of French and German for admission to medical schools; the requirements in Latin, mathematics, etc.

PERSONAL: C. W. Carl Stier, of Alabama, has been appointed junior pharmacist in the Marine Hospital Service, and is stationed at Memphis.

Prof. Geo. E. Beyer, of Tulane University, and Dr. O. L. Pothier, Pathologist and Bacteriologist to Charity Hospital, left for Vera Cruz early in May under commissions from the Marine Hospital Service for the object and purpose of studying the mosquito question in its relation to fevers and infectious and contagious diseases. Prof. Beyer's biologic work and especially with the mosquitoes of New Orleans made him pre-eminently qualified for the work in hand; while Dr. Pothier is to be congratulated at the recognition of his work on the bacteriology of the fevers here, notably his work on yellow fever.

Dr. W. E. Parker, of New Orleans, is now located at Hot Springs, Ark. The JOURNAL'S best wishes are with the doctor.

THE TOURO INFIRMARY FACULTY elected the following assistant surgeons to serve for one year from June 18:

Drs. Jacob W. Newman, Edward L. McGhee and Albert Meyer.

THE LOUISIANA STATE BOARD OF MEDICAL EXAMINERS passed sixty candidates for license to practice medicine at their meeting on May 3, 1902, as follows:

Drs. N. M. Allen, E. E. Barlow, N. A. Battzell, O. D. Benson, F. O. Brinkley, F. V. Boyd, S. C. Cade, J. H. Cameron, N. S. Craig, J. W. Ciniro, A. J. Comeaux, R. E. Cunningham, J. J. Delambre, F. W. Dortch, G. W. Durham, W. K. Evans, J. W. Fetherston, S. P. Feucht, A. E. Fossier, S. G. Green, H. T. Gill, C. Heaminack, S. J. Hymel, A. Jacobs, F. R. Jones, H. Jordan, W. F. Jose, A. S. King, J. A. Lampile, W. M. Ledbetter, J. Levy, J. T. Lewis, E. E. Martin, J. G. Martin, W. W. Mason, R. L. May, A. J. Mayer, A. J. Mayfield, T. M. McGehee, E. L. McGehee, Jr., A. B. Nelson, J. W. Newman, H. Nichuss, W. T. Patterson, G. A. Pennington, T. R. Rudolf, W. T. Richaw, W. A. Roche, H. B. Seebold, H. C. Self, T. C. Sexton, J. R. Spears, S. M. Scott, J. M. Suarez, J. G. Stubb, W. B. Travis, O. T. C. Teagle, W. A. Tickerson, R. C. Tompkins, S. D. Wall, B. B. Warwick, P. Wilson, T. H. Wright, M. W. Wooton, T. F. Worthington.

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## Book Reviews and Notices.

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*All new publications sent to the JOURNAL will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the JOURNAL to review as many of the works received as possible, the editors will be guided by the space available and the merit of the respective publications. The acceptance of a book implies no obligation to review.*

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*A System of Physiological Therapeutics.* A Practical Exposition of the Methods other than Drug-giving Useful in the Prevention of Disease and in the Treatment of the Sick. Edited by S. SOLIS COHEN, A. M., M. D. *Volume VI: Dieto-Therapy and Food in Health*, by NATHAN F. DAVIS, A. M., M. D. P. Blakiston's Son & Co., Philadelphia, 1902.

This is the sixth volume of the Standard system of which we already have reviewed the two volumes on Climatology and Health Resorts. Alimentary hygiene in health and alimentary therapeutics in disease are so essential to practice that the present volume was looked for with great interest.

The principles of Diet, the study of foods, their digestion, the uses of water and other nourishing beverages, the proper diet in health, including infant feeding, finally food as a cause of disease compose the first portion of this volume, in thirteen chapters with an abundance of valuable details. Part second, Diet in individual Diseases begins with a chapter on how to feed the sick. The index is excellent.

The ground has been, with brevity, thoroughly covered, though it was no easy task to embrace in such a limited space so wide a domain as that of up-to-date Dietetics. We earnestly believe that the author's design has not miscarried and that the practitioner's expectation is not defeated.

DUPAQUIER.

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*A Treatise on Surgery, by American Authors.* Edited by DR. ROSWELL PARK. Third Edition, Enlarged and Thoroughly Revised. Lea Brothers & Co., Philadelphia and New York, 1901.

Ever since the first edition of this work came out some years ago, we have frequently referred to its pages for entertainment and instruction; we have found it always of the greatest value. The issuing of a third edition will be welcomed by those who have made themselves familiar with the first or second. As a guide for the practitioner and as a textbook for the student we heartily endorse and recommend it; but a work whose popularity justified a third edition only two years after the previous one appeared can scarcely need the commendation of a reviewer. Indeed, it needs no encomium, buy it and judge for yourself.

PARHAM.

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PUBLICATIONS RECEIVED.

*A Reference Handbook of the Medical Sciences*, Edited by Albert H. Buck, M. D., Volume IV.—William Wood & Co., New York, 1902.

*Photographic Atlas of Diseases of the Skin*, by George Henry Fox, M. D., Parts X and XI.—J. B. Lippincott & Co., London, Philadelphia, 1902.

*Annual Report on the Year 1901*, by E. Merck, March, 1902.

*Ophthalmic Myology*, by G. C. Savage, M. D., published by the author—Printed by Gospel Advocate Publishing Co., Nashville, 1902.

*Report of Vital Statistics of the Cities Havana and Guanabacoa*, March, 1902.

*The Operations of Surgery*, by W. H. A. Jacobson, M. Ch. Oxon., F. R. C. S., and F. J. Stewart, F. R. C. S., 2 volumes—P. Blakiston's Son & Co., Philadelphia, 1902.

*International Clinics*, Edited by Henry W. Cattell, M. D., Volume 1, Twelfth Series, 1902—J. B. Lippincott Company, Philadelphia.

*Principles of Bacteriology*, by A. C. Abbott, M. D., Sixth Edition—Lea Brothers & Co., Philadelphia and New York, 1902.

*First Biennial Report of the Southwestern Louisiana Industrial Institute*, 1902.

#### REPRINTS.

*Insufficiency of Divergence as an Etiological Factor in Concomitant Convergent Strabismus; Its Importance, Determination and Treatment*, by Herbert Wright Wooton, M. D.

*Principles of Hydrotherapy*, by Otto Lerch, M. D.

*Spa Treatment of Gout*, by Charles C. Ransom, M. D.

*The Diagnosis and Surgical Treatment of Nephrolithiasis from the Viewpoint of the General Practitioner*, by Ramon Guiteras, M. D.

*Superheated Compressed Air in the Therapeutics of Chronic Catarrhal Otitis Media*, by Geo W. Hopkins, M. D.

*Inaugural Address as President of the Medico-Legal Society*, by Clark Bell, LL. D.

## MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Report of the Board of Health of the City of New Orleans.)  
FOR APRIL, 1902.

CAUSE.	White.	Colored.	Total.
Insanity .....	3	....	3
Pleurisy .....	3	3	6
Other Diseases.....	2	1	3
Respiratory System.....	3	1	4
Appendicitis .....	1	1	2
Fever, Scarlet.....	1	....	1
“ Typhoid or Enteric.....	7	2	9
Erysipelas .....	2	....	2
Bronchitis .....	5	5	10
Diphtheria and Croup.....	2	1	3
Influenza .....	5	2	7
Pyemia and Septicæmia.....	3	....	3
Paralysis .....	2	2	4
Pneumonia .....	15	20	35
Cancer.....	11	5	16
Tuberculosis .....	44	47	91
Diarrhea (Enteritis) .....	23	17	40
Dysentery .....	2	1	3
Intestinal Obstruction.....	3	1	4
Other Liver Diseases .....	1	1	2
Hepatic Cirrhosis .....	4	....	4
Peritonitis .....	2	....	2
Diseases Locomotor System.....	1	3	4
Debility, Senile.....	9	13	22
“ Infantile .....	10	....	10
Bright's Disease (Nephritis) .....	20	9	29
Puerperal Diseases.....	4	2	6
Heart, Diseases of .....	33	26	59
Apoplexy and Congestion of Brain.....	14	3	17
Inanition.....	7	2	9
Meningitis.....	10	4	14
Alcoholism .....	3	....	3
Convulsions, Infantile.....	3	3	6
Trismus Nascentium .....	1	4	5
Injuries.....	18	14	32
Suicide .....	2	....	2
All Other Causes.....	32	15	47
<b>TOTAL</b> .....	<b>311</b>	<b>208</b>	<b>519</b>

Still-born Children—White, 13; colored, 8; total, 21.

Population of City (estimated)—White, 223,500; colored, 81,500; total, 305,000.

Death Rate per 1000 per annum for Month—White, 16.60; colored, 30.62; total, 20.41.

## METEOROLOGIC SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure.....	30.02
Mean temperature .....	69.
Total precipitation .....	3.71 inches
Prevailing direction of wind, south.	









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