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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.]

THE PATHOLOGY AND TREATMENT OF DEVIATIONS AND SPURS OF THE NASAL SEPTUM IN YOUNG CHILDREN.*

BY E. J. MOURE. M. D. CHARGE DU COURS DE LARYNGOLOGIE, OTOLOGIE ET RHINOLOGIE A LA FACULTE DE MEDECINE DE BORDEAUX.

Before taking up the subject which I desire to bring to your attention, I wish to explain that in speaking of young children I shall limit myself to those which have not yet passed the age of 10 to 11 years at most, because, after this age, they may still be children, but they have ceased to merit the qualification of young. This being understood, I would recall the statement which Zuckerkandl has already made many years ago, that the nasal septum does not commence to deviate until the age of 7 years—that is to say, at the time of the evolution of dentition. Nevertheless, it happens very often that we are consulted for children under this age, who have deformities of the septum sufficiently pronounced to obstruct, more or less completely, one or even both of the nostrils.

It would seem that the clinical examination is not in accord with the theory of the Viennese professor; still, if we examine the subject a little more closely, we shall perhaps be of his opinion. In fact, most of the deformities of the septum observed in children under the age of seven years are not usually

*Translated by W. Scheppegrell, A. M., M. D., New Orleans. Read before the Louisiana Medical Society, May, 1896.

deviations in the true acceptation of the word, but more often simple displacements with partial thickening.

In the normal state the fibro-cartilage is set upon the maxillary bone in a kind of groove by no means deep, from which it is relatively easy to dislodge it. It is on this account that if a cadaver is allowed to fall upon the nose, or if the finger is forcibly pressed upon the side of the nose, the septum is dislodged from its groove; in a word, a kind of definite luxation is produced. Now, what is easy to do experimentally on the cadaver in the amphitheatre is reproduced actually in the practice among children, who fall frequently upon the nose, or receive blows more or less violent upon this organ.

These various transactions have their first effect in displacing the fibro-cartilage from its antero-inferior groove, and carrying the free end into one or the other nostril. This is often the first stage of the deviation of the septum of the nose in children under the age of seven years. When the septum has once been dislocated, following an initial traumatism which has been more or less violent, the cartilage is more or less bent upon itself, forming either a simple concavity on one side to which an *equal* convexity of the opposite nasal fossa corresponds, or a kind of thick edge which may be sufficient to completely obstruct one nostril. In this case the concavity is much less pronounced than the opposite projection. It is easy to ascertain whether we have to deal with a displacement of the nasal septum and not with a simple thickening or spur, or of a true deviation, by simply raising the point of the nose upward and backward. We can then see the inferior edge of the fibro-cartilage appearing under the mucous membrane at the entrance of the nostril to which it is luxated. This displacement is such, in some cases, that, while on the one hand the inferior edge of the cartilage makes a considerable projection into one nostril which it obstructs, the corresponding portion closes more or less the other nasal fossa. It is thus that traumatism, the importance of which in the etiology of spurs and deviations of the nasal septum has been so often discussed, appears to me to have its most distinct influence. I acknowledge, on the other hand, that in the osteo-cartilaginous deformities developing in the course of the concomitant evolution of the superior maxil-

lary and septum, falls, blows, etc., play purely a secondary and accessory role.

This then is the explanation, in my opinion and in general, of the divergence which appears to exist between the opinion of Zuckerkandl and what we observe in our daily practice.

These indispensable considerations being established, we will now consider the question of the treatment of these deformities of the septum in children under the age of 7, 8 or even 10 years.

If a case of displacement of the fibro-cartilage presents itself the indication is clear to replace it in its position and to maintain it there by the aid of an apparatus as simple as possible. It is rarely the case, however, that we are consulted at the time of the accident; most frequently the displacement is of long standing, and often it is accentuated to the extent which we have just explained; it will therefore be necessary to proceed by some other method.

In those cases in which the dislocated septum forms a simple regular convexity on one side and a concavity on the other, the treatment should consist in replacing things in their normal condition, either by forcibly luxating the septum with the finger into the opposite side—that is to say, by making the concave side convex, and *vice versa*, or by attaining this change by degrees by the aid of various straighteners (*redresseurs*) of the septum devised by Dr. Delstanche, of Brussels, these instruments being modified according to the requirements of each case. This treatment, followed methodically and regularly for several months, gives, it must be confessed, very satisfactory results in those cases which I have just described, and which might be called simple in contradistinction with those more complicated, to which I will now call your attention.

In these cases not only is the fibro-cartilage displaced and its edge luxated to one side, but it is turned up on itself as if fractured. This may be to such an extent that a concavity, in the form of a relatively shallow antero-posterior groove, corresponds to a prominent ridge, which may be very thick and often going so far as to push out the wing of the nose under which it projects. There is produced in this case a kind of true cartilaginous thickening, against which the straighteners are powerless and impossible to apply. Even if it were possible to place them in position in these cases, it would be very wrong to

cause the ulceration of the tender mucous membrane which would result and which would soon make the method inapplicable.

For this kind of spurs with displacements, surgery alone is the fashion, and it is not with a view of defending this or that operative procedure that I have undertaken this little study, but rather to learn if, as a matter of principle, it is necessary to interfere under the age of 10 years. Not that the operation is impracticable at this age, or offers any immediate danger, but simply because children are then at the age when, as Zuckerkandl has so well remarked, the septum commences its real development. It is, in fact, at the time of the evolution of the second dentition that the framework of the nose commences to undergo that important change with which we are all familiar. But, to attack surgically the principal piece of support of the nose, to sap at its base the rock which forms the very arch of this structure, to lessen, to remove it even, will this not expose the child to a series of subsequent deformities (such as the fall of the fibro-cartilage, sinking of the nose) which it will afterward be very difficnlt to remedy? For my part, whenever I have had occasion to interfere in cases of this kind, I have always done so with the greatest precaution and patience, limiting myself simply to rendering the nasal fossæ permeable, without lessening too much the thickness of the deformed septum. In spite of these precautions I have almost always seen, after a year or two, the fibro-cartilage continue to sink, and the respiratory difficulties reappear. Very often the partition is so thin that I am compelled to limit myself to resecting the prominent point, at other times it is necessary to create an antero-posterior communication between the two fossæ in order to make the two nostrils permeable to the air.

In these conditions it appears to me interesting to know whether, in the generality of cases, it is not preferable to work with the assistance of straighteners, dilators or other instruments of this kind under the age of 10 to 12 years, instead of interfering surgically in these cases.

I believe, moreover, that the question of the displacements of the fibro-cartilage of the nose (antero-inferior) merits the serious attention of specialists, general practitioners, and of parents who concern themselves too little with the inconve-

niences which may result from a fall on the nose, or other traumatism received upon this organ.

This is the object of this short communication, in which I have tried to give a resumé as briefly as possible of my opinion on a delicate point in this interesting question of the deformities of the nose in young children.

THE INFLUENCE OF DISEASES OF THE NOSE AND ACCESSORY CAVITIES ON THE GENERAL HEALTH.*

BY PROF. E. J. MOURE (BORDEAUX).

Of all the diseases of the nasal fossae, there are two especially which may have a considerable effect on the general condition of the affected subject. The first is hypertrophic rhinitis affecting the inferior or middle turbinal, or both of these parts at the same time. When the affection is sufficiently well marked so as to render nasal respiration difficult or perhaps even impossible, the patient finds himself exposed to all kinds of bronchial and pulmonary complications, because the nasal cavities are no longer in a condition to fill their physiological role. These are matters of fact too common and too easy to explain to require further discussion. Even when the hypertrophy is limited to the pituitary membrane, it often beeomes the departing point of various reflex disturbances, the existence of which always requires a predisposition on the part of the subject to suffer from these kinds of complications.

The second affection of the nasal fossæ, which excites general morbid alterations of a sufficiently grave character, is fetid atrophic coryza. All practitioners are familiar with the poor and depressed appearance of ozenic patients, which has long ago been explained, on the one side, by the vitiated air which they inspire, and, on the other, by the frequent swallowing of the septic products. These are, without a doubt, two serious reasons why this affection exercises an evil influence on the general condition. Nevertheless there is another complication which is much less known and which, for my part, I have fre-

* Translated by W. Scheppegrell, A. M., M. D. (New Orleans). Read before the Louisiana State Medical Society, May, 1896.

quently met with in this category of diseases. I wish to refer to the facility with which they become tuberculous. It is certain, in my opinion, that the enlargement of the nasal cavities, and especially the cutanization of the mucous membrane, renders the penetration of the tubercular bacillus into the respiratory passages more easy; especially since, in most cases of ozena, the larynx and trachea are also affected by the morbid process. Very often have I demonstrated to the pupils who attend my clinic that many tubercular subjects are sufferers from atrophic coryza of a more or less chronic character. There appears to me to be a connection of cause and effect between these two affections, to which it would be well to call the attention of observers; and I feel convinced that many of my confrères have already made the same observation.

I could again recall the fact that the displacement of the fibro-cartilage of the septum, with osteo-cartilaginous projection, obstructing more or less the two nasal fossæ, causes general deformities in the child analogous to those observed in adenoidians. I have often been able to demonstrate the complete absence of retro-nasal adenoid tissue in children of 7 to 10 years, who, at first sight, have nevertheless all the external signs, with exception of the deafness, of hypertrophy of the third tonsil.

I will omit here purulent coryza and foreign bodies in the nose, the symptoms of which are frequently mistaken for those of sinusitis.

In the diseases of the accessory cavities, which may be considered together without describing them separately, we meet with all kinds of general disturbances. Thus we have the recurrent erysipelas so frequent in women at the catamenial period. The septic accidents are transmitted by tonsillary, auricular or retro-pharyngeal abscesses. I have even seen true phlegmons of the neck produced, and cases of abscess of the pleura and lung are reported.

Gastric and gastro-intestinal disturbances are perhaps the most frequent and these have the greatest effect on the general condition. This is easy to explain by the constant falling of pus into the throat during the day, and especially during the night, whence it is swallowed unconsciously. This incessant absorption of pus by the digestive passages is not long in creat-

ing a morbid condition, which, in some cases, may partake of a real grave character.

I have seen a case of transient albuminuria which was almost completely cured by the lavage of the maxillary sinus.

Sinusitis with abundant and fetid suppuration constitutes a latent morbid condition which may take on a dangerous development with the least instigation, and under an influence very trivial in appearance. It is on this account that an attack of influenza, in a patient affected with this kind of nasal suppuration, becomes capable of taking a character of exceptional gravity in the form of an infection attacking, consequently, the whole organism. It is hardly worth while to dwell on the danger of having a focus of infection in some part of the organism—that is, a centre of microbian culture which may at any time inoculate itself at some special point, and afterward develop there with a rapidity greater or less, according to the resistance of the subject. Then, again, the soil is generally well prepared for this culture, on account of the former absorption of toxic products which the organism does not always eliminate completely. The least fatigue, the least general trouble, is then sufficient to create the morbid opportunity which will place the patient at the mercy of these microbes, and will prevent him from reacting sufficiently to eliminate them, or at least to destroy their disturbing action.

The sinusitis with the most abundant and often fetid secretion, that is the suppuration of the maxillary sinus, appears to me to be the one which affects most often and most easily the general condition. These are, it is true, the most frequent and often the most tenacious.

We could extend very much the history of general complications consecutive to inflammation of the accessory cavities of the nose, if we studied them separately. But it appears to me that the actual bacteriological knowledge allows us to understand and explain, without difficulty, these various lesions, without considering them separately. The same theory and the same process is applicable to them all.

A FEW FACTS IN GYNECOLOGY.*

By JOSEPH PRICE, M. D., PHILADELPHIA.

The logic of what we know of the art and science of abdominal surgery presses home the not over-comforting reflection that we have but its alphabet; that we have very much before us to learn. However gratifying the success in many branches of our work, we have still to recognize the fact that achievement in surgery, as in all other sciences, is limitless. So many different conditions may combine in diseased nature, and they combine in so many differing ways as to produce difficulties for the surgeon which one may well believe can never be successfully studied or overcome in the experience of one man's life. It is almost discouraging to consider the innumerable phases which a living organism may assume under forms of abuse which are themselves as varied in character as our differing thoughts. Nature is most energetic in her efforts to restore health, but the obstacles which she encounters are so formidable ofttimes that her work must be accomplished in many roundabout ways much to the harm of organs entirely free from disease. Yet what an ally we have in this same nature. How marvelously well she aids us where we give her opportunity, and how much of an incentive should it always be to us to recognize such a power that is with us.

After all we find science and art to be nothing but the study of nature. Our branch of science pretends to build up man or woman; to remove or restore some diseased organ and re-establish the natural course of life. Moreover, our particular branch, the diseases of women, is in itself most commendable. Our work entails the greatest responsibility, and, forgive a little conceit, is most praiseworthy in successful issue. The surgical profession, or that portion of it devoted to abdominal surgery, has to deal with the most beautiful system which the Creator has bestowed upon humanity, and one which, for every reason, is most complicated.

In the matter of methods the first personal pronoun, with large capital letter, has gained the sanction of extensive use. Scattered all through our surgical literature are descriptions of

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MY method. There are very few men who can lay claim to a method as original with themselves. The art of application must be each individual's. Here comes in the wisdom, dexterity and ability to apply the scientific principles of our surgery. From the great aggregate of experience will come more simple and perfect procedures. In surgery we can not follow a distinct formula as in medicine, we deal with a mechanism in which effects follow causes, and we must know the possible result of the wounds we inflict with our own hands. Science always has some latest report to make and as to this we must keep informed.

We must start out on the broad ground that simplicity of work must give perfection of results; that the less we primarily deal with, the less is the restoration to be made, assuming always that we deal with diseased structures and do all that is necessary for their removal or ultimate recovery. All methods that do not thus aim at completeness must fall under the ban of criticism.

What is the rule with reference to disease, anywhere, of suppurative character? The suppuration must either be encouraged to evacuate itself or assisted to an egress. So it is in the liver, the kidneys, the brain. So it must be in the pelvis. Any method that loses sight of this principle must also fail in its ultimate efficiency. Herein is the failure of most, if not all, of the so-called conservative methods so loudly heralded. In all suppurative diseases there is concurrent inflammation, and the part originally diseased is glued down upon some neighboring structure, interfering with its function or with its anatomical relation, causing greater or less pain and discomfort. It is argued by the conservative camp that to remove just as little as possible is to simplify the work. They would leave adhesions to produce yet more serious trouble than originally existed. Good surgery consists in completing the work in hand; leaving nothing to require future surgical interference. This may not be possible in all cases, but to the extent that it is possible it should be done. The fewer times a patient is on our operating table the better for both patient and the credit of our surgery. The aim of the surgeon is to remove disease; to bring the parts not diseased into their normal anatomical relations, and by so doing conduce more certainly to the ultimate well-being of the patient. From this

point of view the operator who would remove a diseased tube and leave an ovary bound down by adhesions to the pelvic wall, intestine or omentum is no surgeon at all. If his result is favorable it does him no credit. Some peculiar combination of natural agencies has accomplished what he probably ascribes to his surgery.

The same holds if the method is applied to the conservation of a useless tube because it is difficult to remove. To recognize the fact that a patient may recover if left alone, after the abdomen is opened, puts our conservative surgeon in the light of having performed a useless operation and at once becoming conservative because that is the easiest thing to do. To leave a tube full of pus or blood, simply because it is hard to remove, is a wilful and inexcusable breach of faith on the part of the physician which is equally disgusting to the people at large and the surgical profession. Conservatism has no right at the present time to argue from the standpoint of the infancy of abdominal and pelvic surgery, any more than the old fogy who stays at home would have a right to justify his fears of travel by citing the dangers of sailboat transportation as an argument against our ocean liners. To say that many ovaries have been removed which should have been saved is to say what we all know. The same criticism could be offered against vaginal hysterectomy for cancer where only a simple erosion of the cervix exists. It is not good logic in arguing against this operation to cite the fact that the final results are not always what could be desired. We encounter many of these cases too late for practical surgical aid. The operation from its very severity discourages many from resorting to it, as well as does the further fact that cases of cancer of the cervix often continue for several years if left to pursue their natural course. There are sections done for ventral fixation in simple displacements, either because the operator is ignorant of the value of a pessary or wants to do a section. Cures by operation have been sought where the procedure was in nowise justifiable. We know that such errors were a part of the pioneer work—accidentally of the best men, designedly of the seekers after notoriety. But this does not answer the surgery of to-day. The surgery that leaves pus tubes and abscesses to get well of themselves and afterward finds pregnancy occurring is so fabulous, mythical, that I prefer simply to wonder without

caring to understand or believe. The leaving of pus tubes to recover of themselves, either by the vaginal or abdominal route, is just one step removed from stuffing them with gauze and trusting to providence. To puncture, evacuate and stitch a suppurating cyst, say a real ovarian cyst, would be derided, and yet we now have a set of operators who do not hesitate to do this with the smaller pus tube, smiling as they exercise the prudence which is the better part of their valor. I do not hesitate to say, and say positively, that the men who descend to this sort of work are those who in their earlier history have been guilty of extreme rashness and now are hiding behind extreme prudence so-called. All the so-called operations for room and light point to confidence insufficient to trust to the tactile sense. The removal of the sacrum for an ovariotomy or pelvic operation is no more justifiable or necessary than the resection of a rib for a simple pleurisy, than the extirpation of a little healthy uterus, leaving huge pus tubes and ovarian abscesses, laterally and above, and stuffing about them gauze. Extreme resorts are in general the expedients of *bad surgery.*

A word with reference to the assertion that with the Trendelenburg position there is no escape of fluid into the abdominal cavity. If there is a collection of any kind in the tube, not over-distended, and the pavilion is attached to the ovary, it is an easy matter to enucleate the mass without rupture, but if the pavilion is attached deep down on the pelvic wall or to an intestine, what is to become of the discharging fluid? It is very easy to manufacture reasons that will not explain at all in the actual condition of things. Any operator, or set of operators, who argue from a condition of affairs different from the above are taking a stand upon insufficient data.

Akin to all these undemonstrated claims are the tentative methods in certain conditions, such as gauze-packing and vaginal puncture for tubal abscesses. Now, it is a demonstrated fact that gauze does not drain anything but mere fluid matter; the debris of any sort whatever remains behind, and in the cheesy conditions which obtain in pus collections it is a matter of utter impossibility to clean out the cavities by such packing. Then, again, the vaginal puncture is as uncertain as can be any procedure that does not reach to the bottom of the disease. Primarily we do not know the extent of the disease nor its sur-

roundings or complications, and therefore we can not drain it certainly by any one given puncture, nor by any method save enucleation. After the enucleation is made the general cavity can be drained. The result will be in no wise questionable.

What shall we say as to the removal of the entire uterus in the presence of tubal and ovarian disease? I take it that if all the pathologists who have ever examined uterine structure—which is in great part muscular—were to make a report, there would be a consensus of opinion that an abscess condition of the uterine walls, apart from a broken-down fibroid, is the rarest condition imaginable, save at the cornua, in case of pyosalpinx. The disease here is strictly definable and removable. It is an unjustifiable assertion that the uterus is diseased, and is the reason for the failure of cure in certain women whose appendages have been removed. Large numbers of women have conceived and borne children after the removal of a unilateral ovarian abscess and pus tube. To remove, therefore, an organ which in a great majority of cases is not even remotely diseased is a seeking after means to obviate predicated bad results which could not be otherwise explained. When men are on record as saying that it is impossible to remove tubes and ovaries without leaving some ovarian tissue, do we go very far astray in thinking that they must also leave diseased structure sufficient to cause trouble, or that their methods are otherwise imperfect?

Again, the arguments advanced to sustain this position all come from sources prone to bemoan bad results. It must be remembered, also, that there is a difference to be noted in the cases from which they would assume their data. The disturbances due to fibroid tumors are developed at a rather late period, while those necessitating the removal of the appendages are of earlier origin. Hence, it is nonsense to argue that the conditions of the patients should be similar. If the trouble, nervous or otherwise, is no greater in a woman after operation than it would be at the menopause, are we justified in doing a hysterectomy on every woman whose tubes and ovaries are diseased? I think not. To argue that we need not do an entire hysterectomy, but may leave the cervix, is the weak answer of an uncertain position. The cervix of all parts of the uterine structure is the most prone to malignant degeneration, and this one fact

would be the most sensible standpoint from which to argue the total ablation of the uterus in cases in which the operation would otherwise be indefensible.

Again, that it is the seat of unhealthy discharges is continually used as an argument justifying hysterectomy. We are to remember that enough has been done of all kinds of pelvic work to decide the general trend of results; how far they are satisfactory and how far disappointing. The end should justify the means, not in the hands of the disappointed experimentalist, but in those of the careful, painstaking surgeon; one with a conviction and a faith born by experience and care; one who each day balances his accounts with himself and does not seek to escape the onus of a failure. The preparation of a patient must be thorough, but from an objective and subjective standpoint. She is to be duly purged, and her intestinal tract thereby freed from *debris* which may interfere with post-operative comfort. An empty bowel has better tone than a distended one. For the purpose of catharsis, calomel and salines should be used, according to the peculiarities of the patient. Light, simple, liquid nourishment is to be preferred, while in feeble cases the antecedent administration of strychnine is of value. The patient is to be thoroughly cleansed and kept clean, and all the rules of personal cleanliness are to be applied both to the nurse and to the surroundings of the patient. It often is questioned whether successful operation can be done and under conditions which do not permit of rigid cleanliness, so far as the room is concerned. Good results have been obtained under the most adverse conditions, but these have only been reached by extra care and painstaking avoidance of accident of introduction into the immediate field of operation of the filth of the surroundings. The very surroundings prompt the surgeon to seek and rely upon perfection of surgical detail. Cleanliness by soap and water is all that is required. Much fine surgery has been done in the tool-house at railroad crossings. Promptness, soap and water, not rapid surgery, were relied upon. Not a few of our operators gravely argue for slow and deliberate work, asserting that time is a matter of no importance and that speed means imperfect work. Such advice is surgically bad for many and strong reasons, and when carried into practice is mischievous. Work that can be done in twenty minutes should not be spun out over

forty. The fathers in surgery, who did their work without anæsthetics, were compelled to do it with greater rapidity, and they did it deftly and with great precision. There is not one of us who would not prefer the old-fashioned surgeon to perform an operation on him to the modern surgeon who sends a nurse or assistant from the operating room to some other room for an instrument, designating it as having a peculiarly curved point, handle of uniqe shape and labeled the "Johns-Hopkins latest." As to the incision it should be as short as is consistent with the removal of the diseased part. The smaller the incision the less we have to deal with in closing. If the tumor is irreducible, the incision must be longer than otherwise. Ligation of bleeding points must be carefully attended to. All points of bleeding do not necessarily require a ligature. The hæmostatic forceps very readily controls many of these, especially in the incision. Too numerous ligatures introduce an irritating element into the surgery of the pelvis and abdomen. Leaking vessels must be controlled and must be primarily handled so as to excite as little hæmorrhage as possible.

Drainage is the most essential feature, and this is begun by flooding the abdomen. The abdominal douche is as necessary for successful surgery in the peritoneal cavity as is soap for common cleanliness. Men who do not know how to drain cry out: "There is no need of drainage in abdominal work. The man who is in favor of it is a dirty operator." This cry is an old one and has grown to be somewhat monotonous and tiresome. At present this same class of men not only drain, but drain about everything. They practise open methods, both above and below, to favor drainage. Many of them have even changed their methods of doing operations to favor the particular drainage they prefer. The vaginal method of operating is now practised by men who opposed drainage from above, and I welcome this change in their practice, well knowing, as I do, that they can save the lives of more patients by this route than by any other. Again, they will probably favor more complete drainage in incomplete operations by the vaginal route than by the suprapubic. Now drainage, I mean glass drainage, simply continues the good work initiated by abdominal flooding. It permits the escape of lymph, the smaller clots, the serum from irritated surfaces, and conduces to bringing the peritoneum into a more natural condi-

tion. Gauze simply abstracts fluids as such, and does not permit of the elimination of anything else whatever.

I can easily prove by my correspondence that drainage is really one of the chief of life-saving methods in surgery. Some of the objectors to the glass drainage tube offer arguments which their own experience, as compared with that of those who drain more frequently, refute. Sir Spencer Wells, for instance, acknowledged that two of his successors at the Samaritan Hospital resorted to flushing and drainage oftener than he did, and it was found that the percentage of deaths from ovariotomy in his hands had been over fourteen, while in the hands of his successors it had been less than five. When a man condemns drainage I feel that he has been operating in a number of cases in which he should not, for instance, removing comparatively healthy appendages in cases of globus hystericus, or sensitive back, etc. While we speak so freely of drainage, we do not mean to say that it is our custom to drain in all cases, in cases in which adhesions have not to be broken up, in which no pus escapes, but drain in all cases where there is leakage of pus or muddy lymph, in cases of ruptured ovarian cysts with localized peritonitis, of suppurative dermoids, and where there is fluid in the peritoneal cavity antedating the operation.

TREATMENT OF STRICTURE OF URETHRA BY LINEAR ELECTROLYSIS.*

BY CHAS. CHASSAIGNAC, M. D., PROFESSOR OF GENITO-URINARY AND RECTAL SURGERY, NEW ORLEANS POLYCLINIC, ETC.

Electrolysis is the term used to define the peculiar chemical action or decomposition produced by the electric current. It has been resorted to in the treatment of various local and surgical affections for many years. Even in the treatment of urethral strictures its use is not new. The particular method, however, to which I wish to call attention is comparatively recent. It was devised and introduced by Dr. J. A. Fort, of Paris. I saw him operate with his linear electrolyser a number of times in the summer of 1895, and, thanks to his courtesy, I have been able to put the method in practice since my return

*Read before the Louisiana State Medical Society, May, 1896.

home, being the first one to operate by its means in this country.

The older method of using electrolysis for urethral strictures has been practically abandoned. The current is applied by the means of an ordinary urethral electrode, the olive-shaped being the most familiar; evidently the entire circumference of the urethra is affected by the current, healthy as well as unhealthy mucous membrane is acted upon, and the result is bound to be slight and unsatisfactory.

With Fort's instrument, which I exhibit, the action of the current is limited to any particular point you select; consequently it is not only more intense, but does not involve healthy structure. The electrolyser is composed: (1) of a long shaft, the terminal half of which consists only of silk and gum, forming a flexible filliform guide, the other half being rigid and containing within the gum a metallic conductor; (2) of a platinum loop, which is the electrode, and is connected with the metallic conductor just mentioned; and (3) of a metallic tip for the other end of the conductor, which has a thumb-screw, and in which is to be attached one of the battery wires; this tip is covered in part by a rubber knob, which acts as an insulator when the instrument is handled during the operation.

The *modus operandi* is simple. The operation can be attempted on any stricture which will allow the passage of the flexible guide, while being of such character as will not be cured by dilatation or pressure. The guide is introduced and pushed gently along the urethra until the platinum loop is arrested by the constriction; the negative pole of the battery (or rheostat, if you use the city current) is connected to the electrolyser, the positive pole being attached to a large and wide felt or chamois-covered electrode, which is then applied over the lower part of the abdomen, or preferably, the upper anterior aspect of the thigh. The current is then gradually turned on. At about five milliampères the effect is noticed and becomes pronounced when fifteen or twenty milliampères are reached. The patient feels a tingling sensation, and small bubbles or froth appear at the meatus as the action continues. Gradually a *furrow is dissolved through the constriction.* The resistance yielding, the current is turned off and the instrument is either withdrawn or brought to bear against another constriction, if such exist.

Three or more minutes I have found will usually suffice to

get through a stricture, the exact time depending upon the strength of the current and the extent and toughness of the stricture. Dr. Fort resorts usually to cocaine anæsthesia for the operation. I have performed most of mine without it in order to see exactly what was the effect. Most patients bear the current without much complaint. The urethra should be completely irrigated with a strong boracic solution both before and after the operation. The passage of a sound immediately after the operation is not necessary, unless it be to demonstrate a permeable condition of the canal.

I do not claim or believe that linear electrolysis is destined to do away altogether with internal urethrotomy. My experience up to date makes me believe that a certain proportion of very extensive and tough constrictions will require cutting. However, in the vast majority of ordinary cases, electrolysis seems quite sufficient and possesses many advantages:

1. Patients will consent to its use more readily than they will to a cutting operation.
2. The operation can be done by means of local anæsthesia with weak solution of cocaine or without any anæsthetic at all.
3. It is a comparatively bloodless proceeding.
4. From the fact that the blood vessels are not left open, there is less risk of septic infection.
5. The patient is not confined to bed.
6. There is less pain upon urination for the first two days after operation.
7. There seems to be less necessity for the passage of bougies subsequent to the operation.

I am not prepared to say whether or not the results are finally more permanent. Long and numerous observations can alone settle this point. One of my early cases has, at my request, presented himself one month and then nearly four months after the electrolysis, nothing having been introduced in the urethra in the meantime, and each time the 25 French bougie was introduced with as much ease as shortly after the operation. He has promised to return if the slightest evidence of trouble showed itself; it is now seven months since the treatment and he has not presented himself again.

Of the dozen cases upon which I have tried linear electrolysis only one so far has proved intractable by means of that method.

The cicatricial tissue seemed too resisting and I was compelled to complete the operation with the urethrotome.

I will close with an abstract from a history noted for me by my hospital interne, Mr. A. Landry, to whom I am indebted.

"H. S., 48 years old, colored. Has had difficulty in urination for four years, gradually increasing, until upon admission the urine was expelled almost drop by drop, dribbling for some time. Filliform bougie could not be passed as far as the bladder. Rest and an attempt to introduce filliform every other day, the latter being allowed to remain as far as it could go for a few minutes each time, resulted after some days in the filliform going all the way into the bladder.

"Electrolysis by the linear method was then resorted to; no general or local anæsthesia; patient suffered very little pain; operation was almost bloodless. Subsequently the bladder was filled with sterilized water and patient passed it out in a large stream without the slightest difficulty. Patient was not confined to bed and never had the slightest elevation of temperature. A few days after a large bougie was introduced with ease. Patient was discharged some days later."

The above is a fair sample of what has occurred in all my cases but one, the one referred to previously. In the number are included two old cases in which existed several urinary fistulæ.

INTESTINAL OBSTRUCTION CAUSED BY STRANGULATION OF A DIAPHRAGMATIC HERNIA.*

By S. M. FORTIER, M. D., Assistant House Surgeon, Charity Hospital, New Orleans.

We so seldom meet with diaphragmatic hernia that the case which has fallen under my observation can not but be found of interest, and although the diagnosis was established at the necropsy, I consider the case worthy of record.

So great an authority as Dr. Henry O. Marcy, of Boston, Mass., whose immortal researches have carried his fame into national and international repute, has failed to meet with a single case in his extended experience.

*Read before the Louisiana State Medical Society, May, 1896.

Hernia of the diaphragm may present itself under one of three varieties, to-wit:

1. The congenital form, which exists at birth, and is dependent upon the faulty development of the diaphragm. This is rare, usually fatal, and often interesting from a teratological standpoint.

2. The traumatic form, caused by a broken rib penetrating the muscle; a violent blow over the epigastrium or left hypogastric region, causing a rupture of the diaphragm.

3. A hernia may occur at one of the natural openings of the diaphragm under the influence of extraneous efforts and aided by an unnatural disposition of the muscle.

It is worthy of note that a lesion of the diaphragm is never followed by a pneumonocele. This is explained by the difference of pressure between the thoracic and abdominal viscera.

The seat of diaphragmatic hernia is variable. It is usually lateral. Immediately behind the xiphoid cartilage, there exists a weak point, which is due to the anatomical distribution of the muscular fibres.

Some authorities contend that the liver protecting the diaphragm on the right side will explain the reason of hernia being more frequent on the left side. A careful study of the anatomy of the diaphragm will convince us of the absurdity of such a statement.

Congenital hernia, through the natural openings, is rare, and many statements have been offered to prove these conclusions.

Hernia sometimes is dependent upon a relaxation with an attenuation of the diaphragm, without an escape of the organs from the abdominal cavity. This is hernia by distension, the diaphragm forming the sac of the hernia.

The causes of acquired diaphragmatic hernia:

Repeated and violent efforts, due to an exaggerated pressure of the abdominal viscera upon the inferior surface of the diaphragm. But these causes alone would be insufficient were it not that there existed a predisposing tendency to this lesion.

Position plays an important part in the contribution of hernia, as any violent effort in the dorsal decubitus, in the presence of a predisposing tendency, would be sufficient cause to induce hernia.

Following is the history of the case, as furnished by Mr. Benjamin N. Ward (R. S.):

Family history negative.

Individual history: Patient, a colored male, married; by occupation a laborer. Viscera in a healthy (?) condition. Patient states that until two weeks prior to his admission in hospital, he has never been sick. At above mentioned time he was stricken with severe abdominal pain, which necessitated his abandoning work. He was treated for an acute gastralgia, by the attending physician, but without relief. His condition grew steadily worse, pain more acute, distension of the abdomen supervening, and exacerbations of vomiting were noted. The constipation was unrelieved, and, in a most critical condition, he was brought to the hospital.

Examination at the hospital:

Robust man, 41 years of age, conscious and answering questions rationally, but intensely collapsed; abdomen much distended, especially in left hypogastric region.

Percussion revealed a tympanitic sound, extending to the lower border of the fourth rib on the left side.

Auscultation showed an absence of the vesicular murmur. Auscultation of the opposite lung revealed a supplementary puerile respiration. Heart sounds, normal, although rapid and tumultuous; apex beat displaced, but slightly, toward the right. Patient complained of a dull pain in the umbilical region, followed at times by lancinating pains.

Dyspnœa marked, not persistent and progressive, but coming on in paroxysms.

Hiccough, a permanent and distressing symptom, was accompanied, at times, by vomiting.

Deglutition, although easy, was followed by immediate vomiting.

Any movement on the patient's part would aggravate the symptoms to which we have already referred. An enema of soap and water was administered, high up, through the rectal tube, but with no results. The diagnosis of intestinal obstruction was made and the patient transferred to the operating room. His condition was so alarming that it was deemed inexpedient to interfere surgically. The rectal tube was again used with better results; flatus was expelled and scybala were noticed in the re-

turned fluid. Pulse 150. Respiration 45. Temperature subnormal. He was referred to a surgical ward, placed in bed and surrounded by cans filled with hot water. A bold and vigorous course of stimulation was instituted and aggressively pursued. The patient rallied under the heroic treatment, and had a normal evacuation on the same night.

The change in his condition was so much better that the following morning the surgeon in charge of the service did not deem the operation necessary. Pulse 90. Respiration 20. Temperature 99.

I hardly could realize that I had made an incorrect diagnosis, although the condition of the patient seemed to warrant the belief of his ultimate recovery. Our hopes were dashed to pieces, as in the evening he grew suddenly and progressively worse, collapse supervening and death ending a scene of intense agony.

AUTOPSY: Dr. O. L. Pothier, the pathologist, called attention to the hyper-resonant note that existed over the left infra-mammary region and suggested the possibility of the tympanites due to the presence of intestines that had exceeded their normal limits by the excessive flatulence. Upon opening the abdomen, great distension of the transverse and ascending colon and cæcum was observed. Descending colon collapsed, pointing to an obstruction at the splenic flexure of the colon. The obstruction was found to be due to the passage of the colon through the diaphragm, a little to the left of the median line and behind the central tendon.

It was impossible to remove, by traction, the intestines from the thorax, as a previous inflammation following gangrene of a portion of the strangulated gut had firmly agglutinated the adjacent structures.

The thorax was next opened; the left lung was collapsed, and the pleura forming a part of the hernial sac; adhesions were firm, especially in the fifth interspace, and pointing of the sloughing gut was observed to have taken place in this region.

This is a clear demonstration of what nature was preparing to do to relieve this unfortunate, and, had he lived, she would have succeeded in accomplishing what would have been an impossibility to surgery in this particular case.

This shows the difficulty of the diagnosis of diaphragmatic

hernia, and I hope, in making this report, to encourage the profession to be on the lookout for similar cases, and operate at the very incipiency of the trouble. There is no other condition where the ingenuity of the operator is taxed to such a high degree, and authorities are at variance on the question of operation.

PARTIAL PLACENTA PRÆVIA—DELIVERY BY VERSION—INVERSION OF UTERUS WITH FIBROID COMPLICATION AND REPLACEMENT BY MANIPULATION—RECOVERY.

By CLARENCE PIERSON, B. S., M. D., New Iberia, La.

On January the 7th, I was called in consultation by my friend, Dr. M. C. Melanson, to see and with him relieve a case of suspected placenta prævia:

Mrs. P., a native Creole; age, 42 years; weight, about 120 pounds; the mother already of sixteen children, all born perfectly naturally, and now pregnant five and half months.

The doctor had previously spoken to me of the case, and mentioned at first—now four weeks past—his apprehension of placenta prævia, and then gave the treatment to which his patient had been subjected; but under all administrations and every precautionary measure, the case seemingly continued to get worse and worse. Ergot, quinine, viburnum, Jamaica dogwood, and different astringents, together with cold applications to vulva, and general temporization were tried, each in turn doing no perceptible good. With further hopes that the case would safely progress to the viability age, it being only the twenty-second week, he exhausted every means to reach that stage, when he might relieve the anxious mother and deliver her of a live and mature child.

This occasioned the consultation. Being a victim to the grippe himself, and not feeling equal in strength to such an ordeal, the doctor requested me to act as master of ceremonies, while he would assist and would administer the necessary anæsthetic.

A digital examination was made only to verify the diagnosis and to gauge the placental and fœtal bearings. Partial placenta prævia was recorded. Contrary to the usual doughy mass, a friable and granular mass, protruding from the left angle,

attached firmly to the walls of the lower zone of the uterus, was found. The woman was anæmic, greatly exsanguinated, and was losing fearfully. The os was about one inch dilated; her skin was cold and clammy, and each breath was accompanied by a forcible yawn. Her history was of a continued loss of blood, and that afternoon it was "pouring in torrents." Fully recognizing her imminent peril and the necessity for heroic procedure, a few whiffs of chloroform were given and an attempted version was made. She became more feeble and pulseless at the wrist, so the anæsthetic was discontinued. Internal stimulation in the form of chloroform, well beaten up with an egg, was freely given, while the induction of labor was continued.

Manipulation of the os with the first two fingers and the profusion of blood within the uterine cavity produced greater dilatation, and with this result I was better enabled to further explore the soft parts.

Still, a penetration could not be made, and the position of the fœtus could not clearly be defined. An effort was made to push the finger through the placenta and seize the foot, but this was unsuccessful. The placenta was too well wedged and jammed within the opening angle to permit the fœtal expulsion. Barnes' modified method was thoroughly attempted, but it was to no avail. During this while the placenta in its brittle and coagulated consistency was so well torn, the hæmorrhage so profuse and the mother so nearly exhausted that I resolved to remove the placenta according to the Simpson entire separation method. In this I was successful, but I learned that the waters had previously escaped, which, in part, was an explanation of my great difficulty.

By grasping with the right hand the left foot of the fœtus, a large boy child—though of course dead, was there delivered naturally and without subsequent event.

Then, with care and gentleness, the uterus, from without, over the abdominal walls, was kneaded by the doctor, while I was actively engaged in attempting a cessation of the hæmorrhage, which stubbornly continued. Hot, almost burning carbolized water was thrown within the uterine cavity with but little effect. Fearing possibly that there were pieces of adherent placenta, I reintroduced my hand only to discover a non-contracted uterus, free from placenta, but inverted from the left side of the fundus,

soft and flabby, and also containing a small fibroid about the size of a large English walnut in the right anterior side of the fundus.

This flabby inverted uterus was replaced with the first three fingers of the right hand in the uterus, and the left hand over the abdomen, and thereafter held in position by saturated aseptic cotton tampons well tied together. The hæmorrhage still continued until I injected freely, my only convenient astringent, household vinegar.

I first tried to pull out the uterine fibroid, but the hæmorrhage was so free and fearing too much further delay, I packed the uterus as above described, gave the patient more stimulation, a hypodermic of one-quarter grain morphine and placed her in the natural position in bed to await further developments.

Remarkable as it may sound or seem, during all this process of manipulation, the patient did not show the least sign of pain, but bore her precarious condition most bravely. For moments, notwithstanding powerful stimulation, both by the mouth and by subcutaneous injection, we thought each inspiration would be the last.

Thereafter, to my greatest surprise, but satisfaction, there was no interruption in her improvement, save on one occasion there was experienced an inability to void the urine, which was easily relieved by means of the soft rubber catheter.

Of course, the cotton tampons were removed on the next day, but were replaced by thoroughly antiseptic iodoform gauze, and all necessary aseptic precautions were taken.

The patient made an uneventful recovery, and it was my privilege to re-examine her some few weeks ago, when I found her in a most splendid condition.

I review this case, not to show that superhuman tact or powers were exerted successfully to battle the complications as they appeared, but simply to narrate in detail to the interested profession these almost innumerable complications, their rarity and the multiplicity of dangers thereto necessarily attached.

Rare indeed are the dangers when we know from the most accurate statistics that inversion itself occurred only once in 190,869 deliveries at the Rotunda Lying-in Hospital. But let us consider this danger and the danger of placenta prævia, with the complication of uterine fibroid, this all occurring in a

NO. I.
Three Months after Resection of Lower Jaw.
REPRODUCED FROM THE JOURNAL OF SEPTEMBER, 1995.

NO. II.
Resection of Upper Jaw—Artificial Plate.

NO. III.
THE SARCOMA { A—Incisor. B—Molar.

DR. MARTIN'S CASES OF RESECTION OF JAW.

delicate and fragile woman of 42 years, already the mother of sixteen children, and we are forced to exclaim, is there no limit to a human mother's subjugation?

A CASE OF SARCOMA OF THE SUPERIOR MAXILLA WITH COMPLETE RELIEF OF DEFORMITY BY ARTIFICIAL APPARATUS.*

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

In the September, 1895, number of NEW ORLEANS MEDICAL AND SURGICAL JOURNAL will be found a report of the resection of the lower jaw, replaced by a splint made of hard rubber and of the size and shape of the normal maxilla.

Cut No. I shows a photograph of the patient taken nearly three months after the operation, with the artificial maxilla in place.

With the exception of the slight scarring of the tissues along the line of incision, there is no deformity. Although the attempt proved but a temporary success, it taught us the great value of a splint in all cases where the symphysis of the chin is removed, and the glossal muscles severed from their connection.

Since reporting this case I have had occasion to use a splint made of silver wire in two cases, with the greatest benefit to the patient.

Cut No. II will show a case of resection of the superior maxilla, the deformity being relieved by an artificial plate which can be removed at will.

C. P., colored, aged 22; admitted to Charity Hospital January 20, 1896.

One year ago the patient first suffered from what she supposed to be neuralgia, and to get relief had the teeth on the right side of the jaw extracted.

This procedure was partly successful, as it relieved the pressure by opening a channel for the exit of the growth through the alveolus.

At the time of admission the tumor presented in the right side of the mouth, apparently springing from the alveolus, and resembling in appearance an epulis. A small portion of the growth

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* Read before the Louisiana State Medical Society, May, 1896.

was removed and on examination proved to be a sarcoma. There was a slight bulging of the cheek and a perceptible protrusion of the eye, yet the deformity was not marked.

On February 22, assisted by Dr. Parham and Dr. Mighell, of Marshalltown, Iowa, and the hospital staff, I removed the superior maxilla. Weber's incision was made through the soft parts and Guérin's operation performed for the removal of the bone.

Cut No. III shows the tumor originating in the antrum and about the size of an egg; one end forcing its way down through the alveolus, the other pointing upward and backward and pressing against the infra-orbital plate, causing the protrusion of the eye. There was little hæmorrhage attending the operation. The wound was packed with iodoform gauze, the edges of the skin brought into apposition and sutured with silkworm gut.

The patient made an uneventful recovery. A stitch abscess formed just under the external canthus of the eye and left the only scar of any consequence on the face. To Dr. A. J. Friedrichs, chief of the dental staff of the hospital, I am indebted for the plate now worn by this patient.

To overcome this deformity it was not only necessary to make a suction plate containing all the missing teeth, but to so construct it as to fill in the cavity resulting from the removal of the bone.

In this, Dr. Friedrichs has succeeded admirably. The plate is made doubly secure by a gold band fastened to the molar teeth in the left side. The patient has already grown accustomed to the plate, and states that it gives her no discomfort whatever.

The excellent results in this case are verified by the photograph as shown in cut No. II.

THREE CASES OF DIPHTHERIA OF THE EYE CLOSELY SIMULATING CATARRHAL CONJUNCTIVITIS.*

By HENRY DICKSON BRUNS, M. D., Surgeon in Charge of Eye Department, Eye, Ear, Nose and Throat Hospital; Professor of Diseases of the Eye in the New Orleans Polyclinic.

I desire to report these cases because, while heretofore diphtheria of the conjunctiva has been considered a very rare dis-

* Read before the *Orleans Parish Medical Society*, June, 1896.

ease in this region, they at once suggest that if more careful search were made, a larger number of such cases might be discovered, especially when the general disease is epidemic in a locality. Particularly do I desire, however, to call attention to their relation to the health of the community; and to point out that they reveal a source of diphtheritic infection hitherto undiscovered, or rather overlooked. In our text-books diphtheria of the eye is described as a rare disease of great severity and much is said of hard, unyielding infiltration and of gray eschar-like appearance, etc. The general symptoms are spoken of as alarming. So prevalent is this conception, that Noyes (Text Book, 1894) cites two exceptional cases reported by Nettleship (St. Thomas Hospital Reports, 1886) in which the lids "were lined with a moderately adherent membrane, but the substance of the lids was not infiltrated or swollen," and "the hard, brawny, rigid and bloodless condition said to be typical of diphtheritic conjunctivitis was never present."

These cases were known to be diphtheria by the spread of the membrane to the parts usually affected, and by their fatal termination after characteristic general symptoms of great severity. In my cases the ocular symptoms were trivially slight, there were no general symptoms nor spread of the infection to adjacent or other parts, and recovery was prompt and complete.

The cases are as follows:

CASE 1. M. A., white female infant of 16 months, came to my clinic December 27, 1895. She has been unwell for a week with a sudamina-like eruption on skin and eyelid; for three days the left eye has been sore. There is a mild conjunctivitis with a slight watery, mucous secretion, and when the lids are everted they are seen to be covered with the thin, whitish pellicle not uncommon in catarrhal conjunctivitis. A diagnosis of "conjunctivitis, acute catarrhal (croupous or membranous)" is made, and as a matter of curiosity and extra clinical caution a diphtheria culture tube (diphtheria was then prevailing in our city) is inoculated and sent to Dr. P. E. Archinard, bacteriologist of the State Board of Health. A solution of silver nitrate, five grains to the ounce, is painted on the everted lid and a 1 to 1000 solution of formol ordered dropped frequently into the eye at home. Neither I nor any of my assistants had the slightest suspicion of the diphtheritic nature of the affection.

On December 30, Dr. Archinard reports the case one of true diphtheria; the culture has developed an abundance of pure Klebs-Löffler bacilli.

December 31, the next visit of the patient, 5 cc. of antitoxin (Dr. Hans Aronson's) is injected subcutaneously.

On January 2, 1896, nothing having been done meanwhile beyond keeping the eye clean with formol solution, there is great improvement. A few drops of a one-half grain to the ounce silver nitrate solution are instilled.

January 4, 1896. There are no remains of the membrane (pellicle). Some zinc ointment is ordered for the few eczematous little sores on the face.

January 6, 1896. The little sores are almost well. The eye is still slightly injected and a few drops of a two grain to the ounce silver nitrate solution are instilled.

January 20, 1896—twenty-four days since the first observation, the case is practically well; as a precaution it is kept under observation until March 9, 1896, when it is discharged cured.

Case 2. M. C., white female, 1½ years old, came to the clinic February 17, 1896. The eyes have been sore for a day or two and present the appearance of catarrhal conjunctivitis of moderate severity. The lids being everted are found to be lined with a thin pellicle, easily removed, which extends to the bulbar conjunctiva at a few points. There are some minute blister-like spots on the skin of the eyelids and a little sore on the tip of the nose. The temperature is normal, and the child does not look ill.

Case No. 1 having made me suspicious, 2½ cc. of antitoxin (all at hand) are at once injected subcutaneously, and a culture tube prepared.

February 19, 1896. Five cc. of antitoxin subcutaneously. Temperature normal. Dr. Archinard reports true diphtheria: Klebs-Löffler bacilli in the culture.

February 21, 1896. No membrane forming; temperature normal.

February 24, 1896. Practically well; still some catarrhal inflammation. Seven days since first observation.

March 9, 1896. Discharged cured. In this case there was no local treatment other than keeping the eye clean with borax water.

CASE 3. M. M., white female, 2 years old. Came to the clinic February 22, 1896. Nine days ago the left eye became inflamed, the inflammation extending to the other eye next day. The picture is one of catarrhal conjunctivitis with moderate muco-purulent secretion. There is some thin, adherent, whitish membrane ("croupous") on the palpebral conjunctiva of each eye. The temperature is normal and the child does not seem ill. Locally, for cleanliness, borax and camphor water drops are ordered to be instilled every half hour and 5 cc. of antitoxin is at once subcutaneously injected.

February 23, 1896. Dr. Archinard reports the case to be one of true diphtheria.

February 25, 1896. Much improved; little membrane on left eye only.

February 28, 1896. Practically well; discharged cured; borax drops to be continued a little while.

It will be seen that in these cases not only were the eye symptoms not to be distinguished by observation alone from those of moderate catarrhal conjunctivitis accompanied by the formation of a trifling and apparently pseudo-croupous membrane, a thing common enough, but the general symptoms of the disease were most conspicuous by their absence. These cases would never have been recognized as diphtheria but for one accidental finding, and I have no doubt that more frequent search would discover a much larger number. Should diphtheria again prevail in our community, I intend, with the assistance of my colleague, Dr. Archinard, who kindly conducted the bacterial research for me, to prosecute such a search and hope to be able to elicit more extensive and exact information; for it is evident that since the discovery of the Klebs-Löffler bacillus and of antitoxin this whole chapter of our knowledge must be rewritten. The very important bearing of such cases on the general welfare of a community is obvious. In the first place they emphasize the perfect reliability of the diphtheria antitoxin as a specific remedy. The most skeptical could not doubt the evidence of this local manifestation of a general disease disappearing under the influence of the subcutaneously injected remedy without local treatment. In the second place, such mild cases of so deadly a disease must be particularly dangerous as sources of infection, and they have doubtless caused

many a case the etiology of which has remained shrouded in mystery. It is evident that during the prevalence of diphtheria children with "sore eyes" should be regarded with wholesome suspicion and should be segregated from their companions until the innocence of their affection is proven, particularly as this is now so quickly and readily accomplished by our skilled bacteriologists.

Original Communication.

THE REPORT OF THE AMERICAN PEDIATRIC SOCIETY'S COLLECTIVE INVESTIGATION INTO THE USE OF ANTITOXIN IN THE TREATMENT OF DIPHTHERIA IN PRIVATE PRACTICE.*

This subject was chosen by the officers of the society for its eighth annual meeting, with the belief that a large amount of valuable experience, not otherwise available, might in this way be reached and collated. It was also believed that a more trustworthy estimate of the value of the serum treatment of diphtheria might thus be obtained than by statistics taken from hospital practice. There are very few hospitals in America that receive diphtheria patients, and the conditions under which patients are admitted to hospitals, and the surroundings while there, are so different from those of private practice that the measure of success in hospital cases can not be taken as an index of the results which have been obtained upon this side of the Atlantic with the new treatment.

In order, therefore, to obtain an expression of opinion from American physicians as to the serum treatment, after what had been, with most of them, their first year's experience, a circular letter was prepared and issued by the committee early in April. This was distributed through the members of the society as widely as could be done during the time allowed. An attempt

*Reported at the Eighth Annual Meeting held at Montreal, Canada, May 26, 1896.

was made to reach as many physicians as possible who had had experience with the remedy.

The first surprise of the committee was in learning how very widely the serum treatment had been employed, especially in the Eastern and mid-Western States. With more time, the number of cases collected might easily have been doubled and perhaps trebled; but enough reports have come in to enable one to see what opinion was held on the 1st of May, 1896, by American physicians who have used this remedy.

The circular letter asked for information upon the following points: Age; previous condition; duration of disease when the first injection was made; the number of injections; the extent of the membrane—tonsils, nose, pharynx and larynx; whether or not the diagnosis was confirmed by culture; complications or sequelæ, viz., pneumonia, nephritis, sepsis, paralysis; the result; and remarks, including other treatment employed, the preparation of antitoxin used, and general impression drawn from the cases.

Reports were returned from 615 different physicians, with 3628 cases. Of these, 244 cases have been excluded from our statistical tables. These were cases in which the disease was said to have been confined to the tonsils and the diagnosis not confirmed by culture, and therefore open to question. A few cases were reported in such doubtful terms as to leave the diagnosis uncertain. The figures herewith given are therefore made up from cases in which the diagnosis was confirmed by culture (embracing about two-thirds of the whole number) and others giving pretty clear evidence of diphtheria, either in the fact that they had been contracted from other undoubted cases, or where the membrane had invaded other parts besides the tonsils, such as the palate, pharynx, nose, or larynx. It is possible that among the latter we have admitted some streptococcus cases, but the number of such is certainly very small.

There are left then of these cases, 3384 for analysis. These have been observed in the practice of 613 physicians from 114 cities and towns, in fifteen different States, the District of Columbia and the Dominion of Canada.

In the general opinion of the reporters the type of diphtheria during the past year has not differed materially from that seen in previous years, so that it has been average diphtheria which

has been treated. If there is any difference in the severity of the cases included in these reports from those of average diphtheria, it is that they embrace a rather larger proportion of very bad cases than are usually brought together in statistics. The cases, according to the extent of the membrane, are grouped as follows: In 593 the tonsils alone were involved. In 1397 the tonsils and pharynx, the tonsils and nose, the pharynx and nose, or all three were affected. In 1256 cases the larynx was affected either alone or with the tonsils, pharynx and nose, one or all. In many instances the statement is made by the reporters that the serum was resorted to only when the condition of the patient had become alarmingly worse under ordinary methods of treatment. This is shown by the unusually large number of cases in which injections were made late in the disease. Again, many physicians being as yet in some dread of the unfavorable effects of the serum have hesitated to use it in mild cases, and have given it only in those which, from the onset, gave evidence of being of a severe type. The expense of the serum has unquestionably deterred many from employing it in mild cases. These facts, it is believed, will more than outweigh the bias of any antitoxin enthusiasts by including many mild cases which would have recovered under any treatment. It will, however, be remembered that tonsillar cases, not confirmed by culture, have not been included.

Only two reports embracing a series of over 100 cases have been received, most of the observers having sent in from five to twenty cases, although there are many reports of single cases, particularly of single fatal ones.

In addition to this material which has come in response to the circular, there have been placed at the disposal of the committee by the courtesy of Dr. H. M. Biggs, 942 cases treated in their homes in the tenements of New York. Of these, 856 were injected by the corps of inspectors of the New York Health Board, upon the request of the attending physician, and eighty-six others were treated by physicians, receiving free antitoxin from the Health Board. In the first group the diagnosis of diphtheria was confirmed by culture in every case, and in all of the latter except twenty-six; in these the diagnosis rested upon extensive membranous deposits or laryngeal invasion. The cases of the New York Health Board were of a more than

ordinarily severe type, 485, or more than 50 per cent. of these being reported as being in bad condition at the time of injection; to mild cases the inspectors were not often called. Further, an unusually large number of them (38 per cent.) were injected on or after the fourth day of the disease. In 182 of these cases only the tonsils were affected; in 466 the tonsils with the pharynx or nose, the pharynx and nose, or all three; in 294 the larynx was invaded either with or without disease of the tonsils, nose, or pharynx.

Through the courtesy of Dr. Biggs the committee is able to include also a partial report upon 1468 cases from Chicago, treated in their homes in that city by a corps of inspectors of the Health Department. It was the custom in Chicago to send an inspector to every tenement-house case reported, and to administer the serum unless it was refused by the parents. These cases were therefore treated much earlier and the results were correspondingly better than were obtained in New York, although the serum used was the same in both cities, viz., that of the New York Health Board.

THE RESULT AS INFLUENCED BY THE TIME OF INJECTION.

In Table I (page 34) are given the results obtained in these three different groups of cases, classified according to the day on which they received the first injection of serum antitoxin.

The grand total gives 5794 cases, with 713 deaths, or a mortality of 12.3 per cent., including every case returned; but the report shows that 218 cases were moribund at the time of injection, or died within twenty-four hours of the first injection. Should these be excluded there would remain 5576 cases (in which the serum may be said to have had a chance) with a mortality of 8.8 per cent.

Of the 4120 cases injected during the first three days there were 303 deaths—a mortality of 7.3 per cent., including every case returned. If from these we deduct the cases which were moribund at the time of injection, or which died within twenty-four hours, we have 4013 cases, with a mortality of 4.8 per cent. Behring's original claim, that if cases were injected on the first or second day the mortality would not be 5 per cent., is more than substantiated by these figures. The good results obtained in third-day injections were a great surprise to your committee

TABLE I.—DAY OF INJECTION AND RESULT.

	Injected on 1st Day.			Injected on 2d Day.			Injected on 3d Day.			Injected on 4th Day.			Injected on 5th Day.			Day of inject'n Unknown.			Totals.		
	Cases.	Deaths.	Mortality Per cent.	Cases.	Deaths.	Mortality Per cent.	Cases.	Deaths.	Mortality Per cent.	Cases.	Deaths.	Mortality Per cent.	Cases.	Deaths.	Mortality Per cent.	Cases.	Deaths.	Mortality Per cent.	Cases.	Deaths.	Mortality Per cent.
The Committee's Report..	764	38	4.9	1065	89	8.3	620	79	12.7	336	77	22.9	390	152	38.9	215	15	7.0	3384	450	13.0
New York Health Board..	126	11	8.7	215	26	12.0	228	37	16.6	153	32	20.9	203	59	29.0	17	4	23.5	942	169	17.8
Chicago Health Board.....	106	0	0	336	5	1.5	660	18	2.7	269	38	14.1	97	33	34.0	0	0	0	1468	94	6.4
Totals.....	996	49	4.9	1616	120	7.4	1508	134	8.8	758	147	20.7	690	244	35.3	232	19	8.2	5794	713	12.3

But after three days have passed the mortality rises rapidly, and does not differ materially from the ordinary diphtheria statistics. Our figures emphasize the statement so often made that relatively little benefit is seen from antitoxin after three days; however, it must be said that striking improvement has in some cases been seen even when the serum has been injected as late as the fifth or sixth day. The duration of the disease, therefore, is no contraindication to its use.

THE INFLUENCE OF BACTERIOLOGICAL DIAGNOSIS UPON THE STATISTICS.

This is shown in Table II.

TABLE II.—DIAGNOSIS CONFIRMED BY BACTERIOLOGICAL EXAMINATION.

	Cases.	Deaths.	Mortality.
Committee's Reports	2453	302	12.3 per cent.
N. Y. Board of Health	916	160	16.9 " "
Chicago Board of Health	1468	94	6.4 " "
Totals	4837	556	11.4

(Excluding 145 cases which were moribund which died in twenty-four hours, mortality 8.7 per cent.)

DIAGNOSIS FROM CLINICAL EVIDENCE ONLY.

	Cases.	Deaths.	Mortality.
Committee's Reports	931	148	15.7 per cent.
N. Y. Board of Health	26	9	34.6 " "
Totals	957	157	16.3

(Excluding 72 cases either moribund or dying in twenty-four hours, mortality 9.6 per cent.)

In the cases in which the diagnosis was not confirmed by a bacteriological examination the mortality is thus 5 per cent. higher than in the bacteriological cases. This difference is to be explained by two facts: first, as already stated, that we have excluded from our reports all tonsillar cases (and hence most of the very mild ones) not confirmed by bacteriological examinations; and secondly, by the fact that this group of cases comprises those treated in the country, where physicians have hesitated to use antitoxin unless the type of the disease was a grave one, and where also a large proportion of the injections were made later than in the cities. However, should we leave out the moribund cases, the mortality is but 9.6 per cent., which differs

but slightly from the cases confirmed by bacteriological diagnosis.

In our subsequent statistics we shall consider together all the cases bacteriologically confirmed and otherwise, as the statistics are not materially altered by this grouping.

THE RESULTS AS MODIFIED BY THE AGE OF THE PATIENTS.

Unfortunately the ages have not been furnished in the report of the Chicago cases, and we have therefore only the cases reported to the committee and those from the New York Board of Health for analysis. In Table III are shown the mortality of the different ages grouped separately.

The highest mortality is seen as in all reports to be in the cases under two years, but including all those returned, even those that were moribund when injected, the death rate was but 23.3 per cent. (21.7 per cent. of the committee's cases), while if we exclude cases moribund when injected or dying within the first twenty-four hours, it falls to 19.2 per cent.

After the second year there is noticed a steady decline in mortality up to adult life. In many of the reports previously published the statement has been made that no striking improvement in results was observed in adult cases treated by the serum. Our figures strongly contradict this opinion. Of 359 cases over fifteen years old, which were returned, there were but thirteen deaths. That the reader may judge for himself how far antitoxin is to be held responsible for the result, a brief summary of these thirteen cases is appended:

Case I.—Fifteen years old; injected on the fourth day; membrane covering tonsils and pharynx; profoundly septic, sinking rapidly when injected; died in two hours. "My only death in seventeen cases." (Jones, Gloucester, Mass.)

Case II.—Forty-four years old; injected on the fourth day; membrane on the tonsils and pharynx; in bad condition; died three hours after injection. The tonsils had been previously incised, the early diagnosis having been quinsy.

Case III.—Thirty-one years old; injected on the sixth day; membrane on the tonsils, nose, pharynx and larynx; intubation; sepsis; in bad condition; lived eight hours after injection.

Case IV.—Thirty-five years old; injected on the fifth day;

TABLE III.—AGE AND RESULT OF TREATMENT.

	0 to 2 Years.			2 to 5 Years.			5 to 10 Years.			10 to 15 Years.			15 to 20 years.			20 Years and Over.		
	Cases.	Deaths.	Mortality Per cent.	Cases.	Deaths.	Mortality Per cent.	Cases.	Deaths.	Mortality Per cent.	Cases.	Deaths.	Mortality Per cent.	Cases.	Deaths.	Mortality Per cent.	Cases.	Deaths.	Mortality Per cent.
Committee's Report	631	137	21.7	1276	175	13.7	883	108	12.2	276	19	6.8	112	4	3.6	214	9	4.2
New York Health Board	236	65	27.5	466	83	17.8	178	21	11.2	29	.....	.....	11	.....	.....	22	.....	.....
Totals	867	202	23.3	1742	258	14.7	1061	129	12.1	305	19	6.2	123	4	3.2	236	9	3.8
Moribund	43	.....	.....	59	.....	.....	59	.....	.....	9	.....	.....	.....	.....	.....	4	.....	.....
Mortality, Excluding Moribund Cases	.....	.....	19.2	.....	.....	13.3	.....	.....	8.7	.....	.....	3.3	.....	.....	3.2	.....	.....	2.1

membrane on the pharynx and nose (?); in bad condition; septic; died in twelve hours.

Case V.—Sixty years old; in bad condition; had serious mitral regurgitation; injected on the fourth day; membrane covering tonsils, pharynx and larynx; died from heart failure on following day.

Case VI.—Sixty years old; "kidney trouble for years;" injected on the third day; very extensive membrane, covering tonsils, pharynx and nose; profound sepsis; in bad condition; died suddenly on the day after injection.

Case VII.—Seventeen years old; in bad condition; convalescing from measles; enormous adenopathy; profound sepsis; exceedingly high temperature; membrane covering tonsils and nose; injected at the end of forty-eight hours; three injections, temporary improvement after each one; duration of life not given.

Case VIII.—Fifteen years old; in bad condition; injected on the ninth day; membrane covering tonsils, nose, pharynx, and larynx; no operation; enormous infiltration of the tissues of the neck; nephritis; sepsis; lived four days and died of sepsis.

Case IX.—Twenty years old; injected on the third day; membrane upon the tonsils, nose, pharynx and larynx; "a stubborn patient who got up before he was allowed, and died suddenly after it."

Case X.—Twenty-five years old; injected on the fifth day; membrane covering both tonsils, entire pharynx, and completely occluding nose; nephritis and sepsis; throat cleared off entirely; died suddenly on the fourteenth day from cardiac paralysis.

Case XI.—Nineteen years old; injected on the fifth day; membrane upon the tonsils and pharynx; profound sepsis; duration of life unknown.

Case XII.—Twenty-two years old; injected on the fourth day; membrane on the tonsils and gums; sepsis; died on the sixth day.

Case XIII.—The well-known Brooklyn case, reported in 1895. Girl, sixteen years old, who died suddenly ten minutes after injection.

Such are the adult cases which antitoxin failed to cure. Four of them were moribund at the time of injection, no one of them living over twelve hours. Two, both sixty years old, were already crippled by previous organic diseases, one of the heart,

and the other of the kidneys. In the measles case there was undoubted evidence of streptococcus septicæmia. Only two of the cases were injected as early as the third day; three of them on the fifth day; and one on the ninth day. Omitting the four moribund cases the mortality of 355 adult cases treated with the serum is 2.5 per cent.

Paralysis.

Reliable data upon this point and those hereafter to be mentioned are to be had only from the 3384 reports returned to the Committee. Of these, paralytic sequelæ appeared in 328 cases, 9.7 per cent. Of the 2934 cases which recovered, paralysis was present in 276, or 9.4 per cent. Of the 450 cases which died, paralysis was noted in fifty-two, or 11.4 per cent.

The variety of the paralysis and the date of injection is shown in the following table:

Table IV.—Variety of Paralysis and the Day of Injection.

Recovery Cases.	Cases.	Day of Injection. 1st Day.	2d Day.	3d Day.	4th Day.	5th Day.	Unknown.
Paralysis mentioned (variety not specified)	132	8	32	32	19	16	23
Throat only (aphonia, nasal voice or regurgitation)	114	16	21	25	11	16	24
Extremities	14	3	5	2	.....	3	1
Ocular	11	.....	4	3	1	2	1
General (multiple neuritis)	4	.....	1	2	1	.....	.....
Sterno-mastoid	1	.....	1	.....	.....	.....	.....
fatal cases.							
Paralysis mentioned (variety not specified)	9	.....	3	2	1	2	1
*Cardiac, late after throat clear (in 4 of them throat also)	32	1	2	8	9	8	4
Throat only	6	.....	2	.....	.....	.....	4
General late	4	.....	1	.....	1	2	.....
Muscles of respiration	1	.....	1	.....	.....	.....	.....
Totals	328	28	73	74	43	49	59

*Cases of heart failure occurring at the height of the disease have not been included here; although they are mentioned among the cases of cardiac paralysis in the table of fatal cases.

Observations of some of the individual cases are interesting, particularly those of cardiac paralysis. It was twice stated that the child had gotten up and walked out of the house, where it was found dead. Twice death occurred after sitting up suddenly; once, on jumping from one bed into another. One patient of twenty years got up contrary to orders and died soon afterward. Another patient was apparently well until he indulged in a large quantity of cake and candy, soon after which cardiac symptoms developed, and he died shortly. One case was that of a woman sixty years old, who had serious organic cardiac disease.

It is difficult from these statistics to state what protective power the serum may have over the nerve cells and fibres. Apparently this is not great unless the injections are made early in the disease, and even then in severe cases the amount of damage done to these tissues in twenty-four hours may be very great, even irreparable. Time is not the only element in estimating the effect of the diphtheria toxines.

Great discrepancy exists in the statements made regarding the frequency of paralytic sequelæ after diphtheria. In a series of 1000 cases reported by Lennox Browne, paralytic sequelæ were present in 14 per cent. In 2448 cases by Sanne, paralysis was noted in 11 per cent. In the series of cases here reported, the difference is slightly in favor of the antitoxin treatment, but paralysis is certainly frequent enough to show how extremely susceptible the nervous elements are to the diphtheria toxines. One thing is quite striking from a study of these cases, and that is the proportion that have died from the late cardiac paralysis. That very many of them would undoubtedly have succumbed earlier in the disease from suffocation (laryngeal cases), of diphtheritic toxæmia, had the serum not been employed, is beyond question. Although the serum is able to rescue even many such desperate cases, it can not overcome the effects of the toxines upon the cells, which have occurred before it was injected.

SEPSIS.

Sepsis is stated to have been present in 362 of the 3384 cases, or 10.7 per cent. It was present in 145 or 33 per cent. of the fatal cases. Some explanation is necessary for a correct appreciation of these figures. The majority of the reporters, it is plain

from their remarks, have not distinguished between diphtheritic toxæmia and streptococcus sepsis. The former is certainly meant in the great majority of the cases. There is a very small proportion in which there is evidence of streptococcus sepsis. The six cases complicating measles, and the five complicating scarlet fever, however, should possibly be included among this list.

NEPHRITIS.

The statements on this point are quite unsatisfactory. The reports state that nephritis was present 350 times, or in 10 per cent. of the cases. On the one hand it must be stated that the diagnosis of nephritis rests in many cases simply upon the presence of albumen in the urine; but, on the other hand, it is true that in a large number of the cases, more than half, no examination of the urine is recorded as having been made, so that it is impossible to state, with anything like approximate accuracy, the frequency of nephritis in these cases. Of the 450 fatal cases the presence of nephritis is mentioned without qualification or explanation in thirty-nine cases, these being usually put down as septic, dying in the acute stage of the disease. There are fifteen fatal cases, however, in which the renal disease was stated as the cause of death. In no less than nine the nephritis occurred late in the disease, usually during the second or third week. In these fifteen cases the evidence of severe nephritis was conclusive, such symptoms being present as dropsy, suppression of urine, with coma or convulsions.

BRONCHO-PNEUMONIA.

Broncho-pneumonia is stated to have been present in 193 of the 3384 cases, or 5.9 per cent., a remarkably small proportion when compared with hospital statistics. Among the patients that recovered, broncho-pneumonia was noted 114 times, or in 3.8 per cent.; among the fatal cases seventy-nine times, or in 17.5 per cent., but in only about one-half of these was the pneumonia the cause of death. Of these, thirty-seven were laryngeal cases operated upon late, ten were septic cases, and the pulmonary disease was coincident with the height of the diphtheritic process. In seven, pneumonia was independent of both the above conditions, occurring late in the disease in all but two.

LARYNGEAL CASES.

Of the 3384 cases reported to the committee, the larynx is stated to have been involved in 1256 cases, or 37.5 per cent. This proportion is somewhat higher than is usual, and is partly explained by the fact that several physicians have sent in the reports only of their laryngeal cases. These laryngeal cases occurred in the practice of 379 physicians.

In 691 cases, or a little more than one-half the number, no operation was done, and in this group there were 128 deaths. In forty-eight of them laryngeal obstruction was responsible for the fatal issue, operation being refused by the parents, or no reason for its being neglected having been given. In the eighty remaining fatal cases the patients died of other complications, and not from the laryngeal disease.

In the 563 cases, therefore, or 16.9 per cent. of the whole number, there was clinical evidence that the larynx was involved, and yet recovery took place without operation. In many of these cases the symptoms of stenosis were severe, and yet disappeared after injection without intubation. No one feature of the cases of diphtheria treated by antitoxin has excited more surprise among the physicians who have reported them than the prompt arrest, by the timely administration of the serum, of membrane which was rapidly spreading downward below the larynx. Such expressions abound in the reports as "wonderful," "marvelous," "prepared to do intubation, but at my next visit the patient was so much better it was unnecessary," "in all my experience with diphtheria have never seen anything like it before," "no unprejudiced mind could see such effects and not be convinced of the value of the serum," etc.

In establishing the value of the serum, nothing has been so convincing as the ability of antitoxin, properly administered, to check the rapid spreading of membrane downward in the respiratory tract, as is attested by the observations of more than 350 physicians who have sent in reports.

Turning now to the operative cases, we find the same remarkable effects of the antitoxin noticeable. Operations were done in 565 cases, or in 16.7 per cent. of the entire number reported. Intubation was performed 533 times, with 138 deaths, or a mor-

tality of 25.9 per cent. In the above are included nine cases in which a secondary tracheotomy was done, with seven deaths. In thirty-two, tracheotomy only was done, with twelve deaths, a mortality of 37.4 per cent. Of the 565 operative cases, sixty-six were either moribund at the time of operation or died within twenty-four hours after injection. Should these be deducted, there remain 499 cases operated upon by intubation or tracheotomy, with 84 deaths, a mortality of 16.9 per cent.

Of the 2819 cases not operated upon there were 312 deaths, a mortality of 11.3 per cent. Deducting the moribund cases, or those dying within twenty-four hours after injection, the total mortality of all non-operative cases was 9.12 per cent.

Let us compare the results of intubation in cases in which the serum was used, with those obtained with this operation before the serum was introduced. Of 5546 intubation cases in the practice of 242 physicians, collected by McNaughton and Maddren (1892) the mortality was 69.5 per cent. Since that time statistics have improved materially by the general use (in and about New York, at least) of calomel fumigations. With this addition, the best results published (those of Brown) showed in 279 cases a mortality of 51.6 per cent.

Let us put beside the cases of McNaughton and Maddren the 533 intubations with antitoxin, with 25.9 per cent. mortality. With Brown's personal cases let us compare those of the fourteen observers who have reported to the committee ten or more intubation operations in cases injected with serum. These comprise 280 cases, with sixty-five deaths, a mortality of 23.2 per cent. In both comparisons the mortality without the serum is more than twice as great as in the cases in which serum was used.

The reports of some individual observers concerning intubation with the serum are interesting:

Neff, New York: twenty-seven operations, with twenty-seven recoveries.

Rosenthal, Philadelphia: eighteen operations, with sixteen recoveries.

Booker, Baltimore: seventeen operations, with seventeen recoveries, including one aged ten months, and one seven and a half months.

Seward, New York: Eight operations, with eight recoveries.

McNaughton, Brooklyn: "In my last seventy-two operations without serum, mortality 66.6 per cent.; in my first seventy-two operations with serum, mortality 33.3 per cent."

O'Dwyer, New York: "In my last 100 intubations, first seventy, without serum, mortality 73 per cent.; last thirty, with serum, mortality 33.3 per cent."

But even these figures do not adequately express the benefit of antitoxin in laryngeal cases. Witness the fact that over one-half the laryngeal cases did not require operation at all. Formerly 10 per cent. of recoveries was the record for laryngeal cases not operated upon. Surely, if it does nothing else the serum saves at least double the number of cases of laryngeal diphtheria that has been saved by any other method of treatment.

The great preponderance of intubation over tracheotomy operations shows how much more highly the profession in this country esteems the former operation.

A STUDY OF THE FATAL CASES.

Of the 450 fatal cases in the Committee's report, 229, or one-half, received their first injection of the serum on or after the fourth day of the disease, and 152, or over one-third of these, on or after the fifth day.

There were fifty-eight cases in which it was stated that the child was moribund at the time of the injection, the serum being administered without the slightest expectation of benefit, but at the earnest solicitation of the parents.

There remain 350 cases in which the cause of death could be pretty accurately determined by the reports. These died from the following causes, the most important cause being placed first:

Sepsis (including diphtheritic toxæmia) was the cause of death in 105 cases; of which sixteen had nephritis, four were intubated or tracheotomized, two were laryngeal cases not operated upon, four had paralysis, one had pneumonia, and in one the fatal sepsis was attributed to a traumatic condition of the left knee.

Cardiac paralysis was the cause of death in fifty-three cases. Under this head are included cases of sudden heart failure occurring at the height of the disease (twenty-one in number)

as well as those more commonly designated as heart paralysis, where death occurred suddenly after the throat cleared off. Of the latter there were thirty-two examples; four of these cases had throat paralysis, nineteen were septic, eight had nephritis, five were intubated and one tracheotomized.

Broncho-pneumonia was put down as the cause of death in fifty-four cases. In thirty-seven of these it followed laryngeal diphtheria; of these twenty-two were intubated and four tracheotomized; two had nephritis; nine were septic. Broncho-pneumonia and sepsis was the cause of death in ten cases, of which three had nephritis and one general paralysis. Broncho-pneumonia caused death in seven cases, apart from sepsis or laryngeal diphtheria; of these only one had nephritis; one died from heart failure, and in five pneumonia came on late in the disease.

Laryngeal diphtheria without operation caused death in forty-eight cases. In some of these the operation was refused by the parents, in others it was neglected by the physician, the patients dying of asphyxia; three of the cases had nephritis, four were septic, two had pneumonia, and one had sepsis and nephritis.

Diphtheritic tracheitis or bronchitis caused death in eleven cases; all of these were intubated, and in two there was evidence of the existence of membrane in the bronchi before operation. There were thirty-three other cases in which death followed laryngeal diphtheria without the supervention of pneumonia It is highly probable that in some of these death was due to membranous tracheitis or bronchitis. All of them were operated upon; ten were septic, two had paralysis, and one had nephritis.

Sudden obstruction of the intubation tube was the cause of death in three other laryngeal cases.

The tube was coughed up in three cases, fatal asphyxia occurring before the physician could be summoned.

Died on the table during tracheotomy, one case.

Nephritis was the cause of death in fifteen cases; seven of these were septic, and three had been intubated.

General paralysis was the cause of death in five cases; in all probably the pneumogastric was involved.

Paralysis of the respiratory muscles produced death in one case,

one of laryngeal diphtheria, which was intubated, and was complicated by broncho-pneumonia.

Measles associated with diphtheria produced death in six cases; five of these cases were laryngeal and were intubated; in two there was pneumonia and in two sepsis. Diphtheria developed during the height of measles, or immediately followed it.

Scarlet fever with diphtheria was the cause of death in six cases; in three of these there was broncho-pneumonia, nephritis and sepsis; in two, scarlet fever preceded diphtheria, and in one of these there was sepsis with gangrene of the tonsils. In the sixth case the patient died of scarlet fever, which developed during convalescence from diphtheria.

Gangrene of the cervical glands or cellular tissue of the neck was the cause of death in two cases associated with profound general sepsis.

Endocarditis caused death in one case, nineteen days after the diphtheria.

Diphtheritic inflammation of the tracheal wound with sepsis caused death in one case.

General tuberculosis, five weeks after diphtheria, was assigned as the cause of death in one case.

Exhaustion was the cause of death in three cases, one a protracted case; another complicated by pneumonia and sepsis; one by nephritis.

Convulsions was the cause of death in three cases apart from disease of the kidneys. In one, the well-known Brooklyn case, the girl died ten minutes after the injection; in another, twenty-four hours after injection; in the third, the particulars were not given.

Meningitis was assigned as the cause of death in one case.

THE KIND OF ANTITOXIN USED.

They are given in the order of frequency with which they have been used. First, the serum prepared by the New York Board of Health; second, Behring's; third, Gibier's;* fourth, Mulford's; fifth, Aronson's; sixth, Roux's. In addition, a large

*It is worthy of note that in the tests made by the State Board of Health of Massachusetts, published under date of April 6, 1896, this serum was found far below the standard as labeled upon the bottle; thus a package marked to contain 2500 units, by test was found to contain less than 700. All the other varieties of serum tested were found essentially up to the standard.

number of cases are reported as having been treated by the serum prepared by the Health Boards of different cities—Brooklyn, Newark, Rochester, Pittsburg, etc. The largest number of cases have been treated by the serum prepared by the New York Health Board, a very large number by Behring's serum, all others being relatively in small numbers.

Dosage and number of injections. In the great majority of cases but one injection is reported. In very severe ones, two and three have been given. The largest amount is in a case by Weimer (Chicago), who gave eighteen injections of Behring's serum to a laryngeal case in a child thirteen years old. Another instance of ten injections is reported with no unfavorable symptoms.

As a rule the dosage has been smaller in antitoxin units than is now considered advisable, particularly in many of the laryngeal cases and others injected later than the second day.

CASES INJECTED REASONABLY EARLY (DURING THE FIRST THREE DAYS) IN WHICH ANTITOXIN IS SAID TO HAVE PRODUCED NO EFFECT, THE DISEASE ENDING FATALLY.

These cases are twenty in number. Brief reports are introduced that the reader may judge to what degree they may be regarded as a test of the serum treatment. In our statistical tables all of them have been included among the fatal cases.

In Cases I and II the cultures were reported negative. Case I, by Gallagher, New York: Child, 18 months old; septic; although no eruption was present, the reporter was "inclined on reflection to regard this case as one of scarlatinal sore throat."

Case II, by Potter, Buffalo: Male, fourteen months old; two cultures made, but no Löffler bacilli found; membrane in the nose and pharynx. Injected on the third day one dose of Behring's serum No. 1. No improvement; death from sepsis. "Probably pseudo-diphtheria" (I. H. P.).

In Cases III to IX no cultures were made.

Case III, by Tefft, New Rochelle: Seven years old; injected after eighteen hours' illness; two injections of Behring's No. 2 serum; membrane on the tonsils, pharynx and nose; no effect observed from injections; patient dying on the third day.

Case IV, by Tefft: Male, four years old; membrane on the tonsils and pharynx; injected after thirty-six hours' illness with

Behring's No. 2; died on the third day; no noticeable effect from the injection.

Case V, by Tefft: Six years old; membrane on the tonsils, nose and pharynx; septic; injected after thirty-six hours' illness; three injections of Behring's No. 2. "Saw no effect from the injections, the disease going steadily on to a fatal termination."

Case VI, by Cameron, Montreal: Two and a half years old; fifty hours ill; membrane on the tonsils, nose and pharynx; septic; no improvement noticed, and child died twenty hours after injection.

Case VII, by Baker, Newtonville, Mass.: Three years old; laryngeal diphtheria; injected on the third day 10 cc. Roux' serum; cyanosis; intubation; temperature 103 deg. F., and continued high until death in eighteen hours after operation; injections had no effect.

Case VIII, by Anderson, New York: Three years old; injected after three hours' illness; membrane on the tonsils, nose and pharynx; one injection New York Health Board antitoxin. "A case of malignant diphtheria, full duration twenty-four hours."

Case IX, by McLain, Washington: Four years old; twelve hours sick; membrane on the pharynx and larynx; two injections; no operation; first injection early in the morning, the other early in the afternoon; died the same day; no change in the condition; antitoxin had no apparent effect.

In cases X to XIII diphtheria complicated measles, all reported by W. T. Alexander, New York. Disease confined to the larynx in all; in three the stenosis developed during measles, and in one while the patient was convalescing from measles; diagnosis confirmed by culture in every case, and in all intubation performed. Antitoxin seemed to have no effect, the cases going on to a fatal termination; all received their injections within twenty-four hours after laryngeal symptoms appeared.

In three cases—XIV to XVI—the type of the disease was malignant from the outset.

Case XIV, by Lloyd, Philadelphia: Fifteen months old; injected after thirty-six hours' illness; diagnosis confirmed by culture; membrane covered the tonsils, pharynx, nose and larynx;

intubation; sepsis; death on the fifth day. Although antitoxin was used as promptly as possible no perceptible effect noticed. One injection, Behring's No. 3, was given.

Case XV, by Wert, Mount Vernon, N. Y.: Eighteen months old; injected on the third day; diagnosis confirmed by culture; membrane on the tonsils and pharynx. "Very intense type of the disease." Antitoxin could not be procured before the third day: Gibier's serum used. "Died suddenly in apparent convulsions about ten hours after injection; urine not examined; very little passed."

Case XVI, by Ingraham: Six years old; membrane covered the tonsils, pharynx and larynx; diagnosis confirmed by culture; pneumonia present; condition very bad; injected after two and a half days' illness: three injections of Behring's serum; no benefit noticed.

Case XVII, by Johnson, Buffalo: Three years old; twelve hours ill; case septic from the start; membrane on the tonsils, pharynx and larynx; diagnosis confirmed by culture. "Antitoxin apparently had very little effect."

Case XVIII, by Baker, Newtonville, Mass.: Two and a half years old; twenty hours ill; disease confined to larynx; diagnosis confirmed by culture; one injection of Gibier's serum; intubation. "Was doing well a few minutes before death, when child got up in its crib, changed color and died almost immediately." Death attributed to "sudden heart failure; found no obstruction of the tube."

Case XIX, by Story, Washington: Five years old; in fair condition; thirty-six hours ill; diagnosis confirmed by culture; membrane on the tonsils, pharynx, and larynx; one injection of United States Marine Hospital antitoxin; injection produced no effect.

CASES IN WHICH UNFAVORABLE SYMPTOMS WERE, MIGHT HAVE BEEN OR WERE BELIEVED TO HAVE BEEN, DUE TO ANTITOXIN INJECTIONS.

Only three cases reported to the committee could by any possibility be placed in this category. All of the details furnished by the reporters are reproduced:

Case I, by Kortright, Brooklyn: Sudden death in convul-

sions ten minutes after injection. This case is the already well-known Valentine case, occurring in Brooklyn in the spring of 1895. The principal points were as follows: A girl sixteen years old; in good condition; tonsillar diphtheria; diagnosis confirmed by culture; injected on the first day with 10 cc. Behring's serum; died in convulsions ten minutes later.

Case II, by Kerley, New York: Fairly healthy boy, two and one-half years old; membrane on tonsils, pharynx and in nose. Diagnosis confirmed by culture; injected on the morning of the fourth day with 10 cc. (1000 units) New York Health Board serum; temperature at time of injection 100.4 deg. F.; no sepsis, and child apparently not very sick; urine free from albumen. Distinctly worse after injection; in ten hours temperature rose to 103 deg. F.; urine albuminous; throat cleared off rapidly, but marked prostration and great anæmia, with irregular fluctuating temperature continued and death from exhaustion with heart failure four days after the use of the serum.

Case III, by Eynon, New York: Male, three and one-half years old; diagnosis confirmed by culture; two days ill; membrane on tonsils and in nose; two injections New York Health Board serum. "A rapid nephritis developed after the second injection, causing coma, convulsions and death twenty hours after the second injection." In response to an inquiry for further particulars the following was received: "The case seemed a mild one, but the injection was given one afternoon and repeated the following afternoon, about 1500 units in all. The urine, up to that time, had not been examined. About fourteen or sixteen hours after the second injection, unfavorable symptoms began to develop, pointing to infection of the kidneys. The urine was found to be loaded with albumen. My impression at the time was that the antitoxin either produced, hastened or intensified nephritis, thereby causing the fatal termination."

In regard to the three fatal cases just cited, Case I is wholly unexplained. In Case II the query arises, did this sudden change hinge upon the injection of the serum, or was it one of those unexplained, abrupt changes for the worse in a case apparently progressing favorably, so often observed in diphtheria? As regards Case III, it will be seen from the letter that the evidence is not at all conclusive. All details available are given, and the reader may draw his own conclusions.

CLINICAL COMMENTS.

The following are selected from hundreds which have been received, and may be taken fairly to represent the sentiments of the physicians who have sent in reports:

Dr. Douglas H. Stewart, New York, sends reports of four cases, all desperate ones, and all "presumably fatal under any other form of treatment." Very extensive membrane in all; larynx involved in three; in one neglected case in a child three years old, *injected upon the fifth day*, the membrane covered the tonsils, nose, pharynx and larynx. Broncho-pneumonia, nephritis and sepsis all present. Temperature 107 deg. F. at the time of the first injection. Prostration so great that he dared not attempt intubation. Believes that this case would certainly have been fatal in a few hours without antitoxin. Perfect recovery.

In another case three years old, membrane first discovered in the left ear, next morning seen upon the tonsils, and spread in a few hours over the pharynx into the larynx and trachea. Intubation necessary in a few hours; had never seen membrane spread so rapidly as in this child. Urine albuminous; membrane subsequently expelled from larynx and trachea in large casts, with profuse bloody expectoration. Complete recovery on the ninth day. The physician describes this as "the very worst case of diphtheria that has ever come under my notice." Five thousand four hundred antitoxin units were given in four injections. He remarks: "My experiences in the past have been so very fortunate that the advocates of antiseptics or therapeusis were a constant surprise to me. It has been my fate to have the most desperate cases unloaded upon my shoulders. I had been forced into the belief that the profession was absolutely powerless in the presence of true diphtheria; have lost case after case with tube in the larynx and calomel fumigations at work. Previous to antitoxin my only hope had become centered in nature and stimulants. In two years have not lost a single case, and surely I may be pardoned if I suffer from diphtheria-phobia in a subacute form, and use antitoxin sometimes unnecessarily."

Dr. L. L. Danforth, New York, states that during his twenty-two years of practice in New York he has seen many fatal cases

of diphtheria, has used all kinds of remedies, mainly those of the homœopathic school, and while he had as much confidence in the latter as in anything else, he had seen so many deaths during the year past that he "hailed with delight the advent of antitoxin, and determined to use it." Reports five cases, all of a severe type. "The result in every case has been marvelous. I would not dare to treat a case now without antitoxin."

Dr. H. W. Berg, New York, reporting fourteen cases, says: "I have not yet ceased to be surprised at the recovery of some of these cases, which, in the light of my former experience with diphtheria treated without antitoxin, seemed to be irretrievably lost."

Dr. George McNaughton, Brooklyn, reports seventy-two laryngeal cases, with twenty-four deaths; sixty-seven of these were intubated, with twenty-one deaths. He states that he has kept no records of cases other than laryngeal ones, as these seemed the best test of the serum treatment. He believes that if the serum is used early, very many cases will not need operation for the relief of stenosis. "I would urge the use of antitoxin in all cases of croup in any patient who has an exudation upon the pharynx; would not wait for bacteriological confirmation of diagnosis, for in so doing valuable time is lost." Has noticed that the tube is coughed up more frequently in injected cases, and believe this due to the fact that the swelling of the tissues subsides at an earlier date.

Dr. D. C. Moriarta, Saratoga, reporting four cases, says that the first was a malignant one, and "I only used the remedy because I am Health Officer and was urged to do so, as the type of the disease was that from which I have seen recovery but once in eleven years. Boy five years old, four days ill when injected; great prostration, rapid breathing, and he was 'practically gone.' Nares filled and tonsils and pharynx covered; severe nasal hæmmorrhage; cervical glands greatly swollen; heart's action very frequent and feeble; child unable to lie down. Behring's serum twenty cc. injected; in six hours evidently more comfortable; in eighteen hours decidedly improved; in twenty-four hours sitting up and feeling much better; in forty-eight hours all urgent symptoms gone and membrane loosening. Subsequently had nephritis which lasted six weeks, and multiple neuritis which persisted for three months,

but ultimately recovered perfectly. I send this report because it converted me. No unbiased person familiar with diphtheria could see such results as this and not feel there must be good in it."

Dr. F. M. Crandall, New York, sends report of a child seven years old. Membrane on the tonsils and in larynx, with croup for forty hours when antitoxin was injected and intubation done. Progress of the disease had been rapid; semi-stupor and eyes half open; very feeble and rapid pulse; intense toxæmia; general cyanosis. Both cyanosis and dyspnœa persisted after intubation, showing clearly the presence of membrane below the tube. Case regarded as "absolutely hopeless." The first change was seen in the disappearance of toxæmia, with improvement in the pulse, clearness of the mind, etc.; later a change in the local condition; large masses of membrane were expelled from the larynx and trachea, necessitating frequent removals of the tube. Tube finally removed in a week with, complete recovery.

Dr. Reynolds, Baltimore, mentions a case showing the danger of relying too implicitly upon the bacteriological diagnosis. Male, three years. Culture reported only staphylococcus and streptococcus, consequently injection delayed until the fifth day, when membrane covered tonsils, nose and pharynx. Child died two days later. A sister subsequently contracted the disease, received antitoxin on the third day and recovered. The reporter would not wholly rely upon the culture test for diagnosis.

SUMMARY.

1. The report includes returns from 615 physicians. Of this number more than 600 have pronounced themselves as strongly in favor of the serum treatment, the great majority being enthusiastic in its advocacy.

2. The cases included have been drawn from localities widely separated from each other, so that any peculiarity of local conditions to which might be ascribed the favorable reports must be excluded.

3. The report includes the record of every case returned except those in which the evidence of diphtheria was clearly questionable. It will be noted that doubtful cases which recov-

ered have been excluded, while doubtful cases which were fatal have been included.

4. No new cases of sudden death immediately after injection have been returned.

5. The number of cases injected reasonably early in which the serum appeared not to influence the progress of the disease was but nineteen, these being made of nine cases of somewhat doubtful diagnosis; four cases of diphtheria complicating measles, and three malignant cases in which the progress was so rapid that the cases had passed beyond any reasonable prospect of recovery before the serum was used. In two of these the serum was of uncertain strength and of doubtful value.

6. The number of cases in which the patients appeared to have been made worse by serum were three, and among these there is only one new case in which the result may fairly be attributed to the injection.

7. The general mortality in the 5794 cases reported was 12.3 per cent.; excluding the cases moribund at the time of injection or dying within twenty-four hours, it was 8.8 per cent.

8. The most striking improvement was seen in the cases injected during the first three days. Of 4120 such cases the mortality was 7.3 per cent.; excluding cases moribund at the time of injection or dying within twenty-four hours, it was 4.8 per cent.

9. The mortality of 1448 cases injected on or after the fourth day was 27 per cent.

10. The most convincing argument, and to the minds of the committee an absolutely unanswerable one, in favor of serum therapy is found in the results obtained in the 1256 laryngeal cases (membranous croup). In one-half of these, recovery took place without operation, in a large proportion of which the symptoms of stenosis were severe. Of the 533 cases in which intubation was performed, the mortality was 25.9 per cent., or less than half as great as has ever been reported by any other method of treatment.

11. The proportion of cases of broncho-pneumonia—5.9 per cent.—is very small and in striking contrast to results published from hospital sources.

12. As against the two or three instances in which the serum is believed to have acted unfavorably upon the heart, might be

cited a large number in which there was a distinct improvement in the heart's action after the serum was injected.

13. There is very little, if any, evidence to show that nephritis was caused in any case by the injection of serum. The number of cases of genuine nephritis is remarkably small, the deaths from that source numbering but fifteen.

14. The effect of the serum on the nervous system is less marked than upon any other part of the body; paralytic sequelæ being recorded in 9.7 per cent. of the cases, the reports going to show that the protection afforded by the serum is not great unless injections are made very early.

The committee feels that this has been such a responsible task that it has thought best to state the principle which has guided it in making up the returns. While it has endeavored to present the favorable results with judicial fairness, it has also tried to give equal or even greater prominence to cases unfavorable to antitoxin.

In conclusion, the committee desires in behalf of the society to express its thanks to members of the profession who have co-operated so actively in this investigation, and to Dr. A. R. Guerard for the preparation of the statistical tables.

(Signed) L. Emmett Holt, M. D.,
W. P. Northrup, M. D.,
Joseph O'Dwyer, M. D.,
Samuel S. Adams, M. D.,
Committee.

THE ACTION OF THE SOCIETY UPON THE REPORT.

At the close of its presentation the society voted to accept the report of the committee, and after a full discussion it was decided to embody its conclusions in the following resolutions:

(1) *Dosage.* For a child over two years old, the dosage of antitoxin should be in all laryngeal cases with stenosis, and in all other severe cases, 1500 to 2000 units for the first injection, to be repeated in from eighteen to twenty-four hours if there is no improvement; a third dose after a similar interval if necessary. For severe cases in children under two years, and for mild cases over that age the initial dose should be 1000 units, to be repeated as above if necessary; a second dose is not usually required.

The dosage should always be estimated in antitoxin units and not of the amount of serum.

(2) *Quality of Antitoxin.* The most concentrated strength of an absolutely reliable preparation.

(3) *Time of administration.* Antitoxin should be administered as early as possible on a clinical diagnosis, not waiting for a bacteriological culture. However late the first observation is made, an injection should be given unless the progresss of the case is favorable and satisfactory.

The committee was appointed to continue its work for another year, and was requested to issue another circular asking for the further co-operation of the profession, this circular to be sent out as soon as possible in order that physicians may record their cases as they occur through the coming year.

N. O. Medical and Surgical Journal

Editorial Department.

Chas. Chassaignac, M. D. Isadore Dyer, M. D.

OUR NEW VOLUME.

With this number the Journal enters upon its fifty-third year, and the forty-ninth volume begins. This apparent discrepancy of figures is due to the fact that publication was suspended during the four years that lasted the War of Secession. The managing editor at the beginning of hostilities was our esteemed friend, Prof. Stanford E. Chaillé, M. D. To him was allotted the responsible and honorable position of Surgeon in Chief of the Louisiana troops. He naturally obeyed duty's call, and as, on the other hand, there were but few doctors left at home in the South to read journals, and no money with which to pay for them, the interruption in the publication came as a matter of course.

At the close of the war the Journal started again and has been appearing every month since, though it has several times changed hands. At the time of one of these changes, twenty-odd years ago, the numbering of volumes was changed, a "new series" being inaugurated. We think this idea unfortunate, and with this, the first number of our new volume, we take up the figure that we have reached in fact, and call it the forty-ninth.

Our readers will note our change of dress: the size and shape of the Journal are improved upon; the cover, while retaining the same general style, is brighter, and is free from advertisements in front; the paper is better, though still of a neutral tint, which we believe more grateful to the eyes; the type is new, large and modern; the whole appearance is neat and attractive.

The Journal is one of the oldest in this country. Its dress, at least, has now been rejuvenated. It will be our endeavor to show that the recent infusion of new blood is producing increased energy and enlarging the interest and value of our monthly.

A WOMAN'S MEDICAL COLLEGE IN NEW ORLEANS.

It has required a number of years for the standing of the graduated American physician to reach its present low average. Brilliant examples of American medical genius at one time established a reputation in Europe for the whole of our profession. At that time the centres of medical education were few, the opportunities afforded were of the best, and the students drawn from a class of men of serious bent and with assured purpose. The past twenty-five years have witnessed the cropping up of medical colleges in all sections of the country.

Where it was formerly considered essential that a large centre of population should provide the necessary material for clinical teaching, as correlative to the didactic instruction, to-day any such requisite is ignored. Wherever a local profession has felt the necessary ambition, the medical college has come into existence, attendance has been drummed up from outlying country districts and doctors have been ground out in wholesale lots to suit. So medical colleges have sprung into existence in small towns, where the necessity for their establishment could hardly exist. Colleges have been organized in the larger cities simply as the result of an unsatisfied ambition on the part of a desirous faculty.

The harm has been done and the revolution is already at hand. State legislation, administered by competent State Boards of Medical Examiners, has been enacted to prevent the imposition upon the public by unqualified graduated physicians.

Sectional and National Associations of Medical Colleges have been organized to throttle out of existence the mushroom colleges pretending to qualify men for the practice of medicine. This concert of action has resulted already in the elevation of the standards for graduation. Several of our American colleges have compelled the proper qualifications of their graduates, and have opened their courses of lectures only to the educated and to the student, who may be willing to spend the time necessary to give him the moral and educational, as well as the licensed right to practise medicine. Harvard has taken a radical step in requiring a six years' course. The University of Michigan has fallen in line with this radical measure. The University of Pennsylvania, the College of Physicians and Surgeons in New

York, Johns Hopkins, and a few other colleges have adopted a four years' course. The effort, on every hand, is, therefore, to establish a higher standard of medical education, by forcing the higher education of the medical student, and necessarily reducing the number of medical colleges, so that the best result can be consequently obtained. The whole thought in this direction recognizes the advantages which the National system of final qualification, as practised in Germany, France and Great Britain, must entail for all concerned.

It is the centralization of medical education, with but one standard, which must elevate the average of medical education.

The establishment then of any medical school, at this date, would be contrary to the accepted thought. The standard could not be established, at once, without an endowment far beyond the dreams even of the possible projectors.

Thus far, we have considered the mooted Woman's Medical College in New Orleans on the broad plane on which any medical college should be considered.

Do we need a Woman's Medical College in New Orleans?

First of all, is it sufficiently certain that there is a demand for female practitioners of medicine in this section of the country?

New, York, Chicago, Philadelphia, Baltimore and the University of Michigan have been sending out women graduates from their medical schools for years past. These schools have established reputation, have a standard of excellence, at no time questioned. Galveston has a co-educational medical school in its medical department of the Texas State University—itself no mean candidate for the esteem of the advocates of high standard medical education.

New Orleans must compete in this suggested enterprise with all of these schools, already established and successfully.

To-day, in New Orleans itself, the profession is overcrowded. It is useless to argue that the female practitioner fills a new or a different field from her sterner brother, for this is not true; she only gleans a part of his multifarious offices. Even in neighhoring Texas, where the country is newer, the profession complains of a too rapidly multiplying number.

Where then would the graduate of the proposed Woman's Medical College here find her field? It is natural to presume that the school would wish to be more than a school in name,

and that its graduates should be more numerous than an excuse for a graduating class. Tulane University, in its Medical Department, is every year adding to the host of practitioners of medicine, reducing the necessity for their provision. In this section of the country Tulane has developed the method of clinical teaching, and by legislative act largely controls the public service available for this purpose.

The obstacles in the way of the establishment of a Woman's Medical College as is proposed by those interested, we feel from the best motives, are many: chief of all, is the lack of demand for any sort of medical school, whether for men or women. The organization of a faculty for such a school would in itself be no small task, and attended with a degree of expense and embarrassment which would be considerable.

And so, we, guided by the best interest of the profession we represent, impartially weighing the advantages against the disadvantages, the ultimate good against the ultimate harm, which may result, deem the project unwise, unnecessary, untimely and promising nothing but an abortive effigy of the high purpose which should be, if it is not, aimed at.

STREET CLEANING.

Barring the Board of Health itself, there is no department of the government in this city which is so intimately connected with the public health, and consequently the medical profession, its guardian, as the Department of Public Works. Dirty streets and foul gutters are not only enough to spoil the appearance of any city, no matter how fine otherwise, but they affect the public health unfavorably, directly and indirectly. Indirectly, because they produce discomfort through the senses of sight and smell; and constant discomfort plays no small part in predisposition to disease. Directly, for germ-laden dust and noxious vapors frequently inhaled produce many affections that are at times attributed to other causes. We do not believe that these things necessarily lead to epidemics, or that all diseases are due to filth. Yet many inflamed eyes, sore throats, catarrhs, are the result of contact with poisonous dust; and the suffering, as well as loss

of time, which follow are no small factor in diminishing the sum total of the comfort and prosperity of the community.

All this tends to show how important it is that our streets should be cleaned, and cleaned properly. Our present commissioner has not been in office long enough to show what he can do, and we are aware that the means at his command are ridiculously small. We have full confidence in his desire to do the best he can, still we do not think it amiss to call his attention to one or two very necessary reforms.

The one we would mostly lay stress upon just now is in reference to gutter cleaning. The system heretofore in vogue is the most absurdly puerile possible; to scoop up the dirt from the bottom of the ditches, make a feeble attempt at piling it up in installments four or five feet apart, and then let it remain there in the vain hope that some of the out-of-date, out-of-repair, and leaky city carts may get to it before Providence otherwise disposes of it is worse than useless. Useless because Providence arranges either to send a shower in time to wash the dirt right back into the gutters, or in default of that, by means of our bright sunshine dries it so that it can be blown not only into our houses and on their roofs, but into our very eyes, noses and mouths. In the latter places it is a little worse than useless. And, mark you, this is what occurs on our nice streets, our paved thoroughfares. On the unpaved ones the process is yet simpler and possibly more effective—in the wrong direction: the mud as it is lifted out of the gutters is distributed by a skillful and graceful motion of the shovel over the surface of the street so as to reach the middle and a few feet in each direction; when the process is terminated in one square, the entire street is thinly coated with a soft, stinking slush. How the eye is feasted and the nose is regaled as one sits out on the porch or balcony to get some fresh (?) air in the evening! How pleasant it is for the doctor, among others, to drive through this mess, spattering it on his horse, his vehicle, perhaps on himself, as he reflects that he pays taxes and licenses to help perpetrate this outrage—for outrage it is! Far better that the dirt should remain in the bottom of the gutter in the company of the broken glass and nails which are made to accompany it in its peregrinations from ditch to street and street to gutter, serving in the meantime to cripple valuable horses.

This picture is not overdrawn. We have been compelled to see it too often for it not to be well impressed. It has produced too much indignation, necessarily pent up, for it ever to be forgotten. Unfortunately, we have seen it recently enough for a realization that it is not merely a nightmare. Mr. McGary must realize as well as we do that this is all wrong, and we trust that he will bend his energies toward a radical change in street-cleaning methods.

No doubt he can solve the problem better than we can, but we venture to suggest that dividing his gangs into smaller squads, having water-tight carts that can move with reasonable speed, arming some of his men with barrows and brooms, might be moves in the right direction.

The dust question we touched upon indirectly when discussing promiscuous expectoration a few months ago. Every effort should be made to have this all-penetrating nuisance abated. Doctors know the dangers of it, but they should tell the public; let them know how much more risk they run from disease on account of the dust; explain to the people how the majority of what they call "colds" during the prevalence of high winds are irritations and inflammations produced by the dust. Perhaps, then, they will bestir themselves more to correct this serious evil, one of the drawbacks of New Orleans.

When we have streets intelligently cleaned, and are no longer choked with dust whenever it is a little windy, we will be healthier and happier. If Mr. McGary accomplishes something toward attaining that end, we will be among the first to say, "Well done, thou good and faithful servant!"

THE CHARITY HOSPITAL APPROPRIATION.

The Board of Administrators of the Charity Hospital have asked the Legislature to increase the appropriation for that institution from $80,000 to $100,000 per annum. We hope the request can be granted. The entire revenues of the hospital last year, exclusive of donations and legacies, were about $115,000; the amount expended to run it and keep it in repair, was about $120,000. Consequently, had there been no legacies, a deficit of $5000 would have occurred; legacies are variable and uncertain

quantities; they can not be depended upon in making a budget, and, besides, they should be reserved for permanent improvements. This means that the appropriation was already practically insufficient last year; with enlarged facilities, the lack of funds would become more apparent.

It would be wise, then, for the Legislature to vote the amount asked for, if possible, even if the hospital had to be run as it is at present. The utility of such action is emphasized when we consider that our hospital is in need of many improvements which cost money to establish and to maintain. The institution has been much improved within the last few years, and we can well be proud of it as it stands; still it is not yet strictly first-class.

Among other things wanted are enlarged bathing facilities for the patients. There are no medicated baths of any kind, and even no separate bathing accommodations for syphilitic patients. The wards are overcrowded, patients in many of them having to sleep on mattresses on the floor even during our hot season. These things are mentioned merely to show that there is room for improvement; that it is not right to allow the people to think that we have the finest hospital in the world. Let them know its exact status and, through their representatives in the Legislature, they will see that sufficient financial provision is made for it.

A LEPROSY CONGRESS.

An effort is being made to organize a congress of physicians and others interested in the prevention and control of leprosy. An International Congress is proposed. This is a commendable step in the right direction and it should materialize as quickly as possible. There are enough foci for leprosy dissemination now, and every day affords the opportunities for new ones under existing conditions of inactive legislation, or the absence of any at all. An international congress as suggested would succeed in demonstrating the necessity for some general action, as it would present the actual evidence of the existence of the disease and in what proportions. More than this are the likely results to follow the congress. Above all, it is most apt to lead

to a national recognition of the necessity of an investigation of the districts of country infected and the degree of the prevalence in such sections.

The Board of Health of the Sandwich Islands has already signified its willingness to send delegates should the congress eventuate.

REPORT OF AMERICAN PEDIATRIC SOCIETY.

We are glad to be able to present to our readers the magnificent report on the use of diphtheria antitoxin presented by the American Pediatric Society at Montreal last month. The JOURNAL is one of five selected for the publication of this report simultaneously in different sections of this country, Canada and London.

The report includes nearly six thousand cases treated in private practice, and handles them from all standpoints. It is valuable and interesting. We shall probably comment upon it again in our next issue. We have deemed it advantageous to publish every word of it, although its length makes it necessary for us to crowd out all of our abstracts. As it is, the JOURNAL is larger than usual by several pages, and the number consists almost entirely of original matter.

Medical News Items.

AN INTERESTING LETTER from Dr. J. P. Oliver, of Caldwell, Tex., in reference to Dr. Souchon's article in the June JOURNAL, "*Reminiscences of Dr. T. G. Richardson,*" has been received. The doctor knew Professor Richardson very well and speaks of him feelingly and affectionately, among other things saying, "I heartily endorse everything said about the character of this great and good man. Dr. Oliver, however, is under the impression that Dr. Richardson's family was lost on the steamer "Princess," and that Dr. Souchon may be in error as to the date, Dr. Souchon tells us that the name of the boat, "W. R. Carter,"

and the date were both obtained, after a search through the files of the *New Orleans Picayune*, from the paper of that day. There seems to be no possibility of error, hence the memory of our valued friend from Caldwell may have played him a little trick.

Dr. G. W. Glover, of Denison, Texas, an old practitioner and a faithful subscriber of the Journal, died last month from septicæmia following the removal of a cancerous growth on the back of his neck.

The North Louisiana Medical Association held its annual meeting at Gibsland, on the 9th inst. Capt. J. H. Walker, mayor, delivered an address of welcome to the body, which was responded to in an able address by the president, Dr. Poole. The following officers were elected for the ensuing year: president, Dr. Thornhill; 1st vice-president, Dr. Poole; 2d vice-president, Dr. Simmons; 3d vice-president, Dr. A. J. Pennington; Dr. O. M. Patterson, secretary; Dr. Atkinson, corresponding secretary. The association will hold its next meeting at Arcadia, on the 8th of September.

The Attakapas Medical Society held its last meeting in New Iberia, La., on May 7, 1896. The officers were all re-elected for the ensuing year, and are as follows: George Sabatier, M. D., president; J. W. K. Shaw, M. D., vice president; Frank E. Artaud, M. D., secretary and treasurer.

The Executive Committee of the Mississippi Valley Medical Association met at Atlanta on May 6, and the following gentlemen were appointed to deliver addresses: Dr. H. N. Moyer, of Chicago, on Medicine; Dr. H. H. Grant, Louisville, on Surgery.

The indications are that the meeting to be held at St. Paul on October 20, 21, 22 and 23 will be the largest and most successful in the history of the association. As all the railroads will offer reduced rates for the round trip, an opportunity will be given to visit St. Paul and Minnesota during the most delightful season of the year. The officers are: H. O. Walker, M. D., Detroit, president; H. W. Loeb, M. D., 3559 Olive street, St. Louis, secretary; C. A. Wheaton, M. D., St. Paul, chairman Committee of Arrangements.

The Washington State Medical Society held its annual meeting in Tacoma Bay, May 19 and 20. Dr. R. L. Thomson, of Spokane, was elected president, and Dr. J. M. Semple, of Medical Lake, secretary.

The next meeting will be held in Spokane, May, 1897.

Dr. Clarence L. Horton was wedded to Miss Cora Schriever, daughter of our friend J. G. Schriever, traffic manager of the Southern Pacific. The pretty ceremony took place at Trinity Church, New Orleans, June 24, 1896, at 8 p. m. The young couple have our sincere congratulations and good wishes.

The Chikitsaka-o-Samalochaka.—The Journal is in receipt of the fourth number of the second volume of the *Chikitsaka-o-Samalochaka*, published in Calcutta. The periodical is daintily published in a delicate brown yellow cover in octavo size. We should be glad to review the journal, but it is published in the native language, and our polyglot dictionary does not include either Sanskrit or Hindustanee. Besides, we must omit this review, interesting as it might be, on account of want of space.

Daniel Lewis has been re-elected to the position of president of the New York State Board of Health.

The Special Regulations, Second Pan-American Medical Congress, City of Mexico, on the 16th, 17th, 18th and 19th of Nov. 1896, are abstracted for the information of our readers:

Article 1. In order to be properly enrolled, each member of the Congress will pay to the Treasurer in the city of Mexico, five dollars gold.

Art. 2. There will be one opening session, one closing and one intermediate session of a purely scientific character.

Art. 3. The opening session will be presided over by the supreme authority of the nation; besides being attended by the members of the Congress, members of scientific societies and other distinguished persons may be invited.

Art. 6. A scientific speech will be delivered and a short speech by one representative of each one of the nations attending the Congress.

Art. 7. In the intermediate session, four speeches will be de-

livered on general matters by persons distinguished in medical science, who have accepted the commission, one of these speeches being pronounced by a Mexican physician.

Art. 9. Sessions of the sections will be held from 9 to 12 A. M. and from 3 to 5 P. M., in the places that may be designated by the Organizing Committee. They shall be presided over by the president of each section, alternating with the vice presidents of each one of the nations that are represented.

Art. 15. All papers will be presented in writing.

Art. 16. Each author will forward to the secretary of the Organizing Committee in the city of Mexico, before the first day of August of the present year, an extract, not exceeding 300 words, of the paper to be presented by him. These extracts will be printed in English, French and Spanish, and will be distributed to the members of the Congress, before the session in which they are to be read.

Art. 17. No paper will be announced which is not accompanied by this extract; but the authors who comply with these conditions will have a right to have their work published intact in the transactions of the Congress.

Art. 18. The reading of the papers in the sessions must not last more than twenty minutes; when the papers can not be read within that time the authors will give extracts from them, but they will be published intact in the transactions of the Congress.

Art. 21. The papers which have been announced for reading in the order of the day in each section will serve as subjects for discussion. In such discussion no speaker will be allowed to speak more than once and for five minutes, but the author of the paper under discussion will be allowed to reply once and not beyond ten minutes.

Art. 23. In order to form an Executive Committee the Organizing Committee will appoint seven members, including the president, secretary, treasurer, and the Mexican representative in the International Executive Committee, and such members will attend to the business of the Congress.

PROF. DON FRANCISCO BASTILLOS, M. D., has been elected treasurer of the Congress. All those contemplating to go should forward the registration fee ($5, gold) to him at once. His address is No. 7 Calle de Tacuba, Ciudad de Mexico, Repub.

Mexicana. At the same time Dr. C. A. L. Reed, Cincinnati, should be notified.

There Are Three Vacancies in the Medical Corps of the U. S. Army, and it is expected that three more will occur during the present year. An Army Medical Board will meet in Washington early in October for the examination of candidates. The requirements for admission to the Medical Corps are stated in a circular issued by the Surgeon General of the Army, dated May 21, 1896, and approved by the Secretary of War.

Permission to appear before the board is obtained by letter to the Secretary of War, which must be in the handwriting of the applicant, giving the date and place of his birth, and the place and State of which he is a permanent resident, and enclosing certificates, based on personal acquaintance, from at least two reputable persons as to his citizenship, character and habits. The candidate must be a citizen of the United States, between twenty-two and twenty-nine years old, of sound health and good character, and a graduate of some regular medical college, in evidence of which his diploma will be submitted to the board. The scope of the examinations will include the morals, habits, physical and mental qualifications of the candidate, and his general aptitude for service; and the board will report unfavorably should it have a reasonable doubt of his efficiency in any of these particulars.

The following resolutions, presented by Dr. Gould, and recommended by the Council, were discussed and adopted unanimously at the meeting of the American Academy of Medicine last May:

Resolved, That the American Academy of Medicine desires to express its opinion that no legislation is required or desirable in the United States in regard to the so-called practice or subject of "Vivisection," and for the following reasons:

1. Because only by careful discrimination and collection of facts can public and legislative opinion be truthfully formed. To illustrate but a single of many popular errors upon this subject: The dissection or use of dead animals by scientific men is termed "vivisection," when the same proceeding carried out by

the butcher, the hunter, the restaurant-keeper, cooks, etc., does not enter into the consideration, neither do the cruelties in the use and keeping of domestic animals, nor those in the deaths of animals for other purposes than those of experimental medicine.

2. While admitting and deploring the facts of abuses in the past and in some European countries—to a very limited extent also in America—it is the conscientious belief of the members of the academy that at present with us such abuses do not exist, nor are they in danger of occurring, to a degree justifying or calling for legislation, as, under the circumstances, the evils that would inevitably result from such legislation would greatly exceed the benefits to be obtained by it. The charge implied or openly made that physicians, either in theory or practice, are more cruel than other classes of the community is a fancy or prejudice of ignorance which can not be proved, and which we strenuously deny.

3. Legislation upon the subject of cruelty to animals should be so framed as to include consideration of cruelties infinitely greater and more extensive in many other fields of human activity at present not actively objected to by those who urge legislation as regards experimental medicine. Not only this, but legislation concerning these matters should be broadened out in order to prevent the destruction of species of birds and other animals by the votaries of fashion, by the hunters, etc., to prevent derangement of the delicate balance of animal and vegetable life upon which civilization ultimately and largely rests, to prevent deforestation of the head-waters of our streams, to establish Sanctuaries or Resorts for animals, and many such biologic requisites—as also to establish arrangements with other nations as will insure their permanent and extensive effectualization.

4. Legislation upon a subject of vital importance to a peculiarly technical branch of science should be framed under the guidance and by the aid of those who by education and experience are alone fitted and capable of forming and expressing sound judgment upon it, *i. e.*, the experts in the special subject. It would be as absurd to have legislation as to vaccination inspired and shaped by laymen who were anti-vaccinationists, without weighing the opinion of the medical profession, as to allow legislation upon the question of vivisection by laymen

who are anti-vivisectionists and even inexpert in any branch of science.

5. The American Academy of Medicine therefore urges its members and physicians generally to write to their representatives in Congress (or wherever legislation of the kind in question is proposed), and otherwise seek to influence public and official opinion against the passage of a particularly ill-advised bill before Congress, to-wit: Senate bill No. 1552, introduced by Mr. McMillan, entitled *A Bill for the Further Prevention of Cruelty to Animals in the District of Columbia.* In the opinion of the Academy the passage of this bill would be harmful to the true interests of medical and social science and to the public health.

The Western Medical Review is the title of a new medical monthly published in Lincoln, Nebraska, with Dr. Geo. H. Simmons as its pioneer editor. The periodical resembles the *Johns Hopkins Bulletin* in its size and arrangement. The neatness and simplicity of its arrangement is quite refreshing. The contents of the initial number are well selected, and presented so as to introduce most favorably the new candidate for medical patronage. We wish the *Review* all the success a good start can bring with it.

Book Reviews and Notices.

A Manual of Venereal Diseases. By JAMES R. HAYDEN, M. D., ETC., New York. Lea Brothers & Co., New York and Philadelphia, publishers, 1896.

Manuals are not the sort of books that we are particularly glad to see published—we mean the average manual. Yet they have their sphere of usefulness if properly understood, first by the author and then by the reader. The former must know on what parts of his subject to lay stress and where to utter a word of caution; the latter must remember that "a little learning is a dangerous thing," and that his manual is merely an aid in calling his attention to salient practical points.

The author of this particular manual has done his work so

well that the reader is bound to understand the purposes of the work and to profit by either a perusal or reference when needed.

It consists of about 260 pages, well printed on good paper, and includes forty-seven clear illustrations that the author has selected with judgment.

Every most important point regarding the three venereal diseases and their treatment is touched upon except, perhaps the method of urethra and bladder irrigation, without catheter, of Janet. Dr. Hayden gives the latest views and avoids, properly in a volume of this kind, the discussion of debated points. We can not accept, however, that "many men contract typical gonorrhœa from women either during or immediately after the menstrual epoch, the women being free from gonorrhœa." This statement is convenient to use in the office when embarrassing questions are being put to the doctor, but we must express doubt as to its scientific accuracy.

The work is cheerfully recommended. C. C.

A Guide to the Practical Examination of Urine. By James Tyson, M. D., Professor of Clinical Medicine in the University of Pennsylvania, etc. Ninth edition, revised and corrected, with a colored plate and wood engravings. P. Blakiston, Son & Co., Philadelphia; Armand Hawkins & Co., New Orleans (price, $1.25).

This book is recommendable especially for its accuracy and moderate size. Practitioners of medicine and students will find in it all they really need to do or to know in urinalysis. This ninth edition has few changes or additions in comparison with that edition immediately preceding it.

P. E. A.

A Treatise on the Diseases of Infancy and Childhood. By J. Lewis Smith, M. D., Clinical Professor of Diseases of Children in the Bellevue Hospital Medical College, New York. New (8th) edition, revised, rewritten and enlarged. Lea Brothers & Co., Publishers, New York and Philadelphia, 1896.

This work has been before the profession so many years that an extended notice of this eighth edition is scarcely needed.

Comparing it with the fourth edition, published in 1879, we find a difference of 225 pages in favor of the last, which fact

alone speaks volumes for the greater attention which the study of children's disease has attracted of late years. Smaller type, too, has been fully used, so as to keep the volume from becoming unwieldy. Where there is so much to praise we dislike to say anything in the way of unfavorable criticism, but we feel that everything should be done to stimulate the regular pharmacist, and nothing will more conduce to this end than the use and commendation of regular pharmaceutical preparations. We believe, therefore, the author has made a mistake in recommending specifically in the chapter on Therapeutics the elixir adjuvans of a special firm, "as a good vehicle for the bitter vegetables," etc. In the fourth edition, where the same advice is found, the full formula is incorporated. Examination shows it to be almost the same as that of the National Formulary. There was, then, no good reason in specially commending this preparation.

The book is up-to-date and can be heartily commended to both practitioners and students as a reliable guide.

PARHAM.

An Inquiry into the Difficulties Encountered in the Reduction of Dislocations of the Hip. By OSCAR H. ALLIS, of Philadelphia. The Samuel D. Gross Prize Essay. Philadelphia, 1896, 8vo., pp. 171.

This essay, or book, was awarded the prize of $1000, as testified in a letter to Dr. Allis from Dr. J. Ewing, chairman of the committee. The other members of the committee of award were Drs. W. W. Keen and John Ashhurst, Jr.

In the very entertaining "Reminiscences" which precede the work proper, Dr. Allis speaks of the pleasure afforded him by the repetition of the experiments of Bigelow, which he carried out on the cadaver more than twenty years ago, and records the satisfaction which he derived from the consciousness "that Bigelow knew all about the hip * * * and that I knew as much as Bigelow."

A study of these admirable labors of Allis will convince one that Allis knows as much as and more than Bigelow knew. We are sorry that space is not available for a critical review of these painstaking, thorough investigations, but the book gives so much information and food for thought that only a very extended notice could do anything like adequate justice to the work of the author.

The book is divided into two parts—an introductory part, giving the anatomy and pathology as worked out by experimental investigatigations, and the nomenclature of hip dislocations; the second part discusses the methods of reduction.

He rejects the usual classification, starting out with the statement of his conviction that all conceivable dislocations are primarily either *inward* or *outward*, the other positions of the head being brought about by secondary shifting. The inward he denominates *thyroid*, and the outward, *dorsal*. His further classification is low thyroid, mid thyroid, high thyroid—abduction and rotation outward; low dorsal, mid dorsal, high dorsal —adduction and rotation inward; reversed thyroid, reversed dorsal.

We should like to discuss his theories and methods of reduction, but must refrain. We beg to urge all who wish to understand the hip thoroughly to get the book and study it carefully, as a book that will live alongside of the classical "Bigelow."

PARHAM.

PUBLICATIONS RECEIVED.

Mortality from Casualties, report of E. J. Marsh, M. D., Medical Director of the Mutual Life Insurance Company.

Souvenir of the 26th Annual Meeting of the National Eclectic Medical Association.

The True Money System for the United States, by J. B. Watkins.

The Modicum of Hearing of Deaf Mutes; How to Use and Improve it, by S. T. Walker, M. A. Reprint.

Aeroporotomy, etc., by S. W. Kelley, M. D., Cleveland. Reprint.

A Manual of Anatomy, by Irving S. Haynes, Ph. B., M. D. W. B. Saunders, Philadelphia, publisher, 1896.

Traitement Chirurgical de la Surdité et des Bourdonnements, par Dr. E. J. Moure, Bordeaux.

The Pathfinders, by James T. Jelks, M. D., Hot Springs, Ark. Reprint.

Ruhmkorff Induction Coils, by H. S. Norrie. Spon & Chamberlain, New York, publishers, 1896. Price, 50 cents.

Leprosy and the Charity of the Church to its Victims, by L. W. Mulhane.

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Statement of the Board of Health of the State of Louisiana.)

FOR MAY, 1896.

CAUSE.	*White.....*	*Colored...*	*Total .....*
Fever, Malarial (unclassified)	7	6	13
" Intermittent	.....	.....	.....
" Remittent	7	2	9
" Congestive	1	.....	1
" Typho	3	3	6
" Typhoid or Enteric	2	2	4
" Puerperal	.....	1	1
Influenza	.....	.....	.....
Small-pox	.....	25	25
Measles	.....	.....	.....
Diphtheria	1	.....	1
Whooping Cough	2	.....	2
Meningitis	20	5	25
Pneumonia	21	13	34
Bronchitis	5	4	9
Consumption	31	52	83
Cancer	12	2	14
Congestion of Brain	11	3	14
Bright's Disease (Nephritis)	19	12	31
Diarrhœa (Enteritis)	52	20	72
Gastro-Enteritis	15	3	18
Dysentery	8	4	12
Debility, General	3	3	6
" Senile	16	9	25
" Infantile	4	2	6
Suicide	6	.....	6
Heart Disease	24	16	40
Apoplexy	17	10	27
Tetanus—Idiopathic	1	.....	1
" Traumatic	4	2	6
Trismus Nascentium	5	4	9
Hepatitis	2	1	3
Hepatic Cirrhosis	4	1	5
Uræmia	3	2	5
Injuries	10	5	15
All Other Causes	166	64	230
TOTAL	476	276	752

Still-born Children—White, 17; colored, 18; total, 35.

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

Death Rate per 1000 per annum for month—White, 29.29; colored, 41.40; total, 32.81.

METEOROLOGICAL SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure	30 05
Mean temperature	78.00
Total precipitation	2.80
Frosts	none

Prevailing direction of wind, southeast.

A NEW OPERATION OF APPENDICITIS WITH REPORT OF CASE.*

By A. J. BLOCH, M. D., New Orleans, La., Assistant Demonstrator of Anatomy, Tulane Medical College, Visiting Gynæcologist to Charity Hospital, Chief of Clinic to Chair of Gynæcology, Tulane Medical College, Etc., Etc.

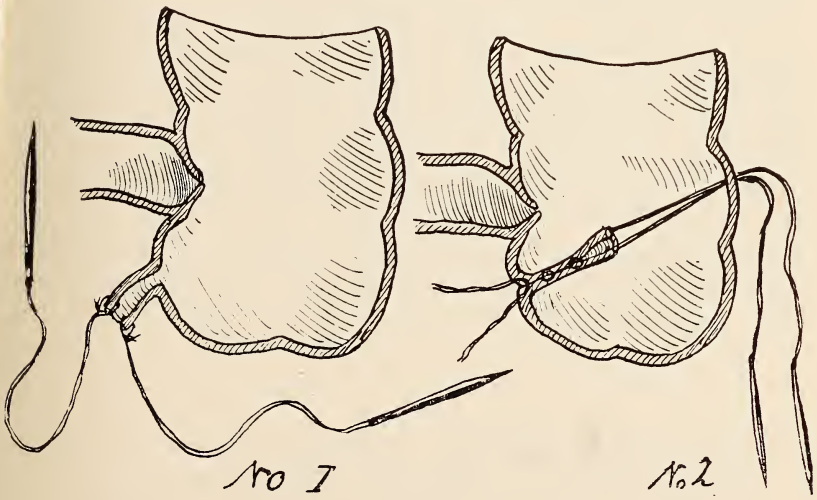
One, if not the greatest, desideratum in all surgical work, is the minimizing of time; especially is this true with all cases in which the abdominal cavity is invaded, and the viscera exposed and handled. Foremost of all measures to insure this is a thoroughness in technique, and, where resection of the hollow viscera becomes imperative, thorough coaptation of surfaces is essential to recovery. The evolution of the surgical work of appendicitis is too weighty to permit me to enter into its discussion. Many reasonable and practicable operations have been suggested to extirpate the disease, each with undoubted good results in the hands of its originator; deftness and surgical experience, however, were essential factors to their brilliant achievements. It is well recognized that appendicitis in the majority of cases, is an acute affection and one that frequently requires immediate surgical interference to save the life of the afflicted one. Delay of six or eight hours may mean death, no time can be given to summon a surgeon skilled in abdominal work from a distance, the attending physician being compelled

*Read before the Louisiana State Medical Society May, 1896.

family would consent to an operation. She was [illegible] to the Touro Infirmary, where preparations were accordingly made. Upon visiting her a few hours later with my assistants, prepared to invade the cavity, I found her condition so much improved, that I deemed it best to await further developments. Improvement being constant, the immediate operation was abandoned with the understanding that it was to be performed as soon as the patient became perfectly well and stronger. This was a false hope, however. With the restoration to health came an unalterable determination to retain the appendix, so we "primed our guns" and awaited another attack. This was not long in coming; nine weeks later I was hastily summoned, and found, as I had anticipated, another attack of appendicitis. The abdomen was distended and very painful, the pain more marked below the ensiform cartilage. The bowels refused to move, though a saline purgative and several enemas had been given before my arrival. Vomiting was frequent, the temperature registered 103 deg. and the pulse marked 130, small and compressible. The family having recognized the danger by this time, readily consented to surgical interference. She was accordingly transferred to the New Orleans Sanitarium, where I operated five hours later. In this I received the assistance of Drs. Loeber and Martin, Dr. Delaup giving the anæsthetic, Drs. McGehee and DeMontluzin being present through invitation.

Method of Operation.—An incision four inches long was made in the right linea-semilunaris, and the cæcum exposed.

This was drawn into the abdominal incision and the appendix located, which was found to be much inflamed, distended and impervious at its cæcal attachment. The appendix was now detached from the abdominal viscera, to which it was adherent by adhesions, and brought out at the wound, the cavity being shut off with sterilized gauze. With two pairs of long forceps I seized the appendix, placing one pair three-fourths of an inch from the cæcum and the other a little nearer the distal end, dividing the appendix between them. Cleansing the surface, two long, straight needles which had been previously threaded with fine silk, were passed, one into the anterior, the other into the posterior lip of the remaining appendix, tied and given to an assist-



No. 1 shows appendix divided and dilated, with traction sutures in position.

No. 2 Shows appendix invaginated with cæcum, with traction sutures passing through latter. First two Lembert sutures have been tied, the third suture being in position.

ant to hold, the needles and sutures being left in place. The forceps were now removed, a small uterine dilator passed through the lumen of the divided appendix into the cæcum, and both dilated to the extent of from one-half to three-fourths of an inch. The needles were then taken from the assistant and both together passed through the dilated lumen of the appendix and cæcum, into and out of the cæcum at its posterior surface, making but one puncture. Pulling now upon the sutures the appendix became invaginated into the cæcum, like the finger of a glove, and

healthy tissue approximated. Three rows of Lembert sutures were now passed through the cæcum, completely closing off the invaginated appendix, the traction sutures cut and allowed to drop into the bowel, and the needle puncture closed by one or two Lembert sutures. The abdominal wound was closed with silkworm gut without drainage, and the regular sterilized dressings applied. Though the patient had a general peritonitis at the time of the operation, and went on the table with a temperature of 103 deg. and pulse of 136, she reacted well; within forty-eight hours the temperature became normal and the pulse 80. The convalescence was rapid and uneventful, and to-day my little patient enjoys perfect health.

Recapitulation.—By this operation we minimize time and coaptate healthy tissue. One can not tell by inspection the limit of inflammation or gangrene, consequently the entire appendix should be removed from the abdominal field. This is accomplished by invaginating the appendix after division into the cæcum. Should sloughing of the appendix remaining occur, no harm will be done, as the diseased and infected tissue will be removed through the intestinal canal. Sound and healthy tissues only are approximated, through which sutures are passed, thus avoiding secondary infection through the latter.

CASE OF HIGH FEMORAL ANEURISM CURED BY THE SYNCHRONOUS LIGATION OF THE EXTERNAL ILIAC, SUPERFICIAL FEMORAL BELOW THE SAC, INCISION OF THE SAC AND LIGATION OF THE COMMOM FEMORAL FOR RECURRENT HÆMORRHAGE.

By EDMOND SOUCHON, M. D., Professor of Anatomy and Clinical Surgery, Tulane University, New Orleans, La.

On October 24, 1895, a white man by the name of John Kenion entered ward 8 of the Charity Hospital. He is thirty years old and single. He is a general laborer by occupation. He acknowledges drinking more or less liquor every day, but is not a drunkard. He contracted syphilis two years ago and was placed under treatment as soon as the chancre was discovered. He had no eruptions. With these exceptions his general history is good. His physical appearance is excellent; he is five feet six inches

in height, weighs 135 pounds; he is slightly stooped and is of a rather florid complexion.

About a year prior to his admission into the hospital, says the patient, pains would flash through his right leg at intervals, but those pains were short. He states also that he had injured his limb while engaged in work upon a coffee boat. But the traumatism was slight, and after a few days of limping he resumed his work as usual.

It was only two months ago (in August, 1895), that a tumor was noticed by the patient in the region where the aneurism is situated. He states that the swelling gradually acquired its present size. A month previous to his admission pains had become so severe as to confine him to his bed.

Upon examining the region a large tumor is noticed in the upper part of Scarpa's triangle; it is as large as a fœtal head and presents all the signs of an aneurism, specially the expansion and the diminution upon pressing the artery above. No other feature of any consequence was noticed on any other part of the body.

The patient was placed upon the iodide of potassium treatment. Compression by means of a rubber ball maintained by an elastic bandage was tried upon the external iliac, but the patient could not endure the pain for more than fifteen minutes. After a few attempts the pain was such, and the tissues were showing such signs of inflammation that this process was abandoned. By this time the aneurism had appreciably enlarged and had reached Poupart's ligament.

On November 1, a distinct redness developed around the upper portion of the sac, and the tumor seemed more diffused. Two weeks after his admission, November 7, operation was decided upon for fear of rupture. The external iliac was first ligated by the extra-peritoneal route and through an Astley Cooper incision. Two strong kangaroo tendons were applied and tied so as not to rupture the coats, and leaving a bloodless space between them of about one-third of an inch. The wound was closed layer by layer. The superficial femoral was then ligated below the sac, near the opening of Hunter's canal. The intention was now to dissect out the sac, but the rapid diffusion and subsequent thinning of the sac caused a spontaneous rupture as soon as the integuments were incised. Considerable bleeding

took place from the proximal end of the sac where the artery, *i. e.* the common femoral, penetrated the sac. The bleeding orifice was plugged by the finger of the operator, while Dr. J. D. Bloom kindly cleared the artery, and a strong silk ligature was passed around it, when the hæmorrhage stopped. The wound was packed and the limb was placed temporarily in a Liston splint; the usual care was taken for the safety of the limb. The temperature never ran above 101 deg. The packing was removed as soon as loosened by suppuration. The sac gradually sloughed away, large pieces at a time being removed with the forceps and scissors. On about December 20 the last slough was eliminated, and on January 13, 1896, the wound was entirely closed, and the patient left a hospital on January 16. He was exhibited at the Orleans Parish Medical Society on April 25. He came there without crutches or stick, using his limb with much ease.

The writer here extends his thanks to his student, Mr. Ward, and to his chief of clinic, Dr. Horton, for their assistance in preparing the notes for the writing of the case.

NEURALGIA. ITS ETIOLOGY AND TREATMENT.*

By J. N. ROUSSEL, M. D., New Orleans, La.

The almost innumerable remedies that the genius of man's brains has suggested for the treatment of neuralgia, is a fairly good evidence of the inability, till now, of drugs to cope with this most painful affection. In reviewing the therapeutics of neuralgia some six months ago, I was bewildered with the great number of drugs that "never failed when properly administered." It was perplexing to decide which one should be selected in this, or that particular case, and, in my bewilderment, I decided to consult the pathology of the disease, and to use that drug which came nearest to fulfilling the theoretical requirements of the condition. But, upon consulting various authorities on the pathology of the affection, my amazement only assumed greater proportions. What was there in their learned discourses to satisfy my wants? Nothing.

I saw the old maxim of neuralgia being the "cry of the nerves for pure blood"—and what else? Nothing. Was there

* Thesis for graduation, Tulane Medical College, 1896.

an inflammation of the nerves or perineurium? No. Was there an irritation local, or reflex—some saturnine or other dyscrasia? None that had been discovered.

Was there a disturbance of co-ordination of the mechanism of sensation? Ah! there is the rub, in the writer's opinion, and, especially so, in those cases of neuralgic dysmenorrhœa, cephalalgia and intercostal neuralgia of long standing.

To explain what I mean by a "disturbance of co-ordination of the mechanicism of sensation," I shall be compelled to bring the subject into line with other more familiar, though perhaps equally unexplained facts, and thus, by a process of physical explanation, reduce two problems to one, and by this means attain my thesis.

For the purpose of explaining the phenomena of pain, normal sensation, and absence of sensation or analgesia, we are forced to the assumption that each nerve-cell has two others connected with it—one of which has the function of stimulating, and the other of inhibiting its action. We are further compelled to accept the hypothesis, that nervous stimuli, like light and sound, consist of a molecular vibrations moving in waves.

In the case of both sound and light, we find that if two waves should fall upon one another, so that the crest of one wave fill up the trough of the other, they interfere so as to neutralize each other's effect, and thus two sounds produce silence and two waves of light darkness.

Admitting then, that nervous stimuli consist of vibrations like those of light and sound, the action, which any nerve-cell would have upon the others connected with it, would be stimulant or inhibitory according to its position in relation to them. If its relation be such that a stimulus passing from it to another cell will meet there with a stimulus from another quarter in such a way that the waves coincide, the nervous action will be doubled, but if they interfere, the nervous action will be abolished; and if they meet so as neither completely to coincide, nor interfere, the nervous action will somewhat be increased or diminished according to the degree of coincidence or interference between the crests ot the waves.

But, it is quite evident, from what has preceded, that the coincidence or interference of nervous stimuli, traveling along definite nerve paths, will vary according to the wave-lengths,

and the time of vibration of the molecules. One wave may be thrown a whole wave-length instead of a half wave-length behind the other, and thus, we get coincidence and stimulation, instead of interference and inhibition.

To have pain, then, the stimulating wave must be accelerated one wave-length or more, and made to coincide with the inhibitory wave, and vice versa. This is, according to the writer's opinion, the very status of affairs existing in acute neuralgia, brought about by a series of anatomical changes in the nerve and nerve-sheath.

I say acute neuralgia, for it is my purpose to show, or attempt to show, that in cases of long standing neuralgia of various sorts, these anatomical lesions have ceased to exist, and the pain is kept up automatically as a psychical manifestation, the nerve-centres having assimilated, so to speak, the "modus operandi" by which the pain was originally produced—the condition having become a real psychopathy. Then, if such be the case, it might be asked, "why is the pain of neuralgia not continuous instead of intermittent as it is?"

The reply is simple; a nerve is not capable of continuous stimulating or continuous discharge. Persistent action of whatever kind on a nerve termination, or the out end of a nerve, does not produce a persistent effect.

The quantity of molecular motion locked up in a nerve-centre, is measured by the contained quantity of unstable nerve-matter; and decomposition of that part of the unstable nerve-matter, which was most favorably placed for being acted upon, 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 change, when disturbed, as well as a decreased stock of molecular motion to be liberated. Consequently, other things remaining the same, every excitation of a nerve-centre reduces for a time its impressibility and its energy.

It is a matter of observation that a functional trouble (and neuralgia is a functional neurosis) may survive the cause, or the organic lesion which gave it birth; the trouble is no longer kept up by the lesion, but is retained, if I may so express it, by the nervous system. The latter has a great tendency for preserving certain modalities which have been impressed upon it. Thus a child, susceptible to convulsions, repeats them under the lightest irritation.

Spasms, nervous movements, as chorea, hysterical paroxysms, nervous cough, vomiting, diarrhœa, etc., are acts which the nervous centres execute spontaneously, if by frequent repetition these acts are, so to speak, assimilated by these centres.

Certain pains last when the lesion which has caused them no longer exists. For example, every surgeon has seen a limb, after a contusion, remain dynamically affected; the patient contiues to suffer and the limb is motionless—nevertheless the contusion seems to be cured.

There is nothing exceptional in the living organism—each act induced is susceptible of being reproduced, because this act implies the activity of a physiological mechanism inherent in the organism. Hence, the moral control—that is to say, the putting into activity of the physical functions has salutary effects. To console a patient, to sustain his courage, to drive away from his mind the great anxiety which consumes him, is often to react efficaciously upon the disease. By the quiet persuasive voice of the physician, the patient is restored as by a "salutary balm," feels his confidence arise and his pains fleeing. Doubtless the physical alterations which occur once persist despite all moral influence, but, unfortunately, it too often occurs that this happy condition is not obtainable, and we are driven to seek aid in some other quarter.

Granting the theory herein proposed to be correct, to control the pain, an agent is necessary that, by acting directly or indirectly upon the accelerating centre, will retard the stimulating wave so that it will interfere with the inhibitory wave to the extent of producing normal sensation; and, if this condition be kept up for a sufficient length of time, the nerve centres will lose their vicious habit and go on functioning normally.

A typical representative of such an agent is belladonna, and I have used it successfully in ten cases of neuralgia of various kinds, one of them a case of neuralgic dysmenorrhœa dating as far back as ten years.

The form of belladonna I have found preferable is the tincture. This I usually prescribe in gradually increasing doses (beginning with five drops) till the patient can stand it no longer, which point will vary with the susceptibility of the individual. It is not uncommon to see patients taking as much as four and a half drachms of the tincture *per diem*, though the average person can

not tolerate more than two and a half or three drachms per day. After the physiological limit has been attained the drug is ordered to be decreased in the same ratio.

The question likely to suggest itself is, whether or not this remedy administered for any length of time will have a vicious effect? Does not the patient contract a belladonna habit? So far as my observation extends, I have not found such the case; but I have observed a very curious nervous phenomenon to develop under its influence, which is inexplicable on the theory of the action of the drug as stated in the text-books of materia medica. This phenomenon—urinary strangury—becomes more curious when the fact is stated that it does not occur in those who have the so-called "spasmodic diathesis," or predisposition to spasm of the involuntary muscles, existing especially in asthmatic individuals, in which condition it has proven, in my experience, almost a specific.

It is highly probable that belladonna produces this urinary strangury by disturbing the normal functional relativity existing between the inhibitory and the accelerating motor centres presiding over the bladder and urethra. But I have not experienced much difficulty from this source. I have found the condition to yield very readily to the action of physostigma, in twenty minim doses of normal liquid.

I have not found that extreme pupillary dilatation ever took place; in fact, I have seen patients taking as much as one and a half drachms of the tincture of belladonna three times a day, with absolutely no peculiar symptoms of a disagreeable nature.

But a great many do suffer from an excessive dryness of the buccal mucous membrane, which is usually relieved by a few drops of the tincture of Jaborandi, or some common table salt. I have not found eruptions of the skin to occur under its influence, which is most probably due to the fact that my experience has been limited.

In conclusion, I desire to state, that it was not for any idle end, nor simply to gratify a vain scientific curiosity that more than six months ago, with many obstacles in my way I began this study.

The result of these investigations are herein submitted to the profession for consideration and judgment. Should this thesis be so fortunate as to meet approval, and should it happen that

my humble efforts have contributed in any degree to the alleviation of human suffering, my reward will be ample indeed.

The following case will serve to amply illustrate the efficacy of the drug in these conditions:

A lady, aged 22, apparently in good health, said that she began to menstruate at the age of twelve years, and simultaneously with that event she became a victim of a diurnal cephalalgia, which, in spite of all treatment, has remained faithful both to the time of occurrence and duration. Along with these headaches her menstrual periods invariably brought her pains of an intense and agonizing nature, which usually lasted from one to three days, and while the intermenstrual periods were not entirely devoid of pain in the region of the ovaries it was only occasionlly that she suffered from that source. She had no leucorrhœa; a vaginal examination revealed nothing abnormal to the sense of touch. A speculum examination was not made owing to the aversion of the patient, but from the sensation which the os imparted to the finger I judged that there was no stenosis of the os to account for the pain. Physical examination revealed nothing abnormal, and strange to relate she never suffered from constipation as is usually the case with these unfortunate mortals. She was ordered to take the tincture of belladonna, as aforementioned, and in one month she was absolutely free from pains—she had menstruated without pain for the first time in ten years.

THE SOURCE OF MALARIA.*

BY SURRY FOSTER MAYFIELD, M. D., NORTHPORT, ALA.

Previous to 1880, malaria was one of the most obscure diseases in the whole category of medicine. It was the great cloak behind which many of the ills of mankind were covered; but since the introduction of the microscope, and since Laveran published his famous series of articles in 1880, describing the germ, the nature of the poison is much better understood. It is now known to be caused by a parasite in the blood.

Even since Laveran's day there has been a great deal written upon the subject, and much light thrown thereon.

*Thesis for graduation, 1896, Medical Department, Tulane University, Louisiana.

It has been clearly demonstrated that the true cause of malaria is a germ of the protozoan type; that it flourishes best in a low, hot climate in the presence of decomposing vegetable matter; that there are different types of the protoplasm, producing the different forms of the disease; an interstitial one, producing the acute forms, and a concentric one, producing the chronic. The former variety is destroyed by quinine; the latter by arsenic. It is also asserted by many that the periodicity of the attacks is due to cycles of development of the germ within the blood, which I believe to be a very logical conclusion.

It is not my purpose, though, to go fully into the etiology, pathology and treatment of malaria; but I shall rather add my small experience to that of many others of the past fifteen years tending to show that it is in reality a water and not an air-borne disease.

Having been educated to the belief that malaria was due to the impurities of the air, I naturally looked to that source for the cause; but after beginning the study of medicine in 1893, I decided to pay especial attention to it during my vacations, and to form my conclusions accordingly. The result of this has been my thorough conviction that the old theory was false, and the main, if not the only source, of malaria is the drinking water.

During the summer and fall of 1895 I had considerable experience with the disease, having had almost an epidemic of it at my home, Northport, Ala. A few of the cases I will report.

The first instance was that of a family of eleven members, consisting of father, mother, and nine children, occupying one of the central houses on one of the back streets of the town. The previous history of the entire family was excellent, having never had any serious illness before. They were all factory hands, as were all the other residents of that street, and all worked in the same building. On July 13, I was called to see the two oldest children, boys, age 18 and 16 respectively. Both had hard chills about 9 A M., followed by high febrile reaction. Temperature at 11 A M. was 105 deg., which promptly yielded to cold water sponging. At 8 P. M. I gave five grains each of calomel and bicarbonate of soda, which caused free action from the bowels on the following morning. I ordered ten grains of quinine to be given on the three following mornings at 5 and 7

o'clock, which kept off the chills for those days. I then stopped the large doses and gave five grains each morning, at six, as a phophylaxis. I was very careful as to their dietary, not allowing them to have any other than liquid and easily digested food. Regardless of the strictest anti-malarial treatment, on the fifth day, the eldest boy was taken with another hard chill, followed by the same treatment and same results. The second boy missed his chill until the tenth day, when he had another, which was promptly warded off on the first, second and third days by twenty grains of quinine two hours before chill-time, but it returned again on the ninth day regardless of treatment.

Between July 13 and August 1 the entire family, with the single exception of an infant six months old, had developed a typical case of malarial intermittent fever, which would promptly yield to quinine, but would return again anywhere between the fifth and twelfth day, regardless of treatment. I at once suspected the drinking water as the cause, and ordered them to either boil their own well water or to get their drinking water from their neighbors' wells.

But, as usual, my advice was not heeded, the father stating that he had recently cleaned out his well, and knew it to be the "best water in town." So the entire family continued to have chills and fever at varying intervals, until on September 27, when his oldest daughter, aged 13 years, was taken with a malignant type of the congestive form, from which she never rallied, dying on the following day at 5 P. M., notwithstanding the fact that everything possible was done to stimulate her and make the shattered nervous system react.

I then told her father that unless he abandoned his well water or boiled it some other member of his family would very probably pass off the same way.

Then he took my advice and secured his drinking water from the well of his nearest neighbor, the two wells not being over twenty feet apart. From the day the change was made, there was not another symptom of malaria in that family, which I think clearly proves that well of water to be the true cause of the malaria. Further proof of the fact is that there were about one hundred and fifty people living there within one hundred yards of each other, all surrounded by the same environments,

all being factory hands, and not a single case of malaria outside of that family. Another proof is that there was a young man boarding with the family, and on August 2 he developed a typical case of malaria of tertian form, which acted very similarly to that of the children in regard to treatment. On August 15, I advised him to change his boarding place, which he did, and had no other chill. Of course the quinine was kept up on the first, second, third, seventh, fourteenth and twenty-first days, as was done in the other cases after the change of water.

Joseph and Robert W., adult males, farmers, living on high hill overlooking river bottom, but their plantation was situated in the bottom. They used water only from their well at their residence, some 200 feet above the river bottom; carrying sufficient water to the field with them each morning and afternoon to last the remainder of the day. They employed about thirty hands on the farm, who did not take the precaution about their drinking water, but used water from a small spring on the river bank. A great many cases of malaria were developed on that plantation among the farm hands; in fact, so many that the crops were almost lost for want of laborers. The two brothers passed through the epidemic without any symptoms of malaria until late in the season, when, owing to a scarcity of labor they were compelled to spend the entire day in the field and use the same water the farm hands had been using. After drinking that water for one week, they both developed a typical case of malarial remittent fever, lasting twenty-one and twenty-eight days respectively. These two cases with many others that appeared on that plantation, I fully believe were caused by the spring water, which is further shown by the fact that there were several large plantations similar to theirs and surrounding it, in every respect, and employing the same class of laborers, and while on this plantation there was almost an epidemic, on the others there was only an occasional case.

I had many other cases which I am confident were traceable to drinking water, yet the histories are not plain enough to state positively. Only one of these I will report. On August 15 a party of five gentlemen left town to spend a few days down the river on "a fish." They remained five days, during which time they drank only such water as they could get—part of the time river water, and at other times water from small

springs on the river bank. Upon returning home three out of the five had attacks of malarial fever. In these cases I am confident the source of the malaria was the water they drank, as there were no other cases of malaria among the farmers who cultivated the lands along the banks where this party was fishing, but who got their drinking water a mile further up on the highlands.

Perhaps the most positive proof that malaria is due to the water supply is the fact that after the introduction of artesian wells along the Atlantic coast by the railroads, in the desire for a larger supply of water than the surface water would afford, and the accidental use of that water by the inhabitants at once produced a marked diminution in the amount of malaria, and after they began to use it exclusively there was almost an absence of the disease.

From my personal experience and from that of many scientists of the past few years, I am convinced that by the exclusive use of boiled water or water from deep seated artesian wells, we would have an entire immunity from malaria even in sections of the country where hithertofore no one dared to live using the surface water.

Still, here, as in many other things in medicine, the majority of the people, and I might include a great number of physicians, have been educated to the belief that malaria is due to impurities in the air, and it will take no little evidence to convince them of their error.

I know of no subject in medicine that affords so broad a field for study as the etiology, pathology and treatment of malaria. There the physician has before him a mission whose field none can limit, and his triumph which his imagination can only picture.

INTERRUPTED DENTITION.*

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

The intelligent practice of what has come to be considered as within the legitimate province of the dentist includes so much more to-day than the mere technique of dentistry, that a more comprehensive designation of the field is not only desirable, but necessary.

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* Read before the Louisiana State Dental Society.

We should consider therefore some of the more essential needs, in order that we may be able to practice in a more satisfactory and successful manner every branch of our profession.

We should not only consult each other more than we do, but we should invite the attention of the general medical advisor, and by all means give due consideration to the many complications that sometimes arise from dentition, and, when necessary, not hesitate to ask the advice of any other specialist, for no doubt there are many times when we can be of mutual service to each other. My experience, limited as it is, has long since taught me that it is almost impossible to practice my profession in a truly scientific manner without an occasional consultation with some other specialist.

We are diagnosticians, according to understanding, education and acquirements. We are also diagnosticians proportionately with employed opportunities. Therefore we should take advantage of all of our opportunities, and not be satisfied with the mere technique of dental operations, for our profession to-day is on a great upward tendency, and we, as professional men, have great responsibilities.

It is perfectly easy to conceive of a case whereby a poor appreciation of existing conditions, and poor judgment of the possibilities, we may make one's future full of unpleasantness, without the opportunity of ever making the condition as satisfactory as it might have been, had we been better able to judge and advise at the proper time.

We are responsible morally, so far as we have capacity and opportunity to acquire the knowledge and skill. It is not possible for some of us to weigh accurately as others the case in all of its bearings, yet we do it with as much dignity and conscientiousness as though we possess all knowledge, and morally, we are doing our duty; but the question is: Are we doing our duty? Are we giving enough of our time to the higher branches, and to the more scientific complications in our profession? Or are we as representatives of a higher and noble calling, simply satisfied with the operative and mechanical departments? He who has no higher ambition at this late day of progress in our profession, should no longer be classed among us as a dentist, but should be recognized only as the mechanic or the tooth carpenter.

It is not my intention to misjudge or underrate any worthy

member of our profession, but I feel that in presenting the subject in this way, that it might awaken a greater interest, and cause some to think more seriously of the many complications that might arise from dentition, and which we, as dentists, are supposed to diagnose and treat to a certain extent.

It must be conceded by all that teeth are not developed at once, but by a very slow and gradual process, and this process is truly physiological, and under ordinary conditions would not give rise to any very serious pathological conditions or nervous reflex disturbances. If this be not the case, and there are pathological disturbances, which at times we must all admit, or else ignore every other branch of dental or medical science, can and does effect different parts of the body. This should be by this time very clear to our minds; not only from what we have been able to learn from the many able authors who have contributed to the subject of reflex disturbances, but also from some cases which no doubt have come directly under our care.

In my opinion, no consideration of dentition is complete which fails to recognize the possibilities of reflex disturbances in the development and eruption of either first or second dentition; although in second dentition the disturbances should not be as great as they might be from first dentition, yet I think that it can easily be shown that many of the morbid conditions and diseases of childhood, could, to a certain extent, be traced to some of the aggravated conditions of dentition. I ought not to confine it simply to childhood, for we have abundant evidence that dentition is sometimes the cause of a good deal of trouble with adults, and it is certainly too late a day in the progress of dental or medical science, for any intelligent observer to take any other position.

The first permanent molar does not, as a rule, cause as much disturbance as the second and third molars, and the only reason that I can give, whether it be a very clear one or not, is that it is developed in the body of the bone and has ample room, and is not erupted until about four years after the last deciduous molar, and six years before the second permanent molar. So taking into consideration the room and time that it has for its development and eruption, it least of all should ever be the cause of trouble.

But notwithstanding all these favorable conditions, even this

tooth is sometimes the cause of trouble at the time of its eruption. Though I must confess that my own experience has been very limited, as I have only seen one case where any very great trouble resulted from this tooth, which was a boy about six years old who was brought to me by his father, who stated that the child was suffering from toothache, and sometimes complained of neuralgia in the face, and on several occasions had complained of earache. But on examination I could find, as I thought, no cause for his trouble, as there were only some small cavities in the deciduous teeth which I filled. About a week or ten days after, the boy was brought back by the mother, who stated that he had been worse since the teeth were filled, that he suffered all the time, and last night had such a fearful earache that he could not sleep. I made another examination, and I must confess, that I was almost as much at sea as at first, as the mouth seemed to be in a healthy condition, and I could attribute it to no cause whatever except a low six-year molar which had not yet made its appearance, and it hardly seemed reasonable to suppose that it was the cause of so much trouble, as the parts seemed to be in a very healthy condition, except some bulging of the gums and a slight pain from pressure; so the only thing that came to my assistance was what little I had been gathering up from the different writers on reflex nervous disturbances, which led me to suppose that possibly the trouble might have been caused from the non-erupted molar. So I lanced the gum very thoroughly over this tooth, and cut out a piece with curved scissors, to be certain that there would be no cicatrix.

To my very great gratification this simple operation at once gave the desired relief, as the child rested well that night and has had no more trouble since.

The second, or twelve-year lower molar, seems to be the cause of more trouble than the first, and this, I think, is very clearly explained in an editorial which appeared in the *International Dental Journal* of December, 1892.

The question was asked: "Why should the second permanent molar produce unusual irritation, and be a source of disturbance to a greater extent than the first?" The answer was found in the fact that these teeth are developed in the rami of the jaw, and, in assuming the direct vertical position, the space at the angle is frequently not sufficient to allow for their development.

The process of formation of the dental tissues proceeds regardless of this, and the result is pressure upon the inferior dental nerve and possible cerebral disturbance to an alarming extent.

I am indebted to Dr. M. W. Rainold, of this city, for quite an interesting case which happened to come under his care, which was in a girl of about 12 years of age, who was suffering very much from earache, and on examination he found that one of the twelve-year molars had not been erupted, and relief was at once given by a deep crucial incision of the gums.

I do not wish to be understood as taking the position that the gum is the prime cause of the trouble, for the gum is by no means the most sensitive part. The part the gum takes in this is to hold down the entire body of the developing tooth, producing pressure on the nerves at the end of the root, which is the principal cause of the reflex nervous disturbance.

Dr. Smith, in his work on Children's Diseases, and in the chapter on Second Dentition, says: "The fact is well established, although often overlooked in practice, that second dentition sometimes deranges the functious of organs and gives rise to pathological symptoms." He says Rilliet and Barthez mention particularly neuralgic pains, rebellious coughs and diarrhœa as effects which they have observed. Quoting from Rilliet, he mentions a case of a girl eleven years old who had a very obstinate and protracted cough, with paroxysms, lasting often half an hour to one hour. The cough immediately and permanently disappeared when the molars pierced the gums.

The reflex nervous disturbances of a third molar are so well known that it seems almost useless to more than mention them, but as I have several cases of some interest it might be well to dwell on them for a while, as they might serve as a basis in the future for others perhaps in making a better diagnosis in case they should ever be called on to treat such cases.

A lady patient, 35 years old, who was having some teeth filled, remarked during the course of the operation that she had been suffering for three or four years from headache, facial neuralgia and earache, and had been treated by several physicians and dentists, but without any success. I then made a thorough examination of the teeth, but could find none that I supposed could be the cause of the trouble, but found one lower wisdom tooth missing, and on inquiry soon found that

she had never had any of her permanent teeth extracted. I also found on further inquiry that the other lower wisdom tooth was erupted about the time her suffering commenced. On examination of the supposed missing tooth, I found by probing what seemed to be the tooth with the crown pushing against the roots of a twelve-year molar and the root pointing toward the rami of the jaw. The patient was of sufficient intelligence to very rapidly appreciate the fact that the cause of her trouble might have originated from that tooth and consented at once to have it out, which gave the desired relief. I saw the patient about one year after and she stated that she had never had any more trouble since the day the tooth was taken out.

Dr. Rudolph Matas, of this city, in an article on Oral Surgery, which he contributed to the *Annals of the Universal Medical Sciences*, mentions several very interesting cases, one showing the difficulties in diagnosis of a dentigerous cyst, due to an unerupted deciduous cuspid, even after repeated microscopical examinations, in a girl 13 years old.

Also, a case in which a wisdom tooth was placed under the first molar, causing suppurative osteoperiostitis of the jaw. Extraction of the first molar performed. The third molar appearing at the sight of the first molar, but the inflammatory disturbance persisted until the third molar was extracted.

Dr. Robert Barclay, of St. Louis, in an article published in the *Cosmos*, May, 1894, on the relation between diseases of the teeth and ears, mentions numerous cases of ear trouble, which were traceable to dental irritation. He quotes Dr. Bruns of this city, reporting twenty-three cases whose ears were not normal, of whom nineteen had hearing that was not good, and in all of the nineteen cases the hearing was more defective on the side where the teeth were worse.

He also quotes Dr. Samuel Sexton, of New York, in speaking of the special sense organs, the ear, nose and eye, states that under certain conditions of the system these organs become strikingly susceptible to disturbing influences, and so far as his own experience goes, from no cause more frequently than dental irritation.

Again, he says, that of fifteen hundred aural cases whose records he has received, perhaps one-third owe their origin or continuance in a greater or less degree to dental irritation, such as cutting, crowding, etc.

Dr. M. H. Cryer, of Philadelphia, in an article on facial neuralgia, published in the *Cosmos*, January, 1895, says: After an experience of fifteen years in the special studies of diseases and surgery of the mouth, face and neck, I have become more thoroughly convinced each year that it will be the properly trained scientific dentist who will be called upon to treat neuralgia.

I hope that what has been said and the cases alluded to are sufficient to convince the unprejudiced mind that this subject is worthy of some consideration. If so, then how natural it is to suppose that little children, who are not able to disclose their aches and pains, and whose tender little natures are so susceptible to the many morbid influences, are at times the victims of untold misery and suffering. And to speak plainly, I think it great negligence on the part of any man, who has under his care for treatment, little children, who fails to post himself, or at least recognize the possibilities of reflex nervous disturbances in the eruption of teeth.

A CASE OF DEPRESSED FRACTURE OF THE STERNUM.*

BY W. E. PARKER, M. D., NEW ORLEANS, LA.

Depressed fracture of the sternum is a comparatively rare injury. We are told in the *American Text Book of Surgery* that this injury is found in about one in a thousand cases of fracture. In 51,938 cases of fracture treated in the London Hospital from 1842 to 1877 there were fifty-two such cases. In looking over the literature of the subject but little can be found. We are told that in nearly all of the cases the fracture is in the upper portion. The common symptoms, aside from the deformity, have been dysponœa and irregularity of the heart. While many of the cases have been due to direct violence, a number have occurred from muscular action. With these preliminary remarks I will now relate a case that recently came under my care at the Charity Hospital. ALBERT COTY, a Frenchman, *æt* 50, sailor by occupation, was admitted to the Charity Hospital May 14, 1896. Family history is good, and personal history was good until about four months ago, when it was found that he was losing flesh, and the physician of his ship found evi-

*Read before the Orleans Parish Medical Society, June, 1896.

dences of tuberculosis at the apex of the left lung. About six weeks before admission, while trying to help a schooner that was in distress, he was caught and jammed by the bowsprit against the stern of his own vessel. He was put to bed, and suffered but little pain, although unable to swallow solids, and he swallowed liquids with some difficulty unless the amount was small. A few days after the injury he had a hæmorrhage of the lungs.

This history was obtained from the physician of his ship. When admitted he seemed to be in fairly good flesh. He had a laryngitis which I considered tubercular as he had a deposit at the apex of the left lung and a microscopical examination showed the presence of the bacillus tuberculosis. He could not swallow solids and swallowed liquids with difficulty. There was a marked depression of the lower third of the sternum, specially on the right side. He was cyanosed but the action of the heart was regular. As his condition seemed to be one demanding surgical interference I took him to the amphitheatre that afternoon to elevate the depression. Soon after he commenced to take chloroform he became so cyanosed and his condition so bad that I decided to operate without an anæsthetic. An incision, three or four inches long, was made in median line and the soft parts dissected back. A piece of cartilage was then nipped out with the keen forceps and the cartilage elevated, but there was some trouble in keeping it up so the opening was enlarged and then the cause of the trouble was found. The sternum had been split to the median line and the inner portion was turned almost at a right angle to the mediastinum and one sharp point had punctured it. I removed the greater part of this and easily elevated the rest. A small amount of iodoform gauze was packed beneath the sternum for drainage and the wound was then closed. When taken to the ward he seemed somewhat depressed and was covered with perspiration. That night he swallowed water and milk without difficulty. His recovery was uninterrupted. He had a daily rise of temperature to 100 deg., but I believe that this was due to the tubercular condition as it continued after the wound was well. The wound was dressed on the fourth day, the gauze was removed and a stitch was put where it had been. The wound healed without pus and he was discharged cured of

his surgical trouble May 31. When discharged he could swallow without difficulty. In fact he could do so from the time that the operation was finished. The first time that he was allowed to sit up he became so cyanosed that we were compelled to put him back to bed, but this did not recur. I may state that before the operation the simpler methods of reduction of the displacement were used. I wish to specially call attention to the fact that the prominent symptoms were cyanosis and dysphagia. His pulse was never over 100. I am obliged to Mr. Geo. R. Carroll, R. S., for assistance during and after the operation.

WHY DOES NOT THE COUNTRY DOCTOR RECORD HIS OBSERVATIONS AND AID IN MEDICAL ORGANIZATION?*

By Dr. S. A. POOLE, Simsboro, La.

Gentlemen of the North Louisiana Medical Society: While pausing for a theme to address you on, "Why Does not the Country Doctor Record his Observations and Aid in Medical Organizations," is a subject I thought would meet with your approbation.

To the country practitioner many points in his practice and experience offer most excellent fields for observation and record.

He is not so much in society, has much more time for sober, calmer meditation and reflection than his confrère of a busy, rushing city. And as there are many varieties of taste each one can select for himself a subject for observation, and after a cautious and careful study and record of cases bearing on it, he should give his professional brethren the benefits of his experience and observations through his State medical journal.

The habit once acquired of writing for medical journals generates more interest in our profession, and the writing of one article is an incentive to another, acting as a lever to encourage the whole mass of professional observers.

It promotes accuracy of observation of facts in recording, as it is open to criticism and exposure if the principles be false. No one is given credit for originalty of observation unless the

* Annual Address to the North Louisiana Medical Society by the President.

public record be shown as proof. In this day of printing presses and hasty book-making, thoughts must be in black and white to sustain their claims to priority.

Few country practitioners are known outside of their immediate neighborhood, and I dare say we have as much natural medical talent among the obscure country practitioners in the pine woods of Louisiana as in any other State of its size in the Union. Why do they not get the proper credit for it? Simply because they hide their talent by not giving to the outside professional world the benefit of their recorded experience and observations. The *vox populi* is not capable of comprehending their status, as the laity have no adequate means or capacity for arriving at a correct conclusion, hence the importance of paying our professional duty and obligation in full if we are to reap the fruits of our sowing.

The great array of workers in medicine to-day is busier than was ever known before in the history of our profession, working and struggling to solve the many mysteries which still surround the numerous diseases afflicting mankind.

An indolent, or non-worker, is rightfully considered a drone and not respectable in one sense, as he is nothing more than a consumer, without making an effort to pay his debt, or rendering a *quid pro quo*.

I am proud to acknowledge that there are a few country practitioners in our State who contribute to medical literature; a few grand and noble exceptions, who shine out like sporadic stars in the dark firmament, and these should stand as exemplars to a multitude of others.

Sometimes I think this neglect of professional duty is through want of thorough medical organization and co-operation in forming parish societies. It seems to me everything in this line has been done by a few individuals, and not as a united profession, which has made the task Herculean and the burden upon a very few willing shoulders and stout hearts. Without unity of action and thorough organization little can be accomplished in the medical profession. It is said, in military parlance, the "route step breaks no bridges." This should not be so, and can be remedied only by live active medical societies in every parish in the State.

I am at a loss to explain the seeming indifference, or lethargy

in so many of the parishes of the State on the subject of parish societies, and still at a greater loss to explain the reason why so many of the profession fail to seek the opportunity for instruction offered by the few medical societies now established in North Louisiana. Can it be that we are fearful of meeting each other for fear of showing how little we know? I am forced not to believe this, and must conclude that it is due to pure indifference to professional obligations.

Then, I ask again, are they paying their professional dues? I answer no! for no medical man or body of men, no matter what their standing may be, if opposed to thorough medical organization, should have the support and fellowship of his professional brother, who has higher aims in his profession, and unselfish motives toward his brother practitioner.

Pardon me when I take the lofty ground that we belong to the noblest and grandest profession that the world ever knew. I appeal to the record of history to bear me out and sustain me in this position. The medical profession has a history all its own, standing out singly and alone, unexcelled and unapproachable. Let us look along the medical line, from Hippocrates to the present day, with its mouldering monuments of fallen greatness, their epitaphs of immortal glory written in letters of blazing light across the dark pages of humanity's history, and then we are made to feel proud of a profession that has grown old in the discharge of duty. No false teachings control its power or direct its faith, but in the spirit of high learning it utilizes the component elements of worlds, chains the fleeting lightning for its electro-therapy, reins the myriads of mental workers the wide world over to her flaming chambers of science. I ask, then, are we not grateful that we live in the golden age of medicine, and can claim membership in such a God-like profession?

In taking a retrospective view of years that have gone by, when ignorance and superstition were in front, we behold expectation standing aloof and gazing wistfully through the mighty veil which darkened the summit of the hill of science. Draw then on your imagination, and view to-day the brilliant light of modern research which has rolled back that veil and made the entire ascent all glowing with brilliant new discoveries and inventions with which to serve the fair brow of the goddess

of science as she sits unwrapped on her sky-towering hill and beckons us with the unfaltering finger of destiny, still onward and upward, and ask ourselves the serious question, are we doing our duty by recording our observations and proving to the outside professional world that we are in the vanguard of a progressive profession?

I am very free to admit that the country doctor, has a great physical strain as well as mental tension to undergo. He often times returns from his distant patients, travel-stained and weary, oppressed with the heat and burden of his day's work, covered with the dust and sweat of unprofitable labor, worn and fatigued with physical toil, with mental anxiety, and with a thousand pathetic and unanswerable appeals to his sympathetic and emotional nature. Some ripe fruits have been gathered and enjoyed, some golden grain has been garnered; some fond hopes have floated before him and cheered him onward, some unalloyed pleasures, bright and sparkling have flashed upon the wave of duty's brimming bowl; again many flattering prospects have withered in his grasp, many disappointments have left their ashes upon his hearth-stone, many cherished and elaborate theories have been rebuked by the list of merciless facts, many sorrows have gathered the folds of their dark mantle around the altar of his professional zeal, professionsl faith, and professional aspirations. Yet this should be no plea for the country doctor in not leaving some legible record of his experience to be carved upon the walls of his work, by recording his observations, and extending a helping hand to medical organizations.

PRACTICAL RŒNTGEN PHOTOGRAPHY.

How to Make Falk-Ray Shadowgraphs(?)—A Cheap Fluoroscope.

By W. LAURENCE STEVENSON, M. D., New Orleans, La.*

In the latter part of 1895, Dr. W. C. Rœntgen, of Wurzburg, made known the discovery of a new kind of light radiation. Uncertain as to the nature of the rays, owing to the difficulty of detecting their cause, he called them for brevity "X-rays." The hypothesis provisionally adopted in explanation of the rays

* Compiled from "Electrical Instruments; Their Construction and Uses," in preparation, by Dr. Stevenson.

is that of longitudinal etheric vibrations, contrasting with transverse vibrations, which are regarded as the cause of light.

The undreamed-of possibility of taking a picture of the bones through the flesh, or of metallic objects through wood or cardboard, in consequence of the flesh or cardboard being transparent to these peculiar rays, has caught the universal imagination as one of the most surprising revelations science has ever made. But it has remained for a New Orleans man to announce a discovery of a method of photographing the flesh and other soft tissues without revealing the bones (?). The writer has carefully and persistently analyzed the methods employed in the obtention of these remarkable photographs and exposes a simple plan by which they are obtained.

The method of making a shadowgraph of the bones, or of metallic objects, consists in posing the part to be photographed upon a photograph plate, enclosed in a plate holder, or enveloped in several thicknesses of black (needle) paper, to protect it from ordinary light, and in suspending above the part for fifteen to thirty minutes, a Crooke's tube, connected by two copper wires with an induction coil or plate glass electrical machine. The rays developed in the tube are transmitted through the soft tissues, and react upon the sensitized surface of the plate, producing a shadow of the bones or other extraneous body. The plate is developed as for an ordinary picture, and prints on photographic paper made therefrom. Practically, the tube should be placed at a distance of four to six inches from the plate. The greater the distance the sharper the outlines of the photograph, but as the intensity of the ray varies inversely with the distance, the time of exposure is necessarily greater. The tube must be "fixed," otherwise the penumbra will be greater, and a partial shadow cast on the margin of the true image. The plates may be developed at night in an ordinary room, with the ruby light, and a ready prepared developing solution.

The method embodies several distinct operations, is tedious, and impossible in many instances, as in the case of a child, who can not readily be induced to pose for so long a time. To overcome these objections, and to further simplify the method whereby any one can make shadowgraphs without costly apparatus, experiments have been made by the writer and Mr. C. S. Barnes, of the New Orleans Electric Company, with the assistance of Dr. T. J. Woolf.

The initial experiments were made with the static machine and an ordinary incandescent lamp in which one of the filaments had been fractured. With an exposure of five, ten, fifteen and twenty minutes, the results were absolutely negative. With a three and a half inch induction coil, operated by twelve bichromate cells, or the Edison current, through resistance, no glow was produced within the lamp or a Crooke's tube. Employing a larger coil and the simple incandescent globe a beautiful glow was obtained, but the sensitized plate was unaffected after an exposure of forty-five minutes. With a large coil and Crooke's tube, satisfactory exposures are made in twelve to fifteen minutes.

The experiments extended over a period of five or six weeks, and in the hands of moderately successful experimentalists, with every precaution taken to secure the successful operation of the apparatus, only develop the facts: (1) That the induction coil affects the sensitized plate more rapidly than the static machine. This is contrary to our accepted ideas that the high potential current of the static machine is capable of penetrating the tissues of the body more deeply and rapidly than the induced current of the induction coil. (2) That the present methods of obtaining electrical shadowgraphs are costly, tedious and beyond the reach of the average practitioner.

It appears perfectly feasible, however, that the expensive Crooke's tube can be dispensed with, and that a simple vacuum tube, or worn-out incandescent lamp, which is practically without value, operated by a small, modified induction coil and battery, or static machine, can be successfully employed for ordinary experiments.

With the static machine the best results are obtained with small condensers—not over 16 to 18 square inches of foil surface on each side. Connect the outside coatings with each other and the anode of the tube with the positive pole of the machine, the cathode with the negative pole. The spark-gap must not be less than one-half inch. A good clean spark is necessary, as no effect is obtained from a brush discharge.

The discovery of Professor Rœntgen has been the pretext for a deluge of bizarre inventions. The most notable is the Edison fluoroscope, which is a box in the form of a field-glass, the large lenses being replaced by a paper disc coated with calcium tung-

state, or other fluorescent substance. When the instrument is held before the eyes, and the part to be examined fixed between it and the rays emanating from a Crooke's tube, the soft tissues become transparent, leaving in relief the bones or other extraneous bodies embedded in the tissues. This instrument we have reason to anticipate will be improved, and will therefore form the most important application of the X-ray. It will become an important diagnostic aid to the surgeon; is instantly applied, and requires no sensitized photographic plates to develop. With the Tesla coil and oscillator the fluorescent power of the fluoroscope is sufficient to penetrate the entire body and other denser solids.

The fluoroscope at present is costly because of the high market value ($5 per ounce) of calciun tungstate. The writer has prepared the salt according to the formula of Mr. H. C. Ogden at a cost of 10 to 20 cents per ounce.

Place one ounce each of sodium chloride, sodium tungstate and calcium chloride in a small Hessian crucible. Close with a tin cover and bury up to the lid in a hot coal fire for two or three hours, or until the contents are fused to a clear liquid state. Remove from the fire and allow the contents to crystallize into a solid mass, which is broken out with a chisel and thrown into water. The sodium chloride is dissolved in the water, and crystals of calcium tungstate are precipitated. Wash by decantation until free from saline taste, and dry on filter paper. Make a pyramidal box of cardboard or thin wood about 5x7 inches on section at the base, 10 inches high and 4x5 on section at the apex. Coat a piece of needle paper or cardboard with common glue and sift on the tungstate. When dry shake off the superfluous material and attach the paper, coated surface inward, to the large end of the box. The side of the box may be advantageously covered with black cloth, which is allowed to project over the apex to exclude ordinary rays of light.

* "Falk ray shadowgraphs" (?) of soft tissues may be readily made after the following method: *Make a shaded pencil drawing of the part to be photographed on heavy oiled paper. Pose the drawing on the surface of an ordinary photographic plate and expose to the light of a lamp or burning match for twenty to sixty seconds.*

* The Falk referred to is a New Orleans photographer who has made wonderful pretensions for a discovery of his own in shadowgraphy, as yet barren of proof.—ED.]

Develop after a PRETENDED *exposure to the X-ray as for an ordinary photograph. Preparation ten to fifteen minutes,* or make a photograph with the camera of a chart or picture of the parts desired, expose the plate as before under the Crooke's tube and develop. *The method permits of ready adaptation to any requirements.*

Mr. Ostenberg, of Columbia College, claims that he resuscitates dying animals with the X-rays. A remarkable fact established by Mr. Troost, of Paris, is that certain phosphorescent substances, notably calcium sulphide, emit X-rays which may be utilized for photography of the invisible, thus completely supplanting the vacuum apparatus. Professor Green, of Louisville, and Dr. Taylor, of this city, claim a method of producing X-ray photographs by means of heat radiations.

Other applications of the new ray refer to the detection of cavities, fractures and diseased surfaces in bone and soft tissues; to the location of bullets, needles and other hidden objects in the body; to the destination of microbes; to the determination of the contents of the intestines and stomach; to the location of stones in the bladder, etc.

Water is more transparent to the rays than wine, hence a method of urinalysis may be founded on this principle. It is claimed that the sex of the fœtus in utero has been determined by an electrical shadowgraph. A very satisfactory method of photographing the stomach and intestines consists, it is claimed, in filling the stomach with lime water, which is as impenetrable to the X-ray as bone.

A REMARKABLE CASE OF PRECOCIOUS PUBERTY.

By A. J. PRICE, M. D., Lockport, La.

This case may not be of great importance to the profession in general, but may possibly be of interest to some who like to note nature's occasional diversion from what we are accustomed to look upon as normal.

On November 15, 1895, the case in question was brought to the office of Dr. W. F. Harang, of Harang Canal, La., whose work, by his request, I have coupled to mine during his absence from the State. The patient, Alexina Lee, aged 6 years and 7 months, presented quite an unusual appearance with a luxurious growth

PRECOCIOUS PUBERTY.
A.... L...., 6 years old.

of downy fur on the face, well marked on the upper lip. The patient appearing to be suffering, the mother, on whose lap the child was seated, was requested to remove the child's clothes to further pursue the examination. The shapely body, with its graceful curves, broad hips, well developed breasts and mons veneris—the latter thickly covered with hair—suggested the appearance of a woman already past puberty. The sexual organs were normal in formation, at least as far as could be ascertained without vaginal or rectal examination (conditions preventing those), with the exception of a slightly hypertrophied clitoris, which required a close examination to detect. Her voice was as coarse as that of an adult woman. Within a week she died of the trouble for which she was brought for treatment—pulmonary œdema, superinduced by mitral regurgitancy—and, to my regret, I was unable to make a post-mortem examination in order to determine the condition of the vagina, uterus and ovaries.

From the parents I learned that the hair on the pubis and under the arms of the child were first noticed at the age of eighteen months. Early in her fourth year, blood stains were frequently found on her undergarments, which the parents did not attribute to menstruation until a few months later—during the latter half of her fourth year—when that function set in more perceptibly and regularly. The child never showed any disposition to play with other children, but rather sought the company of older persons, and was bright and reasonable beyond her years.

A FANCY PRESCRIPTION.—A certain physician, noted for his wit as well as his skill, was called in lately for one of his clients who was suffering from a disordered stomach.

The professional man examined and auscultated the patient, finally leaving the following prescription:

"*Veni, vidi,* . . . VICHY."

—*Les Droleries Medicales.*

N. O. Medical and Surgical Journal

Editorial Department.

Chas. Chassaignac, M. D. Isadore Dyer, M. D.

THE DIPHTHERIA ANTITOXIN QUESTION.

The laity are fond of exclaiming how doctors disagree! They lose sight of the fact that this is a characteristic of human nature in general, and that it is just as evident in all other walks of life. On what is there more discussion and disagreement than upon religion and the great question of a future state? Many decisions of Supreme Courts, State and National, are arrived at only by a majority vote. In political economy, you see in this country an almost equal number of brainy men advocating free trade and protection. When it comes to finances you see as able and sincere men preaching in favor of silver as of gold. The Mississippi river problem is still being argued by the believers in levees on one hand, and the advocates of outlets on the other. Illustrations could be cited *ad infinitum*, but we have said enough to show that doctors agree as often as other people, and that it is natural they should disagree about antitoxin.

When we say disagree, however, we do not concede that the camps are at all equally divided, for there is no question that the consensus of opinion of the medical profession the world over is to-day in favor of the antitoxin treatment of diphtheria. In considering that there are objectors, we must not lose sight of the fact that there are yet opponents of vaccination against small-pox, although we have been celebrating the centenary of Jenner's discovery this summer.

The chief claims of the opponents of antitoxin are: 1. That the decrease in the percentage of fatal results is due to the larger number of mild cases which are included owing to bacteriological examination and a more careful search for cases due to interest in the subject. 2. That although the percentage of

deaths is smaller, the total number of fatalities is about the same. 3. That antitoxin actually produces bad results, both in complicating cases and in causing death in healthy subjects.

It must be noted that a decrease in the mortality percentage is admitted. Now, taking the objections in the order in which they were above stated: (1) Admitting that some mild cases, for the reasons given, are included to-day which were not counted in pre-antitoxin times, it is true also that some ugly cases of follicular tonsillitis, which were often called diphtheria, are now eliminated, and those are cases that get well more generally even than mild true diphtheria; also, before the day of bacteriological examinations, cases then called membranous croup were not computed in calculating the death rate of diphtheria; to-day, most of them being known to be due to the same poison, they are included and go frequently to the bad side of the account. It would seem as if that would counterbalance the added mild cases. This view is sustained by the figures brought out in one of the tables of the American Pediatric Society's report published by us last month. In over two thousand cases confirmed by bacteriological examination, the mortality was 12 per cent., while in nearly one thousand cases diagnosed from clinical evidence only, the death rate was 15 per cent., even though some very mild cases among the latter were eliminated to be on the safe side. (2) It is eminently unfair to argue on the basis of the number of deaths, irrespective of percentage, as the total number of deaths has varied greatly even in successive years, before antitoxin, on account of the greater or less prevalence of the disease. For instance, in Berlin the deaths were 904 in 1867 and 2154 in 1868; in New York, they were 1090 in 1884 and 2167 in 1887; in Boston, 232 in 1891 and 817 in 1894 An interesting detail is that these figures are quoted from a recent paper by Dr. Joseph E. Winters, of New York, the most outspoken opponent of antitoxin in this country. (3) Granting that certain complications like broncho-pneumonia and albuminuria are more frequently observed since the use of antitoxin, can it not be well argued that it is because more bad cases survive or live long enough to allow these sequelæ to develop? Admitting also that the administration of antitoxin has already produced death, we must remember that subcutaneous injections of morphia are considered useful and advisable, and are not dis-

continued because extraordinarily a death results from idiosyncrasy or the introduction of some air in a vein; neither do we stop exploring for pus because the puncture has already produced sudden death. Besides it is not proved that death occurring at the time of injecting antitoxin has been due to the serum *per se*. The case which has attracted most attention is that of the little son of Dr. Langerhaus, of Berlin. Subsequent investigation showed, however, that the child had just completed an unusually heavy meal and that at the necropsy his larynx and trachea were filled with material identical with that in his stomach. "The accepted inference is that while faint from the shock of the injection, he was unable to eject the vomited matter from his throat and instead drew it into the air passages with fatal effect" *(Medical News.)*

What seems an irrefutable argument in favor of antitoxin is the result in intubated cases. There can scarcely be a question here as to the diagnosis or the severity of the case, yet note the difference. Of the cases reported so admirably and fairly by the American Pediatric Society, 533 were intubated with a mortality of 25.9 per cent., while in over 5000 cases of intubation collected by McNaughton and Maddren, the deaths were 69.5 per cent, and the best results without serum, so far published, since the more general use of calomel fumigations, show a mortality of 51.6 per cent.

O'Dwyer has said: "In my last one hundred intubations, first seventy without serum, mortality 70 per cent.; last thirty, with serum, mortality 33 per cent." Surely no one can claim that the inventor of the operation has improved his technique for those last thirty operations, nor any one dare assert that he has intubated without necessity. Hence the conclusion is irresistible.

WHEN WILL THE DRUGGIST STOP PRESCRIBING?

We congratulate the State Board of Medical Examiners upon the successful outcome of their suggested amendments to the State law regulating the practice of medicine. It was a wise Legislature which accepted such timely suggestion and acted upon it.

Now that this one step nearer the purpose of the legislation for

the protection of the public from unqualified practitioners of medicine has been attained, we are inclined to look around us for some of the many points of attack from which the board must begin its work. The State is full of quacks, charlatans, unqualified and criminal infractors of the law, and with these the courts could be kept busy. It is needless for us, then, to indicate that kind of available material for the board's occupation.

While we pause, it is not untimely for a comment to be made upon the indifference of the profession itself to the purpose and work of the board. Some moral support is due. Till now, we have sat idly by, listlessly watching the board struggling against great odds, and only half heartily applauding when a victory has been achieved.

The public is not to be expected to give any moral support. The public is *particeps criminis*, not through criminal intent, but through ignorance or a misguided credulity. The public has to be educated, has to be made to know the injustice it does itself and the whole tone of a community by supporting illegal practice of medicine.

Our State law is broad in its conception and liberal in its provisions. The field is open to all who qualify. Once qualified the law provides for the protection of those who have complied with this requirement. Only a qualified medical graduate is allowed to prescribe for the sick. This, in the law, is explicit.

The unlicensed physician, the charlatan, the "specialist," the "Indian Doctor," and all who dispense nostrums come within the law. Has the druggist any right which these do not possess ? What is the druggist's occupation in all truth ? What is the druggist's relation and what his obligation to the practice of medicine ?

There is no class of tradesmen more closely related and dependent upon the medical profession than the druggist. No men are more apt to recognize and appreciate good service than the medical profession.

In the time of the leeches, chemists and surgeon-barbers, it was not unusual for these individuals to possess the art of compounding mixtures and dispensing them.

In this latter day, however, where medicine has taken the

broader road of science, and has lifted its practice from mysticism, and placed it along a plane of rational empiricism, the physician has become a necessity, and an actual one. The growth of education has enforced an intelligent study of symptoms, and their indications; compatibles are studied, and delicacy in prescription writing has become an object in the physician's work.

More and more has the druggist to depend upon the prescriptions for profit.

Multiplying patent and proprietary medicines for all sorts of conditions find a ready sale, but bring little revenue to the retailers, especially where to advertise their business, these preparations are often sold at or below cost.

With the sale of these, however, the druggist has grown gradually to act as advisor in the sale, commending this or that cough syrup, one or another liniment, perhaps extolling his own (!) above all others. All over his establishment are displayed in attractive, or in obtrusively flaring manner, advertisements of the particular druggist's face powder, worm eradicator, headache capsule, consumption cure, etc.

Nor does it stop here. The stray bilious patient is supplied with medicine of the druggist's prescribing and dispensing. The man with a diseased skin is provided with a lotion or with an ointment, irrespective of the diagnosis, the salve being of service (?) for either cancer or boils, eczemas or freckles. Purgatives are dispensed without regard for the pathologic element at fault. Fever is treated at random, and accidental cases are fed with medicines of doubtful usefulness.

That the patient is at fault is unquestionable, but compounding a fault is just as reprehensible, if not more so.

Is the druggist ignorant of the law? We believe not. Does he advantage himself by infringing upon the law? We think not, and reasons multiply as the argument grows.

It is essential that the druggist enjoy the physician's confidence. It is essential that the druggist should be honest. He can not be honest if he is a law-breaker, and he can not be honest if he pretends to practise medicine when he knows that he knows nothing about it.

This tendency of the druggist to run parallel to the ordinary quack is already provoking reaction among the medical profession.

The wholesale chemists appreciate this fact and cater to it. Neat medicine cases are made and fitted with tubes and bottles for the various combinations of pills and tabloids apt to be needed in the practice of the physician. Catalogues are issued with page after page of special and other formulas for the various ailments of man.

Does the druggist take advantage of this? Hardly. But is he still blind to the result?

Not long since, the State Pharmaceutical Society issued through its secretary a circular letter addressed to the physicians, calling their attention to the fact that there was a noticeable diminution in prescriptions for compounding, while proprietary medicines were being more and more prescribed. Aid was asked in the matter on the part of the physicians.

Can the druggist expect aid without some endeavor on his own part to be true to his obligations?

When will the druggist stop prescribing? How much easier to decline to act the physician. How much more true to himself. No doubt the patient will go to the next drug store and get what the first man has refused, but has the day gone by when the self-consciousness of being honest is in itself a reward? If the medical profession has to acknowledge counter-prescribing as a necessary evil, and to accept every drug store as a free dispensary, then some concerted action must be devised to render the profession independent of the drug store. Fortunately the State law covers this very point, and under the law the druggist is amenable should he pose as the doctor. If his own sense of what may be right is obtunded to a degree which allows him to continue his violation of the law, then he should be prosecuted.

Elsewhere, notably in New York State, this acceptance of the law obtains. Why not here as well, if we are minded to protect ourselves? Instead of flagrant violation, in our very sight, the dispensing and prescribing of medicine by the druggist will become at any rate *sub rosa*, and finally the legal restriction of it will result in its obsoleteness through moral force. Then, and then only, will the druggist stop prescribing.

Medical News Items.

Dr. Jos. T. Scott, aged 63, a native of Kentucky, but a resident of New Orleans since the close of the war, died in this city on June 25, 1896. The doctor had been in active practice up to two years ago, when an attack of paralysis disabled him. He had had one of the large clientèles of the city and one of the most remunerative. A fine-looking and handsome man, he was possessed of great personal magnetism, making him much beloved by his patients. He served the cause of the Confederacy up to the time of the surrender of Gen. Dick Taylor at Shreveport. He leaves, besides a brother, Dr. Ike Scott, the well-known practitioner, his wife and six children, one of the latter being a bright young physician, who is named after the deceased.

Dr. Scott was for several years a member of the board of administrators of the Charity Hospital, and at the time of his death belonged to the Veteran Cavalry Association and the American Legion of Honor.

The Following Officers Were Elected for the coming year by the American Pediatric Society: President, Dr. Sam. S. Adams, Washington, D. C.; first vice president, Dr. W. S. Christopher, Chicago; second vice president, Dr. Chas. P. Putnam, Boston; secretary, Dr. Fred. A. Packard, Philadelphia; treasurer, Dr. Chas. W. Townsend, Boston; recorder and editor, Dr. Floyd M. Crandall, New York; member of council, Dr. Wm. Osler, Baltimore; chairman of council, Dr. Wm. P. Northrup, New York.

The Initial Number of the *Laryngoscope* has been received. It is a monthly journal devoted entirely to diseases of the nose, throat and ear; it announces that it aims at filling the niche between the special and the general journals. It makes a good appearance, has numerous illustrations accompanying several interesting special articles. The fact that our fellow-townsman, Dr. W. Scheppegrell, is one of the associate editors, increases our interest in it and we wish it success.

The Twenty-second Annual Meeting of the Mississippi Valley Medical Association will be held at St. Paul, Minn., October 20, 21, 22 and 23, 1896. The meeting promises to be the largest in the history of the association. Many valuable papers will be presented. Any one intending to read a paper should send the title to H. W. Loeb, M. D., secretary, 3559 Olive street, St. Louis, Mo., at an early date.

The Medical Institutions Remembered in the will of the late W. T. Richards, a retired merchant of this city, are: The Eye, Ear, Nose and Throat Hospital, $8000; the Touro Infirmary, $10,000; and the Charity Hospital, which is made residuary legatee, and will obtain in the neighborhood of $30,000.

At the Millennial Exposition now going on at Budapest, the owners of the Franz Josef Natural Aperient Water have established a special department for the convenience of medical practitioners. Copies of the leading medical journals of the world are kept on file there, and letters may be addressed care of the Franz Josef Aperient Water Exhibit, Millennial Exposition, Budapest, Austro-Hungary.

The New Board of Health of Shreveport recently organized by electing Dr. D. H. Billiu, president; Dr. J. C. Egan, secretary and health officer; Mr. Isaac Barron, treasurer; Mr. John D. Murray, sanitary officer. Dr. Egan and Mr. Murray were re-elected—a sign of confidence, as the board is composed entirely of new members.

The American Microscopical Society will hold its nineteenth annual meeting in the new Carnegie Library Building, Pittsburg, Pa., on Tuesday, Wednesday, Thursday and Friday, August 18, 19, 20 and 21, 1896. Applications for membership and titles of papers should be addressed to A. Clifford Mercer, M. D., president, Syracuse, N. Y., or to Wm. C. Krauss, M. D., secretary, 382 Virginia street, Buffalo, N. Y.

One of the Neatest Advertising Souvenirs is that which has been recently distributed to the physicians of this city by the Zumo Pharmacal Company. It is an aluminum pad holder, with the recipient's name engraved thereon.

The Amendment to the Law regulating the practice of medicine, changing the method of prosecuting violators from a criminal to a civil one, as advocated by the State Society, has been passed by the Legislature and signed by the Governor.

The Charity Hospital Appropriation was increased by the Legislature to $90,000 per annum. This is a gain of $10,000 a year. While not what was asked and needed, it seems it was all that could be allowed, in view of the probable revenues of the State, and it should be thankfully received.

Prof. Edmond Souchon, M. D., is making a European tour, enjoying a needed vacation and making the acquaintance of foreign surgical celebrities, whom he knew by correspondence. Drs. S. P. Delaup, O. L. Pothier and R. de Montluzin are also sight-seeing in Europe.

The *Medical Record*, of New York, with commendable zeal, devotes two pages to standing notices of meetings of national and state medical societies. We think it time, however, for it to revise the list. Out of eighty societies mentioned about two-thirds are shown with the dates of the past meeting and, of course, the officers have mostly changed since that time. For instance, we suggest that the badly spelled name of the ex-president of the Louisiana Society be replaced by that of Dr. P. E. Archinard, who is now holding the office. Also, it is getting monotonous to read that the Texas State Medical Society meets at Fort Worth, April 28, 1896 (as is stated in the number of July 18). It is true that the secretaries of the societies might be expected to send data. We know some of them do, and the *Record* might have gleaned a good deal of this information from the pages of the Journal during the last three months.

William H. Thorndike Prize.—A prize of $200 will be given annually to the author of the best essay on some subject in any branch of surgery. Students of Harvard Medical School and graduates of under five years' standing of any recognized medical school are eligible in competition for this prize. The essay must not bear the author's name, but some sentence or device, which must as well be sent in a sealed

packet, containing within the author's name and residence. It must also contain date of graduation and name of school. The essay must be sent to the Dean of the Harvard Medical School, 688 Boylston street, Boston, Mass., on or before November 1, of each year. If no essay is considered worthy of a prize no award will be made.

The International Periodical Congress of Gynecology and Obstetrics will hold its second session in Geneva, Switzerland, during the first week in September next. The proposed programme is interesting and the attendance will be composed of representative men from various parts of the world. Professor Dr. Vulliet, of Geneva, is president; Dr. Fernand Henrotin, 353 La Salle avenue, Chicago, is secretary general for North America, and from him all desired information can be obtained.

The American Dermatological Association will hold its regular annual meeting at the Hot Springs of Virginia, September 8, 9 and 10. Everything will be done to make the meeting a success, and several papers on interesting subjects have already been promised. Dr. White, of Boston, will open a general discussion on the subject, "What effect do diet and alcohol have upon the causation and course of the eczematous affections and psoriasis."

The New Orleans Polyclinic will begin its tenth session on January 11, 1897. This will make the course in this school twice as long as heretofore. This argues well for the increasing demand for post-graduate education in this section of the country.

Abstracts, Extracts and Miscellany.

Department of Surgery.

In charge of Dr. F. W. Parham, assisted by Drs. E. D. Martin and F. Larue.

THE OPERATIVE TREATMENT OF HYPOSPADIAS IN THE MALE.

Two articles on this subject have recently appeared, and we deem them of sufficient importance to give them somewhat extended notice.

The first is published in the *Annals of Surgery*, April, 1896: "A New Operation for Hypospadias," by Weller Van Hook, M. D., of Chicago.

The writer thinks the cases may be conveniently divided into glandular or balanic, penile and scrotal. In all forms the organ is mal-developed, and in the penile and scrotal forms curved strongly downward. The objects of treatment, then, are manifold:

1. To complete the urethral canal.
2. To straighten the penis and release it from the scrotum.
3. To readjust the penile skin by plastic methods.

The plans proposed may be arranged under five heads:

I. Simple canalization, of Dieffenbach, 1838.

II. Denudation and suture, of Dieffenbach, Duplay and others.

III. Use of penile flaps, of Thiersch, 1869.

IV. Use of flaps from abdomen or scrotum.

V. Combination of these methods.

The fourth method was worked out by Bouisson, Moutet, Nélaton and Dolbeau, but does not give results comparable to those obtained by Thiersch in the use of penile flaps. The scrotal method of Rosenberger (1891), however, is quite ingenious and would justify trial. Landerer has published a case thus treated (1891). In this method two long strips are denuded, one on each side of the urethra, from glans on to the scrotum. The

penis was then turned down and united by sutures to the scrotum. After several weeks the penis was loosened in such a way that a flap was made by the use of a little scrotal skin to cover the denuded surface.

The method of Thiersch is, however, the plan that should most usually be employed for the cases in which the shaft of the penis is involved.

Finally, the author describes a procedure which deserves to be called Van Hook's method, since, as far as we can find, nothing similar to it is found in medical literature. He had a satisfactory result in one case, but feels that with greater experience in the special technique he can hereafter improve upon the result.

The method is thus described: The flap was taken from the prepuce. This was held up to the light and a portion chosen through which the largest blood-vessel could be seen plainly coursing almost to the edge of the skin. The foreskin was then transfixed on one side of this vessel, and the skin cut through in a line parallel to the vessel. Another parallel incision was made on the other side, thus liberating "a generous flap clad on two surfaces with epithelium and supplied with a pulsating artery in its pedicle." The extreme edge of the flap was then split transversely, being careful not to injure the blood-vessel, and the two epithelial surfaces were drawn together around a roll of iodoform gauze, and there maintained by a continuous catgut suture holding the epithelial edges together. By means of a narrow cataract knife the glans penis was then transfixed from the apex to the opening of the urethra. The cylinder-flap was now drawn through from before backward by means of a suture attached to one end of the gauze roll, and fastened at the urethral opening behind. The flap lived and grew fast to the penile tissue, and maintained a good channel through the glans. The opening of the urethra was enlarged at the same sitting.

The remaining operations were for the purpose of closing the canal, between the old and the new urethra, by Thiersch's plan of utilizing penile and preputial flaps. In all, some five operations were performed. In this operation of Van Hook the flaps may be taken from the prepuce, side of the penis or from the scrotum. It promises, he thinks, a new and more certain method of correcting this deformity, annoying not only to the

patient, but to the surgeon as well. The operations were only completed after the lapse of six months.

The second article is by Kronacher, of Munich, and is found in the *Deutsche Zeitschrift fur Chirurgie.* We give an extended abstract of the article, as we believe it adds another operation to our surgical resources.

On the Operative Treatment of Hypospadias in the Male of the First Degree.—The plan of operation is as follows:

1. In the imperforate glans a well-formed furrow is to be established continuous with the urethral opening behind, and corresponding to the middle of the under surface of the organ.

2. In order now to complete the new urinary tube thus formed, this furrow is to be provided with an under wall; to this end the mucous surface of the prepuce is specially suited. The half, or two-thirds, of it may be utilized. Usually this is split into two parts; should one part fail the other is still at command. Should the whole miscarry we possess finally in the scrotal skin a further aid, which was used in one case to advantage.

The mucous surface of the prepuce for the floor of the canal has in itself an advantage over the skin surface, and, moreover, it is, like the scrotal skin, very elastic, and can not, like the canalization of the glans, result in a rigid tube, which may contract and even close. Thiersch's method of making a canal through the glans has the disadvantage that it may become very irregular, and the hinder part especially is very shallow. The most ideal method would be also to line the furrow, and thus complete the canal with the mucous surface of the prepuce. For the carrying out of this method it is absolutely necessary to proceed step by step, in order to maintain the vitality of the small flap formed out of the prepuce. The vascular connection with the prepuce is for the most part not very abundant. One must wait patiently, therefore, at the completion of each step for the formation of new vascular channels.

Here the above mentioned quality of the preputial tissue pertains more or less to the glans itself. It is desirable to divide the operation into a definite number of sittings, and between them to leave a certain interval of time.

First Sitting.—The urethral opening is enlarged by splitting it backward one-half c.m. The glans is then split from before backward up to this enlarged orifice, the incision being carried along

the middle of the inferior surface of the glans, piercing the tissue of the glans half through, then the bleeding surface is touched with the thermo-cautery, partly on account of the bleeding, partly to enlarge and deepen the wound. Packing with iodoform gauze follows. The child is for some days after the operation quiet, without any reaction, general or local. The urine is well voided. After three or four weeks the new-formed furrow is completely cicatrized (covered with epidermis).—*Figure 1.*

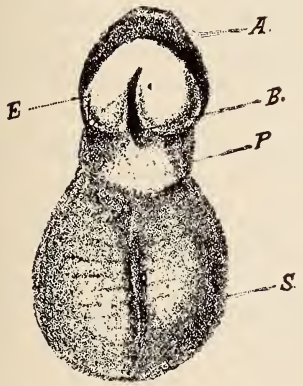

Fig. 1.
Showing Cicatrized Groove.

Fig. 2.
Prepuce Split Longitudinally.

Second Sitting.—After the cicatrization of the furrow, the rudimentary foreskin is split longitudinally in the middle, or somewhat laterally, toward the outer or inner third close up to its attachment to the glans. One may now either wait some time or proceed immediately with the operation. It is better to wait until the vascular conditions are as favorable as possible.—*Figure 2.*

Third Sitting.—One of the flaps, preferably the broader, where they are unequal, is now divided transversely from within outward at its attachment to the glans to a breadth of 5 m.m., then turned downward and around, of course the left toward the right and *vice versa*, so that the mucous surface looks toward the furrow in the glans—that is to say, toward the whole new-formed urethral furrow. In this manœuvre the relatively weak bridge sustains a decided twist. This is usually, however, well borne.

The flap being now, for example, thrown around towards the left side, the skin bordering the left side of the furrow is freshened, both from behind and from the left side, to an extent of 2–3 mm. with scissors or knife, likewise the opposed surface to be here approximated—that is to say, the edge of the preputial flap is also pared, whereupon the freshened surfaces are intimately united by a few silk stitches behind and to the (left) side of the furrow.

The free edge of the half prepuce-flap looks upward, the pedicle (bridge) lies under the right half of the glans quite up to the furrow. The right as yet unfreshened side remains free until the adhesion to the left side has been assured. The small flap would be in great danger of becoming lost, if completely united at once.

He has usually employed six sutures, three deep and three superficial.

The whole field is now sprinkled with iodoform powder and a dressing moistened with salicyl-boric solution laid on. This should be substituted on the second or third day by normal salt solution. He considers the moist dressing necessary to the preservation of the vitality of the flaps.

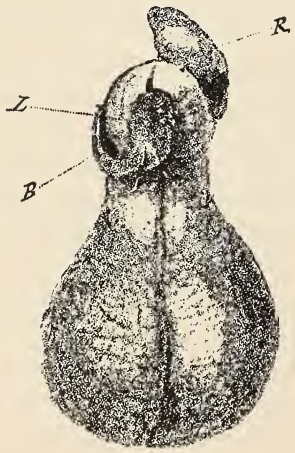

Fig. 3.
Preputical flap united to opposite side of groove in the glans.

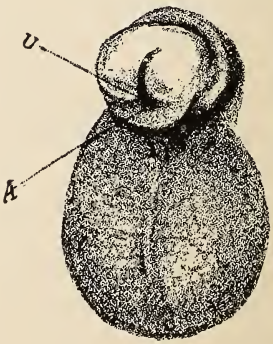

Fig. 4.
Groove completed and all redundant prepuce cut away. The flap R of preceding figure has not been used.

A catheter is to be kept in for about eight days at least, and is usually well borne. Sometimes, when this can not be tolerated, a fistula behind, far from the field of operation, will have to be created. Kronacher has so far, however, not been compelled to do this, the catheter usually answering the purpose well. But one or the other must be resorted to.

In eight days usually the adhesion (union) is complete, the stitches are removed on the fourteenth day (*Fig. 3*). On account of the soaking of the dressing with urine he usually changes the dressing daily in the beginning.

Fourth Sitting.—At the end of three weeks the pedicle is divided, and the whole right side, after previous broad freshening as was done on the left side in the third sitting, accurately sutured to the pared edge of the flap; same dressing and permanent catheter. The divided pedicle at the penis after previous necessary trimming is brought together by suture, so as to make only a linear cicatrix; likewise, after a few days, the other unused preputial flap is removed with scissors or knife, and the edges sutured.

Only after complete union of the part first sutured may the pedicle be safely divided and the other side be fitted into place. The approximation should extend well forward, else the flap will retract and the stream fall under the glans. Sometimes fistulæ form at the sites of the sutures, but these usually close spontaneously or after cauterization, otherwise freshening and suturing would be required.

"As trifling as the matter appears, the carrying out of the described operation is nevertheless tedious. The separate sittings are of short duration, but the progress is step by step, and only thus may the result be assured."

One advantage of this method is that, should the half of the prepuce first used slough, the remaining half may be utilized; this failing, a flap may still be taken.

The methods of Van Hook and Kronacher are both ingenious, and certainly add to our surgical resources for the relief of this unfortunate condition, which is found, according to some careful observers, as often as once in 300 patients. The method of Van Hook is especially worthy of trial, as it would seem possible by means of it to shorten very materially the duration of the operative treatment. To do this, however, one must be careful

to make the cylinder long enough to reach well forward and backward, otherwise it may retract and one end of the new canal become again imperforate, requiring another operation for its restoration. The expedient, first recommended we believe by Thiersch, of making a perineal fistula, will be of the greatest assistance, and we think would be preferable to the plan of Kronacher of keeping in a catheter for not less than eight days, something we have found very difficult to accomplish. The fistula may afterward be easily closed.

Finally, we think some stress should be laid upon the necessity of patience on the part of the patient, or its parents. It would be advisable, on this account, in most instances to operate early, so that the different stages may be completed without objection on the part of the little one, and, moreover, the correction being done early the organ will be much better developed than when done later in life.

Diagnosis of Intra-Abdominal Affections Requiring Immediate Surgical Aid.—Let us consider a woman with pinched features, sunken eyes, meteorism, acute abdominal pains, rapid pulse and with nausea, causing frequent vomiting.

Our first question is: Have we, or not, an intestinal occlusion to deal with? If occlusion exists, defecation and even passage of wind will be found absent for the past 24 to 48 hours.

A. Cases in which Intestinal Occlusion does not exist:

The features are altered, vomiting, less frequent than in occlusion, may be bilious, pea like, but never fecaloid.

Gas and fecal matter are passed, meteorism less pronounced and not so severe.

Metro-salpingitis, peri-uterine hematoceles, inflamed ovarian cysts, often present such symptoms.

Appendicitis and typhlitis would be recognized by the doughy feeling, tumefaction of right iliac fossa, localized pain and slight or absent meteorism. Pre-existing history all-important.

Tubercular peritonitis, secondary perihepatitis can give rise to such peritoneal disorders.

B. Cases in which there exists Intestinal Occlusion:

Stoppage of fecal matter and gas; vomiting, at first alimentary and bilious, becomes fecaloid, with considerable meteorism.

Pseudo-occlusion can be produced by intestinal paralysis, of

which perforating peritonitis is an example, differentiated from true occlusion by the sudden onset, the "hydro-ærique" bruit sometimes present, the localized pain and lastly the temperature, elevated in peritonitis, normal or lower in true occlusion.

Typhoid fever, gastric ulcer or especially appendicular perforations may be the cause.

Eliminating strangulated hernia, we differentiate between invagination and strangulation, caused by a band, a diverticulum or an accidental ringlet.

Invagination, especially frequent in children, can be diagnosed by the incomplete existing occlusion and slight meteorism. The stools contain mucus and blood, with accompanying tenesmus.

Palpation reveals a sausage-shaped tumor, invariably in the ilio-cæcal or ilio-colic region.

Volvulus, met with generally in adults and the aged, affects the sigmoid flexure. There are other signs imputed, but none the less dubious.

Internal strangulation, from whatever cause, is likewise very difficult to diagnose.

Chronic occlusions can be caused by cicatricial stenosis, enteroliths, or most frequently by chronic constipation, the last two more common in women. Although many rational measures have been tried, it remains almost impossible to localize the trouble, all-important in the choice between laparotomy and creating an artificial anus.—*L' Union Médicale.*

Marriage Between Persons Descended from the Same Stock is the subject of an interesting work recently published by Dr. Paul Perrin, from which the following historical particulars are gathered:

The Persians, the Medes, the Hindoos, the Ethiopians, married their mothers, their daughters and their granddaughters in a large proportion, and in the eyes of the people there was nothing reprehensible in that, as neither the priests nor the magistrates, in fact, nobody, ever found fault with such marriages. Far from it. The Persians held in especially high respect the children born out of the union of a mother with her son, union which the Magi chiefly put into practice, and they

were the wise men of the East, the powerful representatives of science and of religion.

Among the Greeks, brothers and sisters by the father's side, but from different mothers, were allowed to marry. In Athens, the brother, who alone possessed the right of heritage, had the choice to either marry or portion his sister. When the Ptolemies, who were of Greek descent, became sovereigns of Egypt, they often married their sisters through dynastic interest. Born of that family, Cleopatra, who herself married in succession her two brothers, Ptolemy XII and Ptolemy XIII, was remarkably beautiful, lovely and bewitching.

In Rome marriages between relatives were strictly prohibited —for example, the marriage of an uncle with his niece was regarded and punished as an incestuous act. Marriages between cousins were at first forbidden, then allowed, and again prohibited under penalty of death.

Up to the time of Mahomet the Arabs had the liberty to marry their own mothers. But the prophet interdicted such unions, besides others in the Koran, which said: "Do not marry the women who were the wives of your fathers; it is criminal. You are also not allowed to marry your daughters, your sisters, your aunts, your nieces, your foster-sisters, your grandmothers and the daughters of the women you have in charge, unless you have not had any intercourse with their mothers." [The prophet purposely omitted to say *not to marry mothers-in-law;* he thought, of course, the recommendation was useless. *Modus invariabilis.* —Translator.] The aborigines of Peru, Brazil and California appear to have paid little attention to marriage between relatives. On the contrary, among the primitive inhabitants of Mexico, Haïti and chiefly of Australia, unions between close relatives were interdicted and severely punished. Chinese legislation forbids marriages between persons having the least relationship by blood, as distant as it may be. So it is in Turkey, as curious as it may seem, for a people who practise polygamy is not expected to show so much sensitiveness as to morals. The Catholic Church at various times has modified her decisions regarding marriages between relatives, but, as a rule, she was particularly strict in that respect. The Council of Toledo in 381 forbade them all, however slight was the relationship. The other Councils of Clermont, Orleans, Tours, Auxerre,

less rigorous, permitted them, but not beyond the relationship of cousins by first degree.

Pope Saint Gregory the Great interdicted marriage between relatives of the second generation, meaning first cousins, and permitted it at the third and fourth generation.

[From the point of view of the physician, practically, marriages between relatives as they are now permitted according to our laws and customs are not dangerous in regard to the progeny,* provided there is no *tare*, as the French call it, meaning blemish or morbid taint in the family's blood. This statement is based upon large statistics. The translator knows a family in this city in which marriages between first cousins have taken place for three generations in succession and has assisted the wife of the third couple in three labors, all being normal; though the young woman had some stigma of hysteria and general debility, her children are not rickety or puny. They are intelligent, and so far do not exhibit any sign of degeneration. The circumstances deeply interest the writer, and the case will be closely observed for reference in this matter.—TRANSLATOR.]—*Journal de Médecine et de Chirurgie Prat.*

FOR BURNS.—Poggi advocates a new treatment for burns. It is the use of potassium nitrate in the form of baths, in application of compresses steeped in a saturated solution of this salt, or in the application of lotions containing the salt.

Potassium acts in burns as a refrigerant. If a burn on the hand or the foot is plunged into a solution of potassium nitrate, the pain of the burn immediately ceases.

If this bath is continued for several hours, two or three, it frequently definitely dispels the pain, and, it is said, may even prevent the formation of the blebs.

The application of compresses steeped in a saturated solution of potassium nitrate exerts the same refrigerant and antiphlogistic action, the pain being relieved, and cicatrization taking place kindly. Vergely, of Bordeaux, has also obtained favorable results in the treatment of burns of the first and second degrees, by covering the affected parts with a thick layer of a paste prepared by mixing calcined magnesia with a certain quantity of water, leaving it to dry on the skin. As the paste dries and

* LAGNEAU, Discussion before *the Académie de Médecine de Paris, 1895.*

falls, fresh paste is applied. The pain ceases immediately after the application of the moist paste, it is stated; and under the protective layer of magnesia the wounds heal minus the pigmentation common after burns exposed to the air.—*Semaine Médicale, 1896.*

Varieties of Psoriasis.—Bouffe (Paris) recognizes three varieties of psoriasis—the differentiation affecting the prognosis and the treatment: The arthritic psoriasis, easily cured; the lymphatic psoriasis, more difficult of treatment; psoriasis found in syphilitics, although not of syphilitic origin.—*Bulletin Médical.*

Odor a Symptom of Disease.—Diseases have their characteristic odors. Insane asylums have a familiar odor. Favus has a mousey odor; rheumatism has a copious, sour-smelling acid sweat. A person suffering with pyæmia has a sweet, nauseating breath. The rank, unbearable odor of pus from the middle ear tells the tale of the decay of osseous tissue. In scurvy the odor is putrid, in chronic peritonitis musky, in syphilis sweet, in scrofula like stale beer, in intermittent fever like fresh baked brown bread, in fevers ammoniacal, in hysteria like violets or pineapple. Measles, diphtheria, typhoid fever, epilepsy, phthisis, etc., have characteristic odors.—M'Cassy, *in Cincinnati Lancet-Clinic.*

Treatment for Epithelioma.—Superficial epitheliomas should be touched frequently with the following solution, allowing it to dry on:

Resorcin	℥ss.
Chlorate of potassium	℥iiss.
Distilled water	℥vi.

—Brocq.

Syphilitic Pigmentation.—The pigmentation following certain syphilitic eruptions may be hastened in their resolution by applications, either by sopping on, or applying on cloths, the following:

Bichloride of mercury	gr. 3.
Ammonium chloride	gr. 10.
Cologne	℥iss.
Distilled water	℥iiss.

—Mauriac.

Dangers and Contraindications of General Anæsthesia in Strangulated Hernia and Intestinal Occlusion.—We can not do better than to give the conclusions of the interesting work of Dr. Rochier, for it involves an eminently practical question, and the author has turned his subject to the best account possible.

General anæsthesia is much to be feared in cases of strangulated hernia or of intestinal obstruction when the trouble is comparatively of remote date, or when, to be more exact from the clinical standpoint, the general condition of the patient is such that anæsthesia may be considered as a new factor of depression, and consequently of death.

One can not condemn this or that anæsthetic, ether or chloroform, for instance. The one as well as the other, to speak only of the two anæsthetics which are most often used, are subject to the same contraindications, and both must be considered, with hardly any difference, as presenting equal danger. We have gathered in surgical literature twenty-three cases of accidents occurring during the course of anæsthesia in operations for strangulated hernia. In twenty-two cases death ensued, and once only could the patient be resuscitated. Out of seven cases of accidents due to anæsthesia occurring in operations for intestinal obstruction, none was ever revived, and consequently it is a record of seven deaths.

Regarding the anæsthetic used in the cases of hernia it was chloroform nine times, ether ten times. In the cases of intestinal obstruction ether was used seven times pure, and once in combination with chloroform.

Death occurred in several ways.

1. By reflex syncope: inhibition of the cardiac and of the respiratory centre in the medulla oblongata, arising from the excitation of a sensitive nerve.

2. By respiratory syncope (toxic apnœa), greatly favored by the depressed condition of the patient.

3. By mechanical obstacle to respiration only in a few cases, the fluid from the stomach having penetrated into the trachea. Generally, however, as Professor Poncet had already remarked, the penetration of the vomited material can not be considered as the direct cause of death, because it is merely an occurrence due to the pangs of death, at the last gasp. Yet it is an ex-

tremely grave complication, for it takes away the chance of calling the patient back to life. Indeed, it happens, as in the case at the Surgical Clinic operated by Mr. Curtillet, that the fecaloid fluids pour into the respiratory channels to overflow and this inundation is not remedied even by the most rapid opening of the trachea.

Summing up, we think that general anæsthesia, either by chloroform or by ether, for it matters little which, is explicitly contraindicated in cases of strangulated hernia or of intestinal obstruction when the general condition of the patient appears grave, when the surgeon ascertains the existence of symptoms well known in such cases which announce an approaching end. To use a trite comparison, general anæsthesia is another source of serious shock, and there is danger of its being the drop of water which causes the glass to run over.

The frequency, the abundance of vomiting is also an important contraindication of general anæsthesia. For in such cases the contents of the whole digestive tract have a tendency to find their way out; on the one hand the weakening of the glottis and on the other the large quantity of fluids explains how easily the latter can penetrate into the trachea. Of course this complication renders the prognosis darker, as accidents of respiration and circulation are already very grave and occur so suddenly.

Most decidedly Mr. Poncet is right in formally excluding general anæsthesia in such cases. It is undoubtedly safer to produce pain by the operation, as the patient's sensitiveness is markedly obtunded, than to risk causing accidents entailing a mortality of 100 per cent.—Dr. Henri Rochier in *Lyon Médical.*

Nitroglycerin for Seasickness.—In a letter to the *New York Medical Record* of recent date, Dr. F. C. Riley, of New York, speaks of hæmatostatical treatment of seasickness. He attributes the chilliness and emesis of seasickness to cerebral anæmia. With this premise, the writer argues for the administration of remedies which will maintain the normal equilibrium of the circulation, with the normal qualities of and frequency of the pulse beat. He, therefore, administered nitroglycerin and caffein. A tablet of one one-hundredth of a grain of nitroglycerin

proved sufficient to so dilate the vessels; and, when followed by a tablet of caffein, two grains, an approximation to the normal pulse in character and frequency has been maintained for from three to eight hours, to the complete exclusion of any seasick feeling. Even smaller doses of the nitroglycerin will suffice in many instances.

Sexual Inversion.—In concluding a strong article on sexual inversion, published in the last number (Vol. 3, No. 4) of the *Bulletin of the Psychological Section of the New York Medico-Legal Society*, Mr. Havelock Ellis summarizes as follows: Sexual inversion, therefore, remains a congenital abnormality, frequently but not necessarily related to states that may fairly be called degenerative. At the very least, such congenital abnormality constitutes a predisposition. We still have to recognize that exciting causes may exercise a large part in the development of a latent predisposition. It is probable that many persons go through the world with a predisposition to inversion which always remains latent; in others the instinct forces itself through all obstacles; in others again some exciting cause plays a predominant part in arousing the latent instinct.

A great variety of exciting causes have been brought forward in connection with inversion. I have only found them operative—disappointment in normal love, example (usually at school) and seduction by an older person. Whether any of these causes can be effectual without a predisposition is a difficult question, complicated for discussion now. In most cases I have reason to believe that there is some predisposition present. This is, indeed, what we should expect in a broad view of the matter. "He can only be seduced," as Moll puts it, "who is capable of being seduced." A large number of individuals are exposed to these influences, but only a few succumb, even temporarily; the majority merely experiencing disgust.

The average invert, moving in ordinary society, is usually the subject of a congenital predisposing abnormality, or complexus of minor abnormalities, which make it difficult or impossible for him to feel sexual attraction to the opposite sex, and easy to feel sexual attraction to his own sex. This abnormality either develops spontaneously from the first or it is called into activity by some accidental circumstance.

I do not now propose to consider what the attitude of society and the law should be toward the person I have here described. How far should we regard him as a deformed person to be medically treated? How far as an anti-social person to be punished or restrained? These are important questions, so important that many of us are inclined to rush to a conclusion concerning them without any clear idea as to what sexual inversion is. Before we decide what to do with the sexual invert we must know something about him and we must attain to some general agreement.

Chylous Ascites.—Mr. Salmon, interne of the hospitals, studies, in the *Archives de Médecine*, that singular form of ascites which has already given rise to a certain number of works.

One knows that the serous membranes may contain a special fluid, milk-like or chyle-like in appearance, the origin of which it is most difficult to determine. Chylous pericarditis is absolutely exceptional. Rare in the tunica vaginalis testis (chyliform hydrocele), that variety of effusion seems more frequent in the pleura, and still more so in the peritoneum, where it constitutes a curious syndrom—chyleform ascites.

That form of ascites * is at times discovered at the autopsy, at others a surprise when paracentesis of the abdomen is performed, and oftener the latter. It follows that its symptomology offers nothing special. The patient presents all the signs of a common ascites—abdomen enlarged, clear sound over the intestines, dullness in the sides and in the supra-pubic region. The fluid moves on easily without causing friction upon palpation. The intra-peritoneal effusion soon becomes very abundant—the distended skin may be crossed in every direction by a supplementary venous circulation; there exists dyspnœa—all the signs indicating paracentesis. After the latter, the fluid which runs out has a special character—it is opaque, milk-like in appearance. This whitish ascites is what is called *chylous ascites*.

It presents, however, a few particular circumstances in its evolution. According to Veil, fever exists at a certain time with symptoms of inflammation of the peritoneum. There are, besides, two capital facts noted in all the cases reported. First,

* Debove, Perree, Veil, etc.

the effusion is very abundant; secondly, it recurs very rapidly. In the space of three months Whitla has tapped a child six times, and each time has removed twelve litres of fluid. Savian, in five months, removed from the abdoman 294 litres. Bargebuhr has calculated in the case of a woman suffering from cancer that more than a litre of chyle must have been poured into the peritoneum daily.

The confirmation of the diagnosis of chylous ascites is most important, for it dictates the prognosis. Without presenting febrile or infectious symptoms, the patient becomes more and more cachectic. He succumbs very rapidly, as if exhausted by the discharge of the nutritive fluid. Smidt has published a case of sudden death. Chylous ascites is never curable; it is a fatal ascites.

Its aspect is characteristic—opaque, white, at times yellowish, fluid, resembling milk or an emulsion of almonds (Lancereaux). No odor. If the fluid is preserved in a vessel, the striking fact is observed that it remains homogeneous a long while; 24 hours according to some, others say several days. At first no coagulum is formed (Strauss, Perrée). Later on the fluid finally separates in two strata, the inferior one being clearer, not quite opaque, containing a few red and white boodcells, the superior being more opaque, more white, like a layer of cream.

As regards its composition, the fluid contains little fibrin, but is, on the contrary, very rich in fat, which brings it nearer the nature of pus and of chyle, in particular. Concerning etiology: the fact that chylous ascites occurs often in children is pointed out; it is also observed in diseases of the heart; in intestinal sarcoma; in chronic peritonitis, simple, cancerous or tuberculous.

To explain the pathogeny of the phenomenon, the authors are divided in two categories—those who consider the fluid as pure chyle and those who believe it is only the product of a pathological condition, simply chyliform. In the first case, the fluid would originate directly in the lacteals, the thoracic canal, etc.; in the second, it would result from a particular transformation of pus.

Be that as it may, the prognosis of that form of ascites is always grave, so much the more as the treatment is purely symp-

tomatic and consists simply in paracentesis, which, by the way, it is not prudent to repeat too often, for it is after all equivalent to blood-letting.

Complications of Empyemas of the Accessory Cavities of the Nose.—It is of the greatest importance to practitioners to be familiar with the complications which arise from the inflammation of the accessory cavities of the nose—complications which we think have not been sufficiently insisted upon, for they are the ones which are the oftener manifest and form the principal object of the complaint of the patient. The true cause of the sinusitis, which manifests itself only under the vulgar name of "cold in the head," often escapes the attention of the affected ones.

Our investigations are based upon 149 cases of empyemas of the different cavities, which are classified as follows:

Bilateral maxillary sinusitis, 16; unilateral maxillary sinusitis, 70; bilateral sphenoidal sinusitis, 19; unilateral sphenoidal sinusitis, 11; bilateral frontal sinusitis, 4; unilateral frontal sinusitis, 6; bilateral ethmoidal sinusitis, 1; combined sinusitis, 22.

The complications can affect:

I. The adjacent organs: Nasal fossa properly so-called, pharynx, ears, eyes and cranio-facial complications.

II. The remote organs: Bronchial tract, digestive tube, etc.

III. The general health: Weakness, emaciation, fever, etc.

1. Nasal fossa properly so-called: We have found thirteen cases of atrophy of the mucous membrane of the turbinated bones (simulating sometimes ozena); eight cases of hypertrophic rhinitis; three cases of caseous coryza (communication with the antrum and in one case pus in the right maxillary sinus, the frontal sinus and the ethmoidal cells); small polypi in twelve cases, and mucous polypi in eighteen cases.

2. The Naso-pharynx: There was naso-pharyngeal catarrh, especially where the sphenoidal and frontal centres were affected, and swelling and abscesses of pharyngeal tonsils in several cases (already stated by Ziem). Liebe published a case of retro-pharyngeal abscess caused by empyema of Highmore's cavity. Menchat presented to the Medical Society of Hamburg the anatomical specimen of a case which had simulated typhoid

fever. Pus was found in the sphenoidal sinus with retro-pharyngeal abscess.

3. Eyes: We found in three cases a dacryocystitis; in two cases exophthalmia; in one case injection of the retinal veins; in two cases atrophy of the optic nerve, and in one case inequality of the pupils.

4. Ears: In the etiology of otitis the inflammation of the sinuses plays the same role as the adenoid growths in children. In fifteen cases there was otitis media suppurativa complicated with mastoiditis; in fourteen cases otitis media chronica (with sometimes obstruction of the Eustachian tubes); in nine cases nervous buzzing, and in three cases vertigo. Robertson also called attention to the relations existing between these complications and the inflammation of the sinuses.

5. Cranio-facial complications: In fifteen cases we observed cephalalgia (hemicrania, frontal and occipital pains), and facial neuralgia, and in four cases (accompanying maxillary sinusitis). Bresgen, Heymann and Loeb had already stated the correlation existing between cephalalgias and these affections. In one case there was present epileptiform attacks with loss of consciousness occurring after washing out of the right sphenoidal sinus (attributed to temporary pressure upon the brain, by the assumption that the posterior part of the sinus was thinned or in part destroyed).

6. Cutaneous affections of the face: We noticed repeated attacks of erysipelas in five cases; eczema of the nares and eczema (pilare) of the lips in five cases and in five cases acne rosacea of the nose and cheeks was improved by treating the maxillary sinusitis.

Temporary œdemas were observed in several cases during the course of the treatment; in one case of frontal sinusitis with repeated attacks of erysipelas and in another of double sphenoidal sinusitis with pulmonary complications.

Arnozan had already shown the relations that existed between the deep affections of the nose and those of the skin of the face.

7. Complications of the bronchial tract: There was present acute and subacute catarrh of the larynx in two cases with thickening of the vocal cords; in several cases paresis of the constrictors of the glottis.

Pseudo-pyæmia: In several cases there was a temporary broncho-pneumonic process (tuberculosis had been diagnosed); in three cases an obstinate cough and in five cases symptoms of oppression by paroxysm (cured by treating the maxillary sinus). Hartman cites a case of supposed pulmonary tuberculosis cured by treating the sinus.

8. Affections of the digestive tube: Dyspepsia was found in four cases, intestinal trouble in three cases (obstinate diarrhœa alternating with constipation). Schwartz and Avellis mentioned similar cases.

9. Cardiac and vascular affections: In one case a slow pulse (28 to 30 a minute) went back to normal during course of treatment. There was phlebitis of the lower limbs in an old standing maxillary sinusitis, and one case died of aortic insufficiency. Renal affections, articular inflammation and myalgias were observed in several cases. It is difficult, however, to say whether these were mere coincidences or whether the suppurative affection of the sinuses were the starting point of these complications. The possibilities of metastatic manifestations do not seem to us in any way doubtful. Similar metastases were noticed by Bayer in a case of phlegmon of the leg consecutive to an empyema of the maxillary sinus, and by Schech, who saw a painful affection of the knee in one of his patients and an acute nephritis in another. It is especially Ziem who reports quite a number of different metastic localizations.

10. General affections: In ten cases there was general debility with emaciation; fever in four cases, insomnia in three, and several presented symptoms of cerebrasthenia. Pronounced melancholia was seen in four cases, and sudden fainting spells, resembling the petit mal of epilepsy, were observed in a boy 10 years old, affected with suppuration of the sphenoidal sinuses. The symptoms disappeared after treatment of the cavities.—Dr. Lichtwitz, *in Annales des Maladies de l'Oreille, du Laxynx, du Nez et du Pharynx, Février, 1896.*

Book Reviews and Notices.

Infantile Mortality During Childbirth, and its Prevention. By A. Brothers, B. S., M. D. P. Blakiston, Son & Co., Philadelphia, publishers. Armand Hawkins Co., New Orleans, $1.50.

This is a William Furness Jenks Prize Essay of the College of Physicians of Philadelphia. As every one will readily recognize, this book deals with a subject of the greatest vital importance. The author, however, steps way beyond the question of infantile mortality *during* childbirth, and deals well with causes of death before and after birth—for instance, in his table he cites intestinal obstruction, syphilis, imperforate anus, imperforate rectum, encephalous monster and congenital cardiac disease.

While the book offers nothing new it makes very good reading and should be given attention by those who think they possess all knowledge of obstetric science and obstetric art.

Michinard.

A Text-Book of Bacteriology. By George M. Sternberg, M. D., LL. D., Surgeon General U. S. Army. Illustrated by chromo-lithographic plates and 200 engravings; pp. 700. William Wood & Co., publishers.

This work is really a second edition of the Manual of Bacteriology, by the same author, which appeared in 1893. It is smaller than its predecessor by nearly 200 pages, this reduction having been accomplished chiefly by omitting the large bibliographical index and all those portions of the older work which treated of the non-pathogenic bacteria, and were therefore of purely scientific value, admitting of no practical application.

The present volume is an excellent text-book for students and medical practitioners, and a guide for laboratory work, and will no doubt be received with still greater favor than the Manual.

P. E. A.

In Sickness and in Health, a manual of Domestic Medicine and Surgery, Hygiene, Dietetics and Nursing. Edited by J. West Roosevelt, M. D. D. Appleton & Co., New York and Atlanta.

Although a volume of over 900 pages of reading matter, this work is a practical presentation of those things in medicine and surgery, etc., which are essential to the well informed man of to-day, be he professional or commercial in his habits. There is nothing offensive to the sense of ethics of the medical profession, as no attempt is made to follow the plan of the multitudinous "Home Physician," or the "Household Medicine Chest," etc., now on the market.

It is essentially a work, intended to cover the ground in a practical way, for the education of the layman in such a way that he can grasp intelligently the opinions and methods of the physician whom he may happen to summon.

Space is freely given to bandaging, dressings, accidents and to nursing, in all of which instruction is much needed. While purposed for the layman, this work is by no means beneath the study or notice of the medical profession. The illustrations are well placed and well executed.

The last chapter on "Nursing the Sick" is particularly commendable for the clearness of its presentation, and for the liberal display of well selected illustrations. Dyer.

Manual of Gynecology, by Henry T. Byford, M. D., Professor of Gynecology in College of Physicians and Surgeons, Chicago, etc. J. Blakiston, Son & Co., Philadelphia; Armand Hawkins Company, New Orleans.

This is a short work, by a well-known writer, which deals with every point in gynecology. As the work is comparatively short, each subject receives rather superficial attention. For those who desire a manual on gynecology this book is recommended. Some of the illustrations are good, some indifferent and some bad. As an example of the bad, Fig. 200, supposed to illustrate a clamp method of hysterectomy, is cited. Probably the best written and best illustrated subjects are Metritis and Endo-Metritis, and Salpingitis and Its Complications. For so short a book they receive very fair attention.

Michinard.

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In Sickness and in Health. Edited by J. W. Roosevelt, M. D. D. Appleton & Co., N. Y., publishers, 1896.

De la Prothèse Appliquée au Traitement des Empyèmes. By Dr. Simon Dunogier, of Bordeaux, 1896.

The Value of Respiratory Gymnastics; the Sanatorium or Closed Treatment of Phthisis. By Ed. O. Otis, M. D., Boston. Reprints.

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Hydrogalvanism of the Urethra. By Robt. Newman, M. D., New York. Reprint.

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The Three Ethical Codes, Illustrated Medical Journal Company, publishers, Detroit.

Neurosis Complicating Dislocation of Shoulder and Elbow, by M. A. Veeder, M. D. Reprint.

Biennial Report of the Board of Health of the State of Louisiana, S. R. Olliphant, M. D., president, New Orleans.

Sero-Therapy in the Treatment of Tuberculosis, by Paul Paquin, M. D. Reprint.

Indio, the Colorado Desert for Health, by Walter Lindley, M. D. Reprint.

Report Upon Two Cases of Tumor of the Spinal Cord, by Pearce Bailey, M D. Reprint.

Deformities of the Hard Palate in Degenerates. Results of Thyreoid Medication in Sporadic Cretinism, by Fred. Peterson, M. D. Reprint.

Thirty-fifth Annual Report of the Cincinnati Hospital, J. W. Hendley, M. D., superintendent.

A Text-Book of Bacteriology, by George M. Sternberg, M. D., etc. William Wood & Co., New York, publishers, 1896.

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Statement of the Board of Health of the State of Louisiana.)

FOR JUNE, 1896.

CAUSE.	*White.....*	*Colored....*	*Total .....*
Fever, Malarial (unclassified)	6	8	14
" Intermittent	1	1	2
" Remittent	2	2	4
" Congestive	1	2	3
" Typho	2	3	5
" Typhoid or Enteric	8	4	12
" Puerperal	2	1	3
Influenza			
Small-pox	1	10	11
Measles			
Diphtheria			
Whooping Cough	7	2	9
Meningitis	6	7	13
Pneumonia	8	9	17
Bronchitis	5	5	10
Consumption	33	40	73
Cancer	8	2	10
Congestion of Brain	5	6	11
Bright's Disease (Nephritis)	18	10	28
Diarrhœa (Enteritis)	37	24	61
Gastro-Enteritis	8	4	12
Dysentery	2	6	8
Debility, General	2	2	4
" Senile	12	7	19
" Infantile	4	2	6
Suicide	4		4
Heart Disease	12	13	25
Apoplexy	5	1	6
Tetanus, Idiopathic			
" Traumatic	4	2	6
Trismus Nascentium	5	8	13
Hepatitis	7	2	9
Hepatic Cirrhosis	8		8
Uræmia	4		4
Injuries	17	2	19
All Other Causes	146	66	212
TOTAL	391	250	641

Still-born Children—White, 22; colored, 24; total, 46.

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

Death Rate per 1000 per annum for month—White, 24.06; colored, 37.50; total, 27.97.

METEOROLOGICAL SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure	30.00
Mean temperature	80.00
Total precipitation	8.23
Frosts	none

Prevailing direction of wind, southeast.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XLIX. SEPTEMBER, 1896. No. 3.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the 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.]

FRACTURE OF THE ZYGOMATIC ARCH.—A SIMPLE METHOD OF REDUCTION AND FIXATION, WITH REMARKS ON THE PREVALENCE, SYMPTOMATOLOGY AND TREATMENT OF THIS FRACTURE.*

BY RUDOLPH MATAS, M. D., PROFESSOR OF SURGERY, MEDICAL DEPARTMENT TULANE UNIVERSITY OF LOUISIANA, ETC.

An instance of this fracture came under my observation in April, 1895, which I deem worthy of record, not so much on account of the comparative rarity or other interesting peculiarities of this injury, but because it suggested a simple and successful mode of treatment which I feel confident will prove a valuable resource to any surgeon or practitioner who may be called to deal with a similar accident.

As the manner in which the injury was inflicted is unusual, I shall quote the details of the accident as related by the patient himself, who happened to be an esteemed medical friend, Dr. W. S. B. (æt. 34). In a note to me he says: "I was walking rapidly on —— street, when, within twenty steps of the corner of the —— building, a boy about fourteen or fifteen years of age came rapidly around the corner on a safety. We saw each other, but apparently too late to make any change in our course. He came straight along on the down grade of the sidewalk. I immediately stood still and braced to receive the shock, expecting

*Proceedings Louisiana State Medical Society, May, 1896.

only body blows. His wheel struck my outstretched foot; his checked momentum carried him onward through the air, his wheel overturning at the same time. The prominence of one side of his frontal bone struck the middle of my zygomatic arch. He fell to the ground stunned for a moment, but soon arose, otherwise unhurt, as far as I know. I was stunned momentarily, but did not lose consciousness or fall. The loud report conducted to my ear, and the crushing sensation made by the impact, were nauseating for a few moments. I continued unaided for two blocks to a drug store, then into a cab, and on my way home I was fortunate enough to meet you." * * *

When I met the doctor, a few moments after the accident, he was extremely pale and evidently suffering intensely. A hasty examination revealed a marked depression, or hollow, corresponding to the most prominent portion of the zygomatic arch, about one inch back of the malar prominence. Evidently the arch had been fractured, and the displaced fragment had sunk at least one inch below the level of its malar and temporal processes.

The depression at the broken level easily admitted my thumb at its broadest diameter, and allowed it to sink into the temporal and zygomatic fossæ below the level of the fixed portions of the arch. There was no break in the skin, and the usual ecchymoses and evidences of contusion were remarkably absent. A more careful examination made at the patient's house, after a quarter of a grain of morphia had been administered hypodermically, clearly confirmed the diagnosis of simple fracture of the zygoma from direct injury, without other associated or complicating injuries.

This was gratifying, as the violence of the blow, coupled with the extreme pallor and other evidences of shock, had made me fear that the temporal shell might have been fissured and hæmorrhage from the meningea media with all its consequences might take place. Fortunately, however, the force of the blow was broken by the zygomatic arch and by the thick temporal tendon which acted as a buffer beneath it. It was also evident by the acute pain felt whenever any attempt was made to open and close the mouth, and by the immobility of the depressed fragment, that the broken bone had been impacted below the temporal fascia in the subaponeurotic fat and connective tis-

sue, and probably into the temporal muscle itself. The diagnosis having been settled, the question of treatment now demanded consideration.

The pain, which was intense, was experienced by the patient with every motion of the lower jaw; the deformity, which was very striking, and the possibility of future anchylosis from rigidity of the temporalis in consequence of the depression by the displaced fragment, or by exudation, callous formation, etc., all demanded the replacement or reduction of the displaced bone as an immediate necessity. I had, therefore, decided, in harmony with the doctor's wishes, that I would cut down upon the impacted fragment with a view of raising it into its proper position by a hook or elevator, when the thought occurred to me that the reduction would be more easily effected and permanently maintained by the following and much more simple procedure:

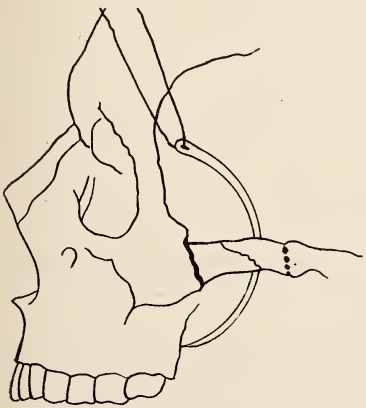

Fig. 1.

Curved needle carrying traction wire under fractured arch.

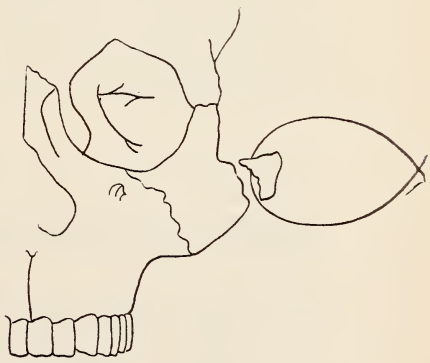

Fig. 2.

Wire *in situ*, ready for traction to replace displaced fragment.

OPERATION.—As the injured area was extremely sensitive a general anæsthetic was administered (chloroform) at the patient's request. The usual antiseptic precautions were carefully observed. A long, full curve (semi-circular) Hagedorn needle, threaded with silk as a carrier, was made to penetrate the skin about one inch above the midpoint of the displaced fragment and was carried well into the temporal fossa under the broken bone. (Fig. 1.) Then the point of the needle was raised and

made to emerge about half an inch below the lower border of the broken arch. As the needle was pulled out a strong silver wire about one foot long was attached to the silk carrier and dragged through the tract of the needle so as to form a metallic loop under the misplaced bone. (Fig. 2.) By twisting the ends of the wire together, a loop was formed which permitted strong and easy traction to be made on the broken fragment. With the index and middle fingers hooked under the wire loop,

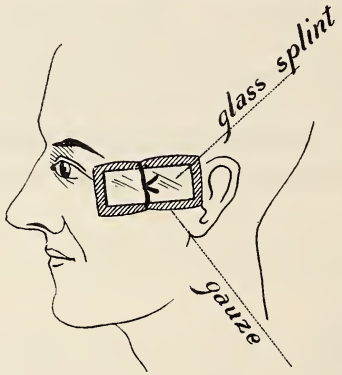

Fig. 3.

Fracture reduced; apposition maintained by a glass splint (microscopic slide) resting on a layer of iodoform gauze. The wire is twisted firmly over the glass slide.

traction was begun by pulling directly upward and outward. The moment this traction began the displaced fragment yielded and instantly returned to its normal position with a snap that was loud enough to be heard by the gentlemen who were assisting. The reduction was effected with all the suddenness and completeness that characterize the return of a displaced bone into its socket. The contour of the arch was immediately restored and the displaced fragment showed no disposition to relapse into its abnormal position. Notwithstanding the apparent permanency of the reduction I did not deem it prudent to trust the fracture without a more permanent support, and the following simple plan was then adopted to secure permanent fixation: An ordinary glass slide of the kind used for mounting microscopic sections, after careful sterilization, was wrapped in a layer of iodoform gauze and placed over the

seat of the fracture with its greatest length corresponding to the long axis of the zygoma. (Fig. 3.) The slide was long enough to rest upon the malar prominence anteriorly and upon the temporal root of the zygoma posteriorly, thus resting upon two fixed points. After twisting the wire firmly over it, it was evident that the bone could not be displaced, as the slide acted admirably as an external splint. The dressing was then completed by applying a layer of sterilized gauze and absorbent cotton over the slide as a dressing, the whole being held in place by a roller head bandage. The patient soon recovered from the anæsthetic and expressed himself as being relieved, especially of the peculiarly intense pain felt in moving the lower jaw.

On the second day following the reduction, a thin shell of vulcanite or dental rubber, moulded to the shape of the normal zygomatic prominence, was prepared by a dentist and substituted for the glass slide. The wire which held the fragment in position was not removed, but was simply twisted over the vulcanite shield without change or disturbance, after the removal of the glass slide. The new splint was now covered with a layer of absorbent cotton soaked in flexible collodion and applied without any additional dressing.

It is possible that the fracture would have remained reduced without the addition of the splint, but the possibility of return of the displacement by accidental causes during sleep, or mastication, obviously called for some means of permanent fixation, and as this was done so easily and effectually by the wire loop, it would have been imprudent not to have utilized it by leaving it *in situ*, for a week, as was done in this case.

The patient was confined to his room only twenty-four hours. On the second day he was able to attend a public meeting without suffering pain or serious inconvenience. On the ninth day the wire, splint and all dressings were permanently removed.

There has been ever since (about fifteen months ago), as the patient informs me, "a total absence of scar, deformity or inconvenience. Absolutely no impairment of function and no suffering."

Remarks.

The relative prominence of the Zygomatic arch, sufficiently prominent, in fact, to give the face a marked physiognomic and ethnic character, would suggest, when associated with the great fragility and thinness of the temporal portion of this arch, that it would be liable to frequent fracture. That this is not the case and that it is indeed a very rare fracture is easily proven by consulting the literature of the subject.* Some idea of the comparative rarity of the injury, both as a simple and primary accident and as a complication of graver head injuries, may be obtained from the experience of Malgaigne.† He says, "this fracture is very rare. Duverney was the first to speak of it (1751). I have never myself met it. I have only been able to collect five cases: even these are not all free from doubt." Hamilton‡ refers only to three personal observations. Agnew§ refers to two cases and these he saw on the same day. My personal experience, in sixteen years of hospital work, is limited, with the present instance, to two cases. In the first case, the patient was seen in my service in the Charity Hospital over six years ago. The patient sought admission into the ward about one year after the injury. A simple depression existed in the mid-zygomatic region. The fracture had been caused by a blow with a base-ball bat. According to the patient's history a great deal of periorbital swelling and ecchymosis immediately followed the blow and so masked the zygomatic fracture that when the swelling cleared up it was too late to interfere. No treatment was therefore attempted and the patient gradually regained the power of mastication without pain. As the patient applied to us for the treatment of other conditions entirely independent of the zygomatic injury, no attention was paid to this, and no record was kept of this incident in his case. In

*The literature of the subject is not overburdened with references. Thus under the heading "Zygoma," in Volume XVI of the Index Catalogue of the Surgeon General's Library, issued in 1895, there are only eleven references to special papers on the subject of fractures of the arch. Since the issue of the Catalogue, the Index Medicus for 1895 and 1896, up to present date (July 28), only records two additional contributions on the subject. By consulting special monographs on Fractures we find that the whole bibliography of fractured zygoma (outside of the systematic texts) would probably sum up twenty-five *separate* reports or special articles, the majority of which have been consulted by the author and are referred to in the body of this article.

†Malgaigne: Fractures and Dislocations, American Edition, translated by Packard, Vol. i.

‡Hamilton: Fractures and Dislocations, 7th Edition, 1894.

§Agnew: Principles and Practice of Surgery, Vol. i, 1878.

this way it is also probable that some cases may have come under the observation of other hospital surgeons which do not appear on the records, because they were mere incidents in the past history of the patient without actual bearing upon the condition for which they sought admission into the hospital.

After my experience with the case of Dr. B., my curiosity was roused, and I decided to investigate the records of the hospital, with the view of determining the rate of prevalence of this fracture in hospital practice as accurately as the records would show. In undertaking this investigation I thoroughly appreciated the fact that only such cases would find their way into the records that were admitted to the hospital expressly for the treatment of this special injury. It is possible that some fractures of the zygoma were also admitted in which this fracture was a mere detail of a far more serious and extensive cranial injury. Such cases may have been classified simply as fracture of the skull without mention of details, but a close study of the hospital records has impressed me with the belief that these instances can not be many, and that fracture of the zygoma is just as rare a complication as it is a primitive injury. As a matter of fact, we find that only two fractures of the zygoma are recorded in seventeen years, from January, 1879, to January, 1896. One of these fractures came in in 1891; the patient a white man. The fracture was associated with a contusion of the scalp. The other occurred in 1894; in a male negro.*

The case of fractured zygoma in this year is classified under simple fractures (p. 72, report of 1895), but in the table of surgical operations a case is recorded as compound fracture with necrosis for which sequestrotomy was performed; presumably it is the same case.

In attempting to establish the rate of prevalence of zygomatic fracture on a basis of hospital experience, we must first determine the actual indoor population of this institution during the last seventeen years (1879-1896). This we find to be

*It is evident from this statement alone that the anatomical (racial) peculiarities of the zygoma in the negroes exercised no influence clinically upon the liability of this bone to fractures. It is well known that the prominence of this arch is greater in the negro. In all races the zygomatic process overlaps the malar bone at the line of union with the temporal, so as to assist it and the superior maxilla to resist the upward pressure to which they are subjected in mastication. The extent of this overlapping, as well as the strength of the zygomatic arch and the size of the space enclosed by it, are greater in the negro than in the European, and far greater in the Carnivora than in either. (Humphrey: The Human Skeleton, 1858.)

111,802 patients, exclusive of cases not diagnosticated. This morbid population included 3125 cases of fractures of all kinds; this being the sum total of fractures treated during the seventeen years. The prevalence of zygomatic fractures in the Charity Hospital of New Orleans could then be stated as follows:

Total number of cases, 2; (1 white, 1 colored).

Proportional prevalence to total fractures .064 per cent. (or 64 in 100,000, or nearly 6½ in 10,000).

Proportional prevalence to hospital population .0018 per cent. (or 18 in 1,000,000, or nearly 2 in 100,000).

This summary surely confirms the statement that fracture of the zygoma is a very rare injury.

The results obtained by this inquiry into the frequency of the zygomatic fracture prompted a similar investigation of the malar bone, which constitutes a part of the arch, and is regionally exposed to the same causes that lead to the fractures of the zygoma but which, owing to the greater strength and solidity of its attachments to the skeleton of the face, is presumably more resistant to fracturing forces. We find, however, that statistically the rate of prevalence is very nearly the same. Thus in seventeen years there were three cases of fracture of the malar bone in the Charity Hospital. One case, a white patient, occurred in 1890; the other two cases, both negro patients, were admitted in the same year, 1886. The white case was complicated with fracture of the nasal bone, and the two negro cases were both compound and comminuted fractures.

The relative prevalence of malar fractures if stated on the same basis of population and total number of fractures previously given, in seventeen years, would be stated as follows:

Proportional prevalence to total number of fractures, .096 per cent. (or 96 in 100.000, or about 9½ in 10.000).

Proportional prevalence to the hospital population, .0027 per cent. (or 27 in 1.000,000, or nearly 3 in 100.000).*

Fractures of the malar are, therefore, almost as rare as zygomatic fractures.

We should note that the fractures of the zygoma and malar

*These results now constitute a fragment of an extensive analytical study on the prevalence and mortality of individual fractures as they occur in the records of the Charity Hospital, in course of preparation by the writer, with the collaboration of Mr. E. Hynes, A. M. (Tulane).

here considered include all those that are mentioned in the records, so that, whether we consider them as primary injuries or as complications of graver accidents, these types of fracture are certainly rare.

MODE OF PRODUCTION.—It is obvious that the force that determines a fracture of the zygoma must usually be a direct one, and it is also plain, when we consider the anatomy of this part, that the break must usually take place on the temporal side of the temporo-malar suture, as this is its thinnest and narrowest part. The two cases that came under my observations were due to direct injury and the point of fracture was no exception to the general rule. Very rarely the arch may be broken by a force applied from within the mouth or by jamming back of the malar, in which case the fragment is displaced outward. The only published instances in which this has occurred are the cases which Duverney reported to the Anatomical Society of Paris (1810), that are referred to by the classics (Malgaigne, Hamilton, Packard and others). We are told that in one, a young child, having in its mouth the end of a lace bobbin, fell head foremost so that the end of the bobbin piercing the soft parts broke the zygomatic process from within outward.

Packard (Ashurst's Encyclopedia of Surgery, Vol. IV, p. 68,) refers to another case in which a fracture of the zygomatic arch had firmly united, with deformity outward. The injury had been caused by a blow on the face with a chain.

Hamilton and Agnew's experiments on the naked skull show that the zygoma may be broken and displaced in an outward direction by any force that will fracture the superior maxilla and depress the anterior margin of this malar bone. Fracture of the arch always takes place under these conditions at the same point, viz.: a little beyond the middle of the zygoma, in the temporal part of the suture, and close to it. The fractures experimentally produced were always transverse, and not in the line of the suture. Therefore, clinically and experimentally, we find that fractures of the zygoma almost exclusively take place in the temporal portion of the arch. So that this fracture may be virtually considered as a fracture of the temporal bone.

DIAGNOSIS.—The diagnosis of zygomatic fracture as a primary accident is usually of the simplest kind. A mere glance will reveal the deformity and will suffice to establish the diagnosis.

There are some cases in which there is fracture and yet no displacement. Tavignot's case, which was only discovered at a *post-mortem* examination, is an illustration of this occurrence. The fracture was caused by a fall during an epileptic fit. The skull was also fractured elsewhere, and the patient died on the fourth day. No one suspected that the zygoma was fractured. The possibility of fracture with a total absence of displacement is easily accounted for by the anatomy of the arch. The upper border of the arch gives a firm attachment to the strong temporal fascia which will not allow the fragment to be displaced unless it is torn away extensively on a level with the bone lesion. On the other hand, when the tear in the temporal fascia exists and there is no impaction of the broken piece, the tendency of the fragment is to downward displacement by the action of the masseter which is attached to the inferior border and internal surface. As the broken zygoma is displaced inward and downward it may be carried down as far as the sigmoid notch, where it may become locked with the coronoid process of the lower jaw, behind the attachment of the temporal tendon. Hence the pain and extreme difficulty in opening and closing the mouth which characterize the graver cases.

An excellent clinical picture of this condition in its most aggravated type is presented in the report by Dr. C. L. Bower:*

"M. F., aged 36, stepped on a long pole, which threw him down; the right side of his head struck the pole, producing a depressed fracture of the zygomatic arch. It caused considerable pain and swelling. On opening and shutting the mouth a kind of friction sound and rubbing sensation was noticed at the seat of the injury. This gradually increased until it was with difficulty that he could close his mouth. While chewing a piece of meat he suddenly found it impossible to close his mouth, which remained open, with the teeth of the two jaws about one inch apart. He could, by an effort, separate the jaws a little further, but was incapable of bringing them together. The deformity resembled a dislocation.

"It was at this time that I first saw him. On examination it was found that the zygoma was fractured a little posterior to the suture, and that the posterior fragment was greatly depressed, with either a decided bend, or perhaps another fracture further back near the tubercle.

"The coronoid process of the inferior maxilla was caught

* Polyclinic, Philadelphia, 1885-6, 111-137.

against the depressed fragment, which accounted for the fixation of the jaw.

"As it was impossible to reach the depressed fragment to elevate it, either externally or through the mouth, Dr. Levis made an incision of half an inch, just above the zygoma, then raised with an elevator, such as is used for elevating depressed fragments into position, which immediately allowed the jaw to close easily. I have not been able to follow the subsequent history of the case."

To determine the coexistence of other complicating lesions which affect the ultimate prognosis is not always so simple a matter. A zygomatic fracture may be only a minor detail in the striking picture presented by a case of fracture of the base, or fracture of the lateral surface of the cranium involving the middle meningeal artery or the cerebral contents. Dupuytren* and Tavignot (quoted by Hamilton, l. c.) report cases which illustrate these conditions, wherein graver injuries entirely mask or overshadow the lesser injury. These cases need not be considered here; they are extremely rare and are usually promptly fatal when they do occur. When met in practice, the treatment of the zygomatic fracture clearly sinks into relative insignificance and must be considered merely as a part of other and more important procedures.

A complication that is also extremely rare is an associated fracture of the zygoma with a fracture of the coronoid process of the lower jaw and a detachment of the insertion of the temporal tendon. Fracture of the coronoid process *alone* may be justly regarded as one of the curiosities of surgery. I do not know that any exists *without* other complications. Even the complicated cases are extremely rare. Thus far there appears to be but one case which has become classical, and that is Houzelot's patient, who, on falling from a height upon his chin, fractured both coronoid processes, both condyles and the symphisis of the lower jaw. Sir W. Fergusson (System of Practical Surgery, p. 457, Lond., 1870) refers to a similar case. The only recorded case that I am acquainted with, in which a fracture of the zygoma occurred simultaneously with a fracture of the coronoid, is mentioned by Park (Dennis, System of Surgery, 1896).

*Injuries and Diseases of Bone. Syd. Edit., Lond., 1847.

Though this combination of fractures must be difficult to produce, its occurrence is nevertheless easily understood, especially if the fracturing force is applied to the zygomatic region while the lower jaw is fixed firmly by the rigid contraction of the masseter and temporalis. Fortunately, also, a fracture of the coronoid process, even if transverse, will not be followed, in all probability, by the total detachment of the coronoid fragment, as the temporal tendon, which is so powerfully and broadly attached to the inner surface of the ramus of the lower maxilla, will prevent a marked displacement. A fracture of this process, should be readily recognized by intra-buccal exploration of the inner surface of the ramus with the finger. If such a fracture exists, absolute fixation of the lower jaw with a sling or permanent gutter dressing, with the view of securing rest and immobilizing the site of fracture, would probably be sufficient. The zygomatic fracture should be treated separately and by the means to be considered later.

When the zygomatic fracture is complicated with a fracture of the sphenoid in the zygomatic fossa, there may be a laceration of the mucous membrane of the corresponding nasal chamber with characteristic epistaxis. If the fracture involves the malar bone, the fissure may extend to the floor or walls of the orbit, and then marked subconjunctival ecchymosis, with some exophthalmos, will tell the tale. If anæsthesia of the cheek and corresponding half of the nose and upper lip exists, it will be reasonable to conclude that the fracture extends to the upper jaw and into the infra-orbital canal; if the gums and the teeth are also anæsthetized, the laceration or compression of the superior dental nerves is indicated.

The diagnostic value of these anæsthetized signs is shown in the case which Hifflesheim reported to the Societé de Biologie de Paris, 1853.*

In this case there was a direct fracture of the zygomatic arch associated with fracture into the intra-orbital foramen with compression of the infra-orbital nerve and partial anæsthesia of the face. These extensive radiating fractures involving the nerve canals are more characteristic of malar fractures. The more distinctive features of zygomatic fracture are the deformity and the painful interference with the functions of the tem-

*Comptes Rendus 1853, Paris, 1854; Vol. 2, pp. 2, 169-172.

poro-maxillary joint previously referred to and caused by impaction of the broken fragments in the temporal muscle, locking with the coronoid, or to the simple laceration of masseteric fibres. In any case, the symptoms are invariably relieved by the reduction of the displaced fragment.

TREATMENT.—Clinically speaking, all cases of fracture of the zygoma may be classed into the (*a*) simple, (*b*) compound, (*c*) complicated. Considering these in an inverse order, we would say that complications should be treated separately and in accordance with the special indications. The indications are based upon the usual principles that guide the surgeon in the treatment of all fractures, viz.: Reduction, fixation or immobilization and rest. If there are intracranial injuries, these should be attended to at first. If there is a fissure of the temporal shell or a depressed fracture of the skull, it should be met by direct incision, trephining and elevation. If there are symptoms of meningeal hæmorrhage, the meningeal trunk should be exposed by the recognized procedures, the clot removed and the artery controlled by plug or ligature. Coincident fractures of the upper jaw, the orbit, the malar, and of lower maxilla must be treated according to established methods which we can not stop to consider here—as we are now dealing only with zygomatic injuries.

In *compound fractures* of the zygomatic arch there is but one course to follow, and that is plainly to utilize the existing break in the soft parts with the view of replacing the displaced fragment, or removing any loose spiculæ if much comminution exists. If a compound fracture exists without much fragmentation the displaced bone can be reduced and fixed in the normal position by subcutaneous wiring, as was done in the case of our patient, Dr. B., here reported. The external wound can then be closed by suturing after thorough aseptic treatment and by using the aseptic glass splint and occlusive dressing, which will transform it into a simple fracture. The method of subcutaneous wiring and fixation with a wire loop over a glass splint is not only simple and reliable but is more benign in its consequences than the method of elevating by means of a screw or of drilling capillary holes into the loose fragment and wiring it to the remaining portion of the arch. Drilling holes into so delicate a lamina of bone as the posterior half of the zygomatic

arch is liable to lead to further fragmentation of the detached bone and cause additional and unnecessary traumatism. Furthermore, the presence of the wire, catgut or other *buried* suture material used to hold the fragments together, is not advantageous or desirable when the same results can be obtained without them. Hence, I believe that even in compound fractures of the zygoma, the method applied in the case herein reported is to be preferred to the usual and less satisfactory procedures advised in the text.

Simple Fractures.—While all writers are as a unit in recommending immediate reduction and fixation by direct interference in all cases of *open* compound fractures, they are much more conservative and guarded in their advice in dealing with simple fractures. This tendency to non-interference in simple fractures has been justified by the belief that in many cases of marked fractures and displacement and deformity the functional disturbances connected with mastication were finally overcome, with little if any assistance, by the efforts of nature alone, as is demonstrated by Hamilton's* and Agnew's† experience, as well as by the cases reported by Bellamy‡, Clark‖, Garland§, Prewitt and others. It is also recognized that the ordinary course of the uncomplicated fractures is toward a benign and favorable termination, the tendency being toward a gradual accommodation of the parts with rapid repair and slight callus formation.

We note, therefore, that all authorities, even to the latest, advise interference conditionally. They all concur with the views expressed by Malgaigne, and subsequently by Hamilton and his followers, to the present generation, to the effect that it is seldom possible to reduce the displacement completely because it is generally inwards, and there is no way of acting efficiently on the bone except through a wound in the skin. (Stimson, Fractures, loc. cit.).

This conditional recommendation to interfere by open section is thus stated by Dean (Treves' System of Surgery, Vol. 11 1896): "In the case of a fracture with depression of the zygo-

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*Loc. cit.
†Loc. cit.
‡Bellamy: "Fracture of the Zygoma" (*Lancet*, London, 1872, 1, 186).
‖Clark (F. L. G.): (St. Thomas Hospital Report, London, 1887. ns. XVII, 3).
§Garland (O. H.): "Impacted Fracture of the Zygoma," *Lancet*, London, 1885, 11, 1185.
¶Prewitt (T. F.): "Fracture of the Zygoma," St. Louis Courier of Medicine, 1886, XVI, 126).

matic arch no treatment is necessary if the lower jaw can be used without any trouble. But, if the movements of the lower jaw are interfered with, an incision should be made and the depressed fragment must be elevated and kept in position by wiring if necessary."

Park, in his excellent article in Dennis' System of Surgery (Vol. II, p. 765, 1896), expresses himself more broadly: "These cases will not permit of complete reduction of fragments unless there be a wound of the skin. Should it appear that serious disadvantage results from this condition, it would be perfectly justifiable to make an opening under aseptic precautions, and with suitable instruments draw the displaced arch into position, securing it there, if necessary, either by drilling or wiring, or by temporarily fastening the bone with silver wire to some external support."

It is evident that these recommendations to interfere are made conditional, partly, because of the slight importance attached to this fracture, and partly because of the acknowledged difficulty of reduction without complicating the original injury by an open section. Nevertheless, the fact that in distinctly recognizable fractures of the arch there is deformity and very considerable if not unbearable pain during mastication, which is likely to continue for days, weeks, and even months; also, that the final consequences of this fracture can not be foretold, often, until the opportunity for simple reduction and repair is past; and, furthermore, that permanent impairment of the function of mastication may follow this injury* would suggest the advisability of immediate reduction in every case in which there is evidence of fracture with displacement and deformity regardless of other more pronounced indications. The wisdom of this course is emphasized when we consider that the pain, general distress and deformity which characterize this injury can be instantly relieved by the simple reduction of the fracture.

The possible risk of infection, though largely disregarded by the contemporary surgeon, is still considered in the writings of

*Case quoted by Muhlenberg; *Philadelphia Medical Times*, May 15, 1871. Stimson has briefly described a case in which the displacement seriously interfered with the movements of the jaw. The difficulty steadily increased until the patient could barely separate the teeth. Then one morning while yawning he felt something snap, and the motion of the jaw became and remained free.

the day, though not as much as when Malgaigne defended Ferrier's first reduction of this fracture by the open method* in 1859. Dupuytren, who had been "horrified" by reading the account of Ferrier's first operation, only reflected the conditions of surgery of his period. Dupuytren himself had once used the elevator in restoring a fractured arch, but it was through a wound which complicated the fracture. Inflammation ensued, pus formed and infiltrated its way along the coronoid and opened into the mouth. However, the patient recovered in six weeks. This experience, which was typical of the period, was calculated to make surgeons cautious in following Ferrier's example, even in the modern period. If we bear in mind, that in all direct fractures, the skin and soft parts at the point of injury are badly damaged by the direct blow which has caused the fracture, we can readily understand that a slight flaw in the asepsis is likely to be followed by infection of the sub-aponeurotic connective tissue of the zygomatic fossa, which may lead to purulent infiltration and final necrosis of the broken fragment or cicatricial ankylosis of the lower jaw. While all these fears are almost groundless and have no reason to be in the mind of the aseptic operator, they are nevertheless possibilities in general practice that can not be disregarded; hence, the simple and ready methods that can be applied safely by all practitioners are still in demand. Unfortunately, the procedures hitherto described, which aim at reduction without cutting or penetrating the tissues, are not reliable. For instance, Duverney (1751) claimed that he had succeeded in forcing the displaced arch into position by the pressure of the finger in the mouth. That reduction by this method is impracticable was demonstrated long ago by Malgaigne, and any one who will try to reach the zygoma by this route will soon convince himself of its fallacy. The difficulties in the way of success by this method are well exhibited in the following case reported by Bellamy (*Lancet*, London, 1872, 1, 186):

"A. B., aged 40, a man of unhealthy hydrocephalic aspect, applied at the hospital in January, 1872, with a severe bruise (the result of a blow with the fist) of the left side of the face; inability to open the jaw beyond a certain distance, and with what he described as a tooth sticking into his cheek.

*Ferrier (of Arles), Bulletin des Sciences Médicales, tom. X, p. 100.

He said he could feel nothing on the left side of his cheek and gum, and that it was 'all cold like.''

"'Examination evidently showed fracture of the zygoma, and most probably fracture of the zygomatic process of the temporal bone, with disarticulation of it from the malar, the dislocated end being forced down toward the cavity of the mouth, having apparently the buccinator and buccal mucous membrane only between its rough extremity and the finger.

"An attempt was made at reduction by passing the finger into the buccal cavity and pushing the end of the bone upward and inward, but the pain was excessive. Moreover, even when something like approximation was attained, directly the masseter was put into action, the fragment assumed its former position. The nervous symptoms seemed to point to pressure and implication of the middle and lower division of the fifth and its inosculations. He appeared to be, moreover, unable to inflate the side of the cheek corresponding to the accident, there being apparently pressure upon the buccal nerve of the lower division of the fifth. There appeared very slight deformity.

"On his next visit (January 5) there was less pain, and he could open the jaw slightly, the other symptoms remaining much the same.''

Duverney also reported a case in which reduction of a simple fracture was impossible by intrabuccal digital compression. He then resorted to an expedient which was more successful. He introduced a small block of wood between the last molars of the jaw. The patient was then ordered to bite as hard as possible on the wedge. This led to a contraction of the temporal with rigidity of the tendon. The coronoid process being partially extended and fixed by the contraction of the jaw, the displaced zygomatic fragment was forced into position by the contracting temporalis.

This is very pretty theoretically, but it is not practicable in the majority of cases, as the pain caused by any contraction of the muscles of mastication is unbearable.

Very recently, P. di Capraris, of Naples, reports a successful reduction of this fracture (Incurabili, Napoli, 1896, XI, 41-46) in a male, adult, æt. 40, whose zygoma was broken at the midpoint by the impact of a stone hurled at him in an altercation. The patient was partially stunned by the blow, but recovered promptly and started in pursuit of his adversary. Failing in his search, he returned home, when he noticed that he could not open his mouth, and that when he tried to force open his mouth he ex-

perienced a most acute pain in the region of the temporo-maxillary articulation. He also noticed a tingling, formication and anæsthesia in the left cheek, evidently from injury to the malar fibres of the fifth pair, and probably from compression of the buccal branches of the same nerve. The patient consulted Di Capraris, who recognized the zygomatic nature of the fracture.

An attempt at reduction was made by Duverney's procedure, with the finger in the mouth, but, failing in this, he decided to pry it by leverage into position through the mouth. For this purpose he availed himself of the handle of Daviel's wooden rectal scoop for the relief of fecal impaction. The handle, which is flat on one side and convex on the other, was wrapped in gauze, and was introduced under the cheek, close to the upper jaw, near the last upper molar. The lever was then forced upward and forward toward the arch. After the third effort he had the satisfaction of prying the fragment into position, and all the symptoms and pain experienced by the patient disappeared as if by enchantment. The patient opened his mouth widely, the anæsthesia, the pain and the deformity disappeared. Di Capraris saw the patient two years afterward, and he appeared to be entirely well, with no perceptible disfigurement. No efforts were made to maintain fixation of the broken fragments after reduction.

Di Capraris appears to be well satisfied with his procedure, and it is so simple that is worthy of trial in any uncomplicated case, at least as a preliminary measure. Should it fail in effecting the reduction, or should a redisplacement follow with further movements of the jaw, then the next method of election would be the procedure that I have described in relating my personal experience. This method, which I would designate as the method of subcutaneous reduction and fixation by wiring, is in every sense simple and practical in its application. In the majority of the cases, I believe, it can be applied without a general anæsthetic—cocaïn anæsthesia by Schleich's infiltration method being sufficient. It is certain to accomplish its purpose, and has the decided advantage of leaving no noticeable scar.

Stromeyer (quoted by Albert and Di Capraris) also suggested a procedure which consists in hooking the displaced fragment with a long tenaculum introduced through the skin. This may succeed in some cases, but like all the bloodless

methods that have been described, does not provide against relapse or secondary displacement, and in this way is inferior to the simple procedure that I have practised and described, I believe, for the first time.

SERO-DIAGNOSIS OF TYPHOID FEVER.

By DR. E. M. DUPAQUIER, New Orleans.

Since the month of September, 1894, when the lofty report of Roux before the International Congress of Hygiene at Buda-Pesth spread all over the world the startling news that diphtheria was successfully treated by serum-therapy improved by Roux himself, there is hardly a subject of practice which commands more attention than the sero-diagnosis of typhoid fever, the result of recent researches by R. Pfeifer, Koll, Max Gruber, Herbert E. Durham and Fernand Widal.

It is a simple and rapid procedure, within the reach of almost everybody, not requiring much laboratory material. It is sufficient to have pure cultures in bouillon of Eberth's bacillus, which can be kept during several weeks; a microscope, with an immersion lens; and a few drops, or even one single drop, of the patient's blood.

Fig. 1.

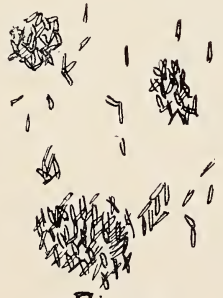


Fig 2.

From Bull. de l'Acad. de Méd. No 27, 1896.

If one drop of the pure culture of Eberth's bacillus is examined with the microscope, a number of bacilli are seen *isolated* and *in motion*. (See Fig. 1.)

But, on the contrary, if one drop of the culture, mixed with serum from the blood of a typhoid fever patient, is examined, the bacilli are seen in clusters and separated masses, stuck together and motionless. (See Fig. 2.)

The agglutinative reaction is characteristic.

This is not the proper time to enter into details concerning the procedure itself, though it remains a simple and rapid one after all; what should be emphasized now, is not only the capital result in distinguishing from genuine typhoid or Eberthian infection, the many other infectious conditions accompanied by fever, which puzzle the best clinicians, but the possibility of now settling this long debated question among us of the typho-malarial and long continued fevers of this country. It is with great interest that the writer is watching the trials now going on in Algeria and Madagascar by the French—their troops being affected with fevers which they are anxious to recognize—and which may probably not differ very much from our own. Not only will those particular documents and reports be of capital importance to us on account of the circumstances just mentioned, but the writer is glad to announce that pure cultures of Eberth's bacillus have been promised him. As soon as he knows where and how to get them his colleagues will gladly be informed through the columns of the JOURNAL.

UNUSUAL SYMPTOMS PRODUCED BY THE RŒNTGEN RAYS.

BY W. E. PARKER, M. D., NEW ORLEANS.

This case is reported because the symptoms apparently produced by the X-rays have not been reported as resulting in other cases, and would seem to show that the rays have a direct effect on some tissues, and can even produce an active inflammatory process. And, too, from the account given me by my patient, electricity would seem to have been stored by prolonged exposure—but this may have been due to his imagination.

On the 1st of June I was consulted by Mr. T. W. M., who had been shot by a former employee through the left inferior maxilla, the bullet passing through the ramus. The hæmorrhage was slight, and I simply removed two small pieces of bone that were loose, and dressed the wound. The bullet wounded the tongue, and I believed that it had passed to the opposite side. He did nicely until the third day, when he had a temperature of 101 deg., and opened his mouth with difficulty. There was some swelling on the right side, and I thought that an abscess was forming around the bullet. The next day the

swelling was more marked; he could scarcely open his mouth at all, and that evening his temperature was 102 deg. I sent him to the Hotel Dieu that evening, saying that I would open the abscess the next day and remove the bullet. That night the abscess ruptured into his mouth, and for two days he spat pus. He made a prompt and uninterrupted recovery without surgical interference. He went to Chicago the latter part of June, and decided to try the X-rays. At this time he was and had been well for some days. At the first sitting (July 1) he was exposed for twenty minutes, with no result as to the bullet. That evening he felt very well, but the next day felt badly. July 3 he was exposed to the rays for forty minutes. That evening he again felt well, but the next day was seen by two surgeons of note, who thought that an abscess was probably forming around a loose piece of bone.

At this time his face was swollen and red about the seat of injury and the region exposed. The next day he again felt better and again was exposed to the rays for forty minutes. That evening he still felt well, but complained of a pricking sensation in the left half of his tongue. The following day, July 5, his neck and face were more swollen and inflamed. July 6 he felt better, but the condition of his neck and face was unchanged. His physicians persisted in the belief that the condition was due to an abscess around bone and not the rays, so he consented to another trial, lasting one hour, with a similar result. On the 9th of July he was exposed for the last time, the duration being one hour and twenty minutes. The exposed parts seemed to be more inflamed the next day and there was a rise of temperature to $100\frac{3}{5}$ deg. Mr. M. became so convinced that the trouble was produced by the rays that he decided, very sensibly, I think, that if the bullet did not bother him that he would not trouble it. On July 20 he was shaved for the first time in several days, and says that as the barber shaved the left side of his face he felt a shock that made him think that his face had been cut, and was surprised when he looked into the glass and found that it was not. He says that for two days he could distinctly feel a current of electricity if he put his hands to his head. The inflammation about his face and neck gradually subsided after the exposure to the rays was stopped. When he reported to me, about the 25th of July, the skin was

peeling over the exposed parts and the swelling had disappeared. He has continued to improve and at this time is perfectly well.

I believe that the rays were responsible for the localized inflammation, as it began soon after he was exposed and disappeared after they were discontinued. I think that we can certainly say that it was not due to an abscess forming around bone. An interesting feature of this case is the fact that he always felt better on the day of exposure, but felt badly the next day. The bullet was not found even after three long exposures and two shorter ones, with what were supposed to be "fast" plates. The abscess ruptured while he was asleep, so he *may* have swallowed the bullet. At all events, it is not giving him any trouble.

That the Rœntgen rays will ultimately be of great service to all surgeons, no one can now have much doubt. At present they are being largely used to locate foreign bodies and in diseases and injuries of bone. That electricity is given off in such a quantity that a decided effect can be felt was clearly shown a few days ago in a case that I exposed to the fluoroscope. As soon as the Crooke's tube was lighted he complained of it. In this case I could distinctly see the bullet and bones of the region involved.

REPORT OF A CASE OF COMPOUND COMMINUTED FRACTURE OF RIGHT SUPERIOR MAXILLARY AND OF INFERIOR MAXILLARY.

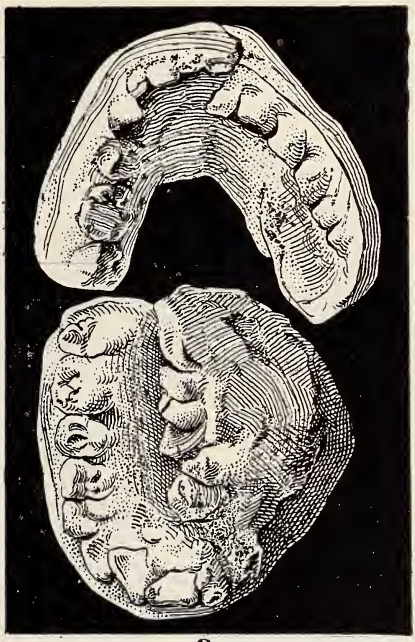
By JOHN CALLAN, M. D., New Orleans.

The subject of this report is a boy aged about 12 years. He received a kick in the face from a horse. On inspection, 15 or 20 minutes after the injury was received, a lacerated and contused wound of chin, starting at median line and extending 1½ inches to the right, was found; also a contused wound of face below junction of malar and superior maxillary of right side.

On manipulation the wound of chin was found to communicate with a comminuted fracture of inferior maxillary. The main line of fracture ran up and through the separation between the central and lateral incisors of right side. The gum tissue was completely lacerated through and down to the alveolar process. The larger fragment—that of the left side—was displaced upward and inward. (See Fig. 1.)

All the teeth except the right central incisor being firmly imbedded in their sockets, enabled me, after reducing fracture, to hold the fragments in position by drawing silver wire around necks of the right and left lateral incisors.

On manipulation of upper jaw was found a comminuted fracture of the palate and alveolar processes of superior maxillary.



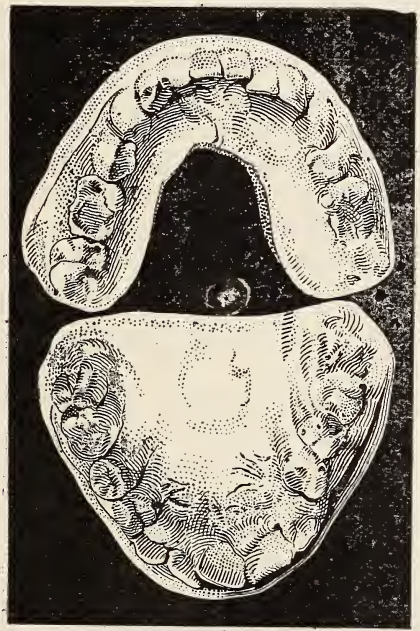
The fragments were crushed in so as to almost obliterate the right half of the vault of the palate (see Fig. 2). The canine tooth was completely knocked out and part of left lateral incisor. The remainder of the teeth from canine were fixed in their sockets, but with the crowns looking almost toward their fellows of opposite side. By pressure with the finger the teeth and alveolæ could readily be returned to their proper places; the fragments of the palate process could be pushed upward and outward and the vault could almost be fully restored. On removal of the finger the parts would immediately return to the malposition. I could devise no means to hold these displaced

parts in proper position. In this dilemma I sought the assistance of Dr. Andrew G. Friedrichs, but when he arrived some hours later it was impossible to get as much as a lead pencil between the boy's teeth, owing to the œdema that had taken place in the meantime. It was agreed that the doctor would return when the swelling subsided and would then take an impression of the parts with modeling compound, from which he proposed to make a hard rubber splint to hold the parts in position.

On the third day erysipelas set in, but by the vigorous use of quin. sulph., tr. ferri chloridi and liq. plumbi, we soon eliminated that element of danger. On the seventh day we invited Dr. F. to come and take the impression, which he did very skilfully. The next day, eighth after injury, Dr. F. brought a hard rubber splint (see Fig. 3), made like a plate for false teeth, but having in addition a deep groove to fit over and around the teeth of both sides of upper jaw. This forced the fragments into line and held them firmly. The boy could now articulate freely and

could take abundant liquid nourishment. The wire around the teeth of inf. maxillary began to irritate them, and Dr. Friedrichs made a Kingsley's splint for the fracture of inf. maxillary (see Fig. 4). This splint covered all the teeth of lower jaw, and contained a stout steel wire which was bent so as to come outside and parallel to the cheeks, and extended almost to lobe of ears. By means of rubber adhesive plaster drawn around these steel

5.



6

bars, and under the chin, the fracture was fixed as firmly as if in a vise. This was of great service in the case as it permitted the dressing of the external wound without disturbing the fracture.

About the seventeenth day pus was detected in right cheek. An incision was made, and about a teaspoonful of pus was discharged. Some pieces of necrosed bone were removed from this wound, also from wound of chin. The upper splint, or plate, was retained in position for four weeks from the eighth day; the lower one for four weeks from the fifteenth day. These

splints were removed three times during the four weeks for the purpose of inspecting the progress of repair.

Figures 5 and 6 are taken from impressions made since the recovery of the patient, and show clearly the good results obtained.

PREVENTIVE INOCULATIONS IN CASES OF CHARBON IN ANIMALS.

By P. E. ARCHINARD, M. D., Bacteriologist of Louisiana State Board of Health.

In view of the recent developments of the anthrax disease in a number of localities in this and neighboring states, it might be interesting to the medical practitioner to know exactly what can be done against this and analogous animal diseases by preventive inoculations. The more so, as in nearly all these cases it is to the medical authority that farmers and other stock breeders look for information on this subject.

Anthrax, charbon, splenic fever, the Siberian plague, etc., has been found to exist to a greater or lesser extent in epidemic or sporadic forms in nearly all civilized countries; in England, France, Hungary, Germany, Russia, India, Persia, and also the United States, notwithstanding the opinion to the contrary of eminent medical and bacteriological authorities. In its treatment nearly all the drugs of the pharmacopœia have been employed, with little or no satisfaction, and its cure is still to be looked for. Luckily, however, what is perhaps of more importance, its prevention has been attempted and satisfactorily practised for a number of years in France and elsewhere by the vaccination first discovered and vulgarized by the immortal Pasteur.

This vaccine is nothing more nor less than filtered bouillon cultures of the bacillus anthracis, developed at a temperature of between 43 deg. and 45 deg. C. (109 deg. to 113 deg. F.), for a greater or lesser period of time. It is manufactured and placed on the market, by the Pasteur Institute of Paris, France, and can be obtained in tubes containing 10, 15 or 25 doses from the distributing agents of this institute. In New Orleans a supply is kept constantly on hand. The vaccine comes in two different strengths, called respectively "first" and "second" vaccine, both of which must be administered hypodermatically

to the same animal; No. 2 from twelve to fifteen days after No. 1, in order to fully protect the animal. An ordinary hypodermic syringe can be used for the purpose. The dose varies according to the size of the animal; in sheep and hogs the usual dose is 1¼ to 1½ decigrammes (1 to 2½ minims); for cattle, horses and mules from 2½ to 3 decigrammes (4 to 5 minims). Under no circumstance must vaccine No. 2 be administered unless vaccine No. 1 has been introduced at least twelve days previously. The inoculations are usually practised about the middle of the thigh for sheep and hogs—the right thigh for No. 1 vaccine, and the left for No. 2; in cattle, the vaccine is introduced back of the shoulders, and in the horse above the clavicles.

Healthy animals after vaccination show at times general symptoms with more or less local œdema and swelling, but these last only a short time and get well of themselves. Animals already infected with the disease sometimes die from the vaccinations. The use of preventive vaccinations does not of course dispense with the proper disinfection and sanitation of contaminated localities, and the isolation and destruction, if needs be, of infected animals.

TOOTHACHE.—A satisfactory remedy for the relief of this unfortunately common ailment is always acceptable. Dr. Gills, of Briançon, has reported to the Société de Thérapeutique de Paris, as quoted in the *Therapeutic Gazette*, that he has rapidly relieved toothache due to dental caries by means of an antiseptic solution, with which the mouth is to be washed out four or five times. His formula is:

Boiled hot water, 4 parts.

Van Swieten's solution, 1 part.

Any tooth wash, q. s. to correct taste.

As Van Swieten's solution is merely a 1 to 2000 solution of bichloride of mercury in water with a very small proportion of alcohol, the mouth wash is simply a hot, aromatized 1 to 10,000 solution of bichloride.

N. O. Medical and Surgical Journal

Editorial Department.

Chas. Chassaignac, M. D. Isadore Dyer, M. D.

THE PHYSICIAN AS A CITIZEN.

There are many excellent reasons why the physician should take active part in the solution of the political and social problems of the day.

He, above all others, depends upon the general prosperity of the State and the community in which he lives. Aside from the fact that his inclinations and training make him wish the good of others, his own interest causes him to desire what will assist in the general welfare. If the population is made thrifty, well-behaved, and successful financially—his fees are paid, he is prosperous. If the people are illy governed, vicious, and consequently poorly off, he necessarily gets little remuneration and lacks much comfort.

Other things being equal, physicians as a class can be particularly trusted in aiding to govern because they are not prejudiced against any certain class or controlled by any special portion of the community. They have clients, good and bad, among all walks of life, all nationalities, and those of all creeds.

The physician comes in closer contact with poor as well as rich than any other man, and is better able to determine the wants of the generality of the people, and, as a natural consequence, is peculiarly fitted to suggest proper plans and methods for filling those wants and leading to the greater good of the greater number.

What is generally thought of the medical man who takes an interest in politics and what is his duty in the premises is stated so plainly and with such common sense in a recent editorial in the *Philadelphia Polyclinic* that we reproduce it almost *verbatim et literatim:*

"That an unreasoning prejudice—and all prejudices are

unreasoning—exists against the participation by physicians in political and sociologic agitations is an undeniable fact. We do not now refer to the scheming and office-seeking of place hunters with medical degrees, but to that legitimate co-operation with one's fellow-citizens in behalf of social or economic measures believed to be of benefit to the community, which, according to the prejudices spoken of, is to be forbidden to physicians only, of all classes of the community.

"Of course there have been notable exceptions. Dr. Joseph Warren, who fell at Bunker Hill while in command as general of the Massachusetts troops, and Dr. Benjamin Rush, no less eminent in the Continental Congress than in his lecture-room, occur to every one. But what may be forgiven to the dead, or to men of genius, is denied to the living, or to those whose less commanding position and abilities render them more amenable to discipline by popular censure. Nor is the laity alone responsible for this feeling; many physicians share it, and look askance upon any colleague whose public spirit leads him into opposition to the powers and wrongs that be.

"In this state of public and professional opinion, what is the duty of the individual physician? Shall he yield to public sentiment, which punishes its violation by curtailment of practice and income, or shall he pursue the even tenor of his way, fulfilling his duties as man and as physician to the best of his ability? It is a difficult question to decide.

"There is no doubt that medicine requires not only close and constant devotion to study, but that the physician shall be within ready call of those to whom he has undertaken to minister. It is quite evident, therefore, that engrossment in public matters and the undertaking of a large share of the direction of the political movements is incompatible with the active practice of the profession. So much being granted, however, it is also quite evident that a physician may, without detriment to his professional studies, and without neglect to his patients, give a portion of his time and thought and action to the public welfare; how much and how applied, circumstances and individual discretion must determine.

"As the physician's habits of research, his endeavors to trace the cause and study the mechanisms of the disorders of the human frame, peculiarly fit him to trace the causes and study

the mechanisms of the disorders of the social organism; and as his experience in combating disease of the human body fits him to pass upon the wisdom of measures proposed to prevent or relieve social distress, his active participation in public affairs should be welcomed by all classes.

"But to return to the question of how that physician should act, whose interest in the welfare of his fellow-men leads him to desire to do his share toward bettering the social environment, yet who knows that the penalty of running counter to the prejudice of the community is loss of a part of his income; it will depend upon which consideration is, or must be, the weightiest. If he need not depend upon professional earnings there is no obstacle to his doing as he prefers. In the other case, his first duty is to earn a livelihood for himself and his family; this being provided, his own character will decide how far he is willing to forego ease, comfort and position for the sake of doing what he considers his duty to do for his compatriots or for mankind at large.

"What should be the attitude of the profession toward physicians who strive to perform their civic duties is easier determined; it ought to be one of encouragement, sympathy and active support, professionally and personally. That it is not such is a matter of every-day observation—and of reproach."

FREE CLINICS AND CONTRACT PRACTICE.

The whole system of to-day's civilization from the sociologic standpoint resolves itself into the occupation of the well-disposed rich in making provision for their fellow human beings less fortunate.

Community laws are directed at the control of crime and lesser evils, while moral laws are directed at the prevention of poverty and the care of its victims. Meantime physical conditions regulate to a greater or a less degree their hygiene and well-being.

In this way the public is protected from itself by itself.

Exactly as prisons and penitentiaries act as the means of fulfilling legal punishments, while they serve a moral purpose as well, so asylums have arisen for the care of infants, the aged, the infirm, the indigent, for the sick and the insane.

The solution of the problem of maintaining the sociologic balance in this way began. It was the community response to the community need. Hospitals came into existence as a necessity, erected and established for those too poor to afford medical care and attention, and for those indifferent to their physical ills and their consequences.

It was at first the provision made for the poor, with a view of concentrating the medical attention needed.

The beneficent charity of individuals able to make such disposition of their money enlarged these opportunities for the relief of afflicted poverty. The usefulness of the attention given was expanded, and provision was made for a proper medical service.

The community demand, at first met by private charity, finally developed in its importance until the city and State have to-day recognized both the necessity and the righteousness of proper hospital facilities.

With a growing civilization these have gradually been supplied in a proportionate measure. The needs of the pauper public have been everywhere supplied by hospitals of varying architectural and hygienic completeness and magnificence.

Advantages have been so provided that they are grateful to the public.

When the need came for the medical care of the ambulant pauper sick, outdoor services were established in connection with the large hospitals, and even independently, in which this new phase was provided for.

Hospital methods have steadily improved, until the system is almost scientific in its usual execution. The visiting medical and surgical staffs are usually composed of the most intelligent of the medical fraternity in the community.

Their best attention is customarily bestowed upon a desirable hospital service, and this receives the full benefit of the most recent medical and surgical developments—even if experimental.

The public at large has not been slow to appreciate all this and both indoor and outdoor hospital services are to-day annually patronized out of all proportion to a possible pauper population.

Little or no restriction has, until now, been made, and the evil of the abuse of hospital privileges, with the abuse in the attendance upon the free clinics, have grown menacing.

The constant augmentation in the numerical status of the medical profession with the annual college output brings forth as constant a complaint of the meagreness of practice.

Yet it is this very medical profession, in part, or entire, which encourages the factors responsible for the paucity of patients.

The abuse of the free clinic, together with the contract practice system, are together largely responsible.

From a beginning as the solution of a necessitous charity, the public free clinic has become an abuse, which places a premium upon dishonesty. In the name of charity, those more than able to pay impose upon the good offices of the visiting or the resident staff.

Institutions existing under private endowment in a large measure are able to prevent or decrease imposition, but where civic or State funds support the hospital, this is found sufficient excuse for the ever-growing imposition, difficult to suppress.

It is time for some thoughtful and intelligent survey of the situation and of the remedy.

The public in nowise resents the glaring notices, such as "For Paupers Only." Some more stringent step must be taken. In some of the large cities the clinic, or dispensary, requires the patients to present a certificate of their poverty, endorsed by some one or two reputable citizens. This is a questionable step, as it discriminates and deprives deserving but unknown patients of needed attention.

The State of Massachusetts, we understand, makes it a misdemeanor for any one to advantage himself or herself of free hospital attention unless actually deserving. This would deter many, but it seems a law difficult of administration. With such legal support, however, and a few routine questions as to the occupation, address, circumstances and conditions of life, etc., a beginning could be made not unpromising in result. In this way it might be possible to clear away much of the present class of undeserving applicants.

Here in New Orleans the contract system of medical practice is in a large degree responsible for the abuse of our clinics.

It is not to be wondered at, when it is considered that fully 20,000 people have organized for the purpose of lowering the standard of the medical profession by putting up their medical

attention at auction, to be knocked down to the lowest bidder for the annual contract.

Contract practice stultifies the ambition and intelligence of the physician who is party to it, in letting out his skill and ability at a commercial valuation, at times ridiculously inconsiderate.

So it is that cheap work is rated as cheap workmanship, and many of those who are subscribers to the contract system find their way to the hospital clinic for "*better attention.*" It is no unusual thing for the clinic patient to request the physician in charge to put on the back of the prescription some such endorsement as "Mrs. X, member of the Hybrid Benevolent Association No. 46," with the comment that the druggist would charge for the prescription unless this endorsement of their claim to membership were in evidence.

This should be stopped!

Among ourselves, to our own advantage, we could, if we would, so raise the standard that it would be unworthy for any of us to engage in contract practice.

This factor eliminated, the task of the solution of the abuse of our clinics would be somewhat easier.

In this day of difficult struggle for an existence, when one-half the world is doing the work for the other half, there should be a just discrimination in favor of those who most need community help. Instead of immoral—we mean indiscriminate, therefore not honest, therefore not moral—charity, we would have the administration of a true beneficence, acceptable and accepted as it is conceived and bestowed.

DELIVERANCE FROM THE YOKE OF CONTRACT PRACTICE.

The profession recognizes that practising under contract for benevolent associations is a grievous burden. It works injury more particularly to the young physician and the general practitioner; they would necessarily obtain many reasonable fees from individuals well able to pay them, who now profit by their servitude. It is the doctor who is the valuable feature of a benevolent society, and he is the one least benefited.

As the system is well established in this city it is very difficult for the beginner not to fall a victim to it. Yet it should be

abolished, and we suggest to our local readers to ponder upon the subject. The Parish Medical Society should study the question.

An object lesson furnished by the profession of Brussels should be taken to heart. It may lead to an earnest and intelligent effort on the part of physicians here and elsewhere to free themselves.

The associations of Brussels, it seems, are banded together, and possess great power; they treated their physicians about like "society doctors" are treated elsewhere, and the latter finally resolved to rebel. They formed a union also. They wisely gathered their strength, and when ready they struck at the associations. They not only struck at them, but they actually went on a "strike" against them.

We get the history of the effort chiefly from a report of the special commissioner of the London *Lancet*.

In July, 1895, the medical strike began and the strike is still continuing. The Brussels Medical Union, or, to use the continental term, the Medical Syndicate, consisted at that time of 430 members out of 450 to 500 medical men living in Brussels. The syndicate now counts 453 members. During a whole year of arduous struggle there has been no backsliding. The Brussels Syndicate, as already explained, was founded on the understanding that each member should pay three francs for postal or current expenses and should render himself liable to meet special levies that were not to exceed, however, $20 in any one year. The three-franc subscription for some time covered all expenses in spite of the strike. But as the year wore on it became necessary to make a strike allowance to the twenty medical men who had thrown up their posts as medical officers of the mutual associations. For this purpose a sum of about $1500 was required and it was decided to make a levy of $5. In a few days the requisite sum was in hand. This occurred last December, and in January the medical men on strike received from their union full compensation for the loss they had incurred by resigning their position. A fresh levy will shortly have to be made and a further strike allowance paid, but the sum required will not be so large. Three out of the twenty medical men have so improved their position that they require no further strike allowance. The medical men on strike received from their

union exactly the same sum as they would have received had they continued to serve the benefit societies, and the cost of management for collecting and distributing this sum did not exceed $15. These figures, more eloquently than any words, describe the perfect discipline and organization of the Brussels Medical Syndicate. The strike has now lasted over a year. So far as the medical profession is concerned the effect of the strike has been to greatly increase the strength of the medical union and the unanimity of its members. It has had the further effect of encouraging the formation of medical unions not only in other parts of Belgium, but in various other countries. What, on the other hand, has been its effect on the benefit societies? They have managed to hold together in a lame and weak manner. The process of disintegration has commenced. A medical service with makeshift medical officers can not last forever. The Brussels associations have hunted far and wide to find medical men to take up the work of the twenty practitioners who were on a strike. In their distress they accepted the service of the first-comer. One of the medical men they engaged proved to be an inveterate drunkard, and there were so many complaints made against him that an association had to dismiss him after a short term of service. Another of their medical officers was found so incapable that he had also to be discharged. The associations had likewise secured the services of two medical men from the provinces. One had not practised for twenty years, and the other was half paralyzed. The latter employed a young assistant, who, however, came to the Medical Syndicate and offered to leave his employment at once if some other occupation could be found for him. Another medical man in the service of the associations had been expelled from his university, and was hiding himself in a little village abroad where the officers of the mutualists went and fetched him to help them to resist the medical strike. They further secured the services of a medical man who had stolen instruments when at college and was consequently boycotted by his fellow-students. Such is the style of the black sheep who are willing to act against the interests of the profession and take the place of the devoted men who are on the strike. Still there were some exceptions; here and there the service of a really competent and respectable man was obtained.

Such was the case when the salary of about $1000 was paid to their chief medical officer, though previously to the strike the highest salaries given by the associations only amounted to less than $400. It will be remembered that a dead set was made against this officer by the Medical Syndicate. He was cu wherever he went. Medical men refused to be in the same room or café with him. He was driven out of the civic guard because the whole medical staff threatened to resign if he was not called upon to quit the corps. The result was that the medical man in question had to give up his post as medical officer of the associations, had to apologize to the Medical Syndicate, enroll himself in the union and pay toward the maintenance of the strike he had at first attempted to thwart. * * * It will be readily understood that, so long as the Mutualists can only obtain the services of medical men of dubious character and doubtful capacity, the process of disintegration already begun will progress more and more rapidly. The fact that respectable physicians will not serve these benefit societies is in itself the best of object lessons for the public. Naturally the Mutualists themselves do not care to be attended by the tag-rag and bob-tail of the profession. Thus it has come about that though the twenty competent and respectable medical officers employed by the Mutualists before the strike were fully occupied, now that they have only ten medical men at their service, these ten men have not enough work to do. Thus the medical service has broken down, to the very great dissatisfaction of the members of the benefit societies.

VACCINATION IN PERSONS PREVIOUSLY ATTACKED BY SMALL-POX.

The experience of Dr. O. Tomoda, jail physician of the prefecture of Sendai, Japan, reported in the *Sei-I-Kwai*, of Tokio, would have the tendency to make us believe that the protective effect of one attack of small-pox against further infection of the system by that disease lasts only a certain length of time and not forever. That is, if the effects against a repeated attack of small-pox are analogous to those noted concerning subsequent vaccination.

Of the large number of prisoners vaccinated by Dr. Tomoda,

484 had previously suffered from small-pox, as was clearly established by the presence of typical scars. Over half of the vaccinations, or 53 per cent., in these subjects failed. The significant feature of the report, however, is this: while in those who had had small-pox *ten* years or less before the vaccination there was not a single successful result, although there were seventeen of those individuals, yet in such persons as had had the disease *seventy* years or more previous to the attempted vaccination, 66.7 per cent. gave a successful result.

The successful results began in those who had had small-pox from ten to fifteen years before, and the ratio almost steadily increased with every decade up to the large proportion of successful vaccinations mentioned above as having been reached in those who had lived long enough to allow seventy or more years' time for the wearing out of the protection.

The practical deduction would be, provided always that resistance to small-pox is comparatively like that to vaccination, that persons having suffered from small-pox over ten years back should be vaccinated just as we advise revaccination to those who have not had it done for a certain number of years.

This suggests a line of study and research to those interested in the subject.

Medical News Items.

Dr. Hy. William Blanc, of this city, died in Asheville on July 25, 1896, at the age of 35. His health had been gradually failing for several years, and he had been unable to do any professional work for two or three years, yet, young as he was at the time of his retirement, he had already been a professor and the dean of a medical faculty.

After graduating at Tulane he had studied dermatology for some time at other medical centres. Not long after taking up the practice of his specialty in this city, he was appointed lecturer on dermatology by his *alma mater*, being already visiting dermatologist of the Charity Hospital. He was one of the

founders of the New Orleans Polyclinic, and taught dermatology in that institution.

When he became concerned about his health he resigned his position in New Orleans, removing to Sewanee, whose equable climate he hoped would better suit his condition. He was made dean of the medical department of the university at that point and did justice to that honorable position until his weakened condition warned him that he must cease work.

Dr. Blanc was not only bright, but intellectual, had been a good student, a faithful worker, and was attaining eminence when his labors were stopped by physical decline at the very beginning of his prime.

He had at one time been a collaborator of the JOURNAL and even after his departure from New Orleans contributed interesting articles to its pages.

We regret him and sympathize with his family in their grief.

THE FOLLOWING APPOINTMENTS were recently made by the Faculty of the Kentucky School of Medicine:

Dr. Louis Frank, Lecturer on Clinical and Operative Gynecology.

Dr. Henry E. Tuley, Lecturer on Obstetrics.

Dr. Carl Weidner, Lecturer on Physiology.

Dr. W. Ed. Grant, Lecturer on Anatomy.

Dr. Ewing Marshall, Lecturer on Physical Diagnosis.

Dr. T. C. Evans, Lecturer on Ophthalmology, Otology and Laryngology.

THE DATE OF THE MEETING of the Mississippi Valley Medical Association has been changed to September 15, 16, 17, 18, in order to permit the members and their families to make a pleasant tour through the Yellowstone Park.

Members of the association in St. Paul and Minneapolis are formulating plans for the special Yellowstone Park excursion trip, to leave on the evening of September 18, arriving in Mammoth Hot Springs, in the Yellowstone Park, on the following Sunday, returning to St. Paul September 27.

The cost of the trip, including all expenses west of St. Paul, will be announced in due season, but the figure will be a very

favorable one. It is desirable that there be a party of 100 or more, in order to obtain the benefit of the special train service. It is urged that members who desire to join the party should send their names to Dr. C. A. Wharton, Chairman of the Committee of Arrangements, St. Paul, as early as possible.

Another Confrère has Departed for Europe.—Dr. Ernest Lewis goes to attend the International Congress of Obstetricians and Gynecologists. No doubt the doctor will manage to enjoy himself in a general way while adding to his vast store of knowledge professionally, and contributing to the interest of the congress.

Dr. P. Michinard has returned, with his family, from a trip of rest and recreation in the mountains of Virginia. A large supply of energy has been laid in, and he is ready to wield the knife or the curette as of yore.

Dr. John B. Elliott, Jr., is back from a tour of the Old World, looking much improved from the same. He declares in favor of Paris as *the* place to see above all.

Dr. Isadore Dyer is enjoying a vacation in Canada, but as he travels a good deal on his wheel, and the roads are not always good, he still has the occasion now and then to practise a little dermatology. We hope the lesions will not be deep enough to be outside of his domain.

Dr. R. Matas is away for a much needed rest, and also, almost a paradox, to do some literary work in Washington.

Dr. J. H. Bemiss is also absent; so is Dr. H. S. Cocram. Dr. Bruns has gone on his usual vacation. We stop counting the absentees, as it makes us feel lonesome, and prefer to note the return of Dr. C. J. Bickham.

The Third Annual Meeting of the American Academy of Railway Surgeons will be held in Chicago, September 23, 24 and 25, 1896. Those interested in the advancement of railway surgery are invited to attend and participate in the discussion.

The officers of the academy are: President, John E. Owens, M. D., Chicago, Ill.; first vice president, L. E. Lemen, M. D., Denver, Colo.; second vice president, F. L. Peck, M. D., Clinton, N. Y.; secretary, Webb J. Kelly, M. D., Galion, Ohio; treasurer, C. B. Kibler, M. D., Corry, Pa.; editor, R. Harvey Reed, M. D., Columbus, Ohio.

The American Electro-Therapeutic Association will hold its annual meeting on September 29 and 30 and October 1, 1896, in Allston Hall, Boston, Mass.

The Brunswick Hotel will be the headquarters of the association during the meeting.

This meeting promises to be a great success. Interest is shown in all quarters; a large attendance is promised. Many candidates of national reputation are proposed for membership, so that an amendment to increase the limit of members becomes a necessity. The best talent has already announced papers at this early date, material almost sufficient to make a programme for the session of unusual interest.

The Post-graduate publishes a supplementary number which contains the announcement of the New York Post-graduate Medical School. The latter makes a good showing for the institution; the session of 1895 to 1896 was attended by a larger number of students than ever before followed the lectures. During the fourteen years that the school has existed, 4921 students have attended. Many men of ability and reputation are on the faculty.

The personnel of the Board of Control of the Louisiana Lepers' Home has changed. Dr. Isadore Dyer, Dr. H. J. Scherck, and Capt. A. A. Woods resigned, and their places were filled, by appointment of the Governor, by Mr. M. D. Lagan, Judge F. McGloin, and Dr. A. A. Carruth.

In reference to these changes, the *American Medico-Surgical Bulletin* states that "the medical members of the old board believed they had been hampered in their work and did not have full control of the department;" and further, it ascribes the change in management to the fact that the Legislature refused to authorize the purchase of the site. The latter point had nothing to do with the resignations. Our contemporary comes

nearer the correct facts in the sentence we quoted above. The truth of the matter is that the president of the board, Dr. Dyer, and the others who resigned with him, felt that they were hampered not alone in the medical department of the Home but in the management of the entire institution. Appreciating the lack of harmony, the president resigned and two of his associates followed suit, not the entire board as the *Bulletin* infers.

Dr. Jerome Cochran, of Mobile, died in Montgomery, Ala., on August 17, 1896, of Bright's disease. He was born in Fayette county, Tennessee. He lived in Mississippi when quite young, and had been practising in Mobile for many years. He was 64 years of age.

Dr. Cochrane was senior censor of the Alabama Medical Association, and had a national reputation as an expert on epidemic diseases. He had charge of the Health Office of the State of Alabama for many years, and had been much commended for the able manner in which he handled the yellow fever epidemic in 1878, and at Decatur in 1887.

The Mobile Medical Society took charge of the remains upon their arrival in Mobile and attended the funeral in a body.

Abstracts, Extracts and Miscellany.

Department of Surgery.

In charge of Dr. F. W. Parham, assisted by Drs. E. D. Martin and F. Larue.

APPENDICITIS.

Professor Dieulafoy describes a form of appendicitis due to calculi, which are neither fecal concretions nor foreign bodies

The lumen of the appendix, he says, is too narrow to allow the passage of fruit seeds or scybala.

The chemical analysis and stratified arrangements of these concretions plainly show that they are true calculi, formed and developed in situ, just like renal or biliary calculi.

Catarrhal appendicitis, which pathologically resembles the

former only in the obliteration of the appendicular lumen, presents the same clinical symptoms.

Professor Dieulafoy has established his theory of appendicitis on the transformation of the appendix into a closed cavity. The microbes, which are normally its inoffensive guests (coli bacillus and streptococci), then become virulent. He cites the experiments of Klecki, who demonstrated that microbes, in an intestinal loop artificially transformed into a closed cavity, became virulent, causing peritonitis without perforation.

This cavity formation causes the attack which is checked by phagocytosis, or by the re-establishment of the appendicular lumen. There most frequently remains in the iliac fossa, adherent bands, encysted abscess, etc.

Peritonitis, with or without perforation, can rapidly supervene. For Professor Dieulafoy "appendicitis is not only infectious, but infecting," most alarming and fatal symptoms being produced by the toxines elaborated in the appendicular laboratory, both perforation and peritonitis being absent during operation or at autopsy.

Professor Dieulafoy extols surgical interference, and concludes by saying that "one never regrets thus treating appendicitis, but often repents tardy or non-intervention.—*Bulletin de l'Académie de Médecine.*

THE INTRADERMAL SUTURE.

Mr. Poncet, addressing the members of the National Medical Society of Lyons on June 1, 1896, spoke of the intradermique suture, which he has been using for the past two years. This method of suturing, in which the derma alone is included, consists in an alternate sub-epidermal basting of each cutaneous border with fine silk thread. It is a continuous overstitch suture.

Mr. Pozzi, who had seen it used at the Johns Hopkins Hospital at Baltimore, described it two years ago to the Société de Chirurgie (February 7, 1894).

It was thought then that this mode of suture was of foreign birth. It was willingly termed the American suture, and Mr. Pozzi believed its origin was due to an Irish surgeon, Kendal Franks ("On Subcuticular Suture," *British Medical Journal*, 1890). Mr. Daurand, a pupil of Poncet, has recently cleared

up the real origin of this method in his thesis on "The Intradermal Suture."

In his bibliographical researches Mr. Daurand found that on the 20th of August, 1851, Chassaignac drew the attention of the Société de Chirurgie to this variety of union, which he fully described the following year in the *Bulletin de Thérapeutique* under the heading: "A New Method of Suture for Uniting Wounds; Cellular or Subcutaneous Suture."

Thus it is that Chassaignac is the father of the intradermique suture, and Mr. Poncet proposes to call it Chassaignac's suture. This suture is particularly applicable for wounds in exposed regions, such as neck and face, following removal of goitres and lymphatic glands.

It produces a linear cicatrix scarcely visible, and its esthetic advantages are such as to demand its use in whatever region. Mr. Poncet presents a young woman from whom he removed, but nine days previous, a large median goitre, in which case he performed the intradermal suture.

Union is so perfect that, even after such a short interval, the scar, whitish and linear, is hardly apparent.—*Lyon Médical.*

Miscellaneous.

Clinical Notes on Rheumatism.—Diseased joints, clinically denominated rheumatism, can be arranged in definite classes and exhibited in the form of distinct types, thus giving the practitioner a guide for distinguishing his cases and, therefore, for treating them in the proper manner. These notes are gathered chiefly from the writings of Dr. J. Grasset, Dr. L. Lercboullet and Dr. G. Lyon, all of them up-to-date authorities.

A.—Classification.

I.—*Cases* presenting first chills and fever, like a general infectious disease; then, articular pains, with swelling and redness; then again, inflammation moving from one joint to another. Atypical fever. Rapid anæmia.

(*a*) Acute cases. No visceral complications. (*b*) Same with

visceral complications, endo or pericarditis, pleuritis, meningitis, pneumonitis, dyspepsia. (*c*) Mild cases. (*d*) Subacute cases.

II.—*Cases* presenting no fever or any general symptom. Swollen and deformed joints. Pains in the joints, about the joints or pains not connected with a joint, pains in the muscles, in the viscera, neuralgic pains. Connection with either a previous attack, of acute articular rheumatism or with inherited arthritism, or with a disease, of general nutrition (bradytrophic) or with a prolonged stay or residence in the damp.

(*a*) Articular pains. No visceral complications. (*b*) Same with visceral complications. (*c*) Same with chronic arthropathy. Hydrarthrosis. (*d*) No actual pain. No swelling or deformity, but from a previous attack of acute articular rheumatism, or from inheritance, a *well-established rheumatic diathesis.*

III.—*Cases* presenting secondarily one or several painful and swollen joints; progressive and stubborn œdematous infiltration; suppuration, ankylosis or very slow resolution. Occurring in the course or decline of infectious diseases, such as gonorrhœa, scarlatina, typhoid.

(*a*) Acute stage. (*b*) Chronic stage.

B.—Treatment.

Cases. I.

(a) Acute cases. No visceral complications.

In these the specific virtue of sodium salicylate is remarkably exhibited. It is the remedy as quinine is in malaria and mercury in syphilis; so much so that, if it fails in any case of acute articular rheumatism, the nature of the latter may be looked upon as suspicious and considered as one of these indefinite cases of pseudo-rheumatism, infectious in nature, but which never yield to the salicylate.

It is even claimed that since the introduction of the salicylate in therapeutics (1877) the usual dreadful complications have been considerably diminished, and that rheumatic meningitis, so common in former days, is hardly heard of at present.

Its administration must be watched carefully because it must be given in rather large doses to be actually effective and has to be continued for a long period to prevent recurrence; if it is not *rapidly eliminated* it becomes dangerous.

In the cases now being considered fever is high. The salicylate must be administered at the outset and at the rate of eight grammes a day for adults. One gramme is dissolved in one tablespoonful of water or syrup and taken in half a glass of vichy or milk every two hours.

The following solution could be made beforehand, each tablespoonful containing one gramme of salicylate:

Sodium salicylate	8 grammes.
Syrup of peppermint	20 cubic cent.
Distilled water	100 cubic cent.

The dose indicated here should be continued as long as the pains persist, and at least eight days after their cessation. It should then be discontinued and taken up again, as shown further.

From the day the first dose is given it must be ascertained by means of ferric chloride that its elimination by the kidneys is *rapidly* taking place. A few drops of the tincture of ferric chloride mixed with some of the urine, filtered, passed two hours after the taking of the first gramme of salicylate, should already give the characteristic dark violet reaction.

It usually takes not more than twenty-four hours to remove the pains by means of salicylate given in that manner. Then it is wise to cease giving it for thirty-six hours, and, if after that period the ferric chloride reaction still shows in the urine, it is a case of slow elimination, and therefore the dose of salicylate must be reduced and its administration must be interrupted in the future.

Indeed, the salicylate has its inconveniences, and even its dangers. It may cause agitation and insomnia, which a dose of 2 grammes of bromide at night easily conquers; or ringing in the ears and obtusion of hearing; it can, also, cause nausea, vomiting, visual troubles, delirium, and even, but exceptionally it is true, cardiac troubles. It commonly determines congestion of the kidneys, entailing temporary albuminuria when the kidneys are in good order; but when the latter are damaged, its accumulation in the economy determines a grave toxic condition. It should, therefore, be the rule to examine the urine of a patient before prescribing salicylate. Yet the presence of albumen is not a contraindication, for intense cases are at times accompanied by albuminuria, and Talamon points out that it is pre-

cisely in those cases, with high temperature attended usually with albuminuria, that the salicylate is a success. But, when there existed nephritis prior to the attack, it is wise to abstain from giving the drug. The use of salicylate, when tolerated, must be continued, like quinine in malaria, for a period after the attack; in the cases now being considered, one month is not an excessive limit. Of course, interruptions of from four to eight days are necessary, according to the degree of elimination.

During the periods of cessation, give two or three wafers per day, each containing—

Lithium benzoate	20 centigr.
Sodium bicarbonate	80 centigr.

It is well to remark, finally, how well children bear the salicylate on account of the usual integrity of their renal filters. A child under six years can take from two to three grammes; from six to ten years, it can take from three to four grammes; and over that age, from four to five grammes.

The predominating importance of the use of salicylate in this class of cases has called our attention to it first. There remains to say a few words about other agents in the treatment.

Alimentation.—This is also important. Nothing is preferable to milk, for instance, a glassful every two hours. If milk, unfortunately, be not digested or taken easily, give light soup, eggs, well cooked green vegetables, fruit preserves. When milk is taken, the addition of fifty centigrammes of sodium bicarbonate to each glass, and the free use as a beverage of Vichy water gives the patient one more advantage, that of the undoubtedly favorable action of sodium bicarbonate on the blood cells. Also, it eliminates uric acid and prevents the formation of fibrinous exudation which is liable to be deposited on the cardiac valves.

Purging.—If the bowels are not moving freely, a glassful of Hunyadi water every other morning is necessary.

Applications.—Nothing is better than the following ointment, rubbed over the painful joints:

Salicylic acid	2 grammes.
Vaseline	30 grammes.

Cover with rubber sheeting or oiled silk.

(*b*) *Acute cases with visceral complications.*

Of course, in any case of acute articular rheumatism all the *serous* membranes must be carefully watched, chiefly the endocardium. In fact, when we speak of complicated rheumatism, we may practically infer the complication is endocarditis, so commonly is it the case.

As soon as the heart sounds are clouded and prolonged, energetic derivation is at once necessary, Mark here, however, that the fly-blister is absolutely contraindicated in the acute stage of fever, while it is the suitable thing at the period of decline. But use wet cups, from twelve to fifteen every three or five days, over the region of the heart. When repeated scarification alarms the patient, use an ice bag day and night over the region of the heart, laying first a piece of absorbent cotton next the skin; or, use, with a compress, applications of chloroform, of alcohol 90 deg.; or, with the spray, ethyl chloride. Derivation by any means and all means must be continued until the last trace of endocarditis has disappeared.

Physical as well as mental rest is essential.

Pure milk alone is the best food recommended. If not digested, order butter, cream cheese, eggs, vegetables *en purée* and fruit preserves.

As a beverage, allow nothing but pure water with or without the addition of pure milk. Sugar of milk (lactose) in large quantity is a good diuretic; taken with the beverage it is more reliable and pleasant a diuretic than any ptisan.

Internally, sodium salicylate is to be continued as long as the articular swellings and alterations in the heart sounds persist. Two remedies are given to act especially on the heart, viz.: Digitalis and salicylate of quinine.

Every three or four days, for 24 hours only at a time, give this preparation:

Powder of digitalis, recently prepared from fresh leaves, the ribs of the leaves being all removed, 50 centigr.; allow to infuse during 15 minutes, with water at + 80 deg. C., 120 cubic cent. Add some aromatic, if preferred. During intervals give three wafers daily, each containing salicylate of quinine, 20 centigr.

If this treatment fails to prevent a lesion of the valves, the latter indicated by a grating murmur, a fly-blister is applied

over the heart region and kept from healing for several weeks. Here the case passes into another class, which is to be considered later on.

The treatment of the other complications is not in any way different from the usual one in other circumstances, except that as long as the joints are swollen and painful the specific sodium salicylate should not be abandoned.

Cold baths are particularly indicated in all cases of complication from pneumonia or meningitis on account chiefly of the high temperature usual in such cases.

(*c*) *Mild cases.*

Every three hours, from 6 A. M. to 9 P. M., give a plate of soup or a cup of pure milk.

Half an hour before these light meals give, in a wineglassful of vichy (Hauterive), one dose of antipyrine of 30 or 40 centigrammes.

At night give a dose of Dover's powders of 50 centigrammes.

(*d*) *Subacute cases.*

Ordinary meals. Mixed alimentation. At meals drink milk as a beverage, but immediately after each meal give a wineglassful of fine claret. As longs as pain exists give, during twenty days of each month, at each meal, one teaspoonful of—

Lithium salicylate	10 grammes.
Water	300 cubic centim.

When pain is attenuated or has disappeared, give instead, in the same manner:

Potassium iodide	10 grammes.
Water	300 cubic centim.

Apply locally on the joints tincture of iodine, blisters or the actual cautery.

[To be Continued.]

A remedy for tape-worm, attributed to Newington, mentioned in the *Medical and Surgical Reporter:*

℞	Hydriodate of potassium	gr. xxxvi.
	Iodine	gr. xii.
	Water	℥j.

Sig.: Ten drops three times a day.

Nothing is said about how long it is necessary to keep up the treatment.

POISON IN POTATOES.—Soldiers in various garrisons of Germany and France have at various times been made sick by potatoes. The symptoms were usually purging, vomiting, abdominal cramps, prostration, sometimes blueness of the lips and dilatation of the pupils; in the severe cases there was a rise of temperature even up to 103 deg. The patients always recovered. A chemical investigation revealed the fact that the poisonous effects were due to the alkaloid solanine when contained in excess. Old potatoes that have sprouted, in the period from March to July, new, unripe potatoes, and withered and softened ones are the most dangerous, as they contain the largest percentage of solanine.—*Centralblatt für die Gesammte Therapie*, in *New York Medical Journal.*

MIXTURE FOR LOCAL ANÆSTHESIA, the effect from the application of which will last about five minutes:

℞

Chloroform	10 parts.
Ether	15 parts.
Menthol	1 part.

—*Le Gérant.*

THE following is used at the *Vanderbilt Clinic* for vaginitis.

℞

Pulv. aluminis, Zinci sulphatis, Sodii biboratis, Acidi carbolici	of each ʒj.
Aquæ	ʒvj.

Mix. Use a tablespoonful to each quart of water as a vaginal douche.

BERNHARDT'S REJUVENATOR.—*The Practitioner* speaks of a liquid from which Sarah Bernhardt is said to get unfailing refreshment, adding that Mme. Bernhardt calls it an *eau sédative.* The formula is given, so that it is easy to recognize the well-known and ancient combination of ammonia, camphor, salt, alcohol and water originated by Raspail, and called by him (and not by Mme. B.) "eau sédative." This lotion is so generally known in France that Mme. B. can scarcely ever have claimed it as her own. It is extensively used here in New Orleans for sponging in cases of fever, and, diluted with water, as a remedy for cephalalgia. A good thing it is, too!

Green-room Echo.—Professor Malgaigne's smile was often sneering and his irony bitter. On one occasion he was discussing some obscure points in the thesis of an unfortunate candidate who was answering in a hap-hazard sort of way. Becoming impatient, the questioner finally said: "Well, sir, I must have at least one good answer! Can you tell me what it is to create?"

"To create!" stammered the astounded young man, "is to make something out of nothing." "Very well, sir," was the rejoinder, "we shall create you a doctor."—*Sabin Mathie.*

At the present time public attention is centred on the currency question.

The relative merits of the two metals—gold and silver—form the salient points of difference between the competing political parties of the nation. In this connection a pertinent question arises, viz.: If the present value or *day* rate of gold be one hundred cents on the dollar, what should the *nitrate* of silver be? Ans. $Ag.NO_3$.

The Hypnotic Effect of Pellotine.—Prof. F. Jolly reports his clinical tests with Pellotine muriate (the new hypnotic introduced by Dr. Heffter, of the Pharmacological Institute of Leipzig, and manufactured by C. F. Boehringer & Soehne, of Mannheim) in the *Therapeutische Monatshefte*, June, 1896. He employed Pellotine muriate, preferring this salt on account of its ready solubility in water; his experience covers forty cases at the Charité Hospital of Berlin. In one-half of these cases the drug was administered during the day, either by mouth or subcutaneously; doses of $\frac{1}{3}$ grain (0.02) caused languor and sleepiness in quiet patients, but usually this effect followed only after $\frac{3}{5}$ to $\frac{9}{10}$ grain doses—causing several hours' sleep within $\frac{1}{2}$ to 1 hour after administration. In some cases the pulse rate was decreased, in others not at all, and only at the beginning of sleep. In painful affections (lancinating pains in tabes, neuritis and ischias) sleep was also induced, but an anæsthetic effect was only occasionally noted before and after sleep. In excitable and delirious patients, the above mentioned doses were insufficient; even 2 grain (0.12) doses did not produce sleep, but had a calming effect—lasting all day—on the patient.

In twenty cases the drug was administered at night as hyp-

notic, and ¾ to 1½ grains (0.05–0.08) doses were found to equal in effect 15 grains of trional or 22 to 30 grains of chloral.

Of side-effects, excepting the inconsiderable slowing of pulse-rate, a few patients exhibited giddiness and a feeling of unrest before sleep ensued; a few also complained of similar feeling upon awakening in the morning. In several cases the hypnotic effect was not produced, but in these other hypnotics had also proved ineffectual. In no instance were serious side-effects noticed.

Prof. Jolly's report is generally favorable, and he concludes that he will continue the use of this new agent and will render additional report after more extended trials.

Book Reviews and Notices.

Transactions of the American Orthopedic Association. Ninth Session, held at Chicago, September, 1895.

This volume comprises a large number of interesting papers, by some of the foremost American and foreign authorities.

In addition to excellent papers by American writers, there are some valuable contributions by Brodhurst, Little, Adams, Walsham, of England, and Grattan, of Ireland, making this one of the best volumes published by the American Orthopedic Association. P.

History of European Morals. By William Ed. Hartpole Lecky, M. A. D. Appleton & Co., New York, publishers.

The changes that have taken place in the moral standard and type is the author's theme, taking up the time from Augustus to Charlemagne. He first considers the natural history of morals; then, studying the effect on morals of the pagan religion at the time of the early Greeks, closes the first chapter with the results of the conversion of Rome.

The second volume, which deals with the period from Constantine to Charlemagne, begins by treating of the moral effi-

cacy of the Christian sense of sin and ends by considering the position and the influence of women in the long series of moral revolutions which have already been described. The latter is one of the most interesting points discussed, although the entire work is highly enjoyable to a student.

A good index to the two volumes is a feature to be appreciated, allowing easy reference to any particular subject. That a work of this order should have reached a third edition is a better recommendation than any further consideration we might give to it in the small space available. C. C.

A System of Surgery. By American Authors. Edited by FREDERIC S. DENNIS, M. D., Professor of the Principles and Practice of Surgery, Bellevue Hospital Medical College, New York, assisted by JOHN S. BILLINGS, M. D., LL. D., D. C. L. Complete in four imperial octavo volumes, containing 3652 pages, with index, 1585 engravings and 45 full-page plates in black and colors. Volume IV, 970 pages, 441 engravings, and 23 plates. Price per volume: $6.00 in cloth; $7.00 in leather; $8.50 in half Morocco, gilt back and top. Lea Brothers & Co., Philadelphia, publishers.

The fourth volume, now issued, completes this valuable work. It will be seen how important this volume was to the completion of the series by glancing at the table of contents. It contains some articles not to be found in any other as yet published book on surgery. It is, therefore, in the scope of its subjects strictly up to date. Moreover, every article is handled in a masterly manner; so that this work can not fail to give the student an adequate presentation of the surgery of the day.

We have in a previous article reviewed this system at considerable length. We can say that it has steadily increased our admiration as one volume after another has come into our hands, until we are willing to pronounce this fourth volume the best presentation of the subjects treated that we have seen in any volume of surgery. The addition of the article on Rœntgen Rays in surgery is timely, and shows the great enterprise of the editor and publishers when it is remembered that our first knowledge of the subject came to us through even the newspapers only eight months ago. We wish specially to commend the article by our friend Dr. Matas, of this city. It is a topic of great

interest to us in this section, and no one could be found better fitted to present the subject than Dr. Matas. We congratulate not only Dr. Matas, but the editor and publishers as well, on the admirable article which has added so materially to the value of the volume.

We regret that space forbids our speaking at greater length in order to point out the many excellencies of this system of surgery; we shall content ourselves by saying briefly that we consider Dennis' system the best work on surgery before American surgeons to-day. P.

The Multum in Parvo Reference and Dose Book. By Henri Leonard, M. A., M. D. Detroit, 1896. The *Illustrated Medical Journal* Company, publishers.

This is a recent edition of the Dose Book. The present edition is printed on very thin paper and is bound in red leather, round corners, so as to make it specially light and handy for the pocket. Besides the doses of some 3500 preparations being given, it has numerous tables and will be found a handy pocket companion.

PUBLICATIONS RECEIVED.

System of Surgery, edited by Fred. S. Dennis, M. D.; Lea Bros. & Co., New York and Philadelphia, publishers, 1896.

Transactions of the Medical Society of the State of New York, 1896.

Climate and Health, United States Department of Agriculture, W. F. R. Phillips, M. D., editor.

Thirty-second Report of the Boston City Hospital, 1895 to 1896.

Report of the Managers of the Observatory of Yale University, 1895 to 1896.

Archives of Clinical Skiagraphy, illustrating applications of the new photography to medicine and surgery, London, 1896.

Practical Points in Nursing, by Emily Stoney; W. B. Saunders, Philadelphia, publisher, 1896.

Manual of Obstetrics, by W. A. Newman Dorland, A. M., M. D.; W. B. Saunders, Philadelphia, publisher, 1896.

Reference and Dose Book, by C. Henri Leonard, M. A., M. D.; Illustrated Medical Journal Co., Detroit, publisher.

Professional Education in the United States, by A. Erskine Miller; United States Bureau of Education, publishers, 1896.

Discurso por el presidente, Dr. Antonio de Gordon y de Acosta, de la Real Academia de Ciencias Médicas, etc., Habana, 1896.

A Treatise on Appendicitis, by John B. Deaver, M. D.; P. Blakiston, Son & Co., Philadelphia; A. Hawkins Co., New Orleans, 1896.

Student's Medical Dictionary, by Geo. M. Gould, A. M., M. D.: P. Blakiston, Son & Co., Philadelphia; A. Hawkins Co., New Orleans, 1896.

The American Academy of Railway Surgeons. Report for 1896, edited by R. Harvey Reed, M. D.

Diet For the Sick. By Miss E. Hilbard and Mrs. Emma Drant. The *Illustrated Medical Journal* Company, Detroit, publishers, 1896.

Twentieth Century Practice. Volume VIII, Diseases of the Digestive Organs. William Wood & Co., New York, publishers, 1896.

Reprints.

Orrhotherapy in Diphtheria, by E. Fletcher Ingals, A. M., M. D.

Clinical Examination of Deaf Mutes, by S. T. Walker, M. A.

The Technics of the Trial Case, by A. Edward Davis, A. M., M. D.

Conclusions Drawn from Experiences in Pelvic Surgery, by A. V. L. Brokaw, M. D.

Experience of Several Physicians with Sero-Therapy in Tuberculosis, by P. Paquin, M. D.

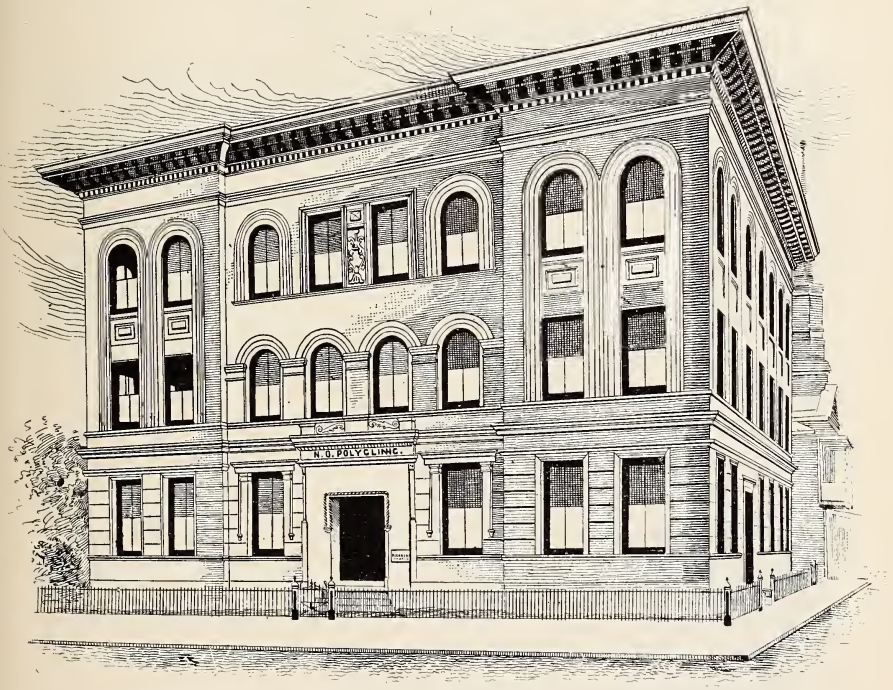
As It Used To Be.—Patient—"Why do you watch the thermometer on the wall so closely?"

Nurse—"Because the doctor said if the temperature riz, I should give you the medicine."—*Ex.*

THE NEW BUILDING OF THE NEW ORLEANS POLYCLINIC.

The building recently completed for the New Orleans Polyclinic at the corner of Tulane avenue and Liberty street adds a feature to the medical and educational institutions of this city.

It is a substantial three-story brick edifice, of a pure style of architecture, finished in stucco. Numerous large windows on all sides ensure abundant light and ventilation, while a modern heating apparatus will give comfort in cold weather.



The ground floor will be used for clinic rooms in addition to the office, the reading room and lavatories. The second floor will be devoted chiefly to clinic rooms. The third floor will be utilized for the various laboratories. In addition, an amphitheatre, with seating capacity of over a hundred, is situated in the rear of the building, so exposed as to get the north light. The entire building is to be supplied with hot and cold water, and is finished off with artistic gas and electric light fixtures.

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Statement of the Board of Health of the State of Louisiana.)

For July, 1896.

CAUSE.	*White.....*	*Colored...*	*Total .....*
Fever, Malarial (unclassified)	3	7	10
" Intermittent	.....	.....	.....
" Remittent	3	2	5
" Congestive	6	.....	6
" Typho	2	4	6
" Typhoid or Enteric	5	4	9
" Puerperal	.....	2	2
Influenza	2	.....	2
Measles	.....	1	1
Diphtheria	1	.....	1
Whooping Cough	2	4	6
Meningitis	5	2	7
Pneumonia	8	14	22
Bronchitis	4	5	9
Consumption	27	47	74
Cancer	11	3	14
Congestion of Brain	3	3	6
Bright's Disease (Nephritis)	12	14	26
Diarrhœa (Enteritis)	18	8	26
Gastro-Enteritis	5	1	6
Dysentery	3	1	4
Peritonitis	4	3	7
Debility, General	1	1	2
" Senile	8	9	17
" Infantile	2	.....	2
Suicide	4	.....	4
Heart Disease	12	9	21
Apoplexy	8	3	11
Tetanus, Idiopathic	.....	.....	.....
" Traumatic	7	4	11
Trismus Nascentium	7	5	12
Hepatitis	4	2	6
Hepatic Cirrhosis	4	.....	4
Uræmia	.....	1	1
Injuries	21	10	31
All Other Causes	127	41	168
Total	327	210	537

Still-born Children—White, 27; colored, 16; total, 43.

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

Death Rate per 1000 per annum for month—White, 19.07; colored, 34.05; total, 23.45.

METEOROLOGICAL SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure	30.13
Mean temperature	83.00
Total precipitation	2.92
Frosts	none

Prevailing direction of wind, southeast.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XLIX. OCTOBER, 1896. No. 4.

Original Articles.

VARIOUS OBSERVATIONS ON MALARIA.

BY DR ST. CLOUD COOPER, FORT SMITH, ARK.

I suspect the amount of literature on malaria will exceed enormously that of any other medical subject. From Hippocrates down to the present day medical men have written about the cause of malaria and malarial diseases, and yet the question is still unsettled.

Surgeon-Lieutenant-Colonel Lawrie in a recent address on the cause of malaria, published in the London *Lancet* of May 16, attacks the theory that Laveran's bodies are animal parasites, and at the conclusion of his address says: "Laveran's bodies are merely the degenerated blood cells which are turned out by the spleen. The precise manner in which malaria acts upon the spleen can only be determined by future observation. All we know at present is that in certain localities and climates, which we call malarious, enlargement of the spleen with fever and anæmia is endemic. * * * Our theory of malarial fever then is that it is produced by the action of malaria on the spleen, and that the production of Laveran's bodies, which are not found in anything like all cases of malarial fever, is one of the effects of the distempered condition of the spleen, of splenitis."

It is my intention to give a few personal experiences occurring in my practice of nearly ten years in a highly malarious locality.

I believe that the water we drink causes more malarial diseases than the air we breathe.

From June, 1886, to October, 1895, I resided at Jefferson, Texas, and practised medicine in the town and the country contiguous thereto. Jefferson is situated in the northeastern part of the State; has a population of 4000; its altitude is about 480 feet above sea level.

Big Cypress Bayou encircles the eastern and southern half of the town. On the north and a mile and a half from the city limits is Black Cypress Bayou. Three miles to the south is Little Cypress Bayou. The three streams run in an almost parallel direction, though they are confluent a few miles east of the town, forming the Main Bayou, which flows into Caddo lake.

These streams have low-lying wooded banks, and flow with sluggish current through low bottom lands. Along these water courses and on both sides are immense shallow lakes, and at places extensive swamps.

The whole country is heavily timbered with pine, oak, sweet gum and cypress, with heavy, bushy undergrowth. In the bottoms, rank vegetation, almost tropical in luxuriance, overgrows fallen and rotting logs.

Here and there are found farm clearings, which, when properly worked, yield abundantly. The upland soil is red and sandy, the low land is rich alluvium.

During the winter and spring months there is an enormous amount of rain, causing the streams to overflow their banks quite extensively and the subsoil water to rise in all the wells of the country.

Half of the town of Jefferson is built on low ground and during high water is overflowed in part; the other half is some twenty to sixty feet higher, varying with the locality.

A rise in the river will cause the subsoil water to rise in all the wells of the town, and during very high water will come within one or two feet of the surface in wells located in the lower part of the town.

Up to 1889 surface wells formed the principal source of water supply. The drainage of the town is bad. Prevailing winds are east and southeast. In spring and early summer the air is saturated with moisture.

During the summer and fall months all kinds of malarial

diseases, from simple intermittent to congestive and hæmaturic types were seen; those living in the lower part of the town and low lands in the country suffering much more than those living on the hill and upland.

The inhabitants and more especially the children clearly showed by their sallow, anæmic faces the effect of chronic malarial poisoning. Whole families were sometimes prostrated at the same time; almost every person examined had evidence of splenic congestion.

In 1889 some enterprising citizens sunk an artesian well 800 feet, getting a fine flow of good, soft, wholesome water.

The people were told to quit drinking water from the wells and use the artesian water; those that did so were soon free from malarial fevers.

Families using the artesian water exclusively were remarkably free from fevers; their children soon lost their anæmic look and sallow hue and became rosy and plump; activity taking the place of fretfulness and listlessness.

I have had a number of my patrons say to me, "Doctor, since I have used artesian water my children have quit having chills and fever, while Mr. A., living just across the street, who depends upon his well in the yard, has some of his folks down all the time with fever."

The fact just stated was one of commmon observation with laity and physician.

Fishing parties going out from Jefferson are careful not to drink any water from the bayou (unless it is previously boiled), for past experience has convinced them of its fever-producing qualities, no matter how much ice is used to make it palatable.

A fisherman friend of mine, who for years has lived on the bank of the bayou, completely surrounded by swamps, gets his drinking water from a fine clear spring of cold water. He does not suffer from malaria unless his spring is contaminated by heavy rains washing soil into it, or through an overflow.

He is careful to drain away all surplus water, and in case the spring is covered by high water he has learned from past experience not to use the water from it for several weeks after the water has receded, giving the sun time to thoroughly dry the surrounding soil, and after frequently cleaning it out.

He is a firm believer in his spring keeping off chills and fever.

In a family of four adults using water from a shallow well, situated within twenty feet of a ditch which drained a marsh, I have seen all the family sick at very near the same time; two with simple intermittent, one with intermittent and diarrhœa, and the third with malarial dysentery.

The one with malarial dysentery—a young woman 25 years of age—was seen in consultation on the fourth day of illness. Her sickness began with a chill and profuse sweats, soon followed by frequent copious discharge from the bowels. At times the discharge would be tinged with blood, with pieces of raw flesh-like bodies floating in the vessel. From a strong and fairly vigorous woman of a few days before, her appearance was so changed I scarcely knew her. There was great prostration, wrinkled face, pinched corpse-like countenance, pulse frequent and feeble, suppression of urine, extremities cold, mind perfectly clear up to the moment of death. Several hours before death these frequent copious discharges would pass unconsciously. I have never seen a well-marked case of malarial dysentery, or, as called by the older writers, hepatic flux, get well, and I have seen several like the above.

Since that time this family has used artesian water, and have had no further malarial fever; before this time some members of the family were sick off and on during the summer and fall months.

I would see quite a number of cases of malarial hæmaturia and had used quinine by mouth, hypodermatic injection and by the rectum; strychnia, ergot, digitalis, various diuretics and other medicines recommended by the various writers on the subject. My mortality under this treatment was fully 50 per cent. The December, 1891, number of the New Orleans Medical and Surgical Journal contained an article on the treatment of this disease by Dr. E. H. Martin, who advocated the withholding of quinine and the administration of turpentine. Since that time I have given no quinine when called to see a case of malarial hæmaturic fever, relying wholly upon ten drop doses of turpentine, in adults, and, if there is much nausea, hypodermatic injection of morphia. This treatment has been so successful in my hands that it is a pleasure now to be called to a case of this disease, whereas before I positively hated to go and wished they had sent for the other fellow.

Leading physicians in Jefferson and surrounding country use this treatment with gratifying results.

I am confident that I have seen quinine produce a chill followed by bloody urine a number of times.

A female patient of mine, whose father was a physician, would have attacks of hæmaturic fever nearly every fall. She was always treated with large doses of quinine, with much gastric disturbance and slow, protracted recovery. I was called to see her during one of her attacks and was told that she had had a chill that morning, and had passed bloody urine several times. She had been given large doses of quinine, was vomiting and presented all the symptoms of this grave disease; the skin and conjunctiva were of a dirty, lemon hue. No more quinine was given and ten-drop doses of turpentine in capsules every two hours were commenced. She had no more chill and the next morning she was passing clear urine freely. She and her household are now loud in the praise of the efficacy of turpentine in black jaundice.

I could relate a good many cases in which this remedy has converted an apparently hopeless case, fast hurrying to the grave, into a smiling and grateful patient. So marvelous has been its action in my hands that it seems almost criminal to me to treat a patient without it.

In all pneumonias in this locality I gave quinine freely. This, with perfect quietude, with windows and doors open, was usually the only treatment of this disease. I have seen several cases of severe hæmoptysis in pneumonias, which I attributed to the malarial element complicating the disease.

Acute nephritis is quite common in this locality, and I am satisfied that I have seen several cases caused by malaria.

Those suffering from malarial intoxication have periodical congestion of lungs, stomach, intestines, liver, spleen and kidneys. I have frequently prevented an outbreak of malaria by administering quinine and calomel in patients complaining of pains in the various abdominal regions.

In many cases consulting me for "biliousness," I have by the use of the thermometer found a slight rise in the temperature.

I have also had quite a number of cases complaining of pain behind the sternum, or pain in the upper part of right breast, quickly relieved by quinine, arsenic and iron.

A negro patient of mine would have violent clonic muscular contractions every time he had a chill and fever.

I have met with two cases of malarial coma in adults, one case remaining unconscious for sixty hours, both recovering.

I do not remember ever seeing a well marked malarial rigor occurring after 11 P. M.

I have found that quinine given between the hours of 3 A. M. and 8 A. M. has more influence than given at any other time of the day.

Summer and fall would furnish quite a number of continued fevers, called by the older physicians slow fever, swamp fever, or typho-malarial fever, lasting from three to six weeks, and sometimes longer.

If called at the beginning of these fevers I would give a calomel purge and quinine in full doses for three or four days; if at the end of this time the disease still progressed, I stopped quinine and treated them as typhoid fever, by giving very little medicine, save thymol in two-grain doses, in gelatin-coated pill, and urged the patient to drink plenty of water.

Thymol prevents the dry tongue, and, like turpentine, keeps down tympanitis. Given in pills properly gelatin-coated, it does not dissolve until it reaches the intestines, acting as an antiseptic.

I have seen these continued fevers assume all the clinical features of typical typhoid fever with hæmorrhage by the efforts of the medical attendant to clear the tongue by giving repeated doses of calomel.

I know there is nothing new or original in this paper; I have simply detailed a few observations and experiences common to many physicians living in the tropical and semi-tropical climates, and my interpretation thereof.

THE ADVANTAGES OF SULPHOVINATE OF QUININE IN HYPODERMIC TREATMENT.

By ALEX. K. FINLAY, New Orleans.

Since the introduction of subcutaneous medication some thirty odd years ago its use has steadily increased until the hypodermic syringe, which was then regarded as a mechanical curiosity, is now found justly entitled to the distinction of hold-

ing first rank among the implements of the practising physician.

Prompt and effective, the remedy thus applied is not retarded in its operation by enfeebled conditions of the digestive organs. Absorption is rapidly accomplished and the physiological results are exhibited synchronously with the current of the circulation.

In most forms of fever quinine is given with satisfactory results by the mouth in the form of pill, tablet, capsule, powder or in solution.

Conditions are sometimes encountered of a furious febrile character which demand immediate relief and the delay which follows the usual method of exhibition may be either dangerous or fatal.

Generally such conditions respond to hypodermic treatment, and any soluble salt of quinine will prove satisfactory. The bisulphate, the bihydrobromate, the hydrochlorate, all give good results.

These salts are all apt to be followed by serious after-effects, in the shape of abscesses of a persistent and annoying character.

The trouble seems to be caused by the excess of acid, which is needed to make the solutions sufficiently concentrated to be serviceable.

Basic salts are out of the question on account of their sparing solubility, as, for instance, the sulphate, which requires 750 parts of water at normal temperature for solution, the hydrobromate, 54 parts and the hydrochlorate, 34 parts.

A very soluble preparation was introduced some years ago—the muriate of quinine and urea. It was brought to the notice of the medical profession by a large pharmaceutical manufacturing firm, and for a while met with favor. The trouble which invariably followed its use (the production of abscesses) caused it to fall into disfavor, and it has been withdrawn from the market.

The only salt of quinine that seems to possess the merit of free solubility, with freedom from anoying after-effects, is the sulphovinate or ethyl-sulphate. It requires but three parts of water for solution. Its quinine strength is about equal to that of the sulphate, and an ordinary hypodermic syringe will contain a full dose of the concentrated solution.

It is to be regretted that the salt is not better known. The writer could not procure it in this city, and a large New York

wholesale drug firm to whom he applied for a small portion of the drug was unable to furnish or procure it in that city.

It is not very difficult to manufacture, and only needs to be better known to be procurable in any quantity. It is not desirable to dispense it in tablet form, as it is rather slowly soluble in that shape. Gentle warming serves to dissolve the crystals in a few seconds. The solution keeps indefinitely, especially when a small proportion of alcohol is added.

The advantages then of the sulphovinate of quinine are: facility of exhibition in hypodermic treatment from its free solubility and the complete immunity from abscesses following its use.

SOME CLINICAL RECORDS FROM THE CHILDREN'S WARDS OF THE CHARITY HOSPITAL.

By E. D. FENNER, M. D., Visiting Physician Charity Hospital; Lecturer on Diseases of Children, Tulane University.

Vesical calculus is a disorder far more common in certain regions than in others. Its frequency seems to depend upon geological formation to a considerable degree. Thus, Dr. Briggs, of Nashville, was able to report over 200 cases operated upon by himself alone, while I doubt whether the records of the whole Charity Hospital in New Orleans could furnish an equal number. In this city, certainly, stone in the bladder is not common, and it was therefore a matter of surprise to me to have four cases present themselves in the children's clinic within six months. The children were all boys of less than 7 years, two of them Italians and two negroes and brothers. They were all submitted to the operation of supra-pubic cystotomy and three of them recovered. Death was due in the fourth case to complications, as will be shown in the history, and not to the operation itself.

Case 1.—Joe Palermo, aged 3 years, Italian, was born in New Orleans, and was brought to the clinic to be treated for painful and frequent urination and constant pain in lower abdomen. The prepuce was adherent and these adhesions were broken up, and child ordered back to be sounded for suspected calculus, on January 18, 1896. Under chloroform, on that day, a large stone was detected. Patient was admitted to the ward,

but the operation could not be done till January 27. In the interim the attacks of tenesmus were so severe that upon one occasion it was necessary to give anæsthetic to give relief. On January 27, with the usual antiseptic preparation, supra-pubic cystotomy was done, and a stone weighing 35 grains extracted. The bladder was held to the abdominal wall by four silk sutures, the wound was left open for drainage, a catheter being left in for forty-eight hours, after which the urine was allowed to flow out of the wound unaided. Irrigation with boric acid solution and a heavy pad of plain gauze, the skin being smeared with vaseline, constituted the after treatment. On January 30 an eruption of varicella appeared on the patient, but the trouble quickly subsided, and on February 28 he was discharged, cured. Some time afterward he appeared at the clinic with a small discharging sinus at the site of operation. A few days later, however, he passed by the urethra a piece of silk suture incrusted with salts, evidently one of those used to stitch up the bladder which had been overlooked, and the sinus then promptly closed.

CASE 2.—Salvator Espinola, aged 5, Italian, was sent to the ward from Ascension parish, La., where he was born, to be treated for dysuria and incontinence; the urine dribbled away as soon as it was secreted. This had been going on for five months. Examination with a sound revealed the presence of a stone, and owing to his intense sufferings, operation was decided upon, although he had been exposed to varicella. On January 29 an irregular sharp cornered stone, weighing thirty-seven grains, was removed by the supra-pubic route. The child did fairly well after the operation, but the drainage tube was left in for eight days on account of the septic condition of the bladder, which was severely inflamed, as was the urethra. Case was treated otherwise exactly like No. 1. On February 9, temperature rose high and on the tenth, eruption of varicella appeared. The child had all along had some cough, but on February 14 he began to whoop. (The infection was just then making its appearance in the ward.) From this time his condition was bad. The paroxysms were severe and frequent (on February 26 he was having about forty spells a day) and the temperature was continuously high. On the 1st of March, pneumonia was diagnosed in both lungs, and the chest also pre-

sented the barrel shape of emphysema. On March 9 the child died, the cystotomy wound having been completely healed for some time, and the urine being passed by the natural channels.

AUTOPSY a few hours after death. Body emaciated; bladder wound entirely healed; heart normal. Apex of right lung consolidated, and smaller patches of consolidation scattered throughout both lungs. Tissue around consolidated areas anæmic. Anterior borders of middle and lower lobes of right lung very emphysematous. Lower half of upper lobe of left lung collapsed. Spleen enlarged and soft. Liver slightly enlarged and showing evidence of fatty degeneration. Kidneys very hard and scirrhotic, surfaces irregular and presenting stellate cicatrices. Pneumococci and streptococci found in pus from lung.

The condition of the lungs in this child illustrates the diverse effects of whooping cough in its severe form.

CASE 3.—Froby Anderson, aged 5, negro, lives near the city and was brought to clinic on account of tenesmus and dysuria. Mother says the stream is sometimes suddenly cut off. Examination with a sound was made at once and the stone easily found. The mother was permitted to feel the stone herself and at once consented to an operation, which was done on March 7. The same operation and after treatment was employed as in the two previous cases, and the child made an uneventful recovery, being discharged on April 5. The calculus weighed about 38 grains.

CASE 4.—This patient's mother brought in her youngest son, 3 years of age, declaring that he had a stone in the bladder too. The symptoms were the same as in the older child, and the stone easily detected. The woman was again allowed to move the sound about and convince herself of the presence of the calculus. A small stone was gotten out, and the child made an uneventful recovery.

In all of these cases the bladder, after being thoroughly washed out, was filled with boric acid solution till it could be distinctly felt, as a globular mass in the abdominal cavity. The rectal bag was also used. My experience has convinced me that the latter is unnecessary, since the bladder in children is so much an abdominal organ that simple distention brings it well up from behind the pubis. But it can do no harm, if it is not

filled too full so as to injure the bowel, and it serves to steady the bladder.

I was struck by the thickness of the pre-vesical fat (it forms a thicker layer than in adults), and by the extent to which the bladder rises into the abdominal cavity in children.

Supra-pubic cystotomy is, in my opinion, a safe operation in childhood, and should be recommended as the operation of choice, to all except surgeons with a large experience in litholapaxy. It has always seemed to me a mistake for authors to recommend as they do the crushing operation as the safest and best mode of treatment, without explaining that they mean *in the hands of an experienced lithotritist.* Supra-pubic cystotomy is the simplest of major operations, while litholapaxy requires special training and special instruments. The one is available to any fair operator, the other to but a few men.

During the time these lithotomies were under observation, there developed simultaneously in the children's wards epidemics of varicella, measles and whooping-cough. Some of the children had all three diseases, and three cases were afflicted with gangrene (cancrum) in addition.

CASE 1.—Sidney Morgan, 2½ years old, was admitted to ward on November 27, 1895, to be treated for otitis media. In January, 1896, he had varicella and soon afterward developed a violent whooping-cough. On February 23, while he was having from fifty to seventy paroxysms of whooping in the twenty-four hours, he developed measles, followed by pneumonia. He was just beginning to recover from these when, on March 6, an ulceration was noticed on the inner side of his cheek, extending to the gum. An antiseptic wash was ordered, but the condition progressed. On March 10 it was plainly cancrum oris and the next morning I decided to thoroughly cauterize the diseased area. The cheek was swollen and hard and had a faint indication of a black spot about to appear on the skin. The ulceration had extended within the mouth till the gums on both sides were involved. His condition was so bad that I did not dare to give chloroform or ether, but with a 4 per cent. solution of cocaine the surfaces were swabbed and then nitric acid applied on a sharpened stick to every portion of the ulcerated surfaces. After-treatment consisted of frequent spraying with peroxide of

hydrogen, and on the 5th of April he was discharged cured, except for some evidences of whooping-cough which still lingered on.

Case 2.—Allen Moriarty, 2 years old, was admitted into the ward on February 1. His mother was ill in the hospital herself and the child was suffering from a condition resembling meningitis, which followed rheumatism, for which I had been treating him in the clinic. He developed measles after recovering from the original trouble, but escaped the pertussis and varicella. He passed successfully through the measles, but was left with a mild diarrhœa and very much pulled down. He lay in the second crib from case No. 1, and on March 9, two days after the appearance of the ulceration in the mouth of the first child, the nurse discovered that this child had begun to slough around the gums. Thorough antiseptic treatment was immediately inaugurated, but did not control the process, so on the 11th of March he was sent to the operating room along with Sidney Morgan, and under chloroform the ulceration was completely burnt with nitric acid. Bichloride of mercury and peroxide irrigations were practised every two or three hours, and on April 1 we were able to send him out cured.

Case 3.—Lee ——, aged 5, was admitted in September, 1895, for hip disease. His lungs became affected and abscess developed in the hip. In January, 1896, he had chicken-pox, and by February 15 he was in the paroxysmal stage of whooping-cough. On February 1 the abscess of the hip had been aspirated. On March 6 he broke out with measles and the condition of his lungs promptly became much worse, miliary deposits being scattered throughout both lungs. On March 9 cancrum developed and by the 11th the alveolar processes were exposed and the teeth were all loose. He was too weak to stand any kind of cauterization, so that we had to employ antiseptic irrigations and sprays. The ineffectiveness of this treatment was shown by a progressive spread of the disease, and on March 28 he died, completely exhausted and with all one side of his face black with gangrene.

This form of gangrene is very contagious, and it was only by the most energetic washing and spraying of the mouths of other children that the disease was restricted to these three cases, nearly every patient in the ward developing a stomatitis in a

few days. Complete destruction of the diseased area is the only method of controlling cancrum that is sure, and it should be resorted to as soon as the diagnosis can be made.

REPORT OF THREE CASES OF HÆMORRHAGIC MALARIAL FEVER IN PREGNANT WOMEN.

BY C. D. SIMMONS, M. D., DUTCH TOWN, LA.

Any serious disease overtaking the pregnant woman is of great concern to the physician, and especially is this the case in troubles that increase the liability to abortion.

CASE 1.—Mrs. G., 20 years of age, personal and family health record very good. I was called October 10, 1891, and found my patient in the sixth month of her first pregnancy. Her mother informed me that she had suffered from this same form of fever several years previously. She further stated that the physician attending her during her first attack decided that quinine increased the hæmorrhage. Without any regard for her former experience with quinine, I directed that she be given twenty-five grains of the drug in divided doses through the day. The quinine was given and retained. At my visit the next day I found the disease more pronounced than it was the day before. She still had considerable fever, very quick pulse and yellow skin and conjunctiva. The urine had not improved; it was bloody and still frequently voided in small amounts. The quinine was now abandoned. As an alterative diuretic and eliminant, calomel was given. Fowler's solution and digitalis were also ordered to be given, five drops of each every four hours.

Under this line of treatment she soon began to improve, and was not long in regaining her usual health. The stomach and uterus were not irritable, which is fortunate in these cases.

After I had moved to Ascension parish, my friend, Dr. J. B. Shelmire, informed me that he had delivered Mrs. G. of a fine, healthy boy.

CASE 2.—Mrs. D., 19 years of age, family health record fairly good.

About one year before her marriage I treated her for continued malarial fever; otherwise she had been healthy. She

had chronic enlargement of the spleen, for which I had been treating her for some time before her last illness.

On October 15, 1893, I was hurriedly called to the case, and found a very typical train of symptoms, such as chill, fever, yellow skin and conjunctiva, great restlessness and bloody urine. It was plainly visible from the first that she was saturated with toxalbumens. I gave an eighth-grain dose of calomel at my first visit. Quinine was given freely for first two days without any good effects. Fowler's solution and digitalis was given from beginning to end. The case went along without any alarming symptoms until, without scarcely a warning note, the uterus rapidly expelled its contents. The child was lifeless at birth, but did not seem to have been dead very long. Although hot milk, whiskey and strychnine were used freely, the shock proved too great for an already weakened heart; in spite of all she rapidly failed and died.

Case 3.—Mrs. F., 35 years old, mother of several children, family and personal history negative.

I was first called to this case on August 14, 1895. From what I could learn my patient was in the sixth month of pregnancy. She was just warming up from a severe chill when I arrived at the house. Her great restlessness and anxious face told of the terrible battle that was raging within. Unlike either of my other cases, her uterus was very irritable and undergoing strong periodical contractions. With the unfortunate recollection of my second case I decided to do my best to keep the child in its mother's womb. I at once gave one-fourth of a grain of sulphate of morphine with orders to repeat the dose in two hours if the pains did not cease. Fortunately the first dose had the happy effect of quieting the uterus perfectly. The drug was kept up at intervals of four hours as long as the pains returned. One full dose of calomel was given which opened the bowels well; Fowler's solution and digitalis were given in appropriate doses; quinine was administered freely for several days. This line of treatment cut short the attack. She had several relapses, which were promptly relieved by the same course of treatment pursued in the first attack. Finally she regained her usual health and was delivered of a healthy child at full term.

Although three cases of any disease are not enough to draw definite conclusions from, still, in reviewing them I am led to

believe that the pregnant woman will rarely escape death if labor, prematurely or not, occurs during the greatest intensity of the fever. Especially will this be true in such as my last two cases, which were of the severest form of the disease.

I have satisfied myself that quinine is useless, and often harmful in a large percentage of cases in the form of fever under consideration; however, I will not depart from its use altogether, for it certainly does benefit some cases. In my opinion the cases receiving quinine in this disease should be selected ones. To me it seems a rational treatment that the nearer they approach the acute type the better will be the results from quinine. If the chill and fever are pronounced, returning every day or two, the stomach tolerant, with a free flow of urine, quinine will often give good results. But the subacute cases, free from chills, having low fever with scanty flow of urine, do better without quinine. I think my last case in this report was one of acute malaria grafted on the chronic form. This was why I gave quinine so freely, and for this reason do I account for its splendid effect.

MATERNAL IMPRESSIONS.

BY LEE DRIESBACH, M. D., COLLINSTON, LA.

As this age brings us wonderful improvement in the science of medicine, as well as in all other creations of which the Almighty expects the human mind to become master, I am anxious to know what scientific observers have decided as to the reality of maternal impressions. According to my limited knowledge, I am of the opinion that there is still a doubt existing as to the reality of this wonderful phenomenon.

I am seeking knowledge, and wish to give to the readers of the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL the brief history of a case that has come under my observation, one that has so excited my curiosity as to cause me to ask their opinion as to the etiology of this condition.

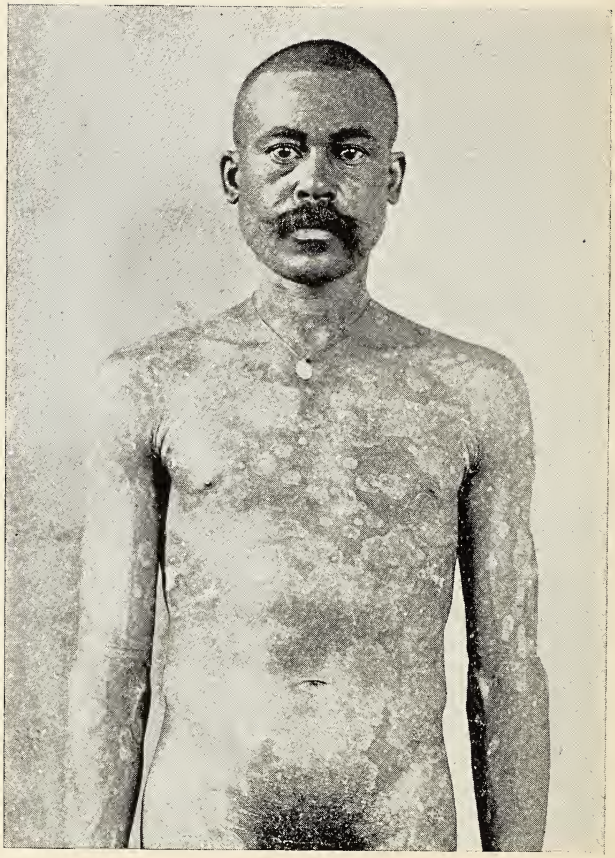
On July 10, 1896, I was summoned to a lady who was in labor with her second child. In due time she gave birth to a male child, in perfect health apparently, weighing about ten pounds. At the proper time after the expulsion of the child I tied the cord, clipped it, and turned the infant over to the nurse. After getting through with the mother, the nurse called

my attention to an abscess, as she termed it, on the child's back. On examination I found a tumor over the region of the kidneys, about the size of a walnut, extending over the entire length of the lumbar vertebræ, and about the same distance transversely, making it about one and a half or two inches in diameter. The covering of this tumor was a thin, smooth, dark-looking membrane; for some distance beyond the edges the parts were œdematous. On percussion and palpation I found the tumor to contain fluid, and with my hypodermic syringe I drew out half a drachm of fluid having the odor and color of urine; the tumor being over the kidneys made this quite significant.

There was also a constant vibration with every inspiration, as if there was some connection with the lungs. This condition lasted about six or eight hours, after which time it ceased, leaving a round, blue tumor. I had never seen anything like this before, and I was without knowledge as to how to get rid of it.

I called in consultation two of our best physicians, and, after a thorough examination we decided to let out the fluid. We got about an ounce of bloody serum. We then introduced a small piece of iodoform gauze and applied a proper dressing, giving instructions not to remove it until our return. About twelve hours later I removed the dressing, and, on doing so, the thin membrane which had covered the tumor came away with the bandage, leaving the most irritated looking ulcer that I had ever seen. Irregular depressions were present in the bottom, and the parts for some distance beyond the ulcer were red and inflamed. The cavity also contained a white, spongy mass of tissue, about the size of a dime, in the centre, which has gradually disappeared. I will state that the odor of urine, which I had thought I noticed the first day, had disappeared on the day that we opened the tumor and let out the fluid. A peculiar thing about this ulcer is that it yielded to treatment so readily.

I will state that the parents of this child, and their ancestors, so far as I could learn, were free from scrofulous or syphilitic diseases. The mother explains the cause of this condition as follows: she states that about eight months previous to her confinement her husband owned a horse with a dreadful sore on its back, caused from the saddle; that she, as would any of the tender sex, decided that she would try to cure this set-fast, as they are called; when her husband would return after riding



HERPETIFORM DERMATITIS FOLLOWING VACCINIA.

this horse, this sore would be very much irritated, and that she would proceed to wash and medicate it; this operation would make her very sick and faint, and she would have to discontinue until she could recover. She states that the ulcer on this horse's back had an appearance like that of her child's back, and that she had a presentiment that her child was going to be born with the same kind of an ulcer on its back, becoming very much worried about the matter.

Such is the brief history of the case as correctly as I can state it. I hope some medical reader may feel interested enough to give his opinion on the subject.

A CASE OF HERPETIFORM DERMATITIS FOLLOWING VACCINATION.

(In the service of Dr. CHARLES CHASSAIGNAC, Visiting Surgeon.)

BY ISADORE DYER, M. D., Visiting Dermatologist to the Charity Hospital, etc.

The multiform accidents attendant upon the several stages of the vaccinia process are varied enough to demand more attention than they have hitherto received at the hands of the profession. Almost from the first twenty-four hours after the lesion of vaccination has been established we find disturbances of the skin. In a former number of this Journal* I have reviewed the series and varieties of eruptions liable to occur.

In the final dissolution stage of the local sore there may arise varieties of the erythema multiforme group, in any of its types, either singly or combined. But in a number of instances I have noticed the unusual occurrence of a persistent eruption, relapsing over a period of months, and lasting as long as eighteen or twenty months in one instance. This has in every case been characterized by a marked symmetry in location, distribution and arrangement. The eruption is constantly of a vesicular or bullous type, the individual lesions varying in size from a pin's head to that of half an orange. The location selected was on the extremities, particularly the shoulders, the neck, and on the chin and forehead.

The distribution has been distinctly upon the extensor surfaces, running down the arms and legs to the very fingers and toes.

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*February, 1896.

The remarkable thing in the eruption is the constant grouping of the lesions, wherever they happen to occur, in patches of herpetiform arrangement. No matter how small or how large the patch, this disposition to group in clusters was persistent. In each definition, then, the eruption is a distinct herpetiform dermatitis in its appearance, occurrence, relapsing and in the character of the lesions individually and collectively.

The "dermatitis herpetiformis" of Duhring, however, is often characterized by the eruption of papules, wheals even, which itch intensely. Itching is seldom present in these vaccination lesions, and beyond the general depression of the patient, there are almost no constitutional symptoms of a subjective nature. In two instances we have found albumin present, even in large quantities; in one case, a child, moist albumin was found for nearly two months in such quantities as 40 per cent.

The etiology of the herpetiform dermatitis is too varied to admit our ignoring vaccination as a possible factor, particularly as the objective evidence in these cases argues the association. In all cases the eruption is slow to disappear and a pigmentation follows, which remains in gyrate serpiginous or irregular outline for months after. It is to be also noted that the eruption is vesicular or bullous from the start, but pustulation does not occur except where the habits of the patient have provoked infection.

The case reported below is interesting from several standpoints. The patient was a negro, well matured, of excellent physical condition. The eruption followed shortly after vaccination, and persisted for quite a time even under treatment. The patient lost weight steadily until convalescence began, when he was quickly restored to a normal state. The unusual extent of the eruption, with the immense bullæ, and the subsequent marking of the skin in scars, are interesting.

Dr. Chassaignac was kind enough to permit me to follow the case in his negro ward at the Charity Hospital until the patient was discharged.

The notes of the case have been prepared for this report by Mr. J. L. Burthe, the attending resident student, to whom all credit for their excellence is due.

Patient was an adult male, aged 34, black. Admitted May 17, 1896. Resident of Louisiana since 1880. This man is

married, has three children living and healthy. Hereditary history is excellent, both parents living; three sisters living.

Patient was vaccinated early in March, the virus producing normal course and effect. On day of admission, patient presented himself suffering from an eruption which he said had appeared in the latter part of March, 1896. It first showed on the inner sides of the thighs, beginning as blisters—with very little inflammation. On examination, the condition present was as follows: A vesicular and bullous eruption, with a general distribution over the whole body, occurring in symmetrical arrangement on both sides of the body. The face was free, as was the scalp.

The tendency of the eruption was to grouping in clusters of from a dozen to three times as many lesions varying in size from a pin's head to those as large as an egg. Even the penis and scrotum were involved. Running over the shoulders and over the upper third of the arm were distinct herpetiform groups—an arrangement which was most noticeable in all the groupings along the extensor surfaces.

The lesions themselves were for the most part clear or containing translucent fluid. In places the contents were cloudy. Where resolution had occurred the walls of the lesions had simply collapsed, broken and left a raw surface with crumpled epidermis as a surrounding boundary. Pigmentation marked such processes as had previously occurred.

The general condition of the patient was fairly good. No elevation of temperature, which was also noteworthy, during the entire attack. Pulse normal.

From the arrangement of the lesions, their distribu ion and the persistence since March, with the immediate previous history of vaccination, argued the diagnosis of dermatitis herpetiformis, which was made.

On May 18 examination of the urine gave the following results: Sp. Gr. 1020; action acid; leucocytes, bladder cells and urates.

The larger lesions were opened, the contents emptied and the following was applied:

℞ Ichthyol ..... ℥ss
Carron oil ..... ad Oi
Ess. Vanilla ..... ℥ii
M. Sig.: Apply.

In two days the whole surface of the body had crusted so as to stiffen the skin uncomfortably.

On May 20, starch baths were ordered every other day, with the instruction that the patient should be soaked for at least half an hour. Locally was ordered:

℞ Bismuth subnitrate ..... ℥iiss
Morphine sulphate ..... gr. v
Acid carbolic ..... min. xx
Liquid vaseline ..... ad ℥viii
M. et Sig: Apply.

This line of treatment relieved the patient quickly. The crusts came off and the surface was consequently exposed at many points. Exudation was quite marked. The same treatment was continued until June 1, with gradual improvement in the patient's local condition. Some of the lesions presented as superficial ulcers, slow to heal, particularly on the glans penis, elbows and knees.

The baths were continued, while the local treatment was changed to—

℞ Acid boracic ..... ℥ii
Lanolin.
Rose water ..... aa ℥i
M. et Sig. Apply.

Successive layers of epidermis peeled from the healing lesions until finally all the evident eruption had disappeared, leaving superficial scars and pigmentation to mark the site and distribution of the eruption.

From the time the lesions were first opened until convalescence began with the healing process, the patient showed marked depression, sleeplessness, and showed signs of emaciation. He was discharged June 15, 1896, cured of the attack.

INTRAVENOUS SALINE INFUSION FOR THE RELIEF OF HÆMORRHAGE AND SEPTICÆMIA.*

By A. J. BLOCH, M. D., New Orleans.

Transfusion, in its strictest application, means the transference of blood from one animal into the vascular system of another. In its modified way, we accept it as the injection of any nutritive fluid, into the arteries or veins, into the tissues or cavities of

*Read before the Orleans Parish Medical Society, August, 1896.

the body. It is with the latter acceptance on which I will dwell to-night, and though I transgress a little from the title of this paper, in order to demonstrate the evolution of transfusion as strictly applied to the intravenous method of saline infusion as generally practised to-day, I trust the society will bear with me, and grant me its indulgence.

* * * * * *

Transfusion of blood is by no means new to our surgical or medical armamentarium. Ovid gives an account of it in his metamorphosis, where he states that the sorceress Media took blood from young, active and healthy young men, mixed it with the juices of vegetables and injected it into the veins of old men, in order to give them renewed life. This may be the earliest conception of the elixir of life, there being some doubt that the decrepitude of age did not mean impotency.

Savonarola, the celebrated Florentine monk, gives an account of the transfusion of Pope Innocent VII, in which blood was taken from two healthy young men and injected into the veins of the Pontiff. The result, however, proved disastrous to his Holiness as well as the generous donors. Numerous instances of transfusion are recorded in the 17th century, by such men as Mayer, Lower, the celebrated Frenchman Denis, Kaufmann, Purmann and others, with much success. From an unfavorable result in the hands of Denis, the operation fell into discredit, and a law was finally passed prohibiting its use, unless the entire medical faculty of Paris gave its consent. This was tantamount to a complete prohibition, and transfusion in France was only a recollection.

In 1825 the operation was revived by Blondell, of London, who experimented on both animals and men. Unfortunately the results were more brilliant with the former than with the latter—five patients and five deaths form the history sheet, though in extenuation it might be said that the patients were almost moribund at the time of the transfusion. These failures, however, did not deter the bold operator, and later on we find several recorded cases, in which lives were saved by this method.

These more encouraging results undoubtedly gave the operation a greater impetus than ever before, and we find it advocated by Edmond King, Thomas Case and Russell at Suffolk. While human blood was generally the medium of transfusion, the pro-

fession did not restrict itself to it alone. The blood of animals was a common agent, and in many cases milk, fresh from the cow, served a similar purpose. This latter method is undoubtedly the connecting link between blood transfusion and intravenous saline infusion. It served a great purpose by demonstrating that the blood corpuscles were not the *sine qua non* to good results, but that the benefit should be attributed to the increased tension of the vascular system. In 1850, Holder, of Toronto, treated three cases of Asiatic cholera by milk infusion. Two of these patients died, but taking into consideration the fact that all three patients were in a state of collapse, his results will compare favorably with those of to-day. Our own T. Gaillard Thomas, in 1875, infused ℥viii of milk into a patient almost moribund from hæmorrhage following an abdominal section. This patient responded at once and made a happy recovery. I can not recall the date when saline solutions were first used for intravenous, subcutaneous or colonic injections, but all find it advocated and practised by such men as Bull, Weir, Sands, Jennings and Little. Little, an ardent advocate, proposed a solution as follows:

℞	Sodii chlor	℥i
	Potass. chlor	grs. vi
	Sodii phosphat	grs. iii
	Sodii carb	grs. xx
	Alcohol	℥ii
	And distilled water	℥xx

For many years this and Jennings' formula were generally used until finally superseded by our simple and easily obtained solution ℥i of common salt to the pint of sterilized water. This completes the history of the evolution of transfusion to date, from the crude, barbarous and unscientific method to the skillful and aseptic administration. Now the question presents itself to us, what have we gained by the labors of others, and by our own experience? A method in such common use should have made for itself a law. I will start out by asking when is infusion indicated? Lewis S. Pilcher (Annals of Surgery, 1892, page 345) divides the indications into three classes.

I.—Those in which the hæmorrhage predominates.

II.—Those in which hæmorrhage and shock are both present in marked degree.

III.—Those in which shock predominates.

I do not wish to infer that this classification harmonizes with my own; on the contrary, my experience is at variance with the third classification, but of this we will speak later on.

In this classification the writer has undoubtedly restricted himself to its surgical use. Under caption one we find one case reported and life saved, resorted to for hæmorrhage resulting from an incised wound at the throat. Under No. 2 we are presented with several cases of hæmorrhage and shock following operations and external violence with uniform good results.

Three cases are spoken of under classification three—one, shock from intestinal strangulation, the second, shock from external violence (patient was run over by a wagon), and the third, after vaginal hysterectomy. Patient No. 1 died; No. 2 received two quarts before patient recovered consciousness, making a long and tedious convalescence, though, by way of parenthesis, it is added, "the usual cardiac stimulants of whiskey, digitalis and nitro-glycerine were resorted to." Patient No. 3 responded to one quart, though Dr. Pilcher again says: "Usual accessory treatment for shock also applied." We may, I think, readily eliminate all three cases from caption 3. No. 1 died, and Nos. 2 and 3 were doubtfully benefited by infusion. The "usual cardiac stimulants" played a most important role, and it is a question whether the two quarts infused in case No. 2 did not delay the convalescence.

We find in the *Medical Record*, Vol. 43, No. 1, two cases reported by Edwin Sternberger, occurring in the practice of Paul F. Munde, in which three pints were infused, at a temperature of 118 deg., followed by hypodermics of strychnine, for shock following vaginal hysterectomy and abdominal section for ovarian tumor. Both cases made a happy recovery. The writer does not think that the shock was due to hæmorrhage, but does not assert it due to anything else. He attributes the good results to the temperature of the infusion assisted by the strychnine.

I select these two cases in order to call your attention to the temperature of the infusion. I have too often seen from two pints to two quarts infused into a patient, the temperature of which infusion was not over 100 deg. If the shock in these two cases were of doubtful origin there is no doubt that the patients had undergone a severe and protracted operation. Under an anæsthetic for an indefinite time, the temperature of the body

was certainly lowered. This of itself could be a contributing if not the cause of shock, and the heat of the infusion, it is reasonable to believe, relieved the condition and restored the patient.

At a meeting of the British Medical Society,* Mayo Robson described two cases in detail, and mentioned many others, in which most happy results were obtained by infusion in cases of simple shock and shock from hæmorrhage. He attributes shock in all cases to a loss of blood, though not visible. When shock results and no demonstrable hæmorrhage has taken place, that is an actual loss from the body, the blood lies in the large abdominal veins, where, for the time being, it is useless. The head and extremities become anæmic and collapse results. Any method pursued to distribute the stagnant blood, to drive it from the paretic abdominal vessels into the smaller channels, to be returned to the heart for redistribution, will relieve the condition. To accomplish this he believes we have no better agent than infusion, and is alway prepared to resort to it whenever occasion demands.

At the same meeting Mr. Burghard dissented from the opinion of Mr. Bronson, giving as his impression that in such cases the fluid injected went to increase the already dilated and overdistended abdominal veins without benefiting the patient. In support of his views he related six or seven cases, two of which were shock following surgical operation, in which there was little blood lost; infusion was practised, but both patients died.

In order to demonstrate the quantity of fluid that can be used (not that I wish to champion the method) I will relate a case occurring in the practice of Benj. Wood Richardson, of England, reported in the *Lancet*, 1891. A young woman, collapsed from cholera, was infused with two pints of the saline solution, and though completely unconscious at the time was after infusion enabled to sit up and make out her will. An hour later, collapse recurring (the choleraic discharge not having been controlled), a second infusion was resorted to with corresponding good results. Dr. Richardson now suggested that the injecting tube be left in the vein, and the syringe at the other end be filled and kept at blood heat, the infusion to be continued as symptoms of collapse become apparent. This was

* *British Medical Journal*, 1893, page 697.

kept up for several hours; no less than six injections were given to the patient, when death finally occurred thirteen hours after the first injection. I will not attempt to comment on this, but leave it to the members to determine whether death was due to cholera or to complete hydration of the patient's blood. If any apprehension exist from my comment of this case that I do not advocate saline infusion in cases of cholera, I wish to correct it at once. Most brilliant work has been done by the Italian, French and German schools in treating this scourge by this method, and whether given subcutaneously as practised by Cantani or intravenously by others, it has come to stay as the greatest weapon in our hands.

In June, 1895, Callan reported to the Orleans Parish Medical Society a case of collapse from cholera morbus, in which a life was saved by timely interference and infusion. This case is possibly fresh in the memories of most of our members. Sturges (*Lancet*, 1892) infused ℥xii into the external jugular vein of an infant nine months old for collapse from diarrhœa and vomiting. A rapid improvement followed and convalescence was uninterrupted.

SUBCUTANEOUS METHOD.

Cobb* enumerates six cases in which subcutaneous infusion was practised for hæmorrhage and shock. In the entire series a marked improvement in the pulse occurred, though three deaths followed as a result of the gravity of the disease. The writer asserts that the advantages of the subcutaneous method are its simplicity and the rapidity with which it is performed. The loose skin about the inguinal region is selected and about ℥xii are introduced. The pulse does not respond quite as rapidly as by the intravenous method, but the results are just as perfect.

* * * * * * *

Intravenous infusion, after a preliminary blood letting, has been advocated in cases of coma from diabetes and uræmia. It is suggested that the patient should first be bled, and when the volume becomes small and the pulse rapid, infusion should be practised. The object is to remove as much of the offending blood as possible, and to restore its volume subsequently. It is a well known fact that convulsions frequently cease in preg-

**Boston Medical and Surgical Journal*, Vol. CXXIX, No. 13.

nant women as soon as the child is delivered. This, by many, is believed to be due to the hæmorrhage following labor, eliminating the toxic product. I have practised blood-letting and infusion in two cases of coma of Bright's disease, without any beneficial results. Colonic injections of a saline solution have been most highly extolled recently by Clark at Baltimore, as a preventive of thirst following laparotomy. These injections are given to the patient at the completion of the operation, before the anæsthetic has been stopped. The urine, which is generally scant, is increased greatly in quantity and the patient, who is forbidden water for twenty-four to thirty-six hours, rarely or never complains. My experience certainly bears this out, and I have frequently given large enemas to relieve thirst, when the stomach was irritable, with much relief to the suffering and anxious patient. I regret that time will not permit me to enter more fully into this subject. The gentlemen who will follow me will, I trust, take up those indications which I have omitted to mention.

I will in conclusion give my impression from many cases which I have had and which I have seen, and of which I can learn from the literature at my command.

Intravenous or subcutaneous injections, preferably the former, are urgently required in shock depending on hæmorrhage, in cholera or cholera morbus.

Intra-colonic injections are of great service in relieving thirst, where for any reason oral administration of liquid is contraindicated. It is also a most valuable and reliable agent in mild shock in which little blood is lost, but great care should be taken that the temperature of the infusion is sufficiently high.

Intravenous or subcutaneous injections have proven of no value in simple shock without hæmorrhage, and if great care is not taken in its administration may even prove harmful. In chronic diarrhœa, uræmia, coma and cholæmia, it has accomplished nothing. Some few cases of marked improvement and relief are reported in diabetic coma, but personally, never having used it, can express no opinion.

Society Proceedings.

ORLEANS PARISH MEDICAL SOCIETY, AUGUST 22, 1896.

Dr. A. J. Bloch read on "Intravenous Saline Infusion for the Relief of Hæmorrhage and Septicæmia."

DISCUSSION.

Dr. Parham—This is quite an extensive subject, with an equally extensive literature. For this reason it would be well to consider it under different heads.

A—The first point to come up for consideration is "What liquid shall be used for infusion into the vascular system?" All authors condemn the use of blood itself as dangerous and as possessing no advantage over the saline solution. Defibrinated blood possesses this sole advantage, that it is, according to Sir William Hunter, less dangerous than the pure blood. Ziemssen, however, insists on the use of blood, claiming that by its use in small quantities good results may be obtained, which do not follow the use of the saline solution. The weight of authority being against the use of blood, we shall exclude it from further consideration and turn to the other liquids.

Milk has in its turn been tried and found wanting. Indeed, no other liquid has been found to possess any advantage over the saline solution. The latter, as used by various men, has been variously constituted, different formulæ varying in the relative proportions of table salt and other ingredients. Thus the solutions of Little, of Jennings and of Warren have been in use. The solution of Schmidt, used in the Charity Hospital by Dr. Matas and others after 1888, when I had fitted up an infusion apparatus, was modeled after the blood. This acted well, but had no advantage over the simple normal salt solution of six or seven parts in a thousand. The precise proportion of salt is not of vast importance, but some salt should be used, as the saline solution is less irritating than the plain water. The solution need not, however, contain more than seven parts of salt to the thousand.

B—The temperature is important. Dawbarn insists on the

necessity of infusing a solution of high temperature, up to 120 or 140 deg., claiming that better results follow the use of such a solution. He practises infusion during an operation, when hæmorrhage is expected to be sudden. Suddenness is an important element in hæmorrhage, by the way. A little blood lost suddenly does more harm than a large quantity lost slowly.

C—As to the quantity of liquid infused. It is difficult to state this exactly. The infusion should be made slowly for the effect desired, viz.: the restoration of heart action, no matter how much liquid may be introduced. The introduction of an excessive quantity would make the vascular tension too great and impede the heart action. In a case of hip-joint amputation, operated on by Dr. White, the Esmarch bandage was applied to the extremity of the patient, a plethoric individual. The case ended in death, which was attributed, by Dr. White, to embarrassment of the heart's action, by the extra blood thrown into circulation. Of course, there is not so much danger of this when cardiac depression exists. As a general thing not more than 5 per cent. of the body weight would have to be injected, say 7½ pounds for a man of 150 pounds. The safest plan is that mentioned above, of allowing the fluid to run in slowly and watching the effect.

D—The methods of introducing the solution into the vascular system are various.

The administration may be:

1. Intravenous.

2. Arterial (as advised by Dawbarn and by Hulter, who inject directly into the femoral and into the posterior tibial respectively).

3. Subcutaneous, being forced in with a syringe or allowed to run in by force of gravity; and

4. Rectal.

By the use of this last method favorable results have been obtained. It is easy to use, requiring in the way of apparatus but a funnel and a couple of feet of tubing. The saline solution should be much stronger than for intravenous use, and may be warm or hot; it may be well to add that some claim that plain cold water is the best liquid for this purpose. Lange uses the rectal method during long operations, practising the subcutaneous or the intravenous infusion besides, if necessary. Some

writers suggest beginning with the intra-venous method and keeping up the effect by way of the rectum.

In a case of middle meningeal hæmorrhage complicated with shock and compression by the packing, the rectal injection rendered considerable service.

E—The indications are several. All admit the good of the infusion in hæmorrhage, especially when sudden, but the surgical world is not agreed as to the beneficial effects in cases of shock. I saw a few days since a case of Dr. Bloch, that would have died but for the infusion. In that case the loss of blood was not to be considered, the hæmostasis was good, yet the patient nearly died on the table. To-day the pulse is good, better than at the time of operation. In this case a state of shock was relieved by infusion.

In cases of internal hæmorrhage, when the source of blood-loss is not under control, the vascular tension is diminished by the loss, the vessels contract, and natural hæmostasis results. The filling of these vessels with an infusion may, by increasing the tension, start the hæmorrhage anew, and in that way cause death. In such cases the subcutaneous method, that of hypodermatoclysis, assisted by pressure, may be used, as may also the rectal.

There are other indications, purely medical. Pinard has practised what is called washing out the blood, a procedure like that resorted to by Dr. Bloch in two cases of nephritic coma, As much saline infusion is introduced as blood removed; in this manner the toxins in the blood are washed out, the kidneys and other organs secreting more actively.

Dr. Parker had practised intravenous infusion either himself or through an assistant about forty times for hæmorrhage, ten or twelve times for shock. He had come to the belief that infusion for shock is not worth doing; in his experience, cases have improved temporarily, the pulse rate being brought down, and then have sunk back into the former depressed condition, never to rally again. The case mentioned by Dr. Parham was the only one known to him in which permanent benefit had resulted from infusion. At the meeting of the Southern Gynecological and Surgical Association, held during the past year, the consensus of opinion, in a discussion on this subject, was that infusion does little good in shock.

In his opinion the indications are acute anæmia, cholera, cholera morbus. Cases have been brought into the hospital pulseless from loss of blood, which have, with the aid of infusion, made excellent recoveries. As for cholera, he would recall the case quoted by Dr. Miles as treated by Warren Stone in 1832 with saline infusion. The amount he thought should be sufficient to bring the pulse rate below 100 beats to the minute.

The temperature should be pretty hot, not hotter than the hand could bear. Wyeth had used a solution at 120 deg. in a case of removal of the maxilla attended with hæmorrhage, with the effect of diminishing shock.

Dr. McGehee said that the object of "internal hydrotherapy" is to add enough fluid to the circulation to distend the ventricles to give the heart something to work on. For this purpose he considers the saline solution best. He mentioned a case of unsuccessful transfusion from the arm of Prof. T. G. Richardson to that of a lady who had suffered a severe loss of blood. He was inclined to believe that the true indication for infusion is anæmia, not shock, being convinced that the benefit in the latter condition is due to the high temperature, just as in abdominal sections flushing with hot water combats depression. Secondary hæmorrhage must not be overlooked, the leak must be stopped in order that good may result from the infusion.

The rectal mode of administration he did not consider a full substitute for the intravenous; it is, no doubt, useful, but certainly slow, and, therefore, not the best for a condition demanding rapid action.

Dr. Parham remarked, in reference to cholera, that Cantani has saved many cases by hypodermatoclysis and large rectal injections. He differed with Dr. McGehee as to his statement that high temperature is the feature of the infusion that does good in shock. He had used saline infusion as a prophylactic in operating, performing with its aid an amputation that could not have been done otherwise; true the patient subsequently died, but without this auxiliary he would have died without the chance given him by the operation. As for the beneficial effect of hot water in the abdomen, that is purely temporary; more good results from the infusion proper. Repetition of the infusion deserves more attention than it has received here. Medical lit-

erature contains records of cases revived on several successive days. Concerning the rectal method he differed with Dr. McGehee as to its value. In cases of hæmorrhage the vessels are empty, sucking up rapidly the fluid in the rectum, as much as a pint in a few minutes. The conditions are very different from those in health.

Dr. Parker agreed with Dr. McGehee as to the inefficiency of rectal injections for hæmorrhage, though he thought they might be useful in cases in which water is vomited. He felt that every instrument case, obstetric or surgical, should contain an infusion apparatus (for intravenous use).

Dr. Callan said that he had been taught when a student that a temperature of 113 deg. Fahrenheit is injurious to muscular fibre, coagulating its myosin. Again, he had read that in testing for albumen in urine, a temperature of 140 deg. would suffice to coagulate it, the liquid being brought to ebullition to make sure of reaching 140 deg. He was inclined to believe, for these reasons, that an infusion at 140 deg. would be dangerous. In the case reported by him the temperature was 106 deg. at the funnel end, probably less at the canula. A chill occurred within forty-five minutes after the infusion was made. In this case he thought the temperature should have been higher.

Dr. Bloch, in closing the discussion, reviewed all the points that had been touched on. He called attention to the possibility of infection and the difficulty of speedily obtaining a supply, as objections to the use of blood, as well as to the disadvantages of milk, which readily undergoes decomposition and is a fertile culture medium for bacteria, being often the means of transmission of tuberculosis. He declared himself in favor of an infusion—temperature as hot as could be borne by the hand, usually about 115 deg. In shock and in septic conditions the benefit has been purely transitory in his experience, patients promptly lapsing into the previous state. In the case of his mentioned by Dr. Parham, one of tuberculous infection in and about the knee, shock was due to loss of blood during the amputation, the Esmarch bandage not having been used. He had seen infusion used by Dr. Matas in cases of dysentery and of diabetic coma (in the latter case after the removal of a quantity of blood equal to that of the infusion), with no benefit. However, in such cases the procedure may prove useful.

Dr. Parham said Dr. Bloch conceded at least temporary benefit from infusion in shock. That is what is needed. The crisis may be bridged over momentarily until stimulants can be introduced and given a chance to act. These, such as aromatic spirits of ammonia, may be given with the infusion.

Dr. Bloch explained that he conceded the infusion has a temporary effect in lowering the pulse rate, just as anything which increases the blood-pressure would, by stimulating the cardiac ganglia, but that he had not seen any improvement in the shock itself, such as return of consciousness.

Dr. Parham had found that after a temporary improvement in shock stimulation had proven ineffectual, death taking place anyhow.

GOOD ADVICE BY THE DOCTOR.

"You have a severe case of indigestion," said the physician to a new patient. "You should be very careful to eat only warm food, as it promotes the flowing of gastric juice. Avoid ice cream and that sort of thing. I am afraid you are not sufficiently careful about taking hot meals. In the hurry of business, people frequently devour cold lunches in the middle of the day. That's where they make a mistake."

"Try to avoid that indiscretion," he went on, "even if you have to neglect your office duties from time to time. May I inquire, sir, what your employment is?

"I'm a fire eater at de Universal Museum," was the reply.

A young physician, who has just established himself and, as would be expected, has very little practice, is noted for his braggadocio.

The old doctor, meeting him on the street the other day, asked him how he was coming on. "I've got more than I can attend to," was the boastful reply. "I had to get out of my bed five times last night." "Why don't you buy some insect powder?" asked the old doctor.—*Exchange.*

N. O. Medical and Surgical Journal

Editorial Department.

Chas. Chassaignac, M. D. Isadore Dyer, M. D.

ADVANCED MEDICAL EDUCATION.

We are not so far from the goal as a few years back we might have thought ourselves.

In one hundred years we have amalgamated in this country an intelligence derived from a motley nationality.

This combined thought has revolutionized ideas. Thought has been rapid enough, and its dispensation as proportionate. Wealth has grown overnight, while invention has seemed to spring from an eternal source.

Medical education with us was at first, and until quite recently, directed at supplying the demand for doctors. Quantity was the desideratum.

The demand grew less as the supply increased.

The demand, therefore, grew more and more for the better doctors than for more doctors.

This was only an evolution as natural as progress, as true as civilization itself.

At first a man was judged by his success, not by his ability nor by his education. But *tempora mutantur!*

In the broad field of advancing science, we find ourselves drifting in the trail of our sister nations, older and wiser in methods than we, while perhaps not as acute.

While our surgical skill and practical developments have been born of a native genius, we have been slow to accept the wider medical education so identified with the Medicinæ Doctor of Europe.

To their credit, be it said, that those of our schools which are governed by educational rather than commercial motives have already taken the step in the right direction. Harvard, and likewise the University of Michigan, compels a six years' course.

Numerous other schools require at least four years of curriculum study.

This plainly means that the man who would be the best physician must be a willing student, recognizing the vast amount of material and the time to cover the ground as essentials to a proper qualification.

These schools, in reality, occupy in well systematized work the time of the man who formerly would be graduated in two or three years and who would subsequently spend a few years more in desultory, even indiscriminate study.

The intelligent student of sixteen or eighteen, with a fair general education, can begin the study of medicine with the assurance that he will find embraced in his course those studies formerly untaught in the medical school. It formerly required a preparatory course in some school of biology where elementary medical branches were taught to prepare a conscientious student for the after study of medicine.

To the student of five years back, the word bacteriology meant but little. Pathology conveyed to him little more than the gross impression of post-mortem evidences. The special schools of medicine: neurology, pædiatrics, gynecology, otology, laryngology, dermatology and ophthalmology were untaught.

The medical graduate hoped that at some future time he would allow himself the opportunity of learning some of these unessential things. To-day we are pleased to note that a number of the medical schools have elevated these special branches from optional to required courses.

The next ten years will see our graduated physician both ready and prepared to practise his profession. He will be grounded both in theory and in practice, using his microscope as a companion, and not as an ornament for his office, a part of his decorative furniture.

Such an evolution was necessary, and with it will come all that should come. Intelligence in the interpretation of the problems of medical and surgical practice always developing something new and unexpected will provoke a wider administration of wise methods, and the medical profession can but profit accordingly.

SHRADER'S SHORT SOUTHERN STAY.

The Board of Medical Examiners (Regular) was too much for Shrader, the so-called "divine healer," to whom the lay press had been giving so much free advertisement during the last few months.

This fraud and impostor, who first appeared in the Northwest, we believe, met with much success in many localities, pretending to cure all ailments by the laying-on of hands, the use of handkerchiefs blessed by him and analogous means; he charged nothing for his services, but accepted all that was given him—a scheme that must have worked pretty well since he found it useful to have a "manager."

The history of Shrader in New Orleans is not long to relate. He arrived here on Friday, September 11. The next morning he held forth at Spanish Fort to only a moderately large audience. At 4 P. M. on the same day he was served with a writ of injunction issued by the Hon. Geo. Théard, judge, at the solicitation of the Board of Examiners, prohibiting him from indulging in the healing art before complying with the law regulating medical practice. His "manager" saw the wisdom of acquiescing and at once stopped the "healing" act. By Sunday night, healer and manager quietly departed, not as mysteriously, however, as they had been said to have done at other points.

Shrader was not "in it" with Kennedy. The active president of the board added another scalp to his belt right after this. The arrival of one Bellairo, a "magnetic" healer, was heralded in the newspapers by means of reading notices. The professor had engaged a magnificent suite of rooms at the St. Charles Hotel and was ready for the harvest which he confidently expected. On Monday, the 14th, he was interviewed by Dr. Cocram, the mild but firm secretary of the board, who called the professor's attention to the law and quizzed him about his diploma, proposing at the same time a little examination before the board. The professor had forgotten his diploma in his other pants' pocket, but said he would get it. He left at night on the 15th.

These occurrences illustrate the advantages of the amendments to the practice of medicine act passed by the last Legislature. By the procedure under the original act, a criminal one,

these men might have carried on their swindling business for several weeks before their cases could have been carried to a termination in court. As it is, the injunction stops them short—disobedience would mean punishment for contempt of court. The amended sections of the law as they now read are published in the "News Items."

It is only fair to call attention to the fact that the law and its enforcement benefits not so much physicians as the general public. To the former it means only the upholding of the dignity of their chosen profession, to the latter it has meant the saving of several thousand dollars, as it is unquestionable that if they had not been interfered with the "divine" and the "magnetic" healers would have realized quite a snug sum out of the credulous and superstitious of the community.

THE FRUITS OF MEDICAL LEGISLATION.

We have struggled so long for the suppression of flagrant iniquities in the abuses of the day in the medical obligations of the public to themselves and to the profession that side issues have been left to solve themselves. These have been many. The regulation of medical practice is not the only question of importance.

State Boards of Health have so gradually expanded in their usefulness as guardians of the public health that to-day this function in the State not only cares for the ignorant, innocent and neglectful public, but has even thrown lines of protection about it.

Almost unwillingly, the necessities of hygiene in individual and public life have been brought to the intelligent consideration of all.

The State exercises close espionage upon the food supply, and has already, through municipal direction, enforced proper building requirements in the erection of public buildings and places of pleasure resort.

Public conveyances are to-day more and more arranged for the healthier comfort of their patrons.

These evolutions of the civilization process have not discriminated in favor of any class. Public school buildings are to-day

erected with careful attention to hygienic detail. Tenement districts are inspected and, so far as practicable, the evils found are remedied as speedily as can be.

The past five or ten years have seen many such radical innovations among established evils.

Some have been slow enough, but all have come of enforced necessity.

Recently the State of New York has promulgated a new labor law, which in its provisions must be also considered an outgrowth of the constant force of the demands for medical legislation. The *New York Evening Post* at some length discusses the law from the sociologic standpoint. Briefly, the law referred to provides for the regulation of the employment of women and children in shops.

"No child under fourteen years can be employed. No male under sixteen and no female under twenty-one shall work in any establishment at the rate of more than ten hours a day or sixty hours per week, nor before seven in the morning, nor after ten in the evening. Exception to this is allowed during the Christmas holidays, when overtime work is to be allowed. Proper and convenient lavatories and toilet rooms and chairs must be provided; no women and children are to be employed in the basement of a building, unless it is properly lighted and ventilated. Forty-five minutes must be allowed for the noonday meal.

"These provisions are to be enforced by the health officers of the place. The employer must keep a register of the name, age, birthplace, place of residence, and personal description of the employee, supported by a certificate from the Board of Health that the register of age is correct, and that the child is physically able to perform the work it intends to do. An affidavit is also required from parent or guardian.

"Violation is punished by fine, imprisonment or both."

We believe this another strong step toward the universal good, emphasizing the necessity for the public, through its legislators, to meet the needs of that same public under the direction of its best advisers, those governed by the unselfishness of making the world better and wiser, by making it healthier.

ANOTHER BLOW AT CONTRACT PRACTICE.

Last month, in calling attention to some of the evils of "society" practice, we detailed at length the brave effort of the physicians of Brussels to throw off the yoke, and how successful they had been up to the present time.

To-day we point with gratification to the action of the physicians of Santa Clara, California. Irrespective of schools they have united against the evil almost unanimously. The *Southern California Practitioner* tells us that five out of every six physicians entered into the following agreement, after having resolved that rendering professional services at a stipulated sum per capita per annum is derogatory to the dignity of the medical profession.

"First—We mutually, jointly and individually pledge our word of honor not to enter into any contract or agreement, or renew any existing contract or agreement, either written, verbal or implied, to render medical or surgical services to any lodge society, association or organization.

"Second—We will not render medical or surgical services to the members of the above mentioned bodies for less compensation than we charge the general public for similar services."

Other sections except existing contracts, fix a time for the pledges to take effect, and specify that they shall be in force for a term of three years.

This move, among others in the right direction, shows that the profession is at last realizing the magnitude of the evil. Shall New Orleans be among the last to join the procession?

THE PAN-AMERICAN MEDICAL CONGRESS AND NEW ORLEANS.

We hope the attendance from the United States will be large at the Pan-American Medical Congress to be held in the City of Mexico in the middle of November next. Three years ago our Mexican confrères were well represented at Washington, and they seem to be working earnestly to make this the second congress a success. They have selected the time of the year at which they can show their fine city to the best advantage. They

intend to receive us well; we must show our appreciation by responding in goodly numbers.

Physicians from other parts of the country would do well to arrange their route so as to pass through New Orleans and stop over, even if it be only for a few days. Tickets at the rate of one fare for the round trip will be put on sale at all coupon railroad offices on November 7 and 10, good to return until December 31. As the congress opens on the 16th, persons residing at points not too remote can easily spend a few days in this city even on the way *to* Mexico, for it takes only about three days from New Orleans to the place of meeting. On the return trip any one can find plenty of time to pay us a visit.

November is usually very pleasant in New Orleans, which is being called the "delightful" city. It is then not too warm nor yet cold. Besides its peculiar topography, its magnificent river and lake, New Orleans presents quaint architecture in the "old quarter," and people unrivaled for sociability and warmth of feeling in all quarters. In addition to many other theatres with fine attractions, this city boasts of the only French Opera troupe in the country. The latter promises to be unusually fine this season and it alone would make it worth while to stop over. An additional inducement to come this way is that the route is short and direct over the Southern Pacific Railroad, one of the finest in the country, connecting with the Mexican International.

Our local confrères have a good opportunity for an agreeable trip, aside from the professional interest of the meeting. The round trip ticket will cost only $47.25, with $10 for a sleeping car berth each way; with an absence of only two weeks one could enjoy the journey itself, three days at the congress and four days more in Mexico. The outlay for one person alone could be within $150.

We will furnish our readers any information on the subject and gladly assist in getting up a good representation of the local profession in Mexico next November.

THE editor of the *Journal of the American Medical Association* says, among other truths concerning the bicycle: "A costume and posture which make ninety women in a hundred absurd spectacles, will not long be popular with the tens of thousands of the fair sex as to-day. Slim legs operating like a steamer's walking-beam and generous buttocks, whose contour is alarmingly delineated, are not pleasing displays."

Medical News Items.

The doctors are nearly all returning and the "has resumed practice" advertisement is frequently seen in the dailies. Among the number who have recently got back are Drs. Cocram, Pothier, de Montluzin, Oechsner, Horton, Weber, Joachim, Dyer, E. S. Lewis and Bloom.

The American Electro-Therapeutic Association, which is now in session in Boston, issued a neat and complete programme of their three days' proceedings. There are three sessions each day and the interesting papers are numerous. The address of the president, Dr. Robert Newman, of New York, is on "The Want of Education in Electro-Therapeutics in Medical Colleges."

Two appointments on the Board of Administrators of the Charity Hospital were made by Governor Foster last month, the terms having expired on August 9. Mr. A. R. Brousseau was appointed to succeed himself and Dr. Loeber to succeed Dr. E. T. Shepard.

The Marion-Sims College of Medicine gives, by a resolution of its faculty, information of the resignation of Dr. I. N. Love, its appreciation of his past services and good wishes for his future success.

The Tri-State Medical Society of Alabama, Georgia and Tennessee will hold their eighth annual meeting in Chattanooga on October 13, 14 and 15, 1896. There are about twenty-five papers announced. The president is Dr. J. B. Murfree, of Tennessee; the secretary is Dr. F. T. Smith, also of Tennessee. We thank them for an invitation to attend the meeting.

The Board of Health of Louisiana has issued the first number of its *Bulletin* instead of its usual monthly report. This *Bulletin* is similar in style and appearance to those of the most progressive Boards of Health in the country. It consists of

twenty-four pages, and contains, besides the routine mortuary report of New Orleans for August, reports as to the condition of public health in the various parishes in the State; a paper on "Small-pox in New Orleans in 1895 and 1896," by Dr. W. H. Woods, chief sanitary inspector; one on "Animal Serums, Extracts and Attenuated Cultures," by Dr. P. E. Archinard, bacteriologist of the board.

The entire number is neat and attractive, speaking well of the enterprise of the officers of the board. The purpose of the *Bulletin* will be to give as full information as possible in regard to sanitary affairs, vital statistics and health matters in general.

The American Dermatological Association held its twentieth annual meeting at the Hot Sulphur Springs of Virginia, on September 8, 9 and 10. The meeting was well attended, and from scientific and social standpoints was a success. Dr. J. C. White, of Boston, was elected president for the coming year; Dr. Louis Duhring, of Philadelphia, vice president; Dr. J. T. Bowen, of Boston, secretary and treasurer; Dr. E. B. Bronson, member at large of the council.

The next meeting will be held during the Congress of Physicians and Surgeons, at Washington, in May, 1897.

Dr. Prince A. Morrow, of New York, was elected a committee of one to represent the American Dermatological Association in the movement now developing to organize an international leprosy congress, to be held at an early date in Berlin, Germany.

The amended sections of the Practice of Medicine Act now read as follows:

Section 14. Be it further enacted, etc., That if any person shall practise medicine in any of its departments in this State without first having obtained the certificate herein provided for, or contrary to the provisions of this act, the Boards of Medical Examiners created by this act may, through their respective presidents, cause to issue in any competent court a writ of injunction forbidding and enjoining said person from further practising medicine in any of its departments in this State, until such person shall have first obtained the certificate herein provided for and under the provisions of this act. That said in-

junction shall not be subject to being released upon bond. That in the same suit in which said injunction be applied for the said boards, through their respective presidents aforesaid, may sue for and demand of the defendant a penalty not to exceed $100, and, in addition thereto, attorney's fees not to exceed $50, besides the cost of court; judgment for which penalty, attorney's fees and costs may be rendered in the same judgment in which the injunction may be made absolute. That the trial of said proceeding shall be summary, and shall be tried by the judge without the intervention of the jury.

SECTION 19. Be it further enacted, etc., That it shall not be lawful for the said Boards of Medical Examiners, or any members thereof, in any manner whatever, or for any purpose, to charge or obligate the State of Louisiana for the payment of any money except as provided for in Act 44 of the Acts of 1882, relating to the publication of registered physicians, etc., and the said boards shall look alone to the revenue derived from the operation of this act for the compensation designated in Sec. 11 of this act. And if said revenue is not sufficient to pay each member in full, as per Sec. 11, then the amount thus received shall be pro-rated among the members. But if, at the end of the year, there should be a greater revenue derived than sufficient to defray the expenses of the boards at all their sessions for the year, as provided in Sec. 7, such surplus shall remain in the treasury to be used in the expenditures of the boards during the succeeding year; provided, that said Boards of Medical Examiners shall have the right to employ counsel to be paid out of the attorney's fees recovered by him or them respectively as part of the penalty provided in Sec. 14 of this act, and that the costs for all proceedings taken under the provisions of Sec. 14 of this act shall be payable out of the revenues, including penalties, collected under the provisions of this act.

DR. J. F. LESCALE has removed from Paincourtville, La., to this city, and has established his office at 929 Canal Street.

CLIMATE AND HEALTH, issued monthly by the U. S. Weather Bureau, has been discontinued, we regret to say, owing to inadequate appropriation by the last Congress.

Abstracts, Extracts and Miscellany.

Department of Surgery.

In charge of Dr. F. W. Parham, assisted by Drs. E. D. Martin and F. Larue.

BLOOD LAVAGES IN SURGICAL INFECTIONS.

P. Walton (*Belg. Méd.*, July 16) reviews this question. Dastre and Loye have shown that a venous injection of salt solution, amounting to even to two-thirds of the animal's weight, may be made without accident, provided the entry be slow and well regulated. At 7 per cent., or even 10 per cent., there is no toxic dose, but merely a toxic speed of introduction.

Bosc and Vedel have shown that the addition of sodic sulphate to the solution has no advantages. By some surgeons enormous venous injections have been practised. Lejars, in a septicæmic patient, injected twenty-six litres in five days without grave sequelæ. Michaux injects doses of 1000, 1500 and 2500 grains a day. Péan and the author regard these as the maximum doses to be reached without serious risks, and Péan insists on the superior safety of subcutaneous injections in prudent doses as opposed to intravenous injections.

The question of their mode of action is difficult and complex. The first result of either method is to restore arterial tension to the normal, and to lessen the frequency of the heart beats. Secondly, diuresis is markedly increased. Michaux had seen a few slight and immediate consequences, dyspnœa and pain in the side, and in one case, where 2000 g. were thrown in at once, abundant serous vomitings. Sometimes complaint is made of a feeling of heat and tension. For venous injections, which are preferable if a large quantity of fluid is to be introduced, Michaux uses a glass funnel, furnished with a rubber tube, to which cannula No. 2 of Potain's aspirator is fixed. The skin is cleansed antiseptically, a cut made over the median cephalic or basilic vein, which is then laid bare and its peripheral end closed with Péan's forceps. The cannula, previously freed of air, is introduced into a V-shaped opening, made by scissors, in the vein. A

force-pressure forceps keeps the vein tightened over the cannula. The temperature of the injection varies between 38 and 40 deg. C. As to hypodermoclysis, unless very slowly performed, a painful swelling may be produced in the subcutaneous tissue. By introducing only about a litre an hour this is avoided. The skin of the abdomen is suitable, and a very fine trocar should be used. Colson has used the latter method in two desperate cases with great success.

Case 1.—Male, 28, with articular abscess of right knee, temperature 40.7 deg. C., dry tongue, delirium constant. Free incision, drainage and daily sublimate irrigations; a purgative, alcohol, quinine. After two days the temperature, which had fallen to 38.6 deg., rose to 40.2 deg. C. Dry tongue, pulse 130, skin dry and burning, urine scarcely a pint daily. Subcutaneous injection of one litre of 7 per cent. salt solution. Two hours later abundant sweating, sensation of comfort, more abundant urine. The next day the disquieting condition returned. Fresh injection of one litre. Renewed improvement of symptoms. The injection was repeated for five days and recovery ensued. In case 2 the results were equally gratifying. Here sixteen litres of salt solution were injected in the space of three weeks.—*British Medical Journal, Epitome.*

Miscellaneous.

CLINICAL NOTES ON RHEUMATISM.

TREATMENT.

[Continued from September.]

Cases.—II.

A.—Articular Pains. No Visceral Complications.

1. Mixed alimentation: green vegetables well cooked, butter, cream and cheese. No game, no pork. No tobacco or spirits.

2. During twenty days in each month (ten days being allowed for complete therapeutic rest) take the two following preparations, alternating each month:

(*a*) Water ..... 300 cc.
Lithium salicylate ..... 10 gram.

(*b*) Water ..... 300 cc.
Potassium iodide ..... 10 gram.
Dose: one tablespoonful at meals.

3. Every week, at bedtime, take one pill containing from ten to fifteen centigrammes of aloes.

4. Every morning a dry friction all over the body with a flannel brush. Live in the open air; physical culture.

5. In May and September commence taking a steam bath three times a week until twenty to twenty-five are taken.

B.—Articular Pains with Visceral Complications.

1. Mixed alimentation. As a beverage at meals take milk exclusively with four grammes of sodium bicarbonate to the quart.

2. During twenty days in each month take at meals one tablespoonful of the following:

Water ..... 300 cc.
Potassium iodide ..... 10 gram.

3. Every week, at bedtime, one pill containing from ten to fifteen centigrammes of aloes.

4. Apply over the cardiac region tincture of iodine, a series of small fly-blisters and of light actual cautery points.

5. Heart complications are treated, as usual, according to the nature of the cardiopathy.

6. In lung complications the use of arseniate of sodium is highly recommended.

7. In gastro-intestinal complications the treatment is as usual and varies according to the form of the trouble.

C.—Articular Pains with Chronic Arthropathy. Hydarthrosis.

1. Eat all that is readily digested, as building up is necessary, excluding game and pork, tobacco and spirits.

2. Take one month, during twenty days, the following at the rate of one tablespoonful at meals:

(*a*) Water ..... 300 cc.
Sodium iodide ..... 10 gram.
Sodium bromide ..... 20 gram.
Sodium chloride ..... 40 gram.

Take the next month, also during twenty days, in the same manner:

(*b*) Water ..... 300 cc.
Gold and sodium chloride ..... 10 centigrammes.

And continue in alternation.

3. On the diseased joint or joints apply blisters and actual cautery every week.

4. Aloes, from 10 to 15 centigrammes, in pill, at bedtime, once a week.

5. Take from twenty to twenty-five sulphurous baths in succession, in summer and winter.

D.—No Pain. No Actual Swelling or Deformity, but from Inheritance or from a Previous Attack, Well Established Rheumatic Diathesis.

1. A strengthening and varied alimentation. Open air. Physical culture. Avoid cold and dampness. No tobacco or spirits. Rubbing down all over the body every morning with a dry, stiff towel.

2. Take every month for twenty days, in a quart of water, 50 centigrammes of lithium benzoate, and one tablespoonful of the following at meals:

Water ..... 300 cc.
Potassium iodide ..... 10 gram.

3. Every fortnight take, in the morning on an empty stomach, a large tumblerful of saline water.

Cases.—III.

A.—Acute Stage.

Aside from the treatment of the primary infectious disease, take:

1. Soup and claret, or milk, every two hours alternately.

2. With the soup and claret take a wafer containing:

Naphthol ..... 20 centigr.
Benzonaphthol ..... 30 centigr.

With the milk take a wafer containing 20 centigrammes of quinine hydrobromate.

3. Apply morning and evening unguentum hydrargyri over the diseased joints until salivation appears, then discontinue.

Keep the mouth clean by using freely a 4 per cent. solution of potassium chlorate.

4. Rest in bed.

B.—Chronic Stage.

1. Ordinary alimentation, insisting upon the use of claret, meats, etc.

2. Apply repeatedly the actual cautery over diseased joints and immobilize them.

3. Take morning and evening, in milk, from four to eight drops of tincture of iodine or one tablespoonful of a 10 per cent. solution of potassium iodide.

Translator's Notes.

Attention is called to the following points of practical importance bearing on the same subject:

A.—*As to the differential diagnosis between Rheumatism and Gout.* Except when the big toe alone is affected, with the well-known local and general features of the acute attack of gout, and except when the tophus deposits are already deforming the joints, gout is not easily distinguished from rheumatism in cases where gout affects several joints at the same time (polyarticular gout).

It is, then, important, in order to differentiate, to depend on the chemical examination of the blood, for uric acid in unusual quantity has been found in the blood in gout, also on the urinary diagnosis. Practically, Garrod's *process of the thread* is a reliable aid. The reason why a differential diagnosis between the two articular diseases mentioned is important is because it bears upon the effective treatment of the case at the time of the attack, for in the case of gout colchicum seed does better than all the salicylic composites which come next in order; also because it bears upon the future of the patient, for in no other disease is hygiene alone more powerful than in gout. Any new theory in this case can not annihilate the experience of the past centuries, and Horace, the Latin poet, knew himself that strict hygiene was the only thing for *podagra*.

Whereas this is far from true in rheumatic diathesis. Here, remedial agents are as capital as hygienic measures and, instead of abstinence, in most cases a tonic and strengthening regime is indispensable.

B.—*In no case should we be more alive to our interests both of honor and of cash.* Here is the occasion to war fiercely against the manufacturers of patent specifics and infallible cures. No

quarter, please, as just now we are losing all these cases. They flock to the drug store, where they are informed as to the latest remedy out, and spread the news of the great discovery among their Joint-Phalanx of Gouty and Rheumatic Sufferers. They all sympathize with one another, of course, and they all allow freely that their physician don't know any better.

Poor innocent folks! In no case is the judgment of the physician more necessary. We know it, but they do not, and we must keep up a crusade of education and persuasion each time we have a chance

C.—*We should encourage all scientific efforts toward investigating the virtue of mineral spring waters in our country.*

It is remarkable how in France, Italy and Germany that class of patients are benefited by a stay and cure at any of the numerous and famous resorts we know of.

A journey to New York is not always possible, and there may be found in our broad land just as good watering places as in Europe, at which our patients may drink and bathe. The day will come when merely money-making concerns on this side of the Atlantic will cease fooling the public and discrediting our honorable and sacred mission as a profession.

The Kneipp water-cure managers of this country, we may say between parentheses, would fail right now, should we enforce domestic hydrotherapy by the simplest contrivances. Nobody is to be blamed in all this but ourselves. We are dangerously lacking in essential principles, and we are too liberal in giving others so many advantages.

D.—*When cases of rheumatism occur in pregnant women beware of the salicylates.* Of all the reputed abortives none is placed before the salicylates. (No. 36, *Gaz. Hebdom.*, 1896.)

Therefore, though quinine is considered as a good eutocic, it is safer to resort to it in such cases than to the salicylates. The writer has given lately high doses of quinine to pregnant women having rheumatic attacks and severe intermittent fevers without any ill effects on the gravid uterus. E. M. D.

A Good Nutritive Enema can be composed with the yolk of one egg, five ounces of cod-liver oil, and ten ounces of lime-water. This is to be divided in five portions and may be given in one day.

Book Reviews and Notices.

Borderland Studies. Miscellaneous Addresses and Essays Pertaining to Medicine and the Medical Profession, and their Relations to General Science and Thought. By GEORGE W. GOULD, A. M., M. D., former Editor of *Medical News*. P. Blakiston, Son & Co., Philadelphia, Publishers.

We have met with much of the material used by Dr. Gould for this book in his editorial work on the *Medical News* and in the periodicals to which he has contributed his literary efforts.

Now as then only pleasure and profit have attended the perusal of the collection, directed at maintaining all that is best among the profession the author has honored by his connection with it.

While such essays as the one on "Vivisection" and "Life and Its Physical Basis" stand out as indicative of the author's strength of conviction and power with his pen; the other essays are none the less attractive and interesting.

For delicacy of logic in the presentation of interpretation of personal religion, the last essay on "Immortality" deserves comment.

This collection should receive so deserved a public approval that the author will be encouraged to continue the production of such material for the improvement of a regrettably indifferent medical profession.

Readable to a degree interesting, the "Borderland Studies" deserve a place on the desk of the physician who respects the effort the author has made to touch the spirit of humanity and progress in the lay and professional public. DYER.

Twentieth Century Practice. An International Encyclopedia of Modern Medical Science. By Leading Authorities of Europe and America. Edited by THOMAS L. STEDMAN, M. D., New York City. In Twenty Volumes. Volume VIII. "Diseases of the Digestive Organs." William Wood & Co., New York. 1896.

The publishers have issued this volume out of its turn in order not to put off the completion of the series. Number VII,

which was next due, was unavoidably delayed, and we deem Messrs. Wood & Co.'s idea a happy one in sending out Volume VIII, as interest in a work published by subscription is apt to diminish if the intervals between different parts are too pronounced.

This volume is on a par in merit with those previously noticed. It has an equal number of foreign and American authorities as contributors. A good deal of attention is given to treatment of the various diseases discussed, making it a valuable volume of reference for the busy practitioner.

C. C.

A Manual of Materia Medica and Pharmacology. Comprising all Organic and Inorganic Drugs, which are and have been Official in the United States Pharmacopœia, together with important Allied Species and Useful Synthetics. For Students of Medicine, Druggists, Pharmacists and Physicians. By DAVID M. R. CULBRETH, M. D. 812 pages, with 445 illustrations. Cloth, $4.75. Lea Brothers & Co., Philadelphia and New York, 1896.

The apology of the author in the preface of his book is almost uncalled for when an examination of the contents is made. True, many works of a like purpose have been published, but the one before us is commendable. Classifications are well drawn, illustrations are introduced in needed places, and care is everywhere evidenced in the preparation of the subject matter. The work does not and can not replace the Pharmacopœia or the United States Dispensatory, but it fulfils all the needs of the practitioner for a book of this sort.

DYER.

The Student's Medical Dictionary. Including all the Words and Phrases generally used in Medicine, with their proper Pronunciation and Definitions. By GEORGE M. GOULD, A. M., M. D. Tenth Edition, rewritten and enlarged. P. Blakiston, Son & Co., publishers, Philadelphia. A. Hawkins Co., New Orleans. Price, $3.25.

It seems that the plates of the *New Medical Dictionary* and the *Student's Medical Dictionary* by the same author have been destroyed. Dr. Gould declares them not to have been quite satisfactory to him notwithstanding their popularity, so that he has entirely rewritten the work.

This dictionary is not encyclopedic in character and is not illustrated, but it is just what the student wants for easy reference when in doubt as to the definition, derivation or pronunciation of a term.

It is not bulky, consisting of about 700 pages, including the tables of bacilli, micrococci, leucomaïns, ptomaïns; of arteries, ganglia, muscles, nerves; of weights and measures; analyses of the waters of the mineral springs of this country, etc.

That it is up-to-date is evidenced by the presence of such terms as skiagraphy or skiography, Röntography, and of a good definition of the X-rays.

The volume is attractively and solidly bound and its price should be considered cheap by the doctor as well as the student.

C. C.

The Ready-Reference Handbook of Diseases of the Skin. By George Thomas Jackson, M. D. New (2d) edition. 589 pages, with 69 illustrations and a colored plate. Cloth, $2.75. Philadelphia, Lea Brothers & Co., 1896.

Dr. Jackson has revised this convenient work on skin diseases so as to make it acceptable to the progressive general practitioner. The illustrations are well selected and some of them an improvement upon those chosen for the former edition. More stress is laid upon methods of differential diagnosis, and more numerous suggestions in the therapeutics of skin diseases are made—a doubtful addition to the usefulness of the work. More pages, additional definitions, and better cuts are the main features of this work.

Dyer.

A Manual of Pharmacology and Therapeutics. By William Murrell, M. D., F. R. C. P. Revised by Frederick A. Castle, M. D. Wm. Wood & Co., New York, 1896.

Attractively bound, printed upon good paper, and in excellent type, the above work in review commends itself for the clearness of its presentation. Most text-books on therapeutics and materia medica fail in this. Dr. Murrell and the reviser have handled a difficult subject in a way to make the subject attractive. The introductory chapters discuss the subjects of exercise and climate, with the usefulness of springs and baths as therapeutic measures. Only too little space is given to the watering

places in this country. A short chapter on the "Art of Prescribing" is well written and to the point. An excellent table of the "Pharmacological Groups" is found toward the end of the book. A list of the formulas is given in the back of the book—we presume as examples of prescription writing. This we censure as rather encouraging the already prevalent habit of students to copy prescriptions instead of evolving them.

The work is just comprehensive enough to make it suitable as a text-book, while it falls short as a reference. DYER.

Practical Points in Nursing. For Nurses in Private Practice. By EMILY A. M. STONEY, Graduate of the Training School for Nurses, Lawrence, Mass. 12mo., 450 pages. Price, $1.75. W. B. Saunders, Philadelphia, Publisher.

This is really a *vade mecum* for the nurse who has had only hospital training and has been habituated to find everything at hand in the way of appliances, dressings, etc. While it tells her a great many things that she ought to know before she can be called a trained nurse, it gives her many valuable hints as to her conduct in private nursing, and teaches her to improvise many things needed in the sick room which she would miss from the hospital surroundings.

A hundred pages or so of the appendix could have been well left out, especially the glossary; many of the words contained in the latter are contained even in small, ordinary dictionaries. Some of the definitions are good, more are imperfect, a few are amusing. The book would have been of more convenient size if the greater part of the appendix had been omitted, and the work, which really serves a useful purpose, would be improved.

It is neatly illustrated and carefully indexed.

The Medical and Surgical Uses of Electricity. By A. D. ROCKWELL, A. M., M. D. Illustrated with 200 engravings. William Wood & Co., New York, Publishers.

Practically a new edition of Beard and Rockwell's "Treatise on the Medical and Surgical Uses of Electricity," it has been so thoroughly revised and so much of it rewritten by the surviving author, Dr. Rockwell, that it can be considered a new book.

The illustrations have been newly drawn and many have been added. All descriptive cases have been omitted, yet there is so much new and valuable material that the volume is one of 600 pages.

The work includes a study of electro-physics and electro-physiology, both of which are little known to the average pyhsician, and a knowledge of which is necessary before the reader can profit by the reading on electro-therapeutics, a consideration of which takes up the greater part of the book. The last chapter is devoted to electro-surgery, and comprises a study of the nature and of the application of electrolysis and the galvano-cautery; their use in the treatment of various tumors, aneurisms, varicosities, strictures, is outlined; the extraction of foreign bodies by the electro-magnet and the telephonic bullet-probe are considered. Rœntgen photography in diagnosis is mentioned, but only briefly, as it was only beginning to attract attention when the work was being prepared for the press.

The number of subjects considered precludes their being treated in a thorough manner, yet enough is said to give valuable information to the average reader, and specialists in any line can find something interesting bearing on their respective branches. We can recommend the book. C. C.

The Therapeutical Applications of Peroxide of Hydrogen, Glycozone, Hydrozone, etc. By CHARLES MARCHAND, Chemist.

The title indicates sufficiently the purposes of this little book. A copy will be sent upon application to the author, 28 Prince street, New York, to any one mentioning this JOURNAL.

PUBLICATIONS RECEIVED.

Annual Report of the State Board of Health of Pennsylvania, 1895.

A Manual of Clinical Diagnosis, by Chas. E. Simon, M. D. Lea Bros. & Co., Philadelphia and New York, publishers, 1896.

Ptomains, Leucomains, Toxins and Antitoxins, by Victor C. Vaughan, Ph. D., M. D., and Fred. G. Novy, Sc. D., M. D. Lea Bros. & Co., Philadelphia and New York, publishers, 1896.

A Treatise on Surgery by American Authors, edited by Roswell Park, A. M., M. D. Vol. I. Lea Bros. & Co., Philadelphia and New York, publishers, 1896.

Handbook of the Diseases of the Skin, by Geo. T. Jackson, M. D. Lea Bros. & Co., New York and Philadelphia, publishers, 1896.

Minor Surgery and Bandaging, by Hy. R. Wharton, M. D. Lea Bros. & Co., Philadelphia and New York, publishers, 1896.

Practical Diagnosis, by Hobart A. Hare, M. D., B. Sc. Lea Bros. & Co., Philadelphia and New York, publishers, 1896.

A Manual of Materia Medica and Pharmacology, by David M. R. Culbreth, Ph. G., M. D. Lea Bros. & Co., Philadelphia and New York, publishers, 1896.

The Therapeutical Applications of Peroxide of Hydrogen, Glycozone, Hydrozone and Eye Balsam, by Chas. Marchand, chemist, New York, 1896.

Food in Health and Disease, by I. Burney Yeo, M. D., F. R. C. P. Lea Bros. & Co., Philadelphia, publishers, 1896.

Anatomy, Descriptive and Surgical, by Hy. Gray, F. R. S. Lea Bros. & Co., Philadelphia and New York, publishers, 1896.

Index Catalogue of the Library of the Surgeon General's Office, United States Army. Vol. I. Government Printing Office, Washington, 1896.

An American Text-Book of Applied Therapeutics, edited by J. C. Wilson, M. D., assisted by Aug. A. Eshner, M. D. W. B. Sanders, Philadelphia, publisher, 1896.

The Doctor's Factotum for September and October.

Our Animal Friends for September.

Functional Disorders of the Nervous System in Women, by T. J. McGillicuddy, A. M., M. D. William Wood & Co., New York, publishers, 1896.

Manual of Pharmacology and Therapeutics, by Wm. Murrell, M. D., F. R. C. P., revised by Fred. A. Castle, M. D. Wm. Wood & Co., New York, publishers, 1896.

The Medical and Surgical Uses of Electricity, by A. D. Rockwell, A. M., M. D. Wm. Wood & Co., New York, publishers, 1896.

Handbook of Pathological Anatomy and Histology, by F. Delafield, M. D., LL. D., and T. M. Prudden, M. D. Wm. Wood & Co., New York, publishers, 1896.

Buck's Medical Lexicon. Wm. Wood & Co., publishers, 1896.

REPRINTS.

Eye Symptoms in Nephritis, as Seen with the Ophthalmoscope, by Wm. Cheatham, M. D.

Technic of Abdominal Salpingo-Oöphorectomy, without Pedicle, by T. J. Watkins, M. D.

Constipation; Some of Its Effects and Its Non-Medicinal Treatment.—The Differential Diagnosis of Neurasthenia and Its Treatment, by Elmore S. Pettijohn, M. D.

A Contribution to the Study of Acute Ascending (Landry's) Paralysis, by Pearce Baily, A. M., M. D., and Jas. Ewing, A. M., M. D.

It is to be regretted that any firm of manufacturing chemists whose methods and dealings with the drug trade have always been fair and considerate should find it necessary to protect themselves against the unprincipled substituter. It is hard to believe the testimony which Fairchild Bros. & Foster have gathered against retail druggists, who have substituted other preparations when Fairchild's was distinctly ordered by physicians. We fail to comprehend what a druggist is thinking of when he permits such practices behind his prescription counter. Where is the profession of pharmacy drifting if it has gotten to the point that a physician can not depend upon a druggist filling his prescriptions with what is ordered? We should discredit these reports if they came from a less responsible source. Such practice, if continued, will work untold injury to the credit and standing of the entire pharmaceutical profession. Physicians are constantly claiming that one of the reasons why they handle their own medicines is that they are then sure of what they are administering. Any such wholesale accusation against the integrity of druggists is unjust. There are thousands of conscientious pharmacists, who would no more think of substituting in a prescription than they would of trying to pass a counterfeit bill. It is unfortunate that reflection must be cast upon these honest druggists by the acts of their unscrupulous brothers, but all of this hue and cry on the part of manufacturers about substituting can not be ignored.—*Pharmaceutical Era.*

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Bulletin of the Board of Health of the State of Louisiana.)

FOR AUGUST, 1896.

CAUSE.	White.....	Colored...	Total.....
Fever, Malarial (unclassified)	14	7	21
" Intermittent			
" Remittent	1		1
" Congestive	13	1	14
" Typho	3	3	6
" Typhoid or Enteric	4	10	14
" Puerperal	1	1	2
Influenza		2	2
Measles			
Diphtheria	4		4
Whooping Cough	3	2	5
Meningitis	3	2	5
Pneumonia	12	16	28
Bronchitis	8	3	11
Consumption	43	44	87
Cancer	5		5
Congestion of Brain	12	4	16
Bright's Disease (Nephritis)	20	5	25
Diarrhœa (Enteritis)	14	4	18
Gastro-Enteritis	3		3
Dysentery	3	6	9
Peritonitis	3	1	4
Debility, General	2	2	4
" Senile	14	12	26
" Infantile	3	1	4
Suicide	4	1	5
Heart Disease	18	12	30
Apoplexy	7	5	12
Tetanus, Idiopathic		1	1
" Traumatic	3	6	9
Trismus Nascentium	7	6	13
Hepatitis	1		1
Hepatic Cirrhosis	9	2	11
Uræmia	5		5
Injuries	16	11	27
All Other Causes	89	58	147
TOTAL	347	228	575

Still-born Children—White, 17; colored, 25; total, 42.

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

Death Rate per 1000 per annum for month—White, 20.84; colored, 34.20; total, 25.09.

METEOROLOGICAL SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure	30.08
Mean temperature	83.00
Total precipitation	3.31
Frosts	none

Prevailing direction of wind, southwest.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XLIX. NOVEMBER, 1896. No. 5.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the 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.]

BALL IN FOOT NINE MONTHS, FOUND BY MEANS OF X-RAYS AND REMOVED, WITH A PRACTICAL SUGGESTION FOR LOCATING AN INCISION.

BY F. W. PARHAM, M. D., NEW ORLEANS.

On December 18, 1895, accidentally by her brother, Miss X., was shot in the foot, outer dorsal aspect, just behind the metatarso-phalangeal articulation of little toe of left foot. Probing failed to find the ball, although it was several times repeated through the enlarged wound. Subsequently an abscess formed in plantar surface, and was incised. Ball not found. All wounds healed but left tender scars on dorsum, at site of wound at entrance and in plantar region where abscess had been evacuated.

Came from Alexandria to see me on Thursday, September 18, 1896. I found leg somewhat smaller than the other, probably from lack of use, as she walked always with some pain, owing to the tender spot in plantar region. Two scars were found on outer side of dorsum of foot near metatarso-phalangeal joint of toe; one marking entrance of ball, the other an incision made to discover it. In plantar surface a small resisting body could be felt about the size of a grain of corn, situated in a line with third metatarsal bone near its base. Pressure on this gave decided pain. This was thought to be the ball, but one could not be sure that it was not a piece of displaced, overlapping bone. So, resort was had to the X-rays. By an arrangement with Mr.

Bianchi, at the time exhibiting his apparatus in New Orleans, I was enabled to clear up all doubt. The foot being in position I could easily see through Edison's fluoroscope, both from dorsal and plantar aspects, the ball situated as in the accompanying skiagraph, taken for the purpose of recording the case. It could be easily determined by looking first from dorsum and then from plantar side, the Crooke's bulb being on opposite aspect, that the ball was better defined with fluoroscope on plantar side. The ball was found at the site of "tenderness on pressure." Next day, under chloroform, since she would not permit me to do the operation under cocaine, I easily removed the ball, which was deeply situated near the plantar aspect of the third metatarsal bone, exactly as seen in skiagraph. No suture was required. The wound healed under one dressing and she left for her home on Monday evening, September 21, complaining of no pain.

COMMENT.—The usefulness of the method of Rœntgen was conspicuously displayed in this case, as the ball was beautifully distinct both to the fluoroscope and in the skiagraph.

I would like to mention here a method for locating the site of incision. A nickel piece placed over the ball completely obscures it, and may be so placed that the centre of the nickel will be in line with the centre of the foreign body. With a pencil or pen, a line drawn around it will give the surface markings of the location of the foreign body, and an incision here will easily disclose it, if accessible. In this manner, the skiagraph would not be at all necessary, except for purpose of record. An apparatus could easily be arranged in a room adjoining the operating room, and the body having been located by the fluoroscope and the spot marked out as indicated, the operation could at once be undertaken without waiting for the more tedious disclosures of the skiagraph.

TABES ARRESTED IN ITS COURSE BY AMAUROSIS.

BY PAUL L. REISS, A. M., M. D. (PARIS), VISITING OCULIST TO TOURO INFIRMARY; CLINICAL ASSISTANT, EYE, EAR, NOSE AND THROAT HOSPITAL, ETC., NEW ORLEANS.

The observation which follows is a special form of sclerosis of the posterior columns, which, though already known, yet always presents some interest, being a less common condition in

the history of this affection and having been studied only in recent years.

M. C., 54 years of age, presented himself to me on the 2d of October, 1896. He came to me because he was totally blind in the right eye and because since five months the sight of the left eye was gradually failing. The condition of the right eye dates back three years, and it is only since one year that it is amaurotic. The vision of the left eye is at present 20-lxx and upon close examination we found that his pupil, although of natural size, did not respond to light. This fact called our attention to a possible Argyl-Robertson pupil, and in fact we found them perfectly movable when we called his convergence into play. They would also react to pain, but, however, very slightly. Our next step was to examine his reflexes as regards the spinal cord and we found a total absence of the "knee-jerk." This immediately confirmed our suspicion and we went over in memory the chain of symptoms that characterize this disease

We found, however, a great many of them absent, as our patient could walk with great surety and could stand perfectly well with his feet together and his eyes closed; thus indicating the absence of any inco-ordination or of the sign of Romberg. He has never at any time had any lightning pains and the sensibility of the body is intact. He has always had perfect control of his limbs and his sensibility to cold and heat is normal. We were thus deprived of a great many of the symptoms of the typical tabes, and yet we felt confident that our diagnosis was correct. The ophthalmoscope came to our aid in a measure and we found on both sides, more marked however in the right eye, a grayish blue optic disk, indicating a double atrophy of the optic nerve.

The rest of the fundus was normal, except that the vessels seemed to be somewhat diminished in size. In examining the sense of color for the left eye, we found a dyschromatopsy for green and deep red, while the other colors could still be distinguished. The field of vision was greatly narrowed. This constitutes one of the special clinical forms of tabes, called amaurotic tabes, a tabes which has been arrested in its evolution. For some time already certain ataxics had been observed which remained tabetic all their lives without presenting any inco-ordination Duchenne, of Boulogne, had seen such cases.

Charcot, Gowers and Leyden speak of it, and each call it by a special name.

Benedikt, of Vienna, was the first to notice the relation existing between that form and atrophy of the optic nerve, the atrophy being one of the prodromic signs. He noticed, too, that appearing as it did at the onset, it checked the evolution of the disease. This fact has been verified by Dr. Martin,* of Geneva, and Dr. Déjérine†, of Paris. Déjérine states that if this law has so long escaped the attention of the neuro-pathologists, it is because those classes of patients on the one hand go to consult oculists, and on the other that the symptoms of the pre-ataxic period of tabes (so well studied by Fournier) were little known.

In fact, he adds, the sign of Romberg was only introduced in semeiology since 1875. Not only does the atrophy arrest the evolution of tabes, but again very often the pains seem to diminish and sometimes disappear completely. In one case Dr. Déjérine saw the patellar reflex reappear after it had been absent for some years. The atrophy is then an early symptom, appearing before the locomotor inco-ordination. It affects the tabetic, but respects the inco-ordinate ataxic, and with Dr. Déjérine we can say, in a general way, that an inco-ordinate ataxic, from the day that the motor inco-ordination appears, stands great chances of never becoming blind. In those rare cases, where there is amaurosis there is not, according to Déjérine and contrary to the opinion of Benedikt, any amelioration in the motor inco-ordination; whereas the pains seem to diminish in a very apparent degree. In those cases the pain may come on some years after the atrophy. Gowers‡ has shown this by keeping such patients under observation for several years. Déjérine has seen this in two of his hospital patients.

Pathological anatomy comes to our rescue in these cases and Déjérine has made examinations in two cases where tabes had been already arrested for thirty years. On microscopic examination he found that at the lumbar enlargement the roots were

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* J. Dejerine and J. Martin—*De l'atrophie du nerf optique dans le pronostic de la sclérose des cordons postérieurs.—Soc. de Biologie*, 1889, page 531.

† J. Martin—*De l'atrophie du nerf optique et de sa valeur pronostique dans la sclérose des cordons postérieurs de la moelle*, 1890—*These de Berne.*

‡ Gowers—*Medical Ophthalmoscopy.*

less voluminous than normal and congested. The microscope showed a sclerosis of the columns of Burdach about the zone of entrance of the posterior roots and degeneration of the zone of Lissauer.

In the cervical region the lesions were limited to the posterior part of the columns of Goll. The optic nerves were gray, atrophied and completely degenerated.

Déjérine states that we are unable to explain how the retinal sclerosis checks the lesion of the posterior columns. The retina is attacked first and the lesion of the optic nerve diminishes as we reach the brain. Another interesting fact is that in this form of tabes Romberg's sign is absent (Déjérine and Martin).

The prognosis is very unfavorable. It always terminates in complete amaurosis.

We have put our patient on increasing doses of the iodide of potassium combined with intramuscular injections of the bichloride of mercury, but we feel rather convinced that the right eye will follow the fate of the left eye. In this case we found the opinion of Fournier confirmed as regards the etiology—that is, that syphilis stands at the head of factors as the cause of tabes. Our patient had a chancre at the age of sixteen years. We can remember two cases analogous to ours, the notes of which we have yet, having been gathered from one of the clinical lectures of Dr. Déjérine, at the Salpetrière, in Paris. The lesson was published in the *Médecine Moderne* of March 20, 1895.

Dr. Déjérine took occasion at that time to compare two cases of the same nature as ours with a typical and classical case of tabes, and to point out the difference, which, in fact, is very apparent. They were both totally blind, and in the first one the pains which had preceded the condition of the eyes, diminished steadily as the sclerosis increased, while in the second they were still present with the same character and intensity. The first one had been blind for two years, while the disease had manifested itself six years previous to this, and had affected the eyes almost at the onset. In the second case the sight began to fail one year after the pains had appeared, until she had become blind, while the pains were still present and had in no way diminished.

A CASE OF FRACTURE OF BOTH BONES OF THE LEG TREATED ON THE LINES OF THE AMBULATORY METHOD.*

By H. B. GESSNER, A. M. (Tulane), M. D., Visiting Surgeon, Charity Hospital, New Orleans, La.

The patient, Isaac Baldwin, colored, aged 17 years, was admitted to Ward 1 of the Charity Hospital on April 17, 1896.

On April 16, while pumping a hand car on a railroad, he had fallen off and been struck by the car, a wheel of which passed over the left leg, causing a fracture of the tibia and fibula at the junction of the middle and lower thirds.

Shortly after admission the leg was immobilized in a plaster cast. At the end of four weeks the cast being removed, there was no union of the fragments. A second cast was applied. When this was removed after two weeks there was still considerable mobility at the seat of fracture, although some callus could be palpated about the site of the fibular injury. After application of a third cast the patient was, at the suggestion of Mr. Gordon King, R. S., and with the approval of Prof. R. Matas, of whose service the ward is a part, directed to walk about as much as as he cared to. A few days later the portions of the dressing over the foot and above the knee were removed on account of the great difficulty with which locomotion was effected. There remained then only the portion between the ankle, which was partly overlapped, and the knee. The patient was now, much against his will, made to walk about with a stick. At first he complained of a pressure of the edge of the cast against the soft parts about the ankle joint, which was relieved by the use of cotton batting.

Soon, however, he was seen walking about boldly as though his limb had never sustained a fracture. At the end of two weeks the bones were found firmly united. On being discharged the patient walked away with ease, feeling no inconvenience at the removal of the support to which his leg was accustomed. The result in this case was very satisfactory, although the following details given by Professor Lewis Pilcher for the application of the dressing in

* Related before the Orleans Parish Medical Society, July 11, 1896.

this method (*Annals of Surgery*, July, 1896) were not carried out, not being known to the writer at that time:

"When the dressing has been completed the sole of the foot is separated from the sole of the casing by a layer of cotton at least one inch in thickness, while the tapering surface of the leg above the point of fracture and the bony prominences about the knee are closely embraced by the casing, and are thus made to receive the weight of the body when it is thrown upon the particular limb in the act of walking, while the foot and lower half of the leg are suspended in, but steadied and protected by the lower half of the casing, through which the weight from above is transmitted to the ground."

SERUM-THERAPY IN LEPROSY.*

BY JUAN DE CARRASQUILLA, M. D., Bogota, U. S. of Columbia.
[Translated by Dr. A. MCSHANE, New Orleans, for the JOURNAL.]

I.

Referring to a former communication† in which he announced his intention of employing serum-therapy in the treatment of leprosy, Dr. Carrasquilla stated that he had carried out his experiments. Not having more than a presumption based upon the similarity of leprosy with other infectious diseases in which this medication has recently been applied in Europe, such as syphilis, tuberculosis, etc.; not being able to make cultures of the leprosy bacillus, Dr. C. decided to apply the method followed by Richet in treating syphilis.

A leper was bled, and with the serum thereby derived a little goat was first inoculated; then a horse; after a lapse of several days these animals were bled from the jugular vein, and the serum was extracted and preserved in small flasks, well corked and protected from the light. In all these operations, the most rigorous aseptic precautions were observed.

Before using the serum, thus prepared, on patients, it was tried on a guinea pig, for the purpose of ascertaining if it contained any septic material which might compromise the experiments. Afterward, treatment was begun in a patient with nerve-leprosy (the case has been carefully reported in a previous

*Communication made to the National Academy of Medicine of Bogota, U. S. of Columbia.
†July 1, 1895.

paper to the Academy). Starting with a hypodermic injection of half a cubic centimeter, the dose was gradually increased until, in about a month, doses of twenty cubic centimeters were given. Altogether, about 90 or 100 cubic centimeters were injected. There were several unavoidable interruptions in the treatment, due to accidental causes.

The treatment thus far has given the following results:

1. Discoloration of the spots in general, and particularly of those in the neighborhood of the site of the injections.

2. Restoration of sensation in places previously occupied by anæsthetic patches.

3. Notable improvement in the general condition of the patient in all respects, in spite of the reaction sometimes observed.

"In presenting this incomplete experiment, I refrain from drawing conclusions, as my object is to obtain the assistance of the members of the Academy, and to beg an opinion regarding the procedure I have employed, that I may continue it or change it for another. I would like to know if they deem the method rational and scientific, and to hear what suggestions may be offered for the confirmation of the theory which led me to undertake this experiment.

"I proposed at first, if this method gave no satisfactory result, to employ the procedure followed in the serum-therapy of cancer—that is, to triturate the substance of the lepromes with distilled water, filter the liquid, and inject it into animals, from which the serum to be employed would be derived."

II.*

Continuing my experiments upon the application of serum-therapy in the treatment of lepra Græcorum, I have had occasion to observe the effect in the tubercular form. In my previous communication I could only mention the effect in the nervous type. In a case of tubercular leprosy, in a very advanced stage, the serum treatment was begun on September 30, 1895. On that day the patient's forehead was covered with a tubercular mass, reaching from the superciliary arch, the skin of which was devoid of wrinkles, almost to the hairy scalp, and from one temporal to the other; many tubercles scattered over the cheeks,

*Meeting of November 22, 1895.

beard, the upper eyelids, the ears, nose—in a word, all over the face, except the temporals, margin of the scalp and the lower eyelids. Suppurating lepromes on the extremities, large spots on all parts of the body, hard edematous areas, insensibility in almost all the skin, etc.

The tubercular masses, very prominent, of a dusky red color, began to desquamate after the first week of treatment, leaving the tubercles flattened and of a dirty ochre color; many of the isolated tubercles disappeared by reabsorption or desquamation of the skin, leaving the shape of the lesion, but on passing the hand over the site no prominence was felt, nor infiltration beneath the skin. The skin is now smooth, sensitive and decolorized.

The numerous large and deep ulcerations, with thickened borders, insensible base and of deep red color, began at once to suppurate freely and to cicatrize with amazing rapidity; there are already ulcerated places covered with healthy skin, which contrasts notably with that on the rest of the body, livid and rough round about the cicatrization. About five small ones remain, in process of cicatrization, the borders of which are now nearly level with the base, and I believe will all be cicatrized in less than a month. On the day that I visited the patient to institute the treatment, he tore the lint off the ulcers so roughly that the blood flowed freely, and even fragments of tissue were torn from the edges. In horror, I exclaimed: "Why do you do that?" He answered: "I feel nothing; it gives me no pain." Now he handles his ulcers in a very different manner, because they hurt him.

In the ears, enormously overgrown, full of tubercles, livid, considerable retraction has taken place, the lobules are much diminished in size, the skin is decolorized, and of the tubercles only one or two can be barely felt, and they are very small and flattened. One of the ears had a suppurating leprome, which helped to give him a hideous aspect; now, this ulcerated part is covered with soft, smooth, healthy skin, and looks better than the rest of the ear.

In the alæ nasi there had been ulcers and tubercles which had caused mutilations, and the portion remaining was covered with thick, yellowish crusts, which blocked the nose and interfered with respiration. The crusts fell off, leaving the skin cicatrized, the same as the ear. The tubercles disappeared; the

nose has the natural shape, without edema. There only remain the traces of the mutilations.

All the skin, covered with red spots and patches, began to desquamate from the beginning, became markedly decolorized at some points, slightly so at others. Sensation has been gradually returning in all places; the little finger of one hand and all the cubital border remain insensible. The other hand is sensitive and presents no lesion.

The hard edemas have been gradually disappearing, and now almost do not exist except in a part of the forearm and leg, where there are ulcers. Anæsthesia lingers in the same parts, though it is not complete.

In the mucous membranes not less important modifications have been produced. The reddish conjunctivæ, the free edge of the lower eyelids covered with very small tubercles, like pin-heads, the incessant lachrymation, the insensibility, were the principal lesions observed about the eyes. All disappeared after fifteen days of treatment. The conjunctiva is not red, the tubercles do not exist, the lachrymation has ceased, vision is normal. We only note the loss of the eyelashes, but they are already beginning to appear, and the free border of the eyelid offers no redness or other lesion than the depressions previously occupied by the tubercles.

In the nasal mucosa, almost healthy, after having been ulcerated, olfaction has returned, having been lost in the beginning of the disease, as the patient assures me. He was astonished at detecting a perfume on October 27—that is, before a month of treatment had been completed. In order to verify the patient's statement, I placed various flowers close to his nose, one after another, while his eyes were bandaged, and he correctly named each flower.

In the velum palati, the tonsils, uvula, almost all the mucosa of the respiratory tract accessible to observation, were covered with tubercles and ulcers; the voice was feeble—almost extinct. Nearly all the tubercles have disappeared; the ulcers have not, but are cicatrizing and diminishing daily; the voice has improved much, but is still very low and rough. One tonsil was almost destroyed; the other had a deep ulcer, which is healing; the uvula, almost eaten away by ulcers, is preserved though very small. I believe that phonation will be restored, as was olfac-

tion, because the destruction of tissue was not deep enough to render restoration of the voice impossible, and the appearance of all the parts is changing in such a way that it is not unreasonable to hope for an early restoration of that function.

In the mucous membranes, as in the skin, I have observed a very notable increase of secretion, chiefly in the bronchi, with each fresh dose of the medicament; but the action has been slower upon this epithelium than upon the skin, which latter exhibits from the first moment the effect of the serum injected by appreciable modifications in color, thickness, secretions, etc. Profuse sweats occurred at night; before, they never sweated.

The leonine countenance, bumpy, with ruddiness (*rubicundez*), has become dry, wrinkled, pale. Instead of the tubercular masses, there are yellowish spots. The patient has a good appetite and sleeps all night without feeling any suffering on awaking, but rather *bien-être*. He assures me that formerly he passed nights in a corridor vainly wooing sleep, until fatigue and atrocious suffering exhausted him and let him sleep.

In another patient, also of the tubercular form, the edemas of the legs and feet, forearms, hands and face disappeared, so rapidly, too, that none was left on the fifth day; but what most called my attention was that the tubercles, instead of disappearing by absorption or desquamation, as in the previous case, softened, became filled with pus, formed ulcers in places where they were most thickly crowded, suppurated freely, and began to cicatrize, which is distinguished by the healthy aspect of the skin, which contrasts with the reddishness by which it is surrounded. The edemas returned when the suppuration set in, afterward disappeared, sensation was restored, as in all the cases treated up to the present time. The general condition of the patient is very satisfactory, in spite of the violent reactions from which he has suffered.

In a third patient, with tubercles, but with a preponderance of the nervous or trophoneurotic form, the tubercles became smooth and have begun to waste away, leaving the impression as in the first case; the anæsthetic spots, decolorized, are gradually becoming sensitive, and one of them has disappeared completely—the only instance of the kind—leaving the skin perfectly healthy.

In the fourth experiment the patient had only a few small

tubercles, on the elbows, forehead and other parts, and edematous spots on the nose, forearms, legs, feet and hands, with insensibility at many points. The tubercles underwent exactly the same changes as in the first case, and also the edemas, spots, etc.

The other cases treated were of the nervous form, and in all of them identically the same changes were observed as those described in my first communication, to which I have nothing to add.

To sum up: serum-therapy in the treatment of leprosy produces the following changes:

1. It restores sensation, more or less rapidly, according to the extent and gravity of the peripheral nerve lesions.

2. It decolorizes the maculæ, without entirely obliterating them; they desquamate abundantly.

3. It makes the edemas disappear rapidly in some cases, slowly in others; the skin shrinks, becomes wrinkled and returns to its physiological condition when the edemas have disappeared.

4. The tubercles become smooth, soft, disappear by absorption, desquamation or suppuration, leaving traces at their sites.

5. The ulcers, after suppurating freely, cicatrize with amazing rapidity, and leave the skin healthy.

6. The scars of old cicatrized lepromes grow pale and tend to become level with the surrounding skin.

7. The ulcerated mucosæ begin to cicatrize, decolorize like the skin, become sensitive and the tubercles vanish.

8. The face becomes dry and entirely loses its leonine expression when the edemas and tubercles disappear and it becomes decolorized.

9. The appetite returns and so does sleep; the mind is gladdened; contentment takes the place of profound despair and depression of spirits; hope returns.

10. From the first injection of serum the morbific action of the lepra-bacillus ceases, because from that day on no new manifestation of the disease develops. I have treated fifteen patients up to the present time, and in all, without exception, I have observed this fact, which I deem fundamental and decisive, since it reveals that the remedy acts directly and immediately upon the cause of the disease, and this is confirmed by the return of sensibility. The peripheral part of the nervous system

is the part affected in this disease; the lesions observed are caused by a lack of nervous action; when this is supplied, the rest gradually disappears.

Are the results obtained sufficient to assure us that leprosy has been cured by the procedure I have employed? I believe they are. The facts that I have observed justify me in asserting unhesitatingly that leprosy is cured by this method. I can readily understand the distrust with which this assertion will be received, because I entertained it at one time myself, and it was only by daily personal observation of the surprising effects of the treatment that I reached the conviction that I now feel that the disease can be cured.

Dr. Maragliano, professor in the School of Medicine of Genoa, in the very notable communication which he made to the Second French Congress of Internal Medicine at Bordeaux, while speaking of the serum-therapy of tuberculosis, said:

"I know that every announcement of a new treatment of tuberculosis is received with distrust, and in speaking of it the first thing to be done is to dissipate the prejudices of an audience. This distrust is certainly justifiable, for how many illusive hopes have been shattered! How many painful disillusions have been suffered even by eminent men, too eager to offer a great service to suffering humanity! Notwithstanding this, tuberculosis can be cured, and science has now reduced to nothing the statement of a great Italian poet when he calls this disease '*il male che non perdona*,' [*the disease that does not pardon; the unrelenting disease*]."

Dr. Maragliano presented eighty-three cases of tuberculosis treated with the serum, sixty-one of which were cured.

He expresses himself on the significance of the results obtained, as follows:

"May we consider the results obtained as true cures? I believe that we may have clear ideas on this point. Tuberculosis is like syphilis: it may remain latent for a long time, and then reappear and become latent again. A tubercular patient, although he may not present any sign of the disease, is not to be regarded as absolutely cured, because sometimes we see, even after the lapse of years, new manifestations of the disease reappear. But if we continue to discuss in this field we shall soon reach the boundary of metaphysics. In tuberculosis

as in syphilis, we may, for the present, consider a patient as cured when he no longer shows palpable signs of the disease, when all the symptoms have disappeared, and all the signs of a complete restoration of the health are observed."

Applying to leprosy what the learned Genoese professor says of tuberculosis, I maintain that the disease is cured when the patient presents no palpable phenomena of the disease; when the sensibility, lost through the action of the microbe on the peripheral nerves, is restored; when the edemas disappear, leaving the skin decolorized, and functioning normally; when the tubercles, eliminated by absorption, desquamation or suppuration, no longer appear as a symptom of the disease; when the febrile attacks, precursors of new invasions of the disease, no longer occur; when headache, which so persistently afflicts the patients, does not show itself; when, finally, the patient feels an appetite, eats and sleeps well, and has a happy mind, the disease is cured.

At our next meeting I will describe the manner of using the treatment, of the fixation of the anti-leprous power of the serum —a study in which I am now engaged—and the means of avoiding the accidents that usually arise during the treatment, and due either to the serum medication or to the hypodermic method.

STRANGULATED HERNIA RELIEVED BY A NOVEL METHOD.

By R. W. SEAY, M. D., of Lutcher, La.

July 1, 1890, I was called to see Louis W , colored, male, whom I found with what seemed to be a strangulated inguinal hernia. He had had no fecal evacuation for four days. He had suffered from a reducible inguinal hernia for years, but he had previously always been able to reduce it. His abdomen was tight, swollen and tympanitic. His suffering was intense, pulse about normal, and he had no fever. I gave a hypodermic of a quarter grain of morphine, also a cathartic of calomel and jalap powder, to be repeated in four hours if bowels have not moved freely. Next morning the bowels had not moved and the hernia was not reduced. I gave an enema of soapsuds and warm water, and ordered a teaspoonful of comp. fluid extract of senna, to be

given every three hours; to be followed later by an enema, as just mentioned. In the evening I gave chloroform, and endeavored to reduce the hernia by taxis, but did not succeed. I ordered warm cloths over the hernia and a calomel and jalap powder every two hours until bowels moved freely. Next day I tried croton oil and repeated enemas of warm water.

July 4, at 8 A. M., patient's bowels have not moved since June 27, last; has stercoraceous vomiting. Taxis was tried again. I could not reduce the hernia.

I wrote to several physicians asking for aid, as I thought the usual operation by incision would be required, but I could get no assistance. At 4 P. M., as I feared the patient would sink, I placed him under the influence of chloroform and I directed two strong men to stand on chairs, eighteen inches above the floor, grasp the patient, who was now under the chloroform, by the feet, his head and body hanging, raise him as high as they could, then lower him quickly until his head was within three inches of the floor; raise him suddenly again as high as they could, producing a jerking motion, and to repeat this several times. After doing this I laid the still unconscious man on a pallet, used taxis and succeeded in returning the strangulated part into the abdomen. He had numerous fecal evacuations later. From the time his hernia was reduced and bowels moved he steadily improved.

The novel part claimed is the raising by the feet, the head and body left hanging, and the alternate lifting and lowering with a jerking motion, the patient being under the influence of an anæsthetic. I would recommend this to be done in case of strangulation where less violent means have been tried ineffectually, prior to cutting the stricture around the neck of a hernia.

[We can not endorse the treatment pursued in this case. The method described should have been tried as soon as the first attempt at taxis failed. In default of this or had this failed, herniotomy should have been promptly performed. We consider the doctor, and particularly the patient, as having been fortunate to a remarkable degree, in having the case terminate favorably, considering the long delay and the heroic efforts at purgation.—EDS.]

A FATAL CASE OF VOMITING.

By JOSIAH I. HUNTER, M. D., M. Ph., Visiting Dermatologist to Touro Infirmary, New Orleans, La.

White widow, aged 67.—Patient, up to about 1889–90, had always been healthy. While driving, the horse ran away, and precipitated her into a creek, causing considerable shock. She was greatly prostrated by the excitement, and vomited quite a good deal for several days. After the accident she was excessively nervous and subject to vomiting spells lasting two or three days. At the consultation she complained of her rectum; of persistent constipation, and of the presence of two anal polypi, each about the size of a pecan.

The excretion of urine was about normal. Specific gravity 1025, highly colored but free from albumen. Her heart, lungs and liver were healthy. A rectal examination disclosed the external hæmorrhoids, the polypi above mentioned, and also that the lower bowel was filled with hardened fæces. Owing to the patient's age I advised no operation done for the hæmorrhoids, consenting to remove the polypi when lower bowel was clear. Rectal injections of warm water ordered night and morning, also phosphate of sodium every morning for three days. A suppository of opium, belladonna, iodoform and tannin was prescribed for any rectal irritation.

Next evening the patient complained of sick stomach.

A mustard plaster was applied over the abdomen, and—

℞ Hydrarg. chlor. mitis. ..... grs. ¼
Cerium Oxalat. ..... " x
Bismuth Subnitrat. ..... " xxv
Ft. Charts v. Sig.: One every hour until relieved.

Next morning the patient vomited so that her stomach could retain nothing. The calomel powders were continued. To relieve the spasmodic condition present sodium bromide and caffeine citrate were given every half hour, later every four hours.

Under this treatment the vomiting ceased. October 16, 1895, conditions being good, I removed the polypi under cocaine, using not more than one-eighth of a grain. There was no pain, and not more than two drachms of hæmorrhage. Ordered—

℞ Ext. opii ..... grs. iii
Iodoform ..... ℥ss
Ft. suppositories vi. Sig.: One night and morning.

That evening, temperature 98⅗ F., pulse good and the urine freely voided. She complained of slight nausea.

℞ Hydrarg chlor. mitis ..... grs. viii
Cerium oxalat. ..... grs. xv
Bismuth subnitrat. ..... ℥ ss.
Ft. charts x. Sig.: One every hour until relieved.

The bromide mixture was continued. The nausea disappeared. On the 17th, 18th, 19th, doing nicely. Ate sparingly, but retained all food. Monday, 21, the vomiting had reappeared and the agents previously used had failed to control it.

℞ Tinct. nucis vomicae ..... ♏ ss
Codein. sulphat. ..... gr. ¼
Sig.: Take in tablespoonful of milk every half hour, until relieved.

That evening there being no improvement, ordered—

℞ Cocaine hydrochlorate ..... gr. i
Codein sulphate ..... grs. ii
Acid hydrocyanic dil ..... ♏viii
Water q. s. ..... ℥i
Sig.: Teaspoonful every hour until four doses were taken.

After three hours I left her considerably relieved. The urine still free of albumen and freely excreted. Iced champagne was now given, tablespoonful every hour. October 22—Had a miserable night. Had passed no urine since previous visit. The bladder was practically empty, yielding only about ℥ii of highly concentrated urine which contained no albumen. The pulse was 100, strong and regular; temperature normal; respiration normal. The bowels were moved by an enema. Ingluvin, grs. x, in milk and lime water, was now given every hour. This relieved the nausea. The patient ate sparingly, but retained the food. Iced champagne was given in larger quantities, at longer intervals. Applied hot applications over the abdomen, a mustard plaster over the stomach. Ice was sucked as desired. Passed night and part of the next morning (23d) without vomiting. Extremely restless and passed no urine. She was conscious that the vomiting might recur at any moment. At noon that day I catherized the bladder, drawing ℥vi of urine, free from albumen. The patient showed signs of failing. The

pulse was 120, feeble and very irregular; respiration slightly increased; temperature normal. Felt weak, but, with the exception of the nausea, comfortable. Tinct. digitalis was given hypodermically and acetate of potash per rectum. Before my leaving the house the patient vomited once. That night, after consultation with Dr. Matas, in addition to the ingluvin, the following was given:

℞ Hydrarg chlor. mitis ..... gr. i
Bismuth subnitratis ..... ʒiii.
Ft. charts xx. Sig.: One every hour.

℞ Hydrate of chloral ..... ʒi.
Tinct. opium ..... ♏xlv.
Valentine's meat juice ..... ʒi.
Milk ..... ʒvi.
Mucilage acacia ..... q. s. ʒxii.
Sig.: ʒiv. every hour by enema.

I remained with the patient from this time until her death, which occurred about noon the following day. After administering three of the above mentioned enemas, which were all retained and which produced absolutely no effect, I gave the following per rectum every hour:

℞ Sodium bromide ..... ʒii.
Valentine's meat juice ..... ʒi.
Aqua ..... q. s. ad. ʒviii.

This likewise was retained without difficulty. During the night a hypodermic of strychnia nitrate, with tinct. digitalis, was given three times. She vomited considerably; was extremely restless; had two severe cramps in the lower extremities, but at no time unconscious. About 7 A. M., October 24, death seemed imminent. Hypodermic of nitroglycerine and strychnia nitrate, and tinct. digitalis deferred the end. On consultation with Dr. Matas, determined to try an intravenous injection of saline solution. Dr. Hermann Gessner kindly gave me his valued assistance. After ineffectual efforts to introduce the canula at the bend of the elbow, we concluded to cut down upon the vessels at the upper third of the arm. The patient's condition improved immediately, but in a few minutes the pulse failed rapidly, and before the conclusion of the operation the patient died. Unfortunately no autopsy was permitted to enable us to see if the kidneys were organically diseased.

APPLICATION OF THE X-RAYS IN TREATING FRACTURES.

BY E. D. MARTIN, M. D., NEW ORLEANS.

The X-rays have already proven an aid in surgical diagnosis and have not only come to stay, but we have reason to expect even greater results. So far I have seen no mention of the use of the rays in the setting of fractures and as their application in such cases is already practicable it would be well to have every fracture examined by the use of the fluoroscope, the deformity reduced, the fracture set and the splints applied. As the rays penetrate most of the materials used for splints, the limb could be as easily examined after the splints are applied. The examination might be conducted once a week until union had taken place. This, I believe, is one of the best uses to which the X-rays can be applied at this time and with the greatest amount of accuracy. So far it is impossible to tell the depth of foreign bodies, or on which side of a bone they are situated, but in the treatment of fractures of the extremities nothing could be simpler, as the instruments now in use are fully adequate for the purpose. This idea was first suggested to me in the examination of a case of genu-valgum. In this case, by the use of the fluoroscope, I was enabled to distinguish the deformity in both the tibia and the femur. The day is not far distant when hospitals will find the apparatus for the Rœntgen Rays a necessary part of their paraphernalia. The rays can then be applied to every case of fracture, and it is safe to predict that results will be better.

Society Proceedings.

ORLEANS PARISH MEDICAL SOCIETY, SEPTEMBER 26, 1896.

GENERAL DISCUSSION ON "A PRELIMINARY CONSIDERATION OF CONTRACT PRACTICE."

DR. CHAS. CHASSAIGNAC—Before entering upon the consideration of contract practice, it would be well to make some explanatory remarks. Firstly as to my own position in the matter

When requested by the Chairman of the Committee on Scientific Essays, Reports and Discussions, to open the discussion on this subject I agreed to do so because I consider the time opportune and because I think myself in as suitable a position as any one else to speak on this matter, having had a society in the past, having none at present, and, finally, not being even in general practice at this day; hence my motive can not be misinterpreted. Secondly it should be understood at the start, that the opposition to contract practice, if any there is to be, must be led not by this society, but by the profession at large, independently of this body. We can but arouse interest in the matter and leave it to those most interested to perfect and carry out their plans.

Lastly, let us define contract practice: by that expression we mean practice for any society, lodge or organization at a fixed price per capita, per annum.

Those who favor such practice might make arguments such as these: That a young man on graduation, instead of being idle as might necessarily be expected, can by taking a society keep himself busy, and become known much sooner than he otherwise would; that in this way he would at once have a revenue and be partly self-supporting. On the other hand we can answer that, for one thing, such practice is derogatory to the dignity of the profession. Again, it is injurious to the individuals who do it. I believe that a young man would be far better off at the end of his first year for having remained at home studying or visiting the hospital. He would have learned something, and emergency calls would probably have netted him as much money as the society practice he could have had. The work done by him, however little, would have been done conscientiously. This is not the case often in society work, when visits are made for a few cents apiece—under those circumstances a man can not make correct diagnoses and improve himself by careful work. He gets into a rut, a routine of examining hurriedly and of prescribing on the prominent symptoms. He grows careless, does just enough to keep in touch with the members, not to be called up for negligence. Another advantage, by the way, which might be claimed by the advocates of contract practice is this, that after a society is given up by the physician, a certain percentage of the members cling to him and become a portion of

his clientèle. Let no man be deceived by this false hope; this percentage is small at the time immediately following his withdrawal from the society, and it will grow steadily smaller. Furthermore, some of the members who have had him as a "Society Doctor" will think they have a claim to his services for nothing.

I have said that contract practice is derogatory to the dignity of the profession. I will venture to say that no man in New Orleans to-day who does contract practice is considered as he should be by the organizations employing him. People who employ a Society Doctor don't consider him as good as a non-Society Doctor. In many instances I have had opportunity to observe this; having been called to a case and having learned that the patient had been sick for some time, I have asked who had been in attendance. Prompt would be the answer: "It was only the Society Doctor; we will tell him we don't want him any more." If societies were composed only of needy persons, their banding together for mutual assistance would be commendable; but they comprise members who are well able to pay a physician. It is not they who are to be blamed; it is the physician who allows himself to be so used. Finally, if he does not satisfy all the members, even disgruntled ones, if he is not prompt enough in answering their calls, charges are preferred against him and he is hauled up like a criminal to defend himself against these charges. I ask you, gentlemen, is this not derogatory to the dignity of the profession?

I have had a society myself, so others can not well feel hurt at what I may say. I tried to keep the members in their places and to treat them properly. Yet I suffered unpleasant things, which I do not like to look back upon, though I suppose I had as good a class of society patients as anybody did. What was the result? Did all the members become my private patients? Few of them did, and the number even of these diminished steadily.

Within the last few years three physicians, upon graduating, have asked my advice in regard to this matter. After I had laid the matter before them, showing the pros and the cons, they kept out of society practice. I am glad to say that to-day they are doing well, have suffered nothing by their decision.

On the other hand some honest, good men who have taken

many societies are now, when they are old and should have leisure and comfort, working hard, unrepaid for the labor of years.

What then is the remedy for these evils?

It is to be found in union of the profession, and by that I mean not this society alone, but the entire profession of the city.

There will no doubt be some to say that this was tried some six or seven years ago, without success. No matter if it did fail once, the attempt should be made again. The mistake made then was that the movers depended on a bubble of enthusiasm, which burst at the critical moment. Let the work be undertaken and carried on slowly and surely, not forgetting the financial aspect of the matter. In Brussels a short time since the condition of affairs was as it is now in New Orleans. The profession was ground down; it was hard to make a living, and, be it marked, the young man suffered. A union was formed; everything was carefully deliberated upon and planned. Dues and assessments were agreed upon. In cases where men who did contract practice were depending upon it for their livelihood a sum was allowed them equal to that lost by giving up society practice. Everybody who stayed out was absolutely ignored by the union physicians.

At the end of a short time it came to pass that the societies could not get men of any standing to do their work. The few who were at first tempted by the inducements held out to them soon found themselves ostracised and threw up their job. Now, at the end of the first year, few of the union men need assistance; several who were helped at first have improved their positions to such an extent that they are independent of the union support.

While at one time a certain number of physicians was required for the society work, and they were hardly able to attend to it, now one-half that number are employed and they have not enough work to keep them busy. All persons at all able to employ an outside physician have done so. Under such circumstances any physician of feeling, finding himself boycotted and disowned by his fellows, would soon come over. Leaving this question now, I will refer to another evil, that of free clinics, not properly controlled, in which all applicants, whether able to pay or not, are received. Were the profession united, deter-

mined enough to break up the society evil, it could also correct the abuses of free clinics, for who keeps up the clinics, but the doctors—the very men who also keep up societies, giving up their labor and their time without proper remuneration? The righting of these evils would be of great benefit to the members of the profession at large, and particularly to the younger men.

Dr. Woolf thought the fact that evil predominates over good in contract practice had been clearly shown by Dr. Chassaignac. The only question in his mind was as to the possibility of organizing the profession. The Brussels plan, offering such good prospects of success, ought certainly to be adopted. In regard to the abuse of clinics he, as a visiting physician to the hospitals of the city, had never tolerated this imposition.

Dr. Kohnke said he could not contradict the statements made by Dr. Chassaignac. He was inclined to consider society practice a necessary evil, a provision for young practitioners without sufficient influence to secure lucrative positions which could keep their heads above water during the struggle for practice. Families able to pay will likely call in a physician of some years' experience; those not so situated procure the services of a society physician.

Thus, society practice becomes a necessary evil, a crime bringing on its own punishment. If a man take but a moderate amount of such work and drop it as soon as he can, that is making a wise use of societies; if he contract for the work of as many societies as he can get and attend to improperly, his act will bring its own punishment, leaving him high and dry after twenty to thirty years of hard work.

Agreeing then on the proposition that societies constitute an evil, which no one wishes to see continued, how are they to be abolished? The heads of the profession are the men who must be looked to. If those who are called upon to consult with the general practitioner will deny their advice to society doctors and society patients, the odium that must fall on the former will hasten the emancipation of medical men.

Dr. Kohnke mentioned, in reference to his own experience with societies, that it had, on the whole, been pleasant. He thought the correction of the free clinic abuse could assist materially in the solution of the contract practice problem, by throwing into general practice many cases which would yield a revenue to the profession.

Dr. Castellanos reviewed the history of the various attempts made within his recollection to abolish society practice. He was inclined to believe that societies are powerful enough to make such attempts difficult to carry out successfully.

Dr. Mainegra referred to a provision in the by-laws of a society (the old Firemen's Charitable Association) with which he once made a contract: none but indigent members were entitled to the services of the physician. At the present day, however, many persons able to pay make use of society doctors. He thought the attack on contract practice should be more systematic than that of a few years ago; he would go so far as to favor placing under bond each man who agreed not to take contract work.

Dr. Martin told of his one week's experience with contract practice, while temporarily in charge of a society which paid $500 a year, or approximately $1.37 a day; he had to make an average of ten calls a day. The fee for a visit amounted, therefore, to about 13 cents a visit, while about 10 cents were spent in making many of these visits. He was sure that every young physician can do better by spending his time in hospital work under able teachers than by doing society work. In the latter class of work a random shot is made at the disease, without previous careful diagnosis.

As to the probability of successful organization, he thought it strong enough to make an attempt worth the trouble. Physicians must all be brought to understand the importance of the question. The task will then be comparatively easy.

Dr. Callan rose to explain, for the benefit of some members who thought him weighted down with contract work, that he has but one society, comprising seventy-five members, who pay him $400 a year. He has had other societies, which he let go, one by one, as soon as he felt able to do so.

Dr. Chassaignac, closing the discussion, touched on the principal points brought up.

He did not agree with Dr. Kohnke in calling the evil of contract practice a necessary one; probably that gentleman meant that contract practice is a necessary evil for individual young men as long as the system continues to exist. He was prepared to admit that, the evil existing, young men sometimes have to do such practice in self-defence.

That societies are powerful, as was claimed by one of the gentlemen, he did not concede; their power is but the weakness of physicians. When the latter are firm in their opposition, organizations have no power to keep up contract practice. In Santa Clara, California, medical men have united regardless of sect to abolish the evil; five-sixths of all practitioners have signed the agreement, binding themselves to do no contract practice during the next three years, besides adopting strong resolutions pertinent to the question.

He referred to the personal statement made by Dr. Callan as to his own relations with societies. Realizing the evil of this kind of practice he gave it up little by little when strong enough to do so. Individual instances like his, in which men have been able to lift themselves clear of contract work, do not make the evil less.

As to the price of visits made under contract he was surprised to learn that it was now but 13 cents; at one time, he was sure, it had reached the high mark of 15 cents.

HERMANN B. GESSNER, *Secretary.*

OUTSIDE of cases of special interest, the routine of practice at the hospital clinics is sometimes relieved by amusing incidents. A young man, evidently of only moderate education, some time ago presented himself at the venereal outdoor clinic and complained of having "nightly insertions." The students who were following the clinic seemed surprised at the complaint, and it seemed as if some of them even thought that congratulations might be more in order, until it was disclosed that the patient meant "night emissions."

A PROPOS of the button fad, or rather idiotic craze, now prevalent: An ebony-hued son of Ham called for treatment at the venereal clinic of the Charity Hospital, suffering from a little combination of chancroids and gonorrhœa with phimosis. He had his button. The button displayed the motto of "Girl Wanted." The physician in charge gravely advised him to change his button until such time as his local condition improved.

N. O. Medical and Surgical Journal.

Editorial Department.

Chas. Chassaignac, M. D. Isadore Dyer, M. D.

POST-GRADUATE EDUCATION FOR MEDICAL MEN.

Every day the lay public is attaining a higher degree of education. Facilities are afforded through various channels. The daily press, the periodicals, the various popular series of scientific works present new discoveries in so intelligible a way that the public must understand. It is not alone the discoveries which would seem to be of ordinary interest which are so discussed, but the modern advancement in medical progress is also material for expatiation.

The relationship is so close between the layman and his medical adviser that not infrequently is the physician called upon to pass comment upon the current topic of medical importance. Time was when a serious demeanor and a wise parry would be all that was necessary. To-day education tells. Advances are so rapid that the cursory reading of the occasional medical magazine scarcely touches the borderland of medical progress. It is true that digests are made and offered of the mass of work done in the scientific world, but to the practical man a brief synopsis is hard to digest, particularly when detail suffers for condensation. Fortunately, with the development of material, facilities are alike increasing for its propagation.

Not only have the greater cities of this country, New York, Chicago, Philadelphia, New Orleans, Baltimore and Washington recognized the necessity for education among graduated physicians, but the same purpose is being effected in some of the cities of Europe, notably Berlin. The hitherto success of these institutions demonstrates the need of their establishment. For the man of the city, whose hospital facilities and the daily contact with superior skill in medical practice are a constant unconscious education, the post-graduate school finds little usefulness.

To the country doctor, or the physician from the smaller or provincial town, this is different. His routine practice finds but little variation, and the saddlebag or the provisioning of his "surgery" usually satisfies the needs for therapeusis.

Undergraduate education has taken rapid strides in the past few years. The graduate of a decade since needs the opportunity of expansion, and none more than the doctor from the smaller locality.

Constituted, as a rule, of men teaching the individual branches for which they are peculiarly fit, or for which they are especially equipped, these schools afford, in a limited time, a review of modern methods, current scientific medical thought, food enough for several months' reflection.

The latest modes of surgical technique and medical practice are displayed and demonstrated. The individual teacher develops the best of his knowledge for teaching purposes. He even goes further than the routine or ordinary methods of his own practice that the student may be fully requited for his attendance upon the school.

Every year finds the country doctor more keenly alive to his necessities, more fully aware of his deficiencies, and he makes a proportionately more exacting demand upon his teacher.

So medical education is growing enhanced. Practical teaching, actual contact with the patient in the sick room, in the clinic and in the amphitheatre substitute the rapid conglomeration of knowledge usually dispensed to the embryo doctor. Correlative branches of medical science, as bacteriology, pathology, the special branches, are being more and more taught, and in a more and more satisfactory way.

The doctor is none the less a member of the community because he has chosen to be a physician. The very selection of his profession exacts of him to meet the requirements of his moral obligations. His education is an essential to his progress, and his progress is essential to his maintaining the position he has himself selected in the community.

Altogether, then, the post-graduate, or polyclinic, medical school, fills a needed place. Its usefulness is bound to grow, as the ambition of the graduated physician leads him to a closer acquaintanceship with the beauties, the glories, and the possibilities of his chosen profession.

SOME GOOD CAN COME OUT OF NAZARETH.

The Tri-State Medical Journal very properly characterizes Dr. Loftus on account of having in the *St. Louis Republic* "cast a few undeserved remarks in the direction of medical college professors and the medical colleges in general." We agree heartily with our contemporary in condemning him for selecting the public press for his diatribe. But we can not agree with it when it *will* insist that medical progress has not been materially assisted by men unconnected with medical colleges. If the writer of the Loftus editorial had but consulted with his brother editor, whom we see put down in the staff as Medical Historian, he would probably not have asked the following risky questions:

No. 1. "We would be overjoyed to have him name some physician, noted for his great service to the profession, either in a literary or experimental way, celebrated in modern times, that did not do the work for which he was noted while teaching in some medical college."

No. 2. "We would like him to name some great discovery in modern medicine or surgery that was made outside of and completely disentangled from some medical college."

No. 3 "We would be glad to hear him mention some great physician, noted for his learning, always excepting Dr. Loftus himself, who has not developed his character and made his reputation in connection with some medical college."

One name is sufficient to answer the question and fortunately that name stands out conspicuously in English medicine, that of Abercrombie, whose treatises on the brain and stomach were classical and known to continental students, who did not know the names of Syme and Christison. And yet, through jealousy or some other cause, the great Abercrombie never had the honor of a professorship in any medical college! McDowell, the father of ovariotomy, might also be mentioned, as an epoch-maker in American surgery, who was not connected with any medical college.

What about Jenner, the discoverer of vaccination, a practitioner in a small country town in Gloucestershire? What about Koch, the discoverer of the tubercle bacillus, and Dr. Mayer, the popularizer of the theory of the conservation of energy, both living in country towns? If not enough, then, what of Pasteur, who

was not even a doctor of medicine and certainly not a teacher in any medical college, or of Marion Sims, who so impressed the medical profession while on that celebrated tour through the European medical centres? The truth is that many of the great professors made their reputations before they became connected with any medical college, and were called to chairs because of these reputations. No one who regards facts will attempt to deny the tremendous amount of work done by men in professorial chairs, but it were as foolish to contend that nothing had ever been done outside of these sacred portals.

Many other names than those mentioned might be given, but this list should be sufficient to answer the questions. To say that some of these men afterward became professors is beside the mark, since in many instances, the work which made them famous (*and* professors) was done long before they were called to warm their professorial chairs.

CHANGES AT THE CHARITY HOSPITAL.

Important changes in the Charity Hospital resident staff have taken place since our last issue. The two assistant house surgeons, Drs. S. M. Fortier and W. E. Parker, have resigned. Their resignations were presented almost simultaneously, although it was said not to be for similar reasons. Notwithstanding many rumors and even some newspaper comments, these reasons have not come satisfactorily to light.

Drs. Fortier and Parker have entered actively into general practice, and, remembering the many courtesies extended to us by these gentlemen, we are glad of the opportunity to commend their good work at the hospital and extend them our good wishes for their future success.

The election of Drs. James Leake and J. M. Batchelor to fill the vacancies had been practically discounted even before it was positively known if and when the resignations would be tendered. The Board of Administrators, however, have somewhat changed the status of these two officials. Dr. Leake was elected first assistant house surgeon, and Dr. Batchelor was made second assistant house surgeon, whereas the two assistants were formerly on an equal footing. The second assistant is also

made Registrar of the hospital. As the JOURNAL has already pointed out, the lack of a registrar was a serious deficiency in the institution, allowing the loss to medical literature of a large amount of valuable data and statistics. We are glad the gap has been filled and hope the incumbent will do himself and the hospital credit by the manner in which he will interpret and execute the new duties. We wish both Dr. Leake and Dr. Batchelor a full measure of success in their respective positions.

We understand that the board contemplates prohibiting outside practice on the part of the assistant house surgeons. We believe the profession would heartily endorse this action and see no reason why the prohibition should not in time include the house surgeon as well.

Medical News Items.

AMONG THE PHYSICIANS who have returned from their vacations since our last issue, and who have resumed their collegiate or other professional duties, are: Drs. S. E. Chaillé, John B. Elliott, S. P. Delaup, John H. Bemiss, Rudolph Matas, Edmond Souchon, Just Touatre, and A. W. de Roaldes

THE BACTERIOLOGICAL DEPARTMENT of the Louisiana State Board of Health has issued the following circular regarding the establishment of stations for the examination of sputum in cases of pulmonary consumption and diphtheria depots:

"Dear Doctor—In view of the importance of a bacteriological examination in a large proportion of cases of confirmed or suspected tuberculosis, as regards the diagnosis, prognosis, treatment and prevention of this disease, the Board of Health has decided in connection with its diphtheria service to establish a service for the gratuitous examination of the sputum of cases of pulmonary consumption or suspected pulmonary consumption, under the following regulations:

"The sputum must be collected and prepared according to the directions found below and properly forwarded to the Bacteriological Laboratory. The data asked for in the form accompa-

nying specimen bottles must be furnished in every case. Those data properly recorded and kept will furnish in the course of a few years valuable statistics.

"It is for this purpose only that the board must insist that they be as exact and thorough as possible and make the compliance with its wishes in this respect a condition of the examination. The results of the examination made will be given to the attending physician only, and without charge, as promptly as possible, by mail or telephone.

"*Directions*—Sputum should be collected only in clean, wide-mouthed, well-stoppered bottles, with a capacity of from two to four ounces. Suitable bottles are supplied by the Bacteriological Laboratory, and have been placed in some of the principal drug stores, as per appended list, for the convenience of physicians desiring to make use of them. Care should be taken that bronchial and not pharyngeal secretion is collected. The expectoration discharged early in the morning is preferred; if the expectoration is scanty, the entire amount in twenty-four hours should be collected. The bottles must be tightly corked, and with the information called for in the blank form furnished by the laboratory for that purpose, returned to the drug store where same was obtained. The results of the examination will be given as promptly as possible, by mail or by telephone."

Then follows a list of the depots in the city, several for each municipal district. We understand, however, that the same facilities are extended to the practitioners in all sections of the State, provided they follow the above directions.

A Second Antitoxin Collective Investigation is under way by the American Pediatric Society. Laryngeal diphtheria is believed to furnish a crucial test for antitoxin. The present aim is to ascertain (1) what percentage of cases of laryngeal diphtheria recover without operation, under antitoxin treatment; (2) what percentage of operated cases recover.

The society asks for records of cases of *diphtheria involving the larynx, whether operated or not, occurring in private practice in the United States and Canada, treated with antitoxin.* It is expected that cases occurring this year will be treated with reliable preparations of the serum, will be treated early, and will be

given efficient doses. The second report is designed to be a study of cases occurring between the closing of the first report, May 1, 1896, and the closing of the present collective investigation, April 1, 1897.

In order to secure data which shall make the tables complete, circulars containing blanks for ten cases have been printed and are now ready for distribution. It is desired that physicians shall fill out circulars, blanks, as cases occur, not trusting to memory, and shall urge their friends having similar cases to do the same. Circulars can be had by applying to the commit tee (address below). Several groups of cases in the first investigation arrived too late and were lost to the report. It is desired that circulars, as soon as filled (ten cases) be returned to the committee. The collection of cases must close at the end of March, 1897.

For extra circulars (blanks), for returning circulars (filled), and for further information, address the chairman of the committee, Dr. W. P. Northrup, No. 57 East Seventy-ninth street, New York, N. Y.

To avoid any tendency to error, we reproduce the conclusions reached by the society, after the first report, as to the method of procedure:

(1) *Dosage.* For a child over two years old, the dosage of antitoxin should be in all laryngeal cases with stenosis, and in all other severe cases, 1500 to 2000 units for the first injection, to be repeated in from eighteen to twenty-four hours if there is no improvement; a third dose after a similar interval, if necessary. For severe cases in children under two years, and for mild cases over that age, the initial dose should be 1000 units, to be repeated as above, if necessary; a second dose is not usually required. The dosage should always be estimated in antitoxin units and not of the amount of serum.

(2) *Quality of Antitoxin.* The most concentrated strength of an absolutely reliable preparation.

(3) *Time of Administration.* Antitoxin should be administered as early as possible on a clinical diagnosis, not waiting for a bacteriological culture. However late the first observation is made, an injection should be given, unless the progress of the case is favorable and satisfactory.

A Marine Hospital Service Examination.—There will be held in Washington, D. C., on February 3, 1897, a competitive examination of candidates for appointment to the position of assistant surgeon in the United States Marine Hospital Service. Candidates are required to be not less than 21 years of age, and no appointment is made of any candidate over 30 years of age. They must be graduates of a reputable medical college and furnish testimonials as to character.

Successful candidates, having made the required grade, are appointed in order of merit as vacancies arise during the succeeding year.

A successful candidate, when recommended for appointment, is commissioned by the President of the United States as an assistant surgeon. After four years of service and a second examination, he is entitled to promotion to the grade of passed assistant surgeon and to the rank of surgeon, and after a third examination, according to priority, on the occurrence of vacancies in that grade.

The salary of an assistant surgeon is $1600 per annum, together with furnished quarters, light and fuel; that of a passed assistant surgeon, $1800 per annum, and that of a surgeon, $2500 per annum. In addition to these salaries, after five years' service, an additional compensation of 10 per cent. of the annual salary for each five years of service is allowed medical officers above the rank of assistant surgeon, the maximum rate, however, not to exceed 40 cent.

When an officer is on duty at a station where there are no quarters furnished by the government, commutation of quarters is allowed at the rate of $30 a month for an assistant surgeon, $40 for a passed assistant surgeon and $50 for a surgeon. The successful candidates, after receiving appointments, are usually ordered to one of the larger stations for training in their duties.

Full information may be obtained by addressing the Surgeon General of the Marine Hospital Service, Washington, D. C.

The Journal Regrets to Notice the Recent Death of Dr. Charles Gehlbach, a well-known physician and druggist in the French part of the city of New Orleans.

Touro Clinical Association. — The outdoor clinical and house staffs of Touro Infirmary have organized a clinical association, to meet semi-monthly at the office of Dr. Loeber, the house physician of the institution. The object of the organization is to bring together the members of the house and visiting staffs, and to present interesting cases. Dr. Loeber is spoken of as the permanent president.

Dr. William A. Sanders, of Mobile, has been elected to the office of State health officer, to fill the vacancy caused by the death of the late Dr. Jerome F. Cochran. Dr. Sanders has been for some years a member of the State Board of Health, thus qualifying him for the position to which he has been raised. Dr. Sanders has enjoyed the distinction of having been president of the Alabama State Medical Association, and is at present a member of the faculty of the Alabama Medical College.

The Ninth Annual Meeting of the Southern Surgical and Gynecological Association will be held in Nashville, Tenn., Tuesday, Wednesday and Thursday, November 10, 11 and 12, 1896. The Nicholson House has been selected as headquarters for the association. Rates from $2 to $4 per day. Arrangements have been made with the Southern Passenger Association for reduced rates on the certificate plan. These certificates, properly signed, will entitle those who attend to one-third return fare. Dr. E. S. Lewis, of New Orleans, will read the presidential address. Among the many papers listed are noted those by Drs. Edmond Souchon, R. Matas, S. M. Fortier, H. S. Cocram, and W. E. Parker, of this city. Members of the medical profession are cordially invited to attend. Dr. W. D. Haggard, of Nashville, is chairman of the committee of arrangements.

A Movement is on Foot to establish a training school for colored nurses, in connection with the New Orleans University Medical College. Steps have been suggested, and from some of the local pulpits funds have been solicited. The promoters of this scheme are much interested, and it is thought the result will be the successful organization of the institution in question.

The Medical Department of Tulane University opened its preliminary session on Monday, October 19. The indications are that the class will be smaller than that of last year. The depression all over the country incident to hard times and to the coming election are considered responsible.

To Mexico by the New Orleans Route.—A rate of one first-class fare has been authorized for the round trip to the city of Mexico from all points south and west of the Potomac and Ohio rivers and west of the Mississippi (including Chicago) for the occasion of the Pan American Congress, which convenes in the City of Mexico, Mexico, November 16–19; and, in this connection, the following will be of interest:

The rate from New Orleans to the City of Mexico, going and returning the same route, will be $47.25.

Persons from points North and East, to which rates apply, can go via St. Louis and return via New Orleans, or *vice versa*, by adding $5.75 to the regular rate from initial points.

Stop-overs will be allowed south of the Rio Grande within the final limit (December 31) of ticket, both going and returning.

Parties chartering special cars going via New Orleans will not suffer the inconvenience of change of gauge, and such cars will be hauled free when accompanied by passengers holding a minimum of fifteen tickets. The attractiveness of the Southern Pacific as the route to the City of Mexico is pretty generally understood. It is the only road running a direct buffet sleeping car service between a point in the United States and the City of Mexico without change.

Tourists via New Orleans and the Southern Pacific will have an opportunity of visiting the points of historic and romantic interest in the quaint Crescent City. Westward from New Orleans the road runs through the greatest sugar plantations in the State; the rice region; the beautiful Bayou Teche land; the pine forests of the Sabine, and the wide plains of Eastern Texas, now dotted with thrifty cities and made productive by numberless farms. Through Houston, with its many industries; and San Antonio, the beautiful city of the Alamo. Then from Spofford, south, to Eagle Pass, where the Rio Grande is crossed, the way leads through a region of matchless interest and natural wonders to the ancient Aztec capital, now the bustling, busy centre of the neighboring republic.

Abstracts, Extracts and Miscellany.

Department of Surgery.

In charge of Dr. F. W. Parham, assisted by Drs. E. D. Martin and F. Larue.

THE X-RAYS AND THEIR APPLICATION TO PRACTICE AND DIAGNOSIS.

In a paper on this subject read at a recent meeting of the British Medical Association and published in the *British Medical Journal* of October 3, Mr. Sidney Rowland summarizes the application of the Rœntgen rays and indicates some of the undeveloped possibilities of the method. We shall abstract as briefly as possible from this valuable article.

PRACTICAL USES.

The method can only be useful in parts of the body consisting of a substance, which is opaque to the rays, surrounded by tissues which are (relatively) transparent. Most of the tissues of the body being to the rays extremely transparent, and only the bones and certain foreign bodies being opaque, it can at once be seen that the new process is necessarily limited in its application. As it is important in the case of any new discovery or method that we should not overestimate its power or applicability, so that our experience with it may not bring woeful disappointment and discouragement, Mr. Rowland has attempted to state for each region what may reasonably be expected of the X-rays.

THE HEAD.

Usefulness practically confined to the discovery of foreign bodies lodged in the brain case. Here the conditions are very unfavorable, since the very transparent brain substance is completely surrounded by the bone case, which serves as a more or less opaque screen in all directions. By continuing the exposure, however, for a sufficient time the bone becomes pervious to the rays and a ball may be located in the brain tissue.

THE SPINE.

The same remarks apply to the spine (but perhaps less emphatically).

In the *cervical spine* the position of a tuberculous focus or foreign body can be readily ascertained. Caries likewise may be diagnosticated. The skiagraph is best taken from the side for this purpose, in order to get a profile view.

In the *thoracic spine* the sternum and ribs furnish a more or less efficient screen, making it difficult to get a picture of any foreign body or disease focus. By directing the rays laterally so as to traverse an intercostal space the difficulty can be to some extent overcome. In the *abdominal spine* the soft wall being pervious the difficulties are less obvious. (In the *pelvis* the difficulties are, of course, again increased by the thickness and projections of the iliac bones.)

THE THORAX.

Only the shadows of the heart can be made out, which is better done by percussion; no valves can be seen. Foreign bodies *opaque* to X-rays can be made out in *trachea*, *lungs* or *œsophagus*.

FOREIGN BODIES IN THE ABDOMEN.

Usefulness in the abdomen is confined to the detection of foreign bodies, the localization of Murphy's buttons, lumbar caries, fracture or dislocation.

The early diagnosis of extra-uterine gestation and the discovery of mal-presentations of *fœtus in utero* have not been much facilitated.

STONE IN THE KIDNEY.

Evidence is one-sided. If a decided shadow is obtained on the plate in the region of the kidney a positive diagnosis of foreign body is justified, but if no shadow is made, it may simply mean that the thickness of the body has not been traversed by the rays.

"In any case the information afforded can not fail to be suggestive."

LIMBS.

Here the method has proved of most value, as might *a priori* have been supposed. In the *joints* the greatest assistance may be obtained. In the *shoulder* great aid has been rendered in the

diagnosis of rheumatoid arthritis and displaced epiphysis [and fractures and dislocations]. But in the *elbow* the greatest usefulness has been displayed.

"Fractures, separated epiphyses, epicondylar fractures and many other intricate combinations of lesions which occur in and around the joint can all be revealed with the greatest clearness by the use of the X-rays." The fluoroscope, on account of its requiring no preliminary preparation and the penetrability of the joint, is particularly useful here [for rapid work, especially for recent fractures which do not tolerate any prolonged manipulation. One useful point should not be forgotten here, that such fractures may be first put up in wooden (not gypsum) splints and then examined to see if adjustment is proper.—EDS.]. In the *forearm* and *wrist* the method is limited to fractures and foreign bodies. It is not easy to make out a dislocation of a metacarpal bone, as a side view is difficult and an antero-posterior view helps little.

HIP DISEASE.

The amount of dense muscular tissue makes a skiagraph in muscular men unsatisfactory here.

In tuberculous disease and in congenital dislocation much valuable information may be obtained.

KNEE AND LEG AND FOOT.

[The same remarks apply as in the upper extremity, but the bones are much thicker and more impenetrable, and the pictures are, therefore, more unsatisfactory.]

This is as far as we can go at present, and with the rays as they are now available no great advance can be predicted, "but it is not too much to imagine that other rays of a similar nature may be discovered, rays that can not pass through carcinoma, and can through all other tissues, just as the X-rays can not pass through bone, but can through the remaining constituents of the body. Should such or similar forms of energy be discovered, it is a curious speculation to realize what the routine of physical examination will become; but for the present we must be content to pursue our investigations quietly without undue speculation, and to be thankful that we live in the age when the tangent of physical research is nearing its point of contact with the circle of the art of medicine."

MASSAGE.

Treatment in Twenty Cases of Fractured Clavicle by Dr. Dagron.

The doctor treated the three types of this fracture, the outer extremity, the inner extremity and the median variety by this method. He states that the fracture of inner and outer extremities are more amenable to treatment, as they present the least deformity. His results are, however, as good with those of the median portion.

Gentle massage beginning from the hand up to the seat of fracture, not encroaching on the fragments themselves, but around them, is immediately begun either with vaseline or sterilized oil.

Beginning gently somewhat anæsthetizes the skin, quickly facilitating more thorough massage.

After each seance slight passive and active movements of the arm should be made, exaggerating these as pain subsides.

The arm is then fixed in an ordinary sling, the forearm fixed at right angles with the arm.

The two upper folds of the sling should pass one over the sound shoulder and the other over the broken clavicle and both be attached to the posterior cervical region.

The patient should be told to throw his shoulder as far back as possible, which position best corrects the deformity and calms the pain. After the fifth day the patient can begin to flex his forearm on his arm outside of the sling.

After the fifteenth day the sling can be placed external to the clothing, and very soon discarded altogether.

Consolidation takes place from the eighteenth to twenty-fifth day, when the patient can be discharged as cured. We should caution patients not to lift heavy weights too soon.

The doctor had some cases, nevertheless, who, in spite of his warning, were imprudent, one mounting the bicycle on the twenty-first day, guiding himself with the injured side on the twenty-fifth day.

Four months after the fracture this patient underwent severe training for the *grand prix* of Paris, and succeeded in carrying off the first prize over all competitors of other nations.—*Journal de Médecine et de Chirurgie.*

Miscellaneous.

"Disabilities Due to Eye-Strain as viewed by the General Physician and the Ophthalmologist," was the subject of a paper read by Dr. S. Weir Mitchell at a meeting of the Section on Ophthalmology of the College of Physicians of Philadelphia. The discussion was reported by Dr. Charles A. Oliver, clerk of the section. Dr. William Thomson gave a carefully detailed account of the ophthalmic conditions found in the case cited in Dr. Mitchell's paper. The patient, myopic in childhood with diplopia at ten years of age, was corrected with astigmatic lenses and prisms when he was seventeen years old. He passed through college and studied law without suffering from much asthenopia. At twenty-four years of age, he was hard at work professionally, and wrote a book of a thousand pages. Since that time he has had periodic headaches.

In 1878, the distress was so pronounced and constant that the patient was unable to do any near work. There was an esotropia of twenty degrees for distance with myopic astigmatism in the right eye; to which, in the left, there was superadded a slight conicity of the cornea situated below and to the inner side of the apex. His distant corrected vision equaled six-sevenths and a half of normal in each eye. The patient was ordered a partial correction of the myopia, a full correction for the astigmatism, with the addition of prisms equaling ten degrees with their bases out for constant use, aided by the substitution of the full amount of myopia and an additional prism-power of ten degrees more in over-fronts, when distant objects were to be seen more accurately.

In spite of a year of outdoor life in Colorado, which much improved his health, a few minutes' reading produced severe headache. As the refraction at this time was unchanged, a full tenotomy of the left internus, leaving but five degrees of esophoria for six metres and equilibrium at fifty centimeters, was performed May, 1888. All the prisms were removed except a five degree prism strength from the distant glasses, resulting in an equilibrium at and within one metre's distance and an esophoria of five degrees at six metres. All strain had gone, allowing him the ability to read an hour each morning and to play tennis with the over-fronts on for several hours daily without fatigue.

About September, the first sudden breakdown took place, appearing as a violent headache, which lasted eighteen hours.

One month later, the right internus was fully divided, leaving an esophoria of three degrees and an abduction of eight degrees. The patient did well until January, 1889, when violent headaches upon any attempts at any binocular fixation came on. Sight and accommodation remained unchanged. The cylinder of the left lens was reduced and three degree prisms were added to the near glass.

Two years later, the relief had become so entire and complete that in spite of a large practice, lecturing twice a day and acting dean of his college, the relief was complete and the patient enjoyed life.

In April, 1893, stronger partial correction, with four degree prisms bases out for thirty-three centimeters, with full correction of myopia for distance, were ordered.

The patient remained comfortable for two years, when he returned with the statement that weekly and biweekly headaches, commencing during the winter, each attack lasting twenty-four hours and associated with sick stomach, had appeared. Vision and refraction-error remained unchanged. There was a return of esophoria, which now equaled thirteen degrees over that of his last correction, and which rose to thirty degrees with the naked eye. At this time, the tendons of both of the internal rectus muscles were divided, obtaining an orthophoria for six metres.

These operations, with slight changes in the lens combinations, gave more or less relief for about a month's time, when it was found necessary to advance and excise three to four millimetres of the tendon of the left externus, reducing the esophoria to three degrees at six metres; orthophoria at one metre's distance being obtained. The patient never presented any symptoms of hyperphoria.

In six week's time, still remaining at work as president of a large corporation in addition to his law practice, he reported the return of several headaches.

One month later it was found that he had an esophoria of seven degrees. Prisms of three degrees each in over-fronts were ordered.

At this time the patient commenced to wear a patch over the left eye, thus preventing binocular vision: stating that this gave him much relief.

Six weeks later no hyperphoria could be found, corrected vision was normal, accommodation was full, abduction equaled nine degrees, and adduction equaled thirty degrees. The refractive error had not increased.

At the time that the author read his paper, he stated that, as the patient carried his head with his brow forward, there was a possibility that there might be too much supraduction. The headaches were frequent and near-work was much limited.

He deemed that the condition of the left cornea lent doubt as to the best position for the placing of the cylinder-axis. He believed that further operations on the muscles concerned in binocular single vision would be still needed for relief which the patient had previously obtained for four years.

In contrast with this case of recurrent esophoria, Dr. Thomson cited an interesting example of esophoria with high myopia and astigmatism.

In this case in three years' time, by careful correction of the refraction-error and muscle disturbance with a complete tenotomy of the right external rectus muscle, complete and entire relief from a series of aggravated local and general symptoms took place.

Dr. Thomson believed that in all cases of muscular asthenopia we are confronted with that last puzzle of binocular single vision which compels us to spend so much time and labor upon them. He further stated that the ophthalmic surgeon knows full well that the care of these cases merely begins when they are supposed by the public and general practitioner to have been finished by being glassed.

Dr. Charles Hermon Thomas reported a case of Irregular Spasmodic Strabismus dependent upon Esophoria. The patient, a young lady, had suffered much pain and distress in the eyes, accompanied with headache, from childhood. She had also been subject to occasional attacks of great distress in the eyes. These latter, however, were not of a painful nature, but were characterized by irregular spasmodic contractions of the internus muscles, producing, while the attack lasted, a constantly varying strabismus accompanied by much confusion of vision and general nervous perturbation. Besides, she had been subject to severe coughing and strangling fits which were accompanied by weeping and violent convulsive movements, and

which occurred at intervals during a number of years. The asthenopic pain and headache, especially, had always been of a very disabling character, interfering seriously with the use of the eyes in reading or other near work.

The visual lines, during much of the time, were manifestly parallel, but marked strabismus occurred when almost any change in the ordinary relation of the eyes was made; for example, as in taking off her glasses. Under the cover-test, convergence became extreme, and when the cover was shifted the target was not seen by the uncovered eye until winking had taken place; this being so even though the eye was found to be looking in the proper direction. During the time the eye failed to see the target, the pupil was in marked contraction, but the instant the pupil expanded to the same size as the other, the patient gave the signal that she could now see. (Evidently the excessive convergence was associated with spasm of accommodation and accompanying pupillary contraction.)

Broad homonymous diplopia, which was seen when a dark purple glass was placed before one eye, was neutralized by prisms that aggregated 8 deg. base out. The phorometer showed an esophoria of 4 deg. to 8 deg., and an abduction of 4 deg. to 6 deg. No hyperphoria was manifest. With prisms aggregating 8 deg. base out, movements of recovery under the cover-test were abolished, and she saw the target at once without previous winking. Prisms of this strength having been worn for a few days with comfort and the heterophoric conditions remaining stable, operations were performed on both interni at a week's interval. The result was an abolition of the strabismus and of the esophoria and an abduction of 10 deg. The eyes could now be used freely and continuously as never before.

Two months later her husband wrote: "I am very glad to report that my wife's eyes are perfectly well, and she has not been troubled with eye or headache since the operation." Her physician also wrote: "The patient is entirely free from the annoying and painful symptoms of her former trouble and is well and happy."

In conclusion, Dr. Thomas said that he was confirmed in the belief that muscular errors are neither of more nor less importance in their relations to asthenopic and general reflex-symptoms than are refractive errors, and that equal relief is to be expected from appropriate correction in both classes of cases.

In the discussion, Dr. Thomson stated that he agreed with Dr. Mitchell in the fact that the case first cited was not hysterical in type. He also called attention to the belief that lateral deviations were frequently dependent upon disturbances in the vertical muscles, and stated that such cases should not be confounded with ophthalmoplegias of hysterical origin.

Dr. Samuel D. Risley stated that he was very much interested in the papers, and that in his experience there was a relatively large number of cases, especially in the young school children and other persons doing many hours of work daily at the near point, where a careful study of the ocular-balance would reveal a normal power of supraduction and infraduction, an actually diminished power of adduction, but who would, nevertheless, both with the Maddox rod and cover test, exhibit well-marked esophoria. This contradictory condition will usually be found in association with either a spasm of or a diminished range of accommodation. In a few instances in his experience the anomalous condition had apparently been due to some foreign source of irritation—*e. g.*, a uterine displacement.

Dr. George E. de Schweinitz said, that in connection with the first case reported, he would like to call attention to the beneficial effects produced by the employment of large and increasing doses of tincture of hyoscyamus.

Dr. George C. Harlan had found that the great difficulty in cases of this kind was to discriminate between the cause and effect, and that the majority of the various modes of treatment aim simply to relieve ever varying groupings of symptoms. Dr. Risley believed that there was a special group of cases which were distinctly benefited by the systematic employment of adducting practice prisms. This type of cases, to which he has given the name of "Relative Insufficiencies," can be greatly relieved by prism training. In a second type, which he has denominated "Absolute Insufficiencies," he has found that there is no permanent result to be obtained from exercise treatment. Such patients may be taught to overcome high degrees of adducting prisms—40 deg. or even 60 deg.—and then fall back to their original condition. He accounts for this by reason of anatomical faults such as abnormal tendon-attachment, inequalities in muscle-lengths, facial symmetries, and osseous malformations, which, in some instances, in spite of operative interference, render comfortable binocular vision impossible.

Good Advice in Acne.—"I may say that success in the treatment of acne depends particularly upon the proper conception of both the etiological factors existing in each case presenting itself, and also in a knowledge of the pathology of the disease. Every example of acne should be regarded as distinct, and whatever remedy or mode of treatment is instituted should be prescribed, after careful investigation into the indications furnished by the patient's history. Routine treatment can not but furnish more failures than successes.—Elliott in the *Postgraduate*.

Fatal Poisoning from Oysters.—In the *Wiener Klinische Wochenschrift*, Dr. Brosch reports a case of fatal poisoning from oysters. The effect was general and the report carefully presented. There were found hemorrhages in the cerebellum, edema of the spinal pia, and hemorrhages in the gray matter, especially in the dorsal and lumbar regions, also hemorrhages in the pleuræ and lower portion of the ileum. The cardiac portion of the stomach was ecchymosed and the spleen enlarged. Microscopic examination of the heart and kidneys showed an advanced pachydermatous degeneration of the muscular fibres of the heart and of the renal epithelium. The protoplasm of the liver-cells was filled with large and small fat balls. The hemorrhages were probably due to the manner of death rather than to the poison itself. Although the chemical examinations proved unsatisfactory, the clinical picture is distinct. Such cases should be separated into two classes: (1) The bacterial cholerines, and (2) the severe poisonings. In the first, evacuants and disinfectants should be given. In the last, the stomach should be cleaned by the pump and the intestines by high irrigation. Frequent evacuations of the bladder by catheterization, artificial elimination by the stomach catheter, and artificial respiration, if necessary. The poisoning is not of bacterial origin, but is due to a toxic substance resembling an alkaloid, which is found preformed in the body of the animal. Similar bodies have been isolated from mackerel, as hydrocollidin, parvolin and æthylendiamin. In other fishes compounds have been found resembling curari in their action. In horse muscle a like substance, named mytilotoxin, has been detected, which gives rise to salivation and diarrhœa.—*American Journal Medical Sciences*.

To Sterilize Catgut.—Hofmeister recommends the following process for sterilizing catgut, the value of which depends upon the capability of formalin for acting on lime substances so that they lose their solubility in boiling water:

1. Harden the raw catgut, which has previously been wrapped on rolls, in 4 per cent. solution of formalin for twenty-four hours.

2. Boil in water for ten minutes.

3. Harden again in the formalin solution and preserve in alcohol, to which 5 per cent. glycerine and 1 per cent. sublimate, or other antiseptic in suitable quantity, has been added. The strands remain from the beginning of the sterilization on the same rolls, so that touching with the fingers may be avoided. It is necessary to wind the catgut, before beginning the sterilization, because the loose catgut rings entangle when placed in the solution and in boiling become converted into unraveled balls. When putting the rolls into the solution of formalin, much care has to be taken to remove the great number of air bubbles which remain among the strands, so as to have the finished preparation uniformly firm. The tensile strength of the sterilized threads which were examined with a dynamometer compared favorably with the raw catgut.

Bacteriological investigation showed the prepared catgut to be free from spores.—*Centralblatt für Chirurg.—American Journal Medical Sciences.*

Music Hath Charms.—An instance is given by Bestchinsky of the effect of instrumental music in calming the night terrors of children.

The child was three years old, and awoke every night in a terror that could not be allayed by any of the ordinary means. The author advised that a piece of music be played in his hearing, choosing one of Chopin's compositions. From the first evening the child slept without waking. After some days the music was discontinued and the night terror recurred. It was prevented by resuming the music for a time. The cure was complete after several months.—*Vratsch.—American Journal Medical Sciences.*

Perchloride of Mercury for Leprosy.—Dr. H. R. Crocker, of London, reports marked improvement in two cases of leprosy

from injections of perchloride of mercury made with Pravaz' syringe into the buttocks. The rapidity of improvement in both cases led him to report them as offering a possibly useful remedy in the treatment of leprosy. It might suggest itself to those seeing this disease as an available method of treatment.—*London Lancet.*

Rheumatism as a Cause of Chorea.—In 552 cases in rheumatic fever and 157 cases of cholera, Dr. Churton drew the following conclusions: (1) The postulated toxin (x) being accepted as an essential element in the causation of rheumatism, depressing conditions (y) determine the first position or locus of the disorder; that is, what cells or tissues (z) the toxin shall strike. (There is probably a quite separate and independent causation for (x).) In 91 cases of rheumatism in which the incidence of the chill, strain, etc., was recorded with precision, and also the joints or parts first affected, it was seen in every case—or with very few, and doubtful, exceptions—that the part receiving the impact of the conditioning cause was the first to become disordered by the toxin; for example, wetting of feet always caused arthritis first in the lower extremities; of shoulders in the upper extremities. (2) If (x) and (y) are given, the position of (z) can be stated within certain limits. (3) If (y) is a fright, shock or intense excitement, (z) will be the nervous system; in the developing brain of a child the result is usually chorea; in adults it may be a delirium or coma, perhaps hyperpyrexia. (4) Arthritis or endocarditis may follow the nervous disorder, since the symptoms themselves may become causes of depression of tissues, and thence of multiplication of micro-organisms and toxins. (5) Similarly, chorea may follow arthritis; but (6) arthritis is never the first result of fright; and (7) chorea is never the first result of chill unless fear or brain excitement accompanies the chill. (8) A man who, being rheumatic, and having no other known disease, is accidentally subjected to strong excitement—a quarrel—and in a few hours develops chorea, is an "experiment devised by Nature" to prove that the essential cause of the two disorders is the same, and that only the conditioning (localizing) causes are different. In non-rheumatic persons, even young children, brain disturbance does not cause chorea.—*Brit. Med. Journ., September 19, 1896.*

Prognosis of Various Albuminurias.—This was the second subject for discussion at the recent *Congrès de Médicine Interne*, at Nancy. The following is almost *in extenso* the report of Dr. Talamon. The clear expounding and the lofty clinical value of that report justify its translation, as we consider it to be a lecture of the greatest interest (*Gazette des Hópitaux*):

"The presence of albuminuria in practice has become so commonplace that the frequency of that symptom has necessarily narrowed its importance, so much so that albuminuria is even considered by some as a physiological phenomenon. But this is carrying too far the consequences of a fact which, though frequent, is, however, not the rule.

"There is no physiological albuminuria; the presence of albumen in urine is always pathological. It always indicates some alteration of the filtrating membrane of the glomeruli, a slight and transitory one in many cases, but an alteration at any rate, the extent, importance, weight and future result of which can be appreciated only by a minute analysis of the conditions under which it was produced. In fact, it is important to us to know that:

"1. Albuminuria being so common we can not consider it as having in itself any prognostic value.

"2. The existence of albuminuria is compatible for a long period with the appearance of health.

"3. A symptom so common gains any value only from the extrinsic conditions which promote, accompany or complicate it.

"4. These conditions form the foundation of the prognosis, immediate or remote.

I.

Elements of the Prognosis in Albuminuria.

A. Characteristics of Albuminuria:

1. *The quantity of Albumen.* It is the easiest thing to determine, but at the same time when considered alone this character is liable to lead to serious errors in prognosis. If we consider, with little risk of blundering, an abundant amount of albumen as a serious symptom, on the other hand the presence of a very trifling quantity does not always carry a favorable prognosis. But, even in cases of abundant albumen, *i. e.*, 5 grammes or more of albumen per litre, the prognosis is not

always alike, for such an albuminuria may be transitory or intermittent without carrying any immediate danger.

Only in one case is the prognosis precisely and invariably a bad one and it is this: a large amount of albumen coexisting permanently with a polyuria of from 2 to 4 litres is *always* of grave omen. This indicates either a large white kidney (amyloid) or a red kidney with rapid atrophy, and the end is fatal and never very remote.

As to the cases of very slight amount of albumen, *i. e.*, oscillating around 0.50 per 1000, nothing sure in prognosis can be derived from the fact itself.

All that can be said is this:

When a trifling amount of albumen exists in a urine of nearly normal composition, it signifies positively nothing serious for the present and as regards the future it furnishes no information, whatsoever. But, on the other hand, if it is found in a urine of pale color, of little density and wanting in organic elements, it points to the existence of an atrophied kidney.

In cases of acute nephritis and of acute attacks in chronic nephritis, when the amount of albumen remains large, it certainly indicates that the inflammatory process about the glomeruli is spreading, even though the blood pressure and circulation are improving. It indicates aggravation with more certainty yet when the pressure remains low—*i. e.*, when the quantity of urine is not increased. Of course, when albumen decreases whilst the quantity of urine increases, it is plainly indicated that the inflammatory process is arrested, or at least limiting itself.

In the periods of remission, at times very long, which occur between the acute attacks in chronic nephritis, the persistence of albuminuria, with a large amount of albumen, indicates a rapid and constant extension of the destructive lesions in the kidney, consequently short-dated accidents of a serious character. On the contrary, a small amount of albumen varying around 1 gram per 1000, allows us to believe that the lesion remains circumscribed or that, if it progresses, it does so in a gradual way, compatible for a long while with the normal functions of the organism.

2. *The Quality of Albumen.* When under the influence of heat the coagulum of albumen is not retractile, Bouchard holds that albuminuria in this case is positively not due to any renal lesion,

but to the poor state of the blood. Such a characteristic prognosis is formed upon an uncertain basis, for the non-retraction spoken of is due in many instances, not to the quality but to the quantity of albumen. In others, the chemical medium in which the coagulum occurs, and the proportion of the various constituents of the urine, may produce the phenomenon.

When the Heller-Gubler test is used—*i. e.*, when pouring nitric acid in albuminous urine, we see above a plain and thick disk of uric acid, we can thereby infer that in this case albuminuria is of a mild character. This indeed is observed only in three conditions, in albuminuria of fevers, in albuminuria of heart diseases, in albuminuria preceding gout. The urine is in such cases highly colored and heavy, and the renal lesion can be considered a slight one. When, on the contrary, and this is observed in cases of colorless and light urine, nitric acid causes immediately a thick precipitate of a dull white color, standing above a violet-hued disk, which rapidly diffuses into the albuminous curd, the latter undergoing retraction whilst in a few minutes the violet color is diffused in the whole mass, it implies directly a grave prognosis; because it occurs only in chronic albuminuria with deep lesions of the kidneys, and because the abundance of indican (present in the diffusing violet disk) involves a deep-seated alteration of the system.

When, in cases also of pale and light urine, nitric acid causes a thin disk of albumen standing above a pink disk of urohematine, the prognosis is variable, because it occurs as well in albuminuria with contracted kidney, in albuminuria with generalized arterio-sclerosis in old people, as in albuminuria in anæmic and neuropathic youths.

3. *The Daily Variations of Albuminuria.* Does this occurrence have any value in prognosis? Does it signify positively that there is no renal lesion. Because of the repetition of albuminuria, the increase of it under the same influences, should it be implied that functional disturbance exists alone.

A large number of albuminurias called transitory, intermittent, cyclic,, paroxystic have been classified under the general term *functional albuminuria*, and subdivided into alimentary, digestive, muscular, postural and nervous albuminurias, according to the particular conditions which provoke or increase the appearance and reappearance of albumen in the urine at more or less regular intervals.

While it is granted that in that class of albuminuria the prognosis is comparatively favorable, it can not be admitted that its mild character is due to the absence of renal lesion, for the same variations are observed in cases of undeniable Brightic albuminuria, according to the more or less observance of hygienic measures.

This so-called intermittent albuminuria is intermittent only in appearance, from the fact that the albumen in the urine is so very small that it is at times imperceptible. Indeed, when the case is taken with some concomitant illness, for example fever, albumen, being therefore increased, becomes perceptible and the intermittent albuminuria becomes a continuous one. The increase, it is true, occurs chiefly at the usual hours and at periodical intervals. At any rate, to avoid implicating any theory, the term *albuminuria minima*, as the albumen is always passed in very small quantities, is self-explanatory and less misleading than such names as intermittent, cyclic and others, particularly functional. Again this *albuminuria minima*, with its variations under certain influences, is suggestive in regard to hygienic therapeutics, as it shows the action of such influences; but in regard to prognosis these variations have not the preciseness and certainty which was attributed to them.

[TO BE CONTINUED.]

Book Reviews and Notices.

Anatomy, Descriptive and Surgical. By HENRY GRAY, F. R. S. A new edition, thoroughly revised by American authors, from the thirteenth English edition, edited by T. Pickering Pick, F. R. C. S., with 772 illustrations. Lea Brothers & Co., Philadelphia, 1896.

Of all of the many standard publications of the Leas', Gray's Anatomy is perhaps the one most widely used, and the one, furthermore, that runs through a physician's life, because anatomy is the foundation of all medicine. We reiterate a statement made in noticing a former edition: "Not to know Gray is to argue oneself unknown," as far as a medical man is con-

cerned. Truth never dies, and never grows old. The very first edition of Gray was a classic; it was a faithful presentation of human anatomy as it was then known. The additions to our knowledge of anatomy were incorporated in the successive editions, and Gray was thus always a trusty guide to the seeker after anatomical knowledge. Accuracy of descriptions has always characterized the work. The engravings are unsurpassed by any others of the kind. The use of different colors for arteries, veins and nerves greatly increases the usefulness of the illustrations to the student. This edition contains one hundred and thirty-five engravings more than its predecessor. This fact alone indicates that much revision and amplification have been employed to make Gray what it always has been, the foremost text-book on human anatomy in the English language. In this edition we miss Holden's "Landmarks, Medical and Surgical," which was a virtual donation by the publishers of an additional text-book to purchasers of the previous edition.

The present edition has been revised by American authorities. In certain departments of anatomical research, investigation has been very active. The nervous system and the abdominal viscera have yielded much to continued study, and the fruits of the labors of careful investigators are incorporated in Gray.

An analysis of a thorough text-book of anatomy is as difficult as that of an encyclopedia. To those who are indebted to Gray's Anatomy for their fundamental knowledge of medicine and surgery, it is only necessary to say that time has not staled their first text-book, as the publishers have never allowed it to grow antiquated; and to those about to enter upon the study of medicine, we most gladly commend this classical work as a trusty guide. A. McS.

The Prescriber's Pharmacopœia. A synopsis of the more recent remedies, official and unofficial, with a therapeutic index. Third edition. Kemp & Co., Ltd., Bombay, 1896.

This little book is intended for the profession of India particularly. To them the names of many local drugs noted, with accuracy of description in brief space, must be useful. As a reference work it is also serviceable. It is neatly edited, and well printed, of a size to make it convenient. D.

Ptomains, Leucomains, Toxins and Antitoxins; or the Chemical Factors in the Causation of Disease. By VICTOR C. VAUGHAN, Ph. D., M. D., Professor of Hygiene and Physiological Chemistry, and FREDERICK G. NOVY, M. D., Junior Professor of Hygiene and Physiological Chemistry in the University of Michigan. New (3d) edition. In one 12mo. volume of 603 pages. Cloth, $3. Philadelphia, Lea Brothers & Co. 1896.

This third edition of Vaughan's work, enlarged and made more comprehensive, is destined to achieve still greater success than its two predecessors. The chapters on bacterial poisons or toxins and antitoxins, quite up to the most recent advances in those branches of science, will especially prove interesting reading to all who wish to understand fully those subjects. We would commend also, especially to the practitioner, the careful reading of chapters VII and VIII on the "germicidal constituents of blood-serum" and on "immunity, antitoxins and serum-therapy."

No physician's library can be complete without a copy of the third edition of this book. P. E. A.

Minor Surgery and Bandaging. By HENRY R. WHARTON, M. D. Third edition, with 475 illustrations; Philadelphia and New York: Lea Bros. & Co., 1896.

The first edition of this book appeared in 1891; the second in 1893. The publication of a third edition now, in 1896, would indicate that the book has been a popular one. That it is a valuable work on minor surgery is shown at once by an examination of its contents. But we believe it would have been much better to devote it exclusively to a consideration of minor surgery. Instead we find it burdened with inadequate descriptions of amputations, excisions and resections, intestinal surgery, and the like, which are much better discussed in systematic works in operative surgery. The only justification for such a plan seems to be that it would make the book sell better, as the author hoped "that this description will increase the value of the work to medical students, for whose use it has been prepared."

As a work on minor surgery it is thorough and one of the best manuals we have seen, and scarcely needed the addition of such

superfluous material to improve it. The book should have been allowed to appeal to the students on its merits as a minor surgery, and not have been permitted to smack so much of a commercial flavor, as an *omnia in uno*. On page 126, in the section on carbolic acid, we notice an error which occurred in the previous edition, and should have been corrected in this: "A ready method of making a 5 per cent. carbolic solution is to add one tablespoonful of carbolic acid to one pint of hot water." A little calculation will show that 3 per cent. was meant, but the student would easily be led into error in blindly following the directions of the book.

In selecting a book on minor surgery the student can not go amiss in buying this work, for we can cordially commend it as one that will fully meet his requirements. F. W. P.

Functional Disorders of the Nervous System in Women. By T. J. McGillicuddy, A. M., M. D., Surgeon in Charge of the New York Mother's Home Maternity Hospital; Surgeon in Charge of the Metropolitan Dispensary and Hospital for Women and Children, etc. Illustrated, 12mo., 367 pp. New York, Willam Ward & Co., publishers.

This work, written especially for the practitioner, will be found very useful, indeed, not only to those it is intended for, but also to those who make a specialty of neurology or gynecology. It is divided into separate chapters treating of the various reflex neuroses and giving the distinctive characteristics and symptoms of each group. After this follow very good descriptions of the general neuroses, such as hysteria, hystero-epilepsy and hemicrania. Last of all is a long and useful chapter on therapeutics, replete with valuable and new suggestions as to the proper way of treating these disorders. P. E. A.

PUBLICATIONS RECEIVED.

Manual of Midwifery. By W. E. Fothergill, M. A., B. Sc., M. B., C. M. The Macmillan Company, New York, publishers, 1896.

American Text-Book of Physiology. By ten authors. Edited by Wm. H. Howell, Ph. D., M. D. W. B. Saunders, Philadelphia, publisher, 1896.

Text-Book of Diseases of the Nose and Throat. By F. H. Bosworth, A. B. Cantab, A. M., M. D. Wm. Wood & Co., New York, publishers, 1896.

System of Medicine. By many writers. Edited by Thomas C. Allbut, M. A., M. D., LL.D., F. R. C. P. Macmillan & Co., New York, publishers, 1896.

Diagnostic Urinalysis. By M. D. Hoge, Jr., M. D. Geo. M. West, Richmond, publisher, 1896.

Feeding in Early Infancy. By Arthur V. Meigs, M. D. W. B Saunders, Philadelphia, publisher, 1896.

Practical Treatise on Medical Diagnosis. By John H. Musser, M. D. Lea Bros. & Co., Philadelphia and New York, publishers, 1896.

Treatise on Obstetrics. By Ed. P. Davis, A. M., M. D. Lea Bros. & Co., Philadelphia and New York, publishers, 1896.

Reprints.

Notes on Inguino-Scrotal Cysts. By Thos. H. Manley, M. D.

Acute Rheumatic Iritis, with Cases. By A. B. Deynard, M. D.

Treatment of Cancer of the Rectum. External Hæmorrhoids, with Special Reference to Their Treatment. By Lewis J. Adler, Jr., M. D.

Critical Study of Changes in Fields of Vision, taken whilst Eyes are placed at right angles to ordinary Position. By Chas. A. Oliver, A. M., M. D.

Fatal Case of Sarcoma of Nose. Survival of the "Fallen Palate." By W. Scheppegrell, A. M., M. D.

Normale Synsorgans Indirekte Stirreblindhed og dans Betydning under Synsfeltundersogelser. By S. Holth.

Some Remarks About Asepsis in Military Service. By Lieut. Col. Edward Boeckmann, M. D.; and *Surgical Sterilization and Sterilizers in Private Practice*, by same author.

L'Emploi de l'Icthyol dans la Tuberculose Pulmonaire. By M. Le Tanneur, M. D.

Behandlung der Lungentuberkulose mittel Ichthyol. By Dr. M. Cohn.

Tumor of the Thalamus, with Remarks on the Mental Symptoms. By Walter Channing, M. D.

Pediatrics; Past, Present and Prospective. By S. W. Kelly, M. D.

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Bulletin of the Board of Health of the State of Louisiana.)

FOR SEPTEMBER, 1896.

CAUSE.	White.....	Colored...	Total.....
Fever, Malarial (unclassified)	8	5	13
" Intermittent			
" Remittent	2		2
" Congestive	1	2	3
" Typho	2		2
" Typhoid or Enteric	5	3	8
" Puerperal			
Influenza			
Measles			
Diphtheria	1		1
Whooping Cough	1	2	3
Meningitis	3	2	5
Pneumonia	9	5	14
Bronchitis	12	7	19
Consumption	25	34	59
Cancer	8	1	9
Congestion of Brain	6	1	7
Bright's Disease (Nephritis)	10	12	22
Diarrhœa (Enteritis)	18	2	20
Gastro-Enteritis	4		4
Dysentery	2	2	4
Peritonitis	3	2	5
Debility, General		2	2
" Senile	14	11	25
" Infantile	3	3	6
Suicide	8		8
Heart Disease	10	13	23
Apoplexy	8	5	13
Tetanus, Idiopathic			
" Traumatic	2	3	5
Trismus Nascentium	8	5	13
Hepatitis	1		1
Hepatic Cirrhosis	3		3
Uræmia	6		6
Injuries	10	3	13
All Other Causes	101	33	134
TOTAL	294	158	452

Still-born Children—White, 33; colored, 17; total, 50.

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

Death Rate per 1000 per annum for month—White, 18.09; colored, 23.70; total, 19.72.

METEOROLOGICAL SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure	30.02
Mean temperature	79.00
Total precipitation	5.26
Frosts	none

Prevailing direction of wind, southeast.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XLIX. DECEMBER, 1896. No. 6.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the 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.]

ANÆSTHETICS.*

BY HERMANN B. GESSNER, A. M. (TULANE), M. D., VISITING SURGEON CHARITY HOSPITAL, ETC.

I take it to be the duty of the individual opening a discussion not so much to exhaust the subject chosen as to give a skeleton outline of its principal divisions and subdivisions, and to give a prominent position to those points which, being not yet positively settled, it may be of value to discuss "in extenso." This it is my purpose to do in opening the *Discussion on Anæsthetics*. At this meeting, so far as the history of the original discovery of anæsthetics is concerned, it will in the main be sufficient to refresh the memories of my hearers. That Crawford W. Long, of Georgia, was the first surgeon in the world to use a general anæsthetic (ether) to advantage in actual operative work, although, unfortunately, he did not publish his results at the time, is, I believe, universally conceded; it is at any rate admitted by such men as Frederick S. Dennis, of New York, and John S. Billings, of Washington, men whose decision in a matter of the kind must have great weight with the profession. It is not so generally known that writers in the thirteenth and fourteenth centuries had described the inhalation of narcotic vapors from certain plants for the purpose of producing anæsthesia in surgical operations, nor that Mr. Hickmann, a London surgeon, had in 1828 informed

* Read before the Orleans Parish Medical Society, October 24, 1896.

King Charles X, in a letter which was laid before the Academy of Sciences of Paris, that he "had discovered a means of performing the most troublesome operations without pain, by producing insensibility by the introduction of certain gases into the lungs." Indeed, as far back as in 1800, Sir Humphry Davy had suggested that, to use his words, "nitrous oxide may probably be used to advantage in surgical operations,"

Efforts had been made from time to time to prevent the pain of operations by the use of narcotics, either in vapor or administered internally, by pressure on the nerves of the part, by profuse preliminary bleeding, by electricity, and by other methods; but to Georgia belongs the credit for the first successful use of a general anæsthetic. Jackson, Morton, Wells, closely connected with the early history of ether, have long been honored as the men to whom we owe the priceless boon of anæsthesia. Indeed, the sad picture drawn by Dennis, in his account of the "Achievements of American Surgeons," of Jackson dying insane; of Morton's impoverished state at the end of his life; of Wells' tragic death by suicide, while an inmate of a New York City jail, turn the reader to thoughts of the ingratitude of man and the irony of fate.

It is, therefore, a matter of no little surprise to find that Dr. Billings, in his article on "The History and Literature of Surgery" in Dennis' System of Surgery, gives the main credit for a "sufficient, general, safe method of anæsthesia" to the co-professors of surgery in the Harvard Medical School at that time, J. C. Warren and Geo. Hayward, and to their successor, Hy. J. Bigelow. The latter, who should be honored for his perfection of the lithotrite and for his thorough explanation of the mechanism of the ilio-femoral ligament, and of its importance in reducing dislocation of the hip joint, if for nothing else, delivered an address, November 3, 1846, on "Insensibility During Surgical Operations Produced by Inhalation," the first definite account of the method of production of satisfactory anæsthesia in surgical operations.

Dr. Billings tells us that Morton wished to patent his method, which was not safe until modified by Bigelow; that little credit is due Jackson, Morton, Wells for the part they played in the business. Possibly, then, it was through unworthy hands that this invaluable gift was bestowed on mankind.

To Sir James Y. Simpson belongs indisputably the credit for the introduction of chloroform.

While we speak of anæsthetics as a priceless boon, an invaluable gift, let us not forget that this rose, not unlike others, is accompanied by thorns. It is not strange that the state of general anæsthesia, this slumber, deep, though but intended to be temporary, should at times pass into the eternal sleep, into "that undiscovered country from whose bourne no traveler returns."

How often this occurs it is difficult to state with exactness. According to the figures given by Dr. H. C. Wood, in his article on "Anæsthesia" in Dennis' System of Surgery, and derived from an immense number of statistics made under all conceivable circumstances, by all sorts of observers, an analysis of nearly 1,000,000 cases of general anæsthesia, under chloroform or ether, shows one death in 3749 cases for the former, one in 16,675 for the latter—a proportionate mortality about as 4½ to 1. I venture to dwell for a moment on the fallacy of basing one's estimate of the relative safety of these two main anæsthetics on the experience of any individual or set of individuals. While on the one hand we see Hunter McGuire's report of 28,000 chloroform administrations without a single death, Nussbaum's of 40,000 without a fatal termination, and it gives us pleasure to note the unblemished record of our own townsman, Professor Ernest S. Lewis, who has performed a minimum of 25,000 operations under general anæsthesia, an insignificant proportion of these being under ether. Let us not overlook the less pleasant side of the picture. During my own brief medical career, extending but little over five years, I have known of five deaths under chloroform—two reported by Drs. Parham and Martin*; two occurring in the service of Dr. Schmittle, not reported, and a fifth in the service of Dr. W. E. Parker, also unreported. This, as it stands, is not encouraging, to say nothing of the hair-breadth escapes, which are not uncommon. Admitting that ether is the more irritating of the two, that fatal sequelæ may follow its use, though the operation crisis may be passed safely, full allowance for the sources of error must still leave the balance strongly against chloroform, the siren whose seductive sweet-

*A rough estimate, no record having been kept. The correct total might possibly be 35,000 or 40,000.

*Transactions, 1895, Orleans Parish Medical Society.

ness and ease of administration have lured many ships of life to destruction.

In marked contrast with these agents is nitrous oxide, charged by the authority above referred to with but two deaths in 10,500,000 cases. This gas, differing from ether and chloroform in that it is an inert substance so far as the human organization is concerned, while they circulate as poison in the blood, would surely be the preferable agent were its action less transient.

Other agents producing general anæsthesia, such as methylene bichloride, pental, ethyl bromide, have been experimented with, but these, too, have their dangers, and at this moment no one of them can be warmly commended to the attention of surgeons. Possibly the practice of commencing anæsthetization with nitrous oxide and continuing it with the use of ether may yield good results, but one death having thus far resulted in 12,941 administrations; the advantages claimed for this method over the plain administration of ether are in sparing the feelings of the patient and in saving time to the surgeon.

No mean rival of general anæsthesia, in many of its applications, is local anæsthesia, especially as exhibited in the form of the Schleich method, brought to the attention of the society in a paper by Dr. F. W. Parham.* This, however, it is not our purpose to discuss at the present time. While we do use chloroform and ether, the indications for the use of which in special cases we consider too well established to require attention here, we may be aided in our efforts to avoid fatal accidents by a knowledge of the manner in which they cause death. I know of no more authoritative, nor more tersely stated conclusion on this point than that of Dr. H. C. Wood, who says: "It must be admitted, first, that both ether and chloroform may kill the man or the lower animal either by arrest of respiration or by syncope; second, that syncopal death from chloroform is not common, though it does occur, in the lower animals, but is not rare in man; third, that the chief difference between ether and chloroform, so far as the mode of death is concerned, is that that form of death (syncopal) which is common under the influence of chloroform is rare under the influence of ether." From which it is plainly to be inferred that during the administration of either agent both pulse and respirations must be watched, but the

* Transactions, 1895 (*loc. cit.*).

pulse more especially during chloroform anæsthesia, the respirations under ether.

In endeavoring to shield our patients, so far as we may be able, from accidents under anæsthesia, too much attention can not be paid to the method of administration and to the preparation of the patient. In view of the importance of the former item, I have brought here to-night such appliances as time and my limited opportunities have permitted; they will, I trust, receive their share of attention in the discussion which is to follow. As to the preparation of patients, it would be carrying coals to Newcastle to tell you of the necessity of depriving the patient of food for a certain number of hours in advance of the intended operation. The importance of a preliminary examination of the urine is, I believe, generally appreciated. But I specially wish to commend to your attention the practice now in vogue in the Charity Hospital service of Prof. Matas, occupying the chair of surgery in Tulane University, of giving about half an hour before anæsthesia is begun a hypodermatic injection of morphine, atropine and strychnine, to which may be added digitaline or sparteine, if indicated by the condition of the circulation. (The morphine may be omitted in cases such as those of abdominal section, in which it is especially desirable not to lock up the secretions.)

After operations of this kind patients seem to yield more readily to the influence of the anæsthetic chosen and to bear it better. Another detail worthy of consideration is the avoidance of the nasal reflex thought to be the cause of syncopal death in chloroform anæsthesia. Pinching the nose until the patient has taken enough anæsthetic by the mouth to abolish this reflex, or spraying the nasal cavities with a 10 per cent. cocaine solution, suggestions made by Guérin and Rosenberg respectively, may yet be shown by extensive experiments to be life-saving means. The plan of administering pure oxygen gas with chloroform or ether has, I believe, been brought to the attention of the society by Prof. Edmond Souchon, its present presiding officer. Should danger signals occur in spite of every precaution, inversion, artificial respiration after a thorough clearing of the respiratory passages, hypodermatic injections of strychnine and digitalis, inhalations of ammonia, Laborde's rhythmic traction on the tongue, mechanical stimulation of the heart with the thumb in

the fifth left costal interspace, dilatation of the sphincter ani, tracheotomy as suggested by our colleague, Dr. Delaup, should be tried singly or in combination, as may be deemed best in individual cases.

I can not forbear referring to the practices in vogue in our city before leaving the subject of anæsthetics. Although ether was the first anæsthetic used in New Orleans, having been administered to a patient of our great Warren Stone, in February, 1847, while that Nestor of Louisiana surgeons operated, we all know that chloroform has hitherto been the routine anæsthetic, ether the *dernier ressort* for patients too weak for the former. This preference, shown also in the other Southern States, has been attributed to the fact that when chloroform was introduced Stone selected it for use in his surgical work. However that may be, the fact of the preference is undoubted. Even Dr. A. B. Miles, although he arrived at the conclusion in an impartial paper read before this body June, 1887, and published in the New Orleans Medical and Surgical Journal of August, 1887, that, to quote his words, "as a rule, in the surgery of adults, anæsthesia should be begun with ether and continued with ether, unless contraindicated," while he claimed that both agents are "equally serviceable in their respective fields of usefulness, equally dangerous when given in the face of contraindications," yet clung to chloroform as a routine anæsthetic, giving ether only in special cases. At this day, however, there is a strong tendency to give its proper place to ether, in evidence of which I may state that ether anæsthesia is to be the rule in the hospital service of Prof. Matas during the college session just begun, while other general surgeons are leaning strongly in the same direction.

During the five years, 1882 to 1886, the total amounts of chloroform and ether used in the Charity Hospital, as determined by Dr. Miles, were 515 pounds and 113 pounds respectively, or 103 pounds and 22.6 pounds per annum. At this day, Mr. Simeon, chemist to the institution, tells me the relative amounts per annum are 84 pounds and 42 pounds, showing a distinct gain for ether. The decrease in the quantity of chloroform used may, however, be accounted for in part by the use of dropping bottles and Esmarch inhalers, a vast improvement over the wasteful method of pouring chloroform over the interior of a towel cone.

Ethyl bromide has, I am informed, been used quite extensively of late in special operations about the throat, notably by Drs. de Roaldes and Scheppegrell, and that too without the disagreeable accidents which elsewhere have caused a total of 16 deaths to be footed up to its discredit.

On the whole it is safe to assert that the subject of anæsthesia is receiving its fair share of attention in our midst, and that our surgeons and other medical men are awake to its great and growing importance at this period of anæsthetization for diagnostic as well as for operative purposes.

THE USE OF ELECTRICITY IN THE EXAMINATION, DIAGNOSIS, PROGNOSIS AND TREATMENT OF THE NOSE, THROAT AND EAR.

By W. SCHEPPEGRELL, A. M., M. D., Professor of Diseases of the Ear, Nose and Throat in the National College of Electro-Therapeutics; Vice President of the American Laryngological, Rhinological and Otological Society, etc., New Orleans, La.

I.—General Considerations.

An electric apparatus forms part of the armamentarium of almost every physician who devotes his attention to diseases of the nose, throat and ear, but, unfortunately, the extent of the knowledge of the owner in electrical matters is usually not in keeping with the appearance of his electric appliances, and frequently the two form an inverse ratio of one another. This state of affairs, no doubt, accounts for the different results, and the many failures obtained in the application of electricity to various diseases in this, as in other departments of medicine.

A thorough knowledge of electro-physics and electro-physiology should form the foundation of any attempt in the application of electricity to the treatment of diseases, but the indifference with which most of our colleges have treated this subject is responsible for the embarrassment which many a physician has felt when he is about to make an application of electricity and finds himself unable to do so, the cause often being one that could be remedied in a few seconds with even an elementary knowledge of this subject.

On one occasion I remember the distress of a physician who

desired to make an application of faradism, and, being unable to obtain any effects, was compelled to postpone the appointment with his patient. The only trouble in this case was that the contact points of the rheotome did not touch, the difficulty being remedied by a few turns of the adjusting screw. Had this physician been familiar with the first principles of induced currents, he would not have been placed in this embarrassing position.

This case, however, is not an isolated one, and I have frequently witnessed occurrences of a similar character. The instruction in the physics of electricity does not, however, belong to this department, and the knowledge of this subject, as well as of electro-physiology, has, I presume, been acquired by the attentive study of the lectures in the other departments of this college.

Without such knowledge the would-be electro-therapeutist is placed in the lamentable position of a woman "healer" whom I met during my visits to the mountains of North Carolina. Unable to read or write, she placed the various medicines, such as quinine, morphia, calomel, ipecac, etc., in various colored papers, on which she relied in the application of her therapeutics. On one occasion the colored papers became mixed, and the patient was given five grains of sulphate of morphia instead of the same quantity of quinine, and a fatal termination was averted simply by the recognition of the husband of the first stage of morphine narcotism, and the prompt arrival of a physician.

The physician who applies electricity in his practice without understanding the difference between the galvanic current, the faradic current, static electricity, etc.; who can not determine the positive from the negative pole, and who understands nothing of the reaction of the muscles and nerves to the galvanic and faradic currents, is as commendable in his attempts as this mountain doctress.

The various batteries described in the lectures on electro-physics are applicable in the ear, nose and throat department; the batteries being selected and connected according to whether a current of high potential and small quantity is required, as in galvanism, electrolysis, cataphoresis, etc., or whether a current of low potential and large quantity is needed, as for the galvano-cautery, motors, faradic coils, etc.

Wherever the Edison illuminating current is available, however, this is to be preferred, as it obviates many of the annoyances incident to the use of the chemical batteries. As there are four varieties of currents used for electric lighting, it is well to understand which of these can, and which can not be used. There is first the *constant potential current*, in which the volts are constant, but the amperes vary according to the number of lamps in the circuit. The Edison is the type of this current, and this is the one which offers the greatest amount of usefulness in electro-therapeutics. Then there is the *direct current*, in which the amperes are constant, but in which the volts vary according to the number of lamps in the circuit. If, for instance, there is a current of ten amperes, and each lamp in the circuit requires fifty volts, then forty lamps would require 2000 volts, a current of a difference of potential that would be dangerous to life. This current is used principally for the arc lights which illuminate our streets so effectually at night.

Besides these, there is an *alternating current*, of which two varieties are used; the first is *constant in volts and varying in amperes*, and, in this respect, resembles the Edison current already referred to. It possesses, however, no chemical property, as this is nullified by the rapid alternations, and this current, therefore, can not be used for electrolysis, cataphoresis or catalysis. It is occasionally used for its stimulating effects, and may be used, like the Edison, for illumination, operating motors and for heating the electro-cauteries. The other *alternating current* is *constant in amperes*, but *varies in volts* according to the number of lamps in the circuit. This current is dangerous and should not be used.

The potential of the Edison current ranges from 100 to 125 volts, but is kept at a constant potential at each station. This is a safe current, as the resistance of the human body does not allow the passage of a sufficient current to be dangerous to life. The potential of each cell of the Law battery is 1.50 volts, so that the electro-motive force of 75 of these in series would be about equal to that of the Edison current. This current may be utilized in our work for (1) illumination, (2) galvanism, (3) electrolysis, (4) catalysis, (5) cataphoresis. By acting on accumulators, motor-dynamos and current controllers, it may further be used for (6) heating the electro-cautery, (7) operat-

ing the drill motor, (8) generating the faradic current, (9) the induction coil for the X-rays, and (10) for the electro-magnet.

Except in the difference of its origin, the Edison current has all the effects and properties of the chemical galvanic current, and where the galvanic current is referred to in this lecture, the Edison current may likewise be applied.

In diseases of the nose, throat and ear static electricity is rarely used; the faradic and alternating currents not so often as the galvanic, which is of the greatest service in this department of medicine.

The thermo-electric batteries have also been used, as by Pouillet, Becquerel, Clamond and others, and are applicable where a low electro-motive force and a large current is required, as for the electro-cautery. Such a battery, however, is cumbersome and complicated, and is rarely used.

The galvanic and alternating currents are used in the many forms of illumination, as the laryngoscopic lamp, the electric forehead lamp (photophore), the electric laryngoscopic mirror and the various speculums with attached electric lights; these currents are also used for the various appliances in transillumination, as for the antrum of Highmore, frontal sinus, etc.

The faradic and galvanic currents are used for testing the reaction of various nerves, as those of the larynx, the acoustic nerve, etc.; to differentiate functional from organic lesions, and the results obtained form a valuable guide in the prognosis of these conditions. The galvanic, as also, to some extent, the faradic, is applicable to the treatment of many nervous disturbances of these parts, and the sedating and stimulating effects of the currents are obtained here as in other parts of the body. The galvanic current is also used for operating the faradic coils, and the induction coils for generating the X-rays.

The mechanical effects of the galvanic and alternating currents are utilized for the motors which operate the drills, burrs, nasal-saws, sounds for massage, etc. These currents are also used for obtaining heat effects, as in the various electro-cautery points and snares, and these are used most frequently, as they are applied to the destruction of superabundant tissue, tumors, hypertrophied tonsils, etc.

The galvanic is the only current that can be utilized for elec-

trolysis (electro-chemical decomposition), which is of spec al service in the reduction of tumors, hypertrophy of the turbinals, and to many purposes for which the galvano-cautery is now generally used. The latter is used more frequently, probably, on account of its simplicity, but the former often gives much better and more permanent results.

Catalysis, which includes a number of physical effects of the electric current, which will be described later, is, as yet, little used in the treatment of the nose, throat and ear, but, with the greater conservatism, which is now being actively urged, this will probably find its place as a valuable remedial agent, as it deserves.

Cataphoresis, the introduction of medicine into the body by aid of the galvanic current, has for some years been used in the treatment of goitres, and, stimulated by its adoption in dentistry, it will probably soon be used more frequently, especially in aiding the action of cocaine in penetrating the tissues. The ear is especially slow to the action of this anæsthetic, and the results, which I have already obtained in this locality, convince me that it is destined to have a wide range of applicability.

In many cases, as in functional disturbances of the nose, throat and ear, and in cases where the affection of these parts is secondary to some constitutional disturbance or the disease of some other organ, the best effects are obtained by general electro-therapeutic measures, as by central galvanization, general faradization, or the treatment of the special organ which has occasioned the reflex symptoms, but as these conditions and their treatment are explained in another department, their merits need not be discussed here.

It is important, however, to bear in mind the possible effect on the ear, nose and throat of the pathologic condition of a distant organ. Thus Dr. Fasano, in a communication before the Italian Society of Laryngology, Otology and Rhinology, states that he has observed in membranous dysmenorrhœa, in ovaritis and in acute metritis and endo-metritis, certain circulatory troubles in the larynx, with aphonia of a spastic form and marked congestion of the vocal cords.* The conditions observed were absolutely independent of all other causes connected with the larynx, and local treatment remained without

* *Revue Internationale de Rhinologie, Otologie et Laryngologie*, September, 1896.

result. The symptoms in the larynx ceased at the same time as did those of the uterus and the ovaries. We can easily understand that galvanic applications to the larynx for this form of aphonia would remain without result in the treatment of these cases.

Having thus given a resumé of the general conditions in the application of electricity to the nose, throat and ear, we will now take up each department of the subject in detail, and will outline, in the next lecture, the subject of the "Application of Electricity in Illumination for the Examination of the Nose, Throat and Ear."

AN HISTORIC MEMORABILE. *

[Translated by J. J. Castellanos, M. D.]

To the Most Illustrious Ayuntamiento †—Don Pedro Dulcidio de Barran, ‡ Attorney General, syndic of the people of this city, would respectfully beg leave to offer the following remarks for your worships' consideration:

The people of our city, appalled by the bitter epidemic (yellow fever epidemic of 1799), and fearing a renewal of a like visitation during the coming season, are now eagerly intent upon adopting active measures in view of averting so deplorable a calamity, and have therefore requested me to be their interpreter, beseeching you to seek and apply the remedies which the importance of the case demands. They also intend to appeal to the governor and intendant for similar aid, hoping thereby to strip the threatening scourge of at least some of its horrors, in case it can not be altogether repressed.

Of all the various precautionary measures calculated to attain this most desirable end, the main and most important is that of insuring cleanliness to the city, not only in its streets and suburbs, but also the yards of private residences, the privy vaults, the gutters, the stables, etc. This result can be best accomplished by a proper drainage of rainfall and sewage waters,

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* Read before the Orleans Parish Medical Society, November 14, 1896.

† Council.

‡ A letter from the syndic to the crown. The syndic was the medium of complaint, the tribunal through whom all matters of public import were carried to the highest executives.—[Ed.]

by the filling up of pits and quagmires which arrest their flow, and by the uniform leveling of ground lots that are faultily low and give rise to stagnation, with its consequent pernicious influence upon public health, specially during our summer season when the intense heat promotes decomposition.

Among the several lots which in this city offer these objectionable conditions four deserve a special mention, being centrally located, and therefore more specially obnoxious. These are: First, the property of Lieut. Col. Zénor Trudeau, situate on Royal street, between the residences of Mrs. Rosalie Andry (Widow Villavazo) and Mr. Félix Andry; second, the ground lot of Mrs. Widow Livaudais, and third, that of Mrs. Widow Chauvin, both being corners of the street of the church, and lastly and fourth, the property of the *parda libre* (free colored woman), Julie Brion, adjoining informer's residence.

The dampness which this faulty condition of these lots creates great inconveniences and endangers the immediate neighbors, and justifies their repeated complaints. Wherefore, the owners of the aforesaid lots should at once be made to fill up and raise them on a level with the adjoining lots, and thus give no further cause for complaint.

Not less worthy of your attention is the condition of that strip of ground called the city's batture, where garbage and refuse matter is habitually dumped. These create a perpetual stench, both repulsive and unhealthful, and have caused the public promenade or walk (which borders upon it) to be shunned by the public.

It is therefore urgent that this space be cleared of its filth, and its use for so objectionable purposes be henceforth prohibited. The garbage, at the same time, should, by virtue of a special ordinance to that effect, be thrown into the river, far away into the stream, from barks and barges constructed for that special purpose.

Reverting once more to this question of public cleanliness, let me again call your attention to the condition of our suburbs, which likewise demands an equal share of your solicitude. It becomes strictly necessary to have all the garbage of the city, which is daily heaped near the St. John's gate, almost by the side of the public highway (*Grande Route St. Jean*) to be hauled still further off, into the adjacent country, and there buried in

trenches dug at a proper depth. The surrounding trees will there, at the same time, keep off, as protective barriers, the unwholesome effluvia. There can be no doubt but that the sun's heat, inducing putrefaction in said garbage, is one of the causes that have begotten the ills which we have lately experienced, and that the sole preventive of this fatal affliction would be the planting of thick groves, in close rows, around these putrescent matters, their thick commingling foliage insuring a permanent shade. Another question calculated to command our most serious consideration, especially in the case of low, marshy countries, is that which deals of cemeteries, which, if neglected, may ultimately prove to be the sources of most fatal diseases. Hence it is of paramount importance that these be located as far as possible from the city, upon as dry grounds as can be selected, and that much space be allowed them; since their too close proximity—their location upon a marshy soil and their being restricted within too narrow limits, are obviously unfavorable conditions, alone sufficient to spread infection.

Frequent burials at periods of intense heat, especially in marshy ground and too nigh to the city, are more than required to jeopardize public health; yea, were all these circumstances weighed with the interest they deserve, we would be led to wonder that we have not undergone still greater evils than we have in the past, nor would we be exonerated from just condemnation were we to neglect to shield ourselves against so imminent a danger. In furtherance of these protective measures, let it be made obligatory that cemeteries be enclosed with trees, after the manner and for reasons stated above, for the thorough protection of our city.

It is needless, also, to mention in this connection what degree of importance has been attached to this question of public sanitation by municipal corporations and their rulers, elsewhere. It is also necessary to provide a more distant location for the burial of those among us who have been so unfortunate as to die in a different faith from ours, for their burial ground lies too close to the city and is protected by no enclosure. It is, therefore, very apt to become a favorite resort for carnivorous birds and beasts (*sic*). So much more readily as the graves are not dug at the required depth.

The prevailing neglect to provide a sufficient amount of quick-

lime for consuming corpses in their coffins necessarily leads to a disengagement of fetid and pernicious emanations from these, whenever a *grave still fresh* is being reopened, on the occasion of a subsequent funeral.

For which reasons, instead of burying in coffins which are here constructed of a certain wood which possesses preserving qualities, it would seem preferable to convey the remains in hearse biers, on hand-litters, and bury them clad only in their shroud.

Corpses will under these circumstances be more readily consumed, funeral expenses reduced in some measure and the poor allowed the privilege of a hearse with the proceeds of the aforesaid savings, as is practised in certain parts of Spain.

Nor can your informer refrain from alluding to another subject equally important and calling for immediate action. It is now universally admitted that epidemics are susceptible of being conveyed and transmitted by travelers and through cargoes, especially woolen goods, which are apt to indefinitely retain within the meshes of their texture pestilential miasms or particles. Upon being landed these are carried up into the atmosphere and diffused all around.

Wherefore, we can unhesitatingly advance upon more than sufficient grounds that the evil agencies mentioned here above are to be held responsible for the dire calamity which has lately befallen us.

I therefore urge the necessity for greater prudence in future and for a stricter application of measures of prevention.

Your informer suggests, for that purpose, the erection of a building or station house several leagues below the river, with a sufficient number for the accommodation of sick passengers taken off vessels coming to the city. To this post or station a surgeon should be assigned, whose duty will be to make a health inspection on board of each and every vessel, as is done in other ports. He will, besides, attend the sick at the hospital, and be furthermore authorized to detain there and then not only passengers or some of the crew on board these vessels if affected by some contagious disease, but the vessels themselves. The quarantine detention having been gone through and likewise the prescribed measures of disinfection, such as thorough exposure to the air and sun of the unloaded bales, boxes, trunks, etc., the

ship will then be allowed to enter port with a satisfactory certification from the health officer as to its sanitary condition, and its having been submitted to the prescribed methods of disinfection. In the contrary case no vessel will be allowed to proceed on its way up the river, under the penalty of a heavy fine upon the captain who would fail to comply with the prescribed regulations.

The better to carry out this project, it is your informer's conviction that assistance is to be sought from our governing authorities, especially with regard to the health station, where a military squad is strictly required, and also the presence of a royal revenue officer in order to avoid fraud whenever vessels are temporarily unloaded.

Once more I deem it my duty to appeal to your worships that you may beseech the much needed aid from our rulers, to whom I have forwarded copies of my present address, in order that they may be thoroughly convinced of the importance attached to the several points upon which, in my capacity as syndic, I have thought fit to lay special stress, both for the public good and the better service of their excellencies. I hope they will lend us their co-operation in the achievement of these much needed reforms with that promptness and efficiency which characterize them. Your informer can not entertain the least doubt but what your worships will also lend him your unanimous support in order to allay the fears and soothe the anxiety of this people.

P. D. Barran,
Attorney General, Syndic.

New Orleans, January 24, 1800.

A REMARKABLE CASE OF CARCINOMA OF CERVIX UTERI IN A GIRL OF FOURTEEN.

By W. L. Little, M. D., Wesson, Miss.

On May 15, 1895, I was called to see Leila N., age 14 years. She was anæmic, had but little appetite, and every month would complain of headache, backache and general languor. My diagnosis was chlorosis, and I treated her accordingly. The symptoms soon began to yield to the treatment, and menstruation set in. Soon after this she suffered from menorrhagia and

dysmenorrhœa. Then leucorrhœa, the discharge gradually becoming tinged with blood. I suggested an examination, but was refused. Later I was out of town a week, when she was taken with a severe attack of menorrhagia, and a physician being called in, advised an examination, to which she finally agreed. He found a growth which he diagnosed polypus. When I came and made an examination, found some growth, but became suspicious of cancer, because of ichorous and fetid leucorrhœa which then existed.

Not being satisfied as to the nature of the case I called in another physician, and, after consultation, we diagnosed cancer of neck of the uterus. Thinking that the only alternative would be extirpation of the uterus, I carried her, in November, to New Orleans and consulted Dr. E. S. Lewis, who, having made examination, gave a prognosis of a fatal issue, and because of such extensive adhesions involving cervix uteri, vaginal walls, and surrounding tissues did not operate. Soon after returning from New Orleans the tissues began to break down from ulceration, the discharge was greater and more characteristic, the rectal walls becoming implicated, the patient losing control of bowels, and the constitutional debility more marked.

These conditions gradually grew worse until October 23, 1896, when she was relieved of her sufferings by the hand of death.

The main object in reporting this case is because of the exceptional age at which the disease occurred, she being only fourteen years old, the youngest on record, the most fruitful age being from forty to fifty years.

Sconzoni reports 108 cases, the youngest twenty-three years.

Another reason is to impress the importance of early examinations whether or not there is a history of cancer in the line of ancestry.

In this case no such history was given, neither was there any evidence of contusion or any other cause.

REPORT OF A SUCCESSFUL CASE OF DOUBLE OVARIOTOMY

By J. HARRISON HODGES, M. D., Gainesville, Florida.

Ex-House Surgeon Good Samaritan Hospital, Baltimore; Ex-Chairman Section on Surgery, Florida Medical Association; Surgeon Florida Central & Peninsular and Gainesville & Gulf Railroads; Vice President Florida State Association of Railway Surgeons.

The specimens which I exhibit are two diseased ovaries* which I removed a short time ago.

The patient, a lady of refinement, is 24 years old and has been married less than three years. She had had pains more or less severe in the ovarian regions for a year, the pain on the left side preceding that on the right by several months. The pain was always greatly aggravated during the menstrual periods. The patient thinks the commencement of her trouble dates from a time a few years since when she, being on a visit to a summer resort, went in bathing while menstruating. At this time the flow suddenly ceased and the function was not re-established again for three months. There is no ground for suspicion of old or latent specific disease in the patient or her husband. She has never conceived.

When she came under my care an examination showed the left ovary perceptibly enlarged and very tender to pressure; the right was also quite tender. For months before the operation she was subjected to every line of medical treatment that suggested itself to my consulting colleague and myself that promised any relief, but in every instance with unsatisfactory results. For four months preceding the removal of the ovaries she appeared never free from pain. She often said that even in sleep she was conscious of suffering. By this time the patient, although naturally of a bright and happy disposition and possessed of one of the best young gentlemen for a husband that it has been my pleasure to know, became very despondent, and expressed at times a desire to die. She had now been bedridden for two months. All measures directed to her relief from the standpoint of the physician having proven fruitless, I decided to pursue my endeavor for her cure in the field of surgery, and determined upon the removal of the offending ovaries. My consultant, who saw her with me again at this stage of the

*Exhibited to the Florida Medical Association, April 17, 1895, two months after their removal.

case, agreed fully that an operation was highly desirable. The patient and her husband having agreed upon the operation willingly, I immediately set about its performance.

All the rules for performing a thoroughly modern aseptic operation were observed as rigidly as they could be outside of an institution specially fitted for such work, and the result fully justified the precaution taken, and was to me another strong illustration of the imperative necessity of clean surgery. The room was stripped of all unnecessary articles, and those left remaining, together with the floor and door and window facings, were wiped over with moist bichloride cloths the morning of the operation; all instruments and dressings were sterilized in the most rigid manner; the instruments were boiled in a 1 per cent. solution of carbonate of soda for ten minutes two hours before the operation, and again immediately preceding it, and the dressings, sutures, and the like, sterilized in a steam sterilizer. The sponges had not previously been used and were washed clean, soaked in a solution of muriatic acid for several hours, then put into a carbolized solution for twenty-four hours, and transferred to sterilized water an hour before being used. The hands of myself and assistants were scrubbed with soap and water, soaked in a saturated solution of permanganate of potash and then rinsed off, first, in a saturated solution of oxalic acid, and, second, in sterilized water. The field of operation was also prepared in the usual manner; the abdomen scrubbed with soap and water each day for three days before the operation, and the pubes shaved. Strychnine in solution and nitrite of amyl in beads were provided in case the patient should show signs of collapse. The temperature of the room was kept at about 78 deg. F. during the operation. The patient was anæsthetized with chloroform; the shoulders lowered and the hips raised. The incision which was made in the median line was somewhat more than four inches long; the ovaries were found to be cystic and degenerating; they were transfixed at their attachment with the ligaments and tied with soft silk, which is procurable especially prepared for the purpose, before being excised. The tubes appearing healthy were not molested. There was no need of a drainage tube. I employed two sets of sutures in closing the abdominal wound, using fine catgut for the peritoneum and silk for the deep external sutures. Now, however,

I believe it is the custom among most operators to use one set of sutures only, employing no separate line for the peritoneum. In Chicago this is the practice. The same sutures close skin, fascia, muscle, peritoneum and all.

The wound healed absolutely by first intention; there was not one particle of pus. At no time subsequent to the operation did the temperature rise higher than 99 deg. F.

Following the patient rapidly along through her recovery we find that she voided her urine naturally from the first; after the operation for several days there was considerable pain, persistent vomiting, hiccough and obstinate constipation. These all yielded in time under the administration of what was thought to be appropriate remedies. The vomiting seemed to be better controlled by hydrochlorate of cocaine, one-eighth grain; oxalate of cerium and bismuth subnitrate, each four grains, given every hour, when found necessary, with cherry laurel water and lime water. The bowels refused to respond to calomel or salts, and I resorted to croton oil in small doses, which had the desired effect.

Two days after the patient was operated on a feature presented which was entirely unexpected—as the operation was done midway between the menstrual periods—there appearing at this time a quantity of dark, bloody discharge from the vagina which alarmed the patient and the nurse to some extent. This appeared at irregular intervals, attended by some pain and a general malaise during the following year, but appears now to have entirely ceased. It was evidently an effort Nature was making to continue the menstrual function independent of ovulation.

It is a serious and sad thing to unfit a woman, especially a young married woman, for maternity; but when she is already so unfortunate as to be the possessor of a hopelessly diseased generative apparatus I do not see, as wielders of the scalpel, how we can avoid the responsibility of following the well-known injunction of Holy Writ when it says in regard to another precious organ: "If thy right eye offend thee pluck it out and cast it from thee."

The patient at this time, twenty months after the operation, has just returned from a visit to relatives in Philadelphia; she is healthy, plump, without an ache or pain, feels better and looks better than she has in years, and withal is very grateful for what she considers being snatched from the brink of the grave.

ENCEPHALOCELE AND PECULIAR BRAIN ACTION.*

BY A. P BROWN, A. M., M. D., FORT WORTH, TEXAS.

Anatomical incompleteness during the stage of gestation is not an uncommon event, and some of these defects are not really inimical to healthy life; but those of the nervous centre, the brain, or of the spinal column, are usually of such marked and enervating kind as to engage our most earnest attention and best surgical skill. Those of the spinal column, while disfiguring, deforming and depressing, are usually not so grave as those that exist in and about the brain, and these congenital defects are often ascribed to, or credited to, causes other than the true ones; sometimes from superstition or want of knowledge of the true laws of nature, or from want of ability to ascribe the defect to the perverted cause when unperverted would develop the natural amount of true tissue.

In the case which I now present for your consideration the deformity, or rather the want of development of the normal amount of bone substance, was the result of tardy ossification, and was truly congenital insufficiency, and not accidental, nor from maternal impressions, as supposed by some, and was a tumor, five by six inches, dependent from the cerebellum through an aperture in the lower portion of the occiput. It was normal in color, and hernic circulation appeared to be as free as in other parts of the body, and it appeared to contain a small quantity of fluid (but this was not definitely determined by exploration), and contained what, from handling, appeared to be true brain substance.

This would have been a splendid case in which to develop the use to our profession of Prof. Rœntgen's X-rays skiagraph, or Prof. Salvinie's screen and lens, or fluoresence color (from the cornice tube) of Edison, as this new development in the art of radiography might have shown the true contents of the tumor.

The Kodak view taken by my friend Dr. J. W. Irion, and developed by that splendid artist, Will R. Works, plainly shows the position and extent of the encephalocele. By slight pressure a small portion of the tumor could be returned to the cavity of the cranium, and this handling did not appear to give pain to the

* Read before the State Medical Association.

child. After the first ten days of life some muscular disturbance was evident and vitality was diminished. The child was sustained by muriate of ammonia and the mother's milk, when sufficiently aroused to nurse, or drank the mother's milk when too feeble to nurse. I suspected cleft palate, but this did not exist, nor any other deformity, except the tumor. The child could hear, *but never cried.*

The mother was satisfied the child could see, hence another unusual occurrence of want of ambylopia where there is a tumor of the cerebellum.

That the child could hear was evinced by being startled by sudden noises.

The age of the child prevented the determining whether the aphasia was amnesic or ataxic, and Broca's discovery that the centre of articulate speech is in the third convolution of the brain led me to think the encephalon about the island of Reil might be dislocated, as this point in the left side of the brain has long been declared to be the point at which the organ of speech is located, and as I was at a loss to determine why the baby language should be absent simply from displacement of the cerebellum *and phonetic disturbances have not been previously observed and recorded as early as noticed in this case.* These are usually one of three kinds, viz.: alalic, those from psychic disorders (or the feeble minded); ataxic, from violence or from scleroses, after scarlet fever or chorea. Other physiologists limited aphasia to a disturbance of the parts supplied by the left middle cerebral artery. Now the question is, were these parts primarily or sympathetically the cause of aphasia in the babe, or have we yet imperfect knowledge of all the anatomy that is required in vocal sounds or language? Then, again, loss of speech or the inability to supply the right word, letter or figure is an evidence of former knowledge of words. But here we have a babe, knowing no words (but most babies cry), unable to cry. The objective cause of this aphasia is an encephalocele, must we consider the inability to cry is an anatomical defect in the brain far distant from that organ from which the ability to speak is located, or Borea's region?

The brain anatomy is so complex, aphasia here may have been the result of reflex influence, but there was no hemiplegia—child had use of all the limbs (but feeble), and this is an evidence

that there is a contradictory action of the cerebellum as compared to other ganglia of the encephalon, for co-ordination of motion is ascribed to the cerebellum. Yet the cerebellum has been entirely destroyed and no marked co-ordination of motion existed. This knowledge should warn the surgeon lest an operation in which the cerebellum is involved should compromise the action of the voluntary muscles. Again, its close relationship to the ganglia of vision, of the third, fourth and sixth nerves and the neuclei of the fourth ventricle should again warn us to be extremely careful lest we injure the brain seat of one of these functions or bodies. Again, the danger in drawing off the fluid is the probability of spasms as a result of the sudden loss of pressure on the brain in withdrawing the fluid pressure or escape of the cephalo-spinal fluid.

This encephalocele was of such large extent as to preclude the idea of relief by surgical procedure other than a bandage to support and hold in place the dependent parts; and there was partly a hydro-meningocele as evidenced by occasional nausea, and some fluctuation on taxis; this could occur as the fluid may have flown from either of the three cerebellar vessels, or it may have been an exudate from the body of the cerebellum, or from the medulla spinalis, as the lower portion of the sack of the tumor extended below the atlas and on to the cervical vertebræ, but there was no deformity nor mal-position of these vertebræ, nor cleft in them as we find in bifid-spine, and even at birth the lateral portions of the occipital bones were in normal relation, and in contact with the parietal bones, and the anatomical conditions present readily determined that this was none of the ordinary tumors of the cerebellum. In all parts of the body seemingly a normal condition existed. The secretions were normal, except urine was quite scanty, but I ascribe this to the remarkably small quantity of natural food and water taken during life.

This was the third child of healthy day laborers, all other children healthy and no scrofulous or other hereditary taint had existed in either family.

We naturally look for muscular derangement where there is a tumor *on* the brain, but here we have a tumor off the brain, presenting some of the characteristics and symptoms we look for in the opposite condition (or tumor *on* brain) as evinced by muscle atrophy, spasms, nausea and aphasia. There are but few

cases of this trouble on record, and it is believed that this is the only one on record with aphasia the result of encephalocele of the cerebellum in a babe.

The patient lost weight rapidly. It did not assimilate its food; could take but small quantities at a time, and he appeared "to dry up." Had several attacks of heart failure, with "sinking spells," when all appearance of life was suspended. This was several times relieved by the use of nitro-glycerine, $\frac{1}{500}$ part of a grain every twenty minutes, together with chloride of ammonium. The last attack of this kind lingered several days. Muscular rigidity with spasm occurred, and terminated its life two a half months after birth.

Had the opening in occiput been small, and the amount of brain tissue extending from the hernia been small, I should have advised closing the opening by vivifying a sufficient portion of the dura mater, returned the brain to the cerebral cavity and dissected parts into apposition by silver wire sutures and trusted to healthy repair and union, or had child lived long enough would have introduced a silver plate to cover the opening and hold back the protruding parts.

Since writing the above my attention has been called to the case of a business man, keen in intellectual powers, though not paralyzed and perfectly able to talk, who suddenly lost the memory of certain letters, viz: d, g, q, x and y, and 6, 7 and 8. These became total strangers to him, and he could not read or write, or add any sums or words containing these figures or letters. He could use all other letters and figures intelligently. He could not tell the time by his watch. Experience has taught us this defect is from disease in a small area of the brain.

In children paralalia or dyalalia may be from mental weakness or from mechanical causes, or catarrh of stomach and is prodromous. Ireland noticed that a defect of speech was some times associated in a peculiarity of handwriting. I have under my observation a child who at three years old developed a rare, natural ability as an amateur artist. He could readily make a picture without a copy, but he drew the picture "upside down," or the reverse of the usual professional form. His voice was clear and he enunciated words at that age distinctly. Later he commenced to stutter (prodroma). There is no defect in vocal organs, throat or nose.

I have noticed this peculiar brain trouble in two other of my cases of ataxic aphasia unaccompanied by right hemiplegia. In one case agraphia also occurred, and the knowledge of these defects troubled the patient exceedingly. All of his efforts for several weeks to speak were a total failure. His voice gradually returned, first as a whisper and gradually grew stronger. But when his voice had returned he could not remember my name twenty-four hours, and afterward told me he associated me with his childhood's family physician. Before he could speak I had another physician see him who I knew belonged to a secret benevolent society to which the patient belonged, and he demonstrated to this physician his perfect recollection of the secret work. All his efforts for several months at writing was a perfect failure, but three years after the accident I received a letter from him grammatically and orthographically correct. The other was aphasic from over-exertion and what I diagnosed syphilitic embolism. As he was an uneducated man I could not determine whether agraphia was present. The peculiarity in his case was that he could not pronounce the names of his intimate acquaintances for a long time, yet he could readily tell the number of miles to all the surrounding towns. From this I infer that there are peculiar or special parts of the brain in which the knowledge of figures is developed separate from the point at which the knowledge of letters is located.

Might a number of such cases compiled and studied help us to determine much of the previous undeveloped knowledge of the minutia of the brain or mind action, perhaps lead us to determine whether the mind has a separate or independent memory? We know the action of nicotine, morphine and traumatism sometimes suspends some functions of the brain, often renewed or revived by medicines, remedies or time. Then the question occurs, have we a mind memory and a brain memory; or does mind exist separate from consciousness and brain memory?

Correspondence.

THE SECOND PAN-AMERICAN MEDICAL CONGRESS.

[From our Special Correspondent.]

MEXICO, November 19, 1896.

THE TRIP.

From New Orleans to the City of Mexico the journey *via* Eagle Pass lasts a fraction under three days. The Rio Grande is reached in about twenty-four hours. It is crossed on an iron bridge, though at this season there is not more water to be seen than in one of Louisiana's narrow and shallow bayous. The entrance into the Mexican Republic is made by way of the city of Porfirio Diaz, named, of course, after the able, progressive and amiable present chief executive of the nation. This is a new city, which promises to be of importance in the near future.

Upon awakening the next morning one realizes at once that one is well engaged in the land of the cactus, the burro and the adobe houses. This first day on Mexican territory is spent chiefly on level ground, arid plains with scarcely any vegetation but cactus and the mesquite; hills are more frequently met with as the day advances, and wherever water can be obtained for irrigation the ground is fertile and cotton and corn are produced.

The eating houses are kept by Chinese. They are clean and the food is acceptable to a very hungry man, still it is only a good appetite and a desire to escape the painful sameness of the Pullman buffet that can combine to make a meal in one of them at all satisfactory. In the same dining room are tables of two classes, indicated by a white table cloth for first-class and a red one for second-class. The delegates from New Orleans, as well as some other delegates, did not know this and sat at the most convenient table, which turned out to be a second-class one; the rest of the crowd poked some fun at them, but, when it turned out that the only difference, besides the color of the cloth, was that the folks of the white paid one dollar while they of the red paid fifty cents, the laugh was on the other side.

During this first day in Mexico only villages are seen, and, even when one passes a good-sized city like Matamoras, for in-

stance, the latter is at a distance from the railroad. One has a good opportunity of studying the adobe huts and structures and the aborigines, the descendants of the proud Aztecs, humble enough to-day and poorer—rich when he has some clothes and sandals, actually wealthy when he owns a five-dollar (Mexican money) burro.

The third and last day of the journey are passed in a mountainous region, an elevation of 8000 feet being reached at one time. The valleys are very fertile, and numerous stops are made at towns of some magnitude. The trains are surrounded at all stations by natives, offering for sale hot tamales, pulque, fruit, various articles of their manufacture, and opals—everywhere opals, all sizes and shapes and shades, all worthless though they brazenly ask you a dollar for one, while you find, after a little, that you can get the whole outfit of two dozen or so for that same dollar. The fruit, as a rule, is delicious; some of the sweets are good, the other eatables (some of them fearful to look upon) and drinkables are better left alone. There are beautiful scenes upon which to feast the eye, and pulque plantations are a novelty. Horseshoe curves are common things on the Mexican Central Railroad; one of them as perfect as can be.

Arrival in the City.

The capital is reached at about 6 P. M. Local doctors were on hand to greet the delegates and see them safe on their way to the hotel. In the bus was encountered a specimen of the American hog. By the way, can a digression be permitted to say a good word for the hog? Tis true his praise has frequently been sung from the time of Elias and the roast pig, but this is more in philosophical than in a physical mood. The hog is seen in Mexico—I mean the animal itself. I have not met any man yet, a Mexican, who could be called such; he is pretty much the same kind of hog that you meet elsewhere, except that his hair is a little more unkempt; he has no mud in which to wallow, especially at this season, neither has he the semblance of any sort of pen, and no doubt he knows his fate as well as his fellows elsewhere, yet there he is rooting and grunting around just as contentedly as he does everywhere else; how happy if man could be as philosophical. To get back to the American hog: This one owned the bus the moment he entered it; he threw his

baggage on other people until your correspondent mildly but firmly protested. He ordered the meek coachman to start at once (*p. d. q.*, as we say in Latin), so that he could get to the hotel before other people took all the rooms; he commanded the driver to proceed directly to his (the hog's) hotel, as, of course, it didn't make any difference whether other people got to a hotel or not. As your delegates could see that a Texas confrère was ready to jump on the hog, and especially as they knew that the hotel mentioned had been full for three days, they restrained themselves, remembering that every dog has his day, the hog to the contrary notwithstanding. A stop at that hotel realized our ex pectations. Driven to another, rooms were found, and to our relief the hog got off. We had the satisfaction to learn later that the latter hotel is the dirtiest in the city. Working on a private tip, the delegates from New Orleans drove to the Hotel Sanz, a new one and the best in Mexico. Those delegates have been "in it" ever since—that does not refer only to the hotel.

The Congress.

Our reception at the depot, and a first visit to the congress, convinced us that our Mexican confrères had spared no pains to make the congress a success, and their visitors to have a good time.

There were about 400 delegates and members in attendance.

Most of the sections took place at the National School of Engineers, a vast building centrally located, and whose rooms are well suited for the purpose. A few others are held at the National School of Medicine, according to the subjects, and from the reason of the large number of sections, fifteen in all. These are: (1) General Medicine; (2) General Surgery; (3) Military, Naval and Railroad Surgery; (4) Obstetrics, Gynecology and Abdominal Surgery; (5) Anatomy and Physiology; (6) Diseases of Children; (7) Ophthalmology; (8) Laryngology, Rhinology and Otology; (9) Dermatology and Syphilography; (10) Hygiene and Demography; (11) Mental and Nervous Diseases and Medical Jurisprudence; (12) Dental Surgery; (13) Medical Pedagogics; (14) Bacteriology; (15) Veterinary Surgery.

The sections met always at 9 A. M., sitting until noon, and from 3 to 5 P. M., unless some special entertainment caused

slight modifications. Papers before the various sections were numerous and the discussions usually interesting. A number of those on the programme, however, were absent and failed to send their papers. Another drawback was that many who read had not sent the required abstract of their paper for publication in various languages in the programme, so that such members as were not polyglots missed good articles and were hampered in the discussion. The Louisiana delegates contributed their mite to the latter, although, fortunately, one of them was pretty hoarse for two days; he had let some Mexican orange juice go down his windpipe; this did not prevent his having the honor of presiding at a session of his section.

The first formal session of the congress took place at night at the National Theatre, and was presided over by President Porfirio Diaz, attended by most of his cabinet, the minister of foreign affairs sitting at his right and the minister of public instruction on his left. The house was beautifully decorated with flags, flowers, and, what made it peculiarly attractive, everything was arranged on the old Aztec fashion. The delegates were seated on the stage with the president and suite, the other members of the Congress occupying places of honor in the auditorium, the remainder of which was filled with some of the best people of the capital, the ladies nearly all in full dress. President Diaz opened the proceedings with a cordial speech of welcome. He was followed by the secretary, Dr. Eduardo Liceaga, who read his report (published in this number). Next Dr. Manuel Carmona y Valle read his address of welcome, which was highly interesting, from an historical standpoint, as far as the Medical University of Mexico is concerned (published in this number).

This was followed by a scientific discourse by Lic. José Maria Gamboa, of the Consejo Superior of Salubridad, which was also well received. Dr. William Pepper, of Philadelphia, president of the first Congress, then read an address on the purposes of the Congress, the union of the American countries for mutual protection from a health standpoint, bringing in the Venezuelan question very cleverly and much to the gratification of his auditors; he also recommended action by the various American governments in the line of granting to public health matters the importance now given to other departments and a represent-

ative in the council of the nation. The various addresses were separated by beautiful selections performed by the orchestra of the National Conservatory of Music. The President of the Republic closed the exercises by formally declaring the Congress open.

During the day a visit was paid to the Museum of Pathological Anatomy at the School of Medicine, which is in charge of Dr. Rafael Lavista, who is also the vice president of the Congress. Besides the objects of interest and preparations usually found in such museums, Dr. Lavista had selected a number of freshly prepared specimens which he knew would particularly interest his guests on account of their rarity or local color; for instance, a beautiful case of cysticercus of the brain; an old hydatid cyst of the liver; case of diphtheritic colitis; abscess of liver following acute inflammation by pulque; histological specimen of cirrhosis of the liver in pulque drinkers, which seems to differ from the ordinary cirrhosis.

I can little more than enumerate the other interesting features. outside of section-work, and the various entertainments, as to give a comprehensive account of them would take up all of the JOURNAL.

On the second day the members visited the new City Slaughter House, which is just completed, but not yet in operation. It gave occasion for a pleasant ride in special coaches to the outskirts of the city and an opportuuity for a good view of the snow-clad peak of Popocatapetl and the other high mountains, which are about sixty miles off. A nice lunch was served to the visitors, whose appetites (and thirst) had been stimulated by the ride, judging by the appearance of the tables and bottles as we departed. The offices of the Supreme Board of Health were visited in the afternoon at the Plazo de Santo Domingo. At night many of the visitors went to the opera to hear "Faust," the performance being giveu in their honor.

On Wednesday, the third day, we got up early to go by special train to visit the General Hospital, which is now being erected on what are at present the outskirts of the city. When completed this hospital will be one of the noteworthy ones of the world. It is on the pavilion plan and is to cost two million pesos ($1,000,000). There will be thirty-five pavilions, of which twenty-four are to be wards for various diseases, the remaining

ones to be devoted to the administration, kitchen, machinery, dead-house, etc. Several pavilions are completed and one of them was entirely furnished and arranged for our inspection. Each pavilion for patients is composed of two wings, each wing containing sixteen beds, consequently accommodating thirty-two patients, which means a total capacity of over 760. There will be an isolation pavilion for suspicious cases, one for contagious diseases, for maternity cases, an operating amphitheatre, etc., but insanity cases will not be admitted nor persons wounded in broils, etc., as it is preferred to keep them more under the eye of the police authorities. The pavilions are widely apart, but will be connected by means of covered galleries, the intervening spaces to be occupied by gardens. Nearly all the structures are one-story and are built of brick, iron and stone; the floors, ceilings and window frames alone are of wood. Their style of architecture is simple, yet not entirely devoid of ornamentation, especially the administration building. The foundations are built of brick, very much like ours, only a few feet in the ground, dampness being prevented by coating the sides and top with Portland hydraulic cement. The wards are supplied with iron beds, iron and glass tables, the utensils being of porcelain-lined ware. They are well lighted and ventilated, the space between the two wings and opposite the entrances being taken up for a dining-room for the ambulant cases. Dr. Liceaga piloted us around, and to him in great part is due the elaboration and perfection of the plan for this modern hospital.

In the afternoon a visit was paid to the nearly completed new penitentiary, after over a half hour's ride in special cars. At night a reception was tendered by the honorable City Council in the municipal palace. The ball room was transformed into a fairy scene. The rear of the grand entrance vestibule was transformed into a fac-simile in miniature of the cave of Cacahuamilpa and the supper was served there. The grotto was unique in appearance; the limestone roof was sparkling with stalactites and a few stalagmites of snowy hue projected from the floor. The whole thing, including some walks, with artificial sky effects, stars, moonlight, etc., was simply scintillating with electric lights; it was stated that nearly fifty arc lights and five hundred incandescent lamps were brought into use for the occasion.

A reception was tendered by President and Mrs. Diaz to the members of the Congress on Thursday, the last day, in the palace of Chapultepec. This fine and historic palace was reached by means of special cars, the route being along the Paseo de la Reforma, which is the fashionable drive of Mexico and is lined with fine specimens of monumental sculpture and the handsomest residences in the city. I regret that I can not devote more time or space to the description of the last two gorgeous entertainments, but it may be as well, as it might cause too much regret to those who failed to avail themselves of the magnificent opportunities for a scientific treat and the delightful social functions.

The closing exercises of the Congress is to take place in the Chamber of Deputies at 8 P. M. The Congress was unquestionably a success from every standpoint, and it now seems assured a continuous existence. The thanks of the members are due to the officers and committees, who so faithfully and cordially performed their arduous duties. Drs. Carmona y Valle, Lavista and Liceaga are deserving of special commendation, and it would be ungrateful for your correspondent not to mention Dr. Nunez, of the local committee, and conneeted with the Board of Health: no inviduous comparison is intended, but it is only fair to acknowledge the attentions of Dr. Nunez, who was ever obliging, and could be seen here and there and everywhere.

The Next Congress.

The International Executive Committee have selected Caracas, Venezuela, as the next place of meeting for the Congress, the third of its kind. The time is to be in December, 1899, Christmas week. The place of meeting will be universally approved. It is accessible, three days and a half by sea from New Orleans; it is an important and interesting city; the climate is equable and agreeable. The month is selected as one of the most agreeable and especially healthful. The exact time does not seem to meet with general satisfaction. There are many reasons *pro* and *con*, but as it is within the possibilities that it might be changed at the final session, I shall not touch further on the subject. I shall reserve, also, for another occasion any dissertation upon pulque, mescal and caquila.

Finale.

The day after adjournment will be employed by those remaining over in visiting the drainage works of the Valley of Mexico, leaving at 7:15 A. M., returning at 4:30 P. M., lunch being partaken of near the mouth of the tunnel at about noon. At night a reception tendered at the Jockey Club by its board of directors promises to be a very enjoyable and fashionable entertainment. Many of the belles and distinguished matrons will honor us with their presence, affording a contrast to the majority of aborigiual females seen in the streets of Mexico and the villages. The latter are not usually pretty; they are very much of the type of our American Indian squaws; they, as well as the men, seem the most gentle, patient and affectionate creatures in the world. They love their babies. The latter are always plump, pretty and healthy-looking little things, and they are very numerous. You meet few aboriginal women above the age of puberty, and under that of senility, who have not either a baby in their arms, on their backs or in their uterus. Verily, if they only learn to take care of themselves when they grow up, the descendants of the Aztecs will increase, as they certainly multiply.

C. C.

Society Proceedings.

SECOND PAN-AMERICAN MEDICAL CONGRESS, MEXICO, 1896.

Inaugural Address by Dr. M. Carmona y Valle, President of the Congress.*

Mr. President, Ladies and Gentlemen:

At the end of the fourth century after the discovery of America by that great man called Christopher Columbus, the idea was suggested in our neighbor, the great Anglo-American Republic, of celebrating that anniversary, among other ways, by the meeting of a Medical Congress in which all the nations ex-

* Read at the Inaugural Session, November 16, 1896.

isting on this continent and on the adjacent islands would take their part.

This happy thought was realized, and on September 5, 6, 7 and 8, 1893, we met in the city of Washington. The meeting was a perfect success, whether we consider the number of physicians attending, the importance of the papers that were read, or the magnificence with which we were all received and treated by that great nation and by its prominent men, who to their great talents add an extreme courtesy and a perfectly refined taste. We, who had the good fortune to take part in that first Pan-American Congress, can never forget either the affectionate reception that was given us, the great courtesy with which those gentlemen treated us, or the sumptuous entertainments with which they diversified our stay in that beautiful country. In remembrance of such an agreeable time, I can not do less than assume to myself the representation of the other American nations, and repeat to our northern neighbors, "Thanks, friends; a thousand thanks." We will know how to reciprocate, if not with such opulence, certainly with the same entire sincerity in our own affections.

At the time of closing that great scientific meeting it was arranged that another Pan-American Congress should meet three years after. It was decided that the meeting place should be the capital of my beloved country.

This, gentlemen, is the reason of this meeting. Do you wish to know why I have been selected to occupy this place and to have the honor of addressing you to day? I would inform you that I owe this honor purely and simply to my age; because there are numberless persons who have a better right than myself to such a position, and who would have filled it with great success. But let this be how it will, it now becomes my duty to extend the most cordial welcome to all our illustrious guests; to express my hopes that they will have an agreeable visit to our beautiful country, and that on their return to their homes they may not find anything but reasons to congratulate themselves for having come. I very well know that on leaving their *lares* and *penates* they must always feel something of an indefinite melancholy, but I also know, because I myself have experienced it, that this melancholy feeling disappears as soon as they find that instead of meeting foreigners and strangers, as

was to be expected, they find themselves in the midst of brethren who receive them with open arms and treat them with the effusion of a sincere friendship. You are welcome therefore, my esteemed friends, and you can be certain that in each one of us you will find a brother ready to help you in everything you may desire.

But I must go a little further, gentlemen, and under pretext of making a presentation, I must give you a little knowledge of our scientific antecedents, and lay before you our medical education. But to be able to do so, I have to bring to your remembrance certain data of our history, and rectify certain reproaches that are often passionately thrown out to Spain, our mother country.

It is often said that the Spaniards attempted to keep us submerged in ignorance with the object of facilitating their domination. Gentlemen, such imputations are really calumnious, and unworthy of the always grateful and well constituted heart of a good Mexican. During the war of independence, we were loyal enemies; but in times of peace we are her grateful sons.

Let us remember, gentlemen, that on the 13th of August, 1521, the imperial city of Mexico fell into the hands of the conquerors under the leadership of Hernan Cortés. Eight years after that event the College of San Juan de Letran was founded in Mexico, dedicated to secondary instruction and to the preparation for the clerical and legal professions, which were those in vogue at the time.

Let us detain ourselves for a moment and ask: what other conquering Nation, but the noble and chivalrous Spain, would have thought of founding colleges in such an extensive and newly conquered country? Would it not have been more natural at that time to have thought of sending forward troops, of increasing the means of defence, and of taking advantage of the abundant wealth of the magnificent soil? And after all, for whom was this college intended? It is not probable that it should have been for the Spaniards, because we can not conceive that any great number of Spanish families could have come to the New World, before the lapse of eight years after the conquest. It is more natural to suppose that the immigrants of that nation would be well grown men capable of defending themselves, and would not find much use for any college. On the

other hand, the mixed race could not in the course of eight years have become very numerous, and would be too young to require the foundation of any school of secondary education. We must therefore come to the conclusion that this college was founded with the object of educating and developing the intelligence of the aboriginal Indian races.

But there is more yet; the first Viceroy of New Spain, Don Antonio de Mendoza, in the years 1534 and 1535, that is to say, 13 or 14 years after the conquest, petitioned the King to allow the founding of a University in Mexico, and feeling certain that this petition would be granted sooner or later, he ordered certain classes to be given which would later on be opened with the sanction of law in that institution. Unfortunately these negotiations were at that time subject to long and wearisome steps, and the distance between ourselves and the mother country was so long and the means of communication so difficult that Don Antonio de Mendoza could not realize his plan; but the second Viceroy, Don Luis de Velasco, when he came in 1551, brought with him, amongst other things, the commission to found the university, and that institution was legally established in 1553.

Subsequently, in the year 1573, the colleges of San Gregorio and San Ildefonso were founded. In 1587 that of Santiago Tlaltelolco was founded, and later on the College of Saints and the Clerical Seminary. Well now, seeing that during this short space of time seven colleges were founded in the City of Mexico, for superior education, can we still say that the mother country attempted to keep us submerged in ignorance? Far from this: the education in Mexico during the sixteenth and seventeenth centuries was of such a character that it merited the name of the Athens of the New World; and by way of results it produced such men as Ruiz de Alarcon and such women as Sor Juana Inez de la Cruz.

Gentlemen: Every age its own ideas and its manner of appreciating them. During the sixteenth century, not only in Spain, but in the whole of Europe, the careers open to nobles were those of arms, the church and the forum. The career of medicine was at that time considered very low, and surgery was thought to have something ignoble about it. For this reason perhaps the University of Mexico established with a certain pomp its theo-

logical, canonical and forensic classes, without taking the medical science into account, up to the year 1578. In that year the chair of medicine was founded, called the "*prima*," or morning class, this being the first chair of that science which was founded in the new world. There was only one sole professor, and he taught the complete course of medicine in four years, whilst the practice was acquired by the side of some well reputed practitioner. The candidates to this career were required to study previously Latin, the course of Arts and Astrology, or Mathematics, so that from the moment when the medical career was established in Mexico, the candidates were required to undergo a more or less complete course of preparatory study, and to obtain the degree of Bachelor of Arts.

In spite of the slight importance that was in those times accorded to the study of medicine, it was very soon seen that one professor was not enough for the teaching of this science, and in the year 1599 a second chair of medicine was founded in the university, which was called "*vesperas*," this being the second class of medicine given in New Spain. In the year 1661, the chairs of *Metodus medendi* and of anatomy and surgery were created, to which, later on, the class of dissection was added.

The professor of *prima* studied the healthy man, physiology, and probably hygiene. The professor of *vesperas*, or afternoon class, studied the sick man, pathology, medical by preference. The professor of *Metodus medendi* taught the treatment of the sick; therapeutics, materia medica and pharmacy; and, lastly, the professor of anatomy taught dissection and surgery, described the elements that constituted the human body, taught the practice of operations, and probably also entered somewhat on surgical pathology.

The first professors were appointed by the viceroys, but they were subsequently appointed by competitive examinations. There were two classes of lecturers: incumbents and provisional lecturers. The former gave the lectures as long as they lived and were able to do so, and when they died their places were filled by competitive examinations. The temporary lecturer served four years, after which time an examination was called for. Should an incumbent professor become superannuated, an examination was called for, but the professor who obtained the position entered with a provisional character and was changed

every four years. The new incumbent was never appointed until the former one died.

Medicine was studied in a four-year course, besides those that might be employed in the preparatory studies. Once the course was terminated, the student could obtain the degree of Bachelor of Medicine, and when he perfected his practice and increased his knowledge, he could, after passing a fresh university examination, obtain the degree of licentiate and subsequently that of Doctor in Medicine.

The ecclesiastical and forensic studies could be completed in the university or in any other of the colleges I have already spoken of: that of San Juan de Letran, San Gregorio, San Ildefonso and the seminary, although all the degrees were given in the university, but the medical studies could only be followed in the last institution. Nevertheless, a decree was issued in 1768 for the creation of a Royal College of Surgeons, in imitation of a similar organization that then existed in Cadiz and of another in Barcelona. The institution was opened to study in the year 1769, but the official opening was only held in the following year.

There were four chairs founded in this college: first, anatomy and dissection; second, physiology; third, operations, and fourth, clinical surgery with elements of medical jurisprudence. In this college the Romancist surgeons studied; so called to distinguish them from the Latin surgeons who studied in the university. From thence also came the phlebotomists, the dentists, the bone-setters, the midwives, etc.

The surgeons who studied in this school were called Romancists, because when the institution was founded preparatory studies were demanded for matriculation, from whence arose a certain contempt, due as much to the title of surgeon which was there obtained as to their want of solid instruction, in view of the absence of preparatory education. Nevertheless, in the year 1793 orders were given that the matriculation in this school should require the previous study of Latin, an order which was not carried into effect until the year 1803.

This was the condition of things when in 1821 we obtained our independence from the Mother Country. The university continued under the same conditions and the Royal College of Surgeons changed its name to that of National Surgery. In the

year 1830 a great step in advance was taken, when orders were given that nobody should be admitted to the School of Surgery who did not previously prove his degree of Bachelor of Philosophy. At that time even the Latin surgeons of the university were obliged to follow the courses of the School of Surgery, the by-laws of which had been amended. In the year 1831 another step was taken. Before this time physicians' diplomas were issued, as well as of Latin and Romancist surgeons, and from that time the faculty was ordered to only issue the diploma of physician and surgeon, thus putting an end to the division in the profession and obliging the candidates to undergo an examination in medicine and surgery.

The year 1833 arrived and with it came great events in connection with public education. Orders were given for the closing of the university and a general board of education was organized, creating several new educational establishments of a superior class, amongst which was a school of medical science, which is the one that interests us for a moment, as we may call it the germ of our present School of Medicine. In this institution the following classes were established: Anatomy, Physiology and Hygiene, Medical Pathology, Surgical Pathology, Materia Medica, Medical Clinics, Surgical Clinics, Operations and Obstetrics, Medical Jurisprudence, and lastly Pharmacy. The government appointed the ten professors, and from amongst them one who should be the director. On the 5th of December of that year this institution was inaugurated in the building in the Betlemitas Alley and at once entered on its labors.

The institution had not been opened a month when at the end of 1834 an entire political change came over our country, and consequently the university was ordered to be opened afresh and things went back to the state they were in before the 23d of October, 1833. Fortunately for the new-born school, orders were given to the university to make an inspection of this institution and present a detailed report of its present condition. For the sake of truth, we must confess that the university acted with the greatest impartiality, and its report was so favorable to the Institution of Medical Science that it was decided to keep up that school.

It would be too long to enumerate all the vicissitudes and difficulties that were suffered by this corporation, but we can

easily imagine them when we bear in mind the frequent changes of our governments; the total want of pecuniary resources; the want of a proper locality for the classes and the necessary cabinets; the many enemies, some of them powerful, against whom it had to struggle in order to establish a system of teaching that abandoned the old style, etc.

When we consider all this, we can no longer wonder that in the midst of such squalls, this frail vessel should have been on the point of sinking on two or three occasions, and that its classes should have been temporarily closed at such times. The heroic founders of our school found themselves more than once obliged to resign their positions, seeing that although they gave their lectures gratuitously, and that they shared between them the necessary expenses of the institution—in spite of that, I say, they suffered rude treatment from the government, or they were deprived of the building that they occupied and were turned into the street. The self-denial of these men was such that every one of them deserves the erection of a statue and the engraving of his name in letters of gold in our school.

Although very slowly, nevertheless the improvements were continued. In August, 1835, the director proposed certain improvements, of which the principal were as follows: (1) That a professor of obstetrics should be appointed and this class separated from that of operations; (2) that eleven substitute professors should be appointed, one for each incumbent; (3) that thereafter all appointments of substitutes should be made by competitive examination; (4) that pharmacists should be obliged to take the course in the institute, of botany, chemistry and pharmacy; (5) that no student should be allowed to matriculate without having the title of Bachelor of Philosophy; (6) that after the lapse of five years, no student should be allowed to matriculate in the school, unless he had taken the courses of Latin and logic, first and second course of mathematics, physics and experimental chemistry; (7) that the physicians should be required to go through a four-year course, and pharmacists a two and a half year course.

All the above amendments were accepted and the greater part of them went into effect little by little, but the difficulties that the institution encountered were so many and serious that the results could in no way correspond to the ambition of the founders.

With the year 1838 the school commenced a period of comparative calm, because, although it continued its struggle with the scant pecuniary resources and the want of a proper locality, the persecutions at least decreased and the governments now began to try and assist the institution. At the end of that year certain reforms were established, of which the principal was that of assigning a course of five years for the medical career, and the others were amendments to the regulations. As a general rule we can say that every fresh administration introduced more or less changes into the regulations of public education, but they all left untouched the fundamental part of the studies which were carried on in the school of medical science. Amongst the reforms which were decreed in the year 1842, there was one that merits attention, because with that the name of the school was changed, and instead of being the "Institution of Medical Science" it has since been called "The National School of Medicine."

When I entered that school in the year 1849, it occupied a part of the College of San Juan de Letran, after having held its meetings in Betlemitas, in the Espiritu Sto. in the College of S. Ildefonso and sometimes in the professors' private houses for want of any public building in which to meet. But at the time that I now refer to, I repeat that the school existed in the College of San Juan de Letran, and for the sake of truth we must confess that as guests we were very fairly lodged, as we had good high rooms and some of them of sufficient size to contain the magnificent cabinets of physics and chemistry which the institution then possessed.

The requirements for matriculation were either a diploma of Bachelor of Philosophy, or at the least certificates of having studied French, English, two years of Latin, and the two first years of philosophy, but with this difference, that those who like myself found themselves in the first case, that is to say with a bachelor's diploma, were matriculated to take what was called the sixth year's course of preparatory studies, botany, physics and experimental chemistry, whilst those who had only taken the second year class of philosophy were matriculated into the fifth year, for the study of botany and physics, and in the following year only took the class of chemistry. Once the six-year preparatory course was concluded, we commenced on the

five years of medical study, which were distributed as follows: First year, anatomy and pharmacy; second year, a repetition of anatomy and a course of physiology, with first year of surgical clinics; the third, surgical pathology, operations, bandages and apparata, together with first year of medical clinics; fourth year, materia medica and therapeutics, medical pathology and second year of surgical clinics; fifth year, obstetrics, medical jurisprudence, second year of medical clinics.

During my student's career, great events happened which are worthy of being related, because they show the misfortunes that frequently overtook the school and the magnanimity and liberality of our professors. In the year 1850 the director was informed that a part of the building of San Hipólito could be purchased which then belonged to the municipality, and that the school of medicine could there be located definitely. The necessary negotiations were entered into, and the professors having agreed to yield $50,000 out of their overdue salaries with the object of paying for the building, the deed of conveyance was prepared and the school took possession of its house. The necessary arrangements and repairs were made, and in the following year of 1851 we entered into our new home. With the greatest satisfaction we remained there for that year and for the year 1852; but when least we expected it, in the year 1853, a peremptory order came from the government to disoccupy the building, as it was required for a barracks. It was in vain that we protested that the building was the property of the school and that it was beginning to be adapted to its object. Nothing could avert the blow, and we were obliged to make up our minds to search for a lodging in some other place, and eventually went to the College of San Ildefonso in the character of guests, where we passed the examination at the end of that year. Having reached the year 1854, which was the last of my studies, we commenced our classes in January; but hardly had a month passed over our heads when the rector of that college, through his secretary, and without taking any notice of our own director, commenced to subject us to certain measures that we considered offensive to ourselves and to our professors, for which reason we decided to abandon that institution, but offering our own director that we would subscribe amongst ourselves to pay the rent of a house in which we could continue our studies. For-

tunately for us, our director just then obtained information that a part of the building of the ex-inquisition, which belonged to the seminary, could be purchased in the same way as the building of San Hipólito had been purchased. Our professors, who were always generous and free-handed, this time ceded $50,280 of their unpaid salaries, and in that way we acquired the ownership of the building, which has from that date been occupied by our school. I can therefore say that at the conclusion of my student's career the peregrinations of our beloved school also came to an end, and that I was one of the first to receive the diploma of physician and surgeon in that building.

From that date the School of Medicine has progressed more or less rapidly to its high position. It is true that even then the salaries of the professors were paid with great irregularity; but, to say the least, the minor expenses of the institution were covered, and a small fee was required for each matriculation and for the partial examinations. The general examinations used to cost us a little over $70, and the examiners had some participation in all these revenues, whilst the other part was dedicated to the funds of the establishment. I remember that I myself got the advantage of some of these perquisites when I was a substitute professor, but all these disappeared with the law of the 2d December, 1857, from which date the salaries of the professors have been properly paid, with very rare exceptions. The scientific instruction continued improving with great rapidity. I have have already said that the Institution of Medical Science was created in the year 1833, with ten professors, who divided amongst themselves the whole of the classes; and that a little later on the classes of operations and obstetrics were separated, from which date the professors were eleven in number. In this way things continued until the year 1866, when the obstetrical clinic was established. The law of the 2d December, 1867, created the classes of topographical anatomy, general pathology and hygiene. The law which is now in force, and which was enacted on the 6th of May, 1869, made no alteration in the number of classes; but a little later on the class of normal histology was opened. So that in less than one decade five new classes were established.

We now come, gentlemen, to the present period—I mean to the period under the administration of General Diaz. I have

had much hesitation as to the manner in which I ought to treat this part of our history, and my pen has hesitated a good deal, because I have found it difficult to see my way in continuing my story. Am I going to wound the modesty for which our chief magistrate is proverbial? Do I expose myself to be taken for a mean adulator? But at the same time, how can I keep silence with respect to public facts? How can I seek to hide that which is perfectly well known to all Mexicans? I shall therefore confine myself to the dictates of my own heart, begging in the first place the permission of our president, and on the other hand, assuring everybody who does not know me that I never say what I do not feel. Experience on the one hand, and history on the other, have taught us how difficult it is to unite in one and the same person the character of a consummate warrior with that of an able statesman and politician. The rare exceptions that are found are considered as phenomenal, and they constitute a real era in the history of nations. But, gentlemen, it is necessary to confess that General Diaz is one of those rare exceptions. He is as brave in the field of battle, when it has been necessary to punish him who has dared to stain the name of Mexico, or him who has dared to disturb the public peace, as he is an able statesman and a courteous gentleman, and always has been, during the long periods of peace that he himself has provided for the country. He has as perfect a knowledge of the sharp and concise language to manage soldiers as of the soft and gallant language that is necessary to deal with ladies in the parlors of the highest society. With the same facility does he treat political personages with reserve and prudence that he displays during moments of good humor that are proper for private friends. We who have had opportunities of dealing with him in matters of more or less importance have always been astonished at the special talent that he has for understanding at first sight the difficult point of any problem, and for coming to the most prudent decision on the subject; and this even when treating of scientific questions, or of matters of which he has no knowledge.

Very seldom has he found any necessity of postponing a resolution in order to give himself time to investigate or meditate on any question.

Endowed with these rare qualities, and with an extraordinarily

keen intelligence, nobody will wonder that the School of Medicine should have progressed during his administration as it never could during the first forty-four years of its existence. At the time when it was founded, it may be said to have had eleven classes, and from the year '33 up to '77 only five chairs were added, whilst from '77 to this date, ten professors have been added to the school without counting a large number of assistants, prosectors and chiefs of clinics; and all of a new creation.

Both the president and his learned Minister of Public Education being convinced that a great number of students can not be attended to by one professor, they duplicated the number of those who teach medical and surgical clinics, as well as those of medical and surgical pathology. They did not consider it desirable that the male and female students of obstetrics should attend the same class, and therefore created a new chair for the exclusive teaching of midwives. In view of the absolute necessity of teaching pathological anatomy, a special professor was appointed to this new chair. And lastly, in view of the constant advancement of science in our days, which renders it difficult for any one man to possess, even to a fair degree, all the knowledge now accumulated by medical science, four chairs were established of special subjects—that is to say, of Bacteriology, Ophthalmology, Gynecology and Pediatria.

In order to give an exact idea of the present condition of medical teaching in Mexico, I would inform you that nobody is admitted to the study of that science who does not prove that he has passed a successful examination in his five-year course of preparatory studies, which are composed of the following subjects: First and second year of Mathematics; first and second year of French; first and second year of English; first and second year of Latin, Spanish, Figure and Landscape Drawing, Physics, Kosmography, Chemistry, Greek roots, Universal and National Geography, Botany, Zoology, Logic, Morality, Universal and National History and Literature. The medical courses must be taken in another five years, and consist of the following studies: Descriptive Anatomy and Dissection, Normal Histology, Elements of Pharmacy, Physiology, Surgical Pathology (two years), Medical Pathology (two years), Topographical Anatomy, Operations, Bandages and Apparata, Therapeutics and Materia Medica, General Pathology, Surgical Clinics

(two years), Medical Clinics (two years), Medical Jurisprudence, Hygiene and Medical Meteorology, Obstetrics, Clinical Obstetrics, Anatomy and Pathology, Bacteriology, Ophthalmological Clinics, Gynecological Clinics and Clinics of Infantile Diseases.

You now have before you a picture of the present condition of our School of Medicine. Study it with some care and you will be convinced that without possessing the resources of some of our neighbors, but having men of the high character of our founders, and governors such as we now have, we have no reason to blush for our school when compared with the best organized European schools.

Gentlemen, I should be very sorry to abuse your kindness, but I have considered myself in duty bound to present our medical institution to our visitors, as it was and as it now exists. I still have to point out to your consideration certain medical questions of interest in the present day, and that merit a careful study in our Congresses. I shall try to do so in a very concise manner, seeing that men of such practical scientific knowledge as I now have before me do not require me to enter into any great detail.

The whole world will support me in saying that with the recent bacteriological studies, science has taken an enormous step in advance; but these same studies have produced such a commotion in the old nosological knowledge that we now have a condition of real anarchy in the classification of diseases, many of which are considered as microbian, before science has demonstrated the fact. Besides this, many of them which were formerly considered inflammatory are now excluded from that group, and placed amongst the microbian diseases, and through this fact alone they are classified amongst the general diseases. It is now time for us to undertake a scientific classification of all these complaints, founding our work on certain general principles, which I take the liberty of pointing out.

The first is, that we must either suppress from the nosological classification the idea of phlegmasia or inflammation, or if we admit that symptom, you must agree that this process, that is commonly of a microbian character, can be caused by very varied organisms; thus showing that every disease which shows symptoms of phlegmasia can be considered as inflammatory, whether the generating germ is called *staphylococcus albus*, *mi-*

crococcus tenuis, *staphylococcus pyogenes*, *streptococcus*, *pneumococcus*, *gonococcus*, etc., and whatever might be the organ in which this micro-organism is developed.

The second consideration that we must not lose sight of is the following: there are microbian diseases in which the microbe appears to be fundamental part of the evil, as in the case of leprosy and tuberculosis, whilst in others the microbe takes a secondary place and its ptomains take the first, as for instance in tetanus, diphtheria, etc.

And lastly, we must not forget that however numerous may be the diseases of a strictly microbian character, there are many others which only have that appearance and perhaps some analogy, but that as long as science does not fully prove the existence of the germ, they must not be reputed as such; in spite of the fact that the greater part of the pathological writers so consider them. I refer to rabies, syphilis, small-pox, measles, scarlatina, etc. It appears to me better to modify our nosological classifications from time to time, and not prejudice the question by acting on analogy and popularizing or spreading errors that must always be injurious.

The second question that I would desire to see treated in our Congresses, I will present by means of a simple question. In the present condition of science, can the surgeons have a perfect certainty in their asepsis and antisepsis, so as to authorize them to undertake operations for the sake of satisfying the patients, when these operations may be of such a character that the slightest neglect or accident may endanger the life of the patient operated on?

And lastly, I would point out an abuse that has gradually introduced itself, and with respect to which I would call the attention of the profession in general, and especially my colleagues who form the section on therapeutics. I refer, gentlemen, to the progressive and fabulous increase of the so-called patent medicines. Little by little, our drug stores are being transformed into simple warehouses for medicines already prepared; and in some foreign towns, I have seen with the greatest wonder that it is very rare to see any prescription made up of any of the physicians practising in the locality, thus completely setting on one side the pharmacists, who are converted into ordinary merchants, without any responsibility whatever for the

goods they furnish. This practice can lend itself to the greatest abuses and lead to the most unfortunate results, that would be very difficult to remedy. A prescription that is made up in a known drug store and by an intelligent pharmacist constitutes a guarantee for both the physician and the patient; not only because the scientific reputation of the pharmacist requires that the substances employed should be perfectly pure, but also because it affords a certainty that the dosification and manipulation of the medicine has been properly done. The method of procedure leaves us perfectly satisfied, and in case of an accident, it is easy to discover whether the fault lies with the physician or the pharmacist; but when the patent medicines are employed, many of which come to us from abroad, all guarantee disappears. Indeed, how could we possibly make those manufacturers responsible? How could we demonstrate to them that the altered or badly prepared medicine had come out of their factories, or that some falsification had been committed?

But there is more yet: I maintain that the use of prepared patent medicines is a practice entirely contrary to science. Because in fact, just as it is an undeniable truth that disease does not exist but that patients do; that the morbid types are only found in the books, and that what we see in practice are individuals who modify the clinical symptoms by reason of their age, sex, constitution, idosyncrasies and medium in which they live; in the same manner it must happen that no specific medicine can exist for such diseases as anæmia, tuberculosis, dyspepsia, etc.; but that the medicines must vary just as the patient varies, and the former must be adapted to the requirements of the latter.

Let the patent medicines be abandoned to the vulgar herd, and to those who will not call in a physician; but the latter, if he is a man of learning and knows his profession, must first of all form a complete diagnosis, and afterward bringing into action all his knowledge in materia medica and therapeutics, he should prescribe the patient a medicine that would be in perfect accordance with the special indications presented by the symptoms. To proceed in any other manner could only be likened to a bad tailor, who insisted on dressing his customers with ready-made clothes.

Gentlemen, I bring my long and ill-arranged discourse to an

end, expressing a desire that all my co-professors may have an agreeable stay in Mexico, and that their labors may attain the most complete success, and also that our subsequent meeting may further enrich the science of medicine and increase the high reputation of science in America.

Report of the General Secretary.

Mr. President, Ladies and Gentlemen:

The by-laws of this congress impose on me the duty of rendering a report of the labors undertaken to realize this meeting. I propose to be very brief, so as not to tire your attention, and because the details are set forth in the programme which has just been distributed.

The first congress which was formed by the physicians of the Western Hemisphere met in the city of Washington, in September, 1893, the meeting being due to the powerful initiative of Dr. William Pepper.

I beg leave to interrupt my report for a moment to introduce Dr. Pepper to your knowledge.

At the risk of offending his modesty, I have to inform you that his scientific merits have raised him to the first rank in the medical profession of the United States; that the University of Pennsylvania, already famous before 1881, owes to this distinguished physician the great fame that it now enjoys; the increase in the space covered by the university, the new buildings with which it has been endowed, the great number of fresh branches of instruction that it has initiated, and that have given it such prosperity; the creation of important museums; the good organization of the studies and the admirable conditions on which it has founded the university education; all of which merits have procured him the special honor of a bronze statue in the same library that he founded. This is Dr. Pepper, whom we have the honor of seeing amongst us to-night.

The other initiator of the First Pan-American Congress was Dr. Charles Reed, whom I also take the liberty of presenting to you, seeing that he is here to-night. His untiring activity took advantage of all resources and led to a favorable resolution in Congress, with the powerful support of the most important orators, and which resolution authorized the President of that Re-

public to invite all the nations of the American continent to send delegates to that scientific meeting.

In one of those sessions it was decided to honor our country by holding the second meeting, in the present year, in the City of Mexico.

In accordance also with its own by-laws, the Mexican Medical Congress, which met in San Luis Potosi in the year 1894, appointed an organization committee which should make the preparations for the present meeting. This committee addressed itself to the Supreme Executive of the Republic, asking for the necessary means with which to carry out its mission, and received the most decided support on the part of the President of the Republic; the support that he has always granted whenever it has been a question of protecting and encouraging everything that tends to the progress of our country. I consider it my duty, as a matter of justice, to publicly declare in this place that Gen. Diaz has identified himself with this project, inviting all the nations of this hemisphere to send their delegations and to stimulate their national physicians to attend this meeting, and he has in every way contributed with all the resources that are at the disposal of the executive for such matters.

All the Ministers have given us their valuable co-operation. The scientific societies have cordially responded to our invitations; but I must make special mention of the International Committee that resides in the United States, and of which Dr. Pepper is president and Dr. Reed is the secretary. Both of these gentlemen honor us with their presence this evening, and they have carried on a most energetic propaganda amongst the physicians of the American Union and of the Dominion of Canada. In the same manner I must express my gratitude to the government of the Federal District and the City Council of the Capital, who will do us the honor to tender a reception to the members of the congress; to the Valley Drainage Board, which is going to give us an opportunity to inspect its great work, perhaps the most important that ever has been undertaken, for the sanitation of a sole district and one city; to the Governor of the State of Mexico, who will kindly receive in the town of San Juan Teotihuacan those members of the Congress who may take an interest in Mexican antiquities, and the archeological monuments that are found in that picturesque town; to the Jockey Club of Mexico,

and to the numerous private individuals who are giving us their valuable aid in receiving and entertaining in this city the distinguished guests who honor us with their presence.

The invitations issued by the government of the Mexican Republic have been responded to by the Dominion of Canada, the United States of America, Guatemala, Nicaragua, San Salvador, Honduras, Costa Rica, the Argentine Republic, Venezuela, Ecuador and Uruguay, as well as by the islands of Cuba, Hayti and the French and Danish West Indies.

Official delegates have been sent by the Dominion of Canada, the government of the United States, which will be represented by members of the Army and Marine Medical Services, and the government of this Republic, the States of Mississippi, Nebraska, Montana, Kentucky, Missouri, New Mexico and South Dakota. From the Mexican Republic, delegates have been sent from the Territory of Lower California and from the States of Chihuahua, Jalico, San Luis Potosi, Puebla, Michoacan, Vera Cruz, Oaxaca, Guanajuato, Hidalgo, Zacatecas and Colima.

The island of Cuba and Hayti, the Republics of Guatemala, Nicaragua, Venezuela, Ecuador and Peru have also appointed delegates, as well as the Scientific Associations of the District of Columbia, States of New York and Massachusetts, the Faculty of Medicine of Lima, Peru, the National Academy of Medicine in the same city, the Hospital Association of the Atchison, Topeka & Santa Fé Railroad, the Supreme Board of Health of Mexico, that of the State of Queretaro, the National Medical Institute, the Academy of Medicine, the Army Medical Corps of the Mexican Republic, the Iatromatic Society, etc.

The Republics of Chili, Brazil and Argentine are represented by means of papers which have been forwarded by physicians of those countries.

Five hundred and fifty physicians of the whole Hemisphere have promised us their attendance and they are accompanied by ninety-six ladies.

The reading of 294 papers has been announced.

Ninethy-eight extracts have been received for insertion in the programme.

With this contribution of personal and scientific work the Second Pan-American Medical Congress will open its sessions.

We have every reason to hope that its results will be beneficial

to the progress of science and will tend to alleviate the evils that afflict humanity. It is in every way a consolation to see the spectacle that is presented by such meetings as this. They make us appreciate the advances of civilization, the benefits of the association and at the same time give us a practical proof of the universal fraternity that is found in scientific studies.

The physicians who come from the continent, from the islands, from the most northern points, from tropical countries or from the distants republics of the South, all come animated with the same idea. They will separate from their discussions all questions or controversies that could touch politics or religion. Their studies and mutual instruction will not be interfered with in any way by difference of race or of language.

Those who come from distant countries have not taken into consideration the pain of leaving their families, nor have they measured the distance that separates us from their distant lands; they have not been afraid of the dangers to be met with in their long journeys, nor have they counted up the losses incurred through the abandonment of their business, and still less are they are animated by the sordid avarice that the celebrated English poet, Lord Byron, so bitterly censured in those traders who abandoned their comforts, their families and their countries, who defied the dangers of the seas and the ardent sun of the torrid zone in search of wealth without ever being able to satisfy their unlimited avarice.

No, gentlemen, you have not been brought here by the thirst for gold; you do not sacrifice your peaceful and laborious life, nor do you abandon your homes and countries for the sake of ignoble passions. You come here to bring your contribution of knowledge and experience to the progress of medical science; you come to investigate the truth, to study the means of alleviating physical pain and to advance the improvement of human intelligence.

Gentlemen, I can only express the hope that the fulfilment of the duties which you have freely imposed upon yourselves, and the realization of these beautiful ideas will compensate you for your sacrifices and contribute to the progress of humanity.

Gentlemen, in the name of my country I thank you for your presence at this meeting.

GENTLEMEN, YOU ARE WELCOME.

ORLEANS PARISH MEDICAL SOCIETY, MEETING OCTOBER 24, 1896.

Discussion of General Subject of Anæsthesia.*

Dr. H. B. Gessner opened the general discussion on "Anæsthetics."

Dr. Parham discussed the historical side of the subject, which had been fully considered at the fiftieth anniversary celebration, in Boston, on October 16. This was held in the same operating room of the Massachusetts General Hospital in which Warren first operated on a patient rendered unconscious with ether.

He said it should not be forgotten that, although the general anæsthetics were not thoroughly appreciated and understood before the fifth decade of this century, they were known and experimented with at the end of the last century.

Davy had had occasion to observe the anæsthetic effects of nitrous oxide in 1799, and had, in a paper read in 1800, distinctly enunciated the possibility of using it to relieve pain during surgical operations.

Thomas Beddoes, of England, had, while working in his pneumatic laboratory, discovered the exhilarating effects of nitrous oxide; he was, furthermore, acquainted with the pain-benumbing effects of ether.

The latter was used by Warren, of Boston, in 1805, and by Woolcombe, of Plymouth, in 1806, to afford relief in pulmonary phthisis and in asthma, respectively.

No general use was made of this knowledge until 1844, when Horace Wells, then a traveling lecturer, discovered that a man who had taken nitrous oxide suffered an accident without pain. While his first public demonstration of the anæsthetic properties of the gas was a failure, the patient having made an outcry, though he afterward acknowledged that he had felt no pain, Wells deserves the credit for having demonstrated its practical usefulness.

Ether was used by Long in 1842 for the first time in actual operative work, as was established by Marion Sims, who collected evidence on the subject. He did not, however, use it to any great

* Introducing discussion read by Dr. Gessner (see article in this number of Journal).

extent, nor did he publish his results before 1849, when Morton had already demonstrated the practical use of the agent. It was at the suggestion of Jackson, a chemist, that Morton first used ether to produce unconsciousness during the extraction of teeth. That on October 16, 1846, the first surgical operation (exclusive of that of Long) done under ether anæsthesia was performed n the Massachusetts General Hospital, by Warren, is too well known to require detailed mention. General interest was aroused, and the administration of the anæsthetic was soon taken up in England, first in dentistry, then in general surgical work. The first administration in a case of midwifery was in 1847, by Sir James Y. Simpson, who later in the same year was the first to make a practical test of chloroform anæsthesia. The latter agent had been known and studied as early as 1832, by Professor Ives, of Yale. Nitrous oxide was introduced in 1844 by Horace Wells, who demonstrated the practicability of anæsthetizing with it, but did not establish its reliability.

The effects of ether were known long before it was used as an anæsthetic. Long, on March 30, 1842, according to Sims, operated on Venables, and in 1849 published an account of his experience with ether. On October 16, 1846, was performed the operation of Warren, on a vascular tumor of the neck, ether being given by Morton, who demonstrated its safety and reliability. Dr. Jackson claimed to have suggested its use, and Wells seems to have mentioned it to him.

Chloroform was discovered by an American, Guthrie, as well as by Soubeiran, of France, studied by Liebig, named by Dumas, and introduced by Simpson.

Dr. Parham declared himself impressed with the danger of chloroform anæsthesia, having had one patient die under it and another make a narrow escape. It is certainly not a safe anæsthetic, nor is ether to be so considered, nor any drug which puts a patient into a profound sleep.

He was inclined to place little reliance on statistics, which seem to vary considerably. For instance the proportion of deaths to administration of chloroform ranged in the observation of Gurlt from 1 in 2614 during the three years 1890–1892 to 1 in 1946 in the two years 1893–1894. Again, ether in the same period of three years gave no death in 9431 administrations,

but two deaths in 11,668 during the subsequent two years, or 1 in 5834.

He contrasted the German statistics in regard to chloroform, showing one death in 2400 to 2600 cases; with those of the Scotch he records one death in 11,000 cases. The difference may be explained by the fact that the Germans push the anæsthetic, while the Scotch are more conservative in its use.

Dr. Chassaignac said that statistics mislead as often as not, and that debaters can prove anything by figures. He was inclined to think that the quantities of chloroform and ether being used in the Charity Hospital are not a reliable index of the relative frequency of the use of these agents for purposes of anæsthesia. It was his impression that much ether is used in the preparation of sites of operation.

Dr. Sexton thought atmospheric conditions could explain the different degrees of danger in various regions. In hot countries and in the open air chloroform appears to be much less frequently fatal. In cold countries where operations are performed in heated rooms, not well ventilated, chloroform would have a specially bad effect, on account of the deficient supply of oxygen. He laid stress on the necessity of giving some form of liquid nourishment a little more than two hours before an operation, stating his conviction that patients thus prepared would stand operations much better than if they were subjected to operation on an empty stomach.

Dr. Gessner, closing the discussion, said he differed with Dr. Chassaignac as to the amount of ether used in the preparation of site of operation. The custom in the Charity Hospital is to cleanse the part to be operated on first with a hand brush and green soap, next with alcohol, and, finally, with bichloride of mercury or carbolic solution.

Hermann B. Gessner, *M. D.*, *Secretary.*

N. O. Medical and Surgical Journal

Editorial Department.

Chas. Chassaignac, M. D. Isadore Dyer, M. D.

THE KLEPTOMANIAC: THE LAW: THE PUBLIC.

We have all followed the course of the recent trial of a kleptomaniac in London. We have been sensationalized by the enormous amount of the bond required. We have been astonished at the detail of the trial. We have been impressed with the energy, nay, the vigor of the prosecution. We have been duly reflective over the judgment arrived at, in a sentence which has been set forth as an example, a sentence which has succeeded in humiliating and crushing, only to be set aside by a gracious (!) pardon.

What has been gained? The detection and the resulting trial worked up to the highest pitch of interest by the flaming sensational press have shocked the family and friends of the victim, while the affliction of the woman was already known to them.

All this makes us stop to inquire if the kleptomaniac is amenable to the law in fact? If stealing is a crime, then punishment is due and should be meted. Extenuating circumstances often ameliorate the punishment in degree. But the law does not as a rule acknowledge the extenuation as an excuse, or a reason for the crime. Is the case of the kleptomaniac in point?

If the criminal be a criminal by predisposition, owing to no fault of his or of her own, provoked by or due to some integral defect in the brain development, is the common punishment of a common crime either apt, or is it far reaching enough? The case recently tried brought out the fact that the unfortunate woman was an unnecessitated thief, guilty of a crime in law for which she could have no excuse beyond an uncontrollable desire to yield to an uncontrollable impulse provoked by an incurable habit.

For this she was sentenced to three months' imprisonment,

after a most depressing and humiliating experience as a prisoner before the bar of justice. And then!

Notwithstanding the pardon, she is restored to her friends humiliated, a moral derelict, stamped with the brand of crime, lowered in her mental tone, on account of the mental degradation. So she is returned to the community, with an uncorrected mental defect, ripe again for the next opportunity.

A repetition of the offence, in the law, would aggravate the crime. The same process would be gone through, with a still further impression made upon the moral and physical balance of the victim, and consequently producing a still less capability to control the balance which in turn could alone regulate the morbid keptomaniac habit.

So nothing is accomplished for the community, while harm is really done by the law, for the remedy is temporary, and only checks, while it intensifies the disease.

The secular press is prone to moralize on such events of crime. Parallels are drawn between the rich and the poor. Poverty does not beget fashionable criminal instincts, kleptomania is no offspring of poverty, a poor man's theft is stealing, is the sarcastic verdict. Poverty can not condone theft, and polite society pities while it pardons the rich kleptomaniac who steals for fun! This is not just nor rational. The perversion of mental instincts, like the perversion of sexual and of moral instincts, is more common with the intellectual classes, because the occasion for the loss of balance is more frequent. The strain for one or two generations, at the bid of progress and of civilization, must sooner or later tell the tale of an over-spent brain, and among the rich, among the intellectual, among the thinkers of and for the community, the loss of balance strikes.

Perversion of moral instincts is not uncommon. The mania of theft is not new enough, therefore, to admit of the ridicule by the ignorant. Theft sustained by physical force has been a tribal virtue in days gone by. Education has made us recognize certain qualities as weakness, and we have risen above such criterions of virtue.

If it is not the moral privilege of the law to control the kleptomaniac, where should this control be placed?

Clearly it is not for the law to act. Destroying a delicate piece of mechanism is not justified as an attempt at correcting a

defect in the workmanship. Lowering the social, humane, moral and physical level of a member of society, rich or poor, is not justified as a correction of an evil, or a defect in the organization of that member which is radical. If kleptomania is a mania, then it is not curable, though it may be controllable.

We reduce the possibility of control by lowering the mental balance, and legal prosecution and criminal justice become themselves a crime. Legislation has compelled the separation of the dangerous or the troublesome insane. Legislation has compelled the control of infringers of the peace. How much more humane, how much more rational, how much more cautious of the public good it would be if kleptomaniacs were controlled under bond. The victim is not at fault, for the first outbreak is known to the family, and it becomes them to guard against a repetition. Either the private respect for the public's protection, or the legal demand for it, could compel a keeper. In an inoffensive way this attendant could keep constant surveillance of the victim. So each offence could be rectified, amends be made, justice done and the dirt pot of public scandal might rest in peace, while the poor unfortunate, innocently a criminal, could still carry the joys of life, and some of its burdens, with no harm to the public.

The medical man may be a poor judge, because his honesty of purpose and his faith in the justice of his convictions too often are at variance with accepted laws, which have been argued for, enacted by and made for the lawyers rather than the public and by the public. To us amputation is a supreme ultimate, and not the first judgment. It is far better to heal than to destroy, far better to save than to lose, no matter how small or how large the part diseased, no matter if it be a jot of a finger, or the sum total of a human mechanism.

POLYCLINIC DISPENSARY FOR THE POOR.

The New Orleans Polyclinic formally opened the free clinics at the new building on the corner of Tulane avenue and Liberty street, on Monday, November the 16th. The members of the faculty, their assistants and a few friends informally asked to come on that occasion assisted in the opening. These clinics

are to be held daily in the afternoon. While the addition of another institution for the use of the poor in New Orleans may be a questionable proceeding, the demand argues the origin. The Polyclinic has done much for the development of medicine in New Orleans, and it can be readily believed that no advantage is to be taken of their disposition to make a charity of their handsome edifice. The section of city territory in which the Polyclinic stands is not a rich one, and it only offers an afternoon service to the already crowded morning dispensary service at the Charity Hospital.

Only ambulant cases will be treated, as the plan of the building provided only for the treatment of such a class of patients.

With the opening of the clinics a regular visiting staff, composed of members of the Polyclinic faculty and their assistants, begin the daily attendance from three to four in the afternoon.

Medical News Items.

At the Pan-American Medical Congress, in the City of Mexico, New Orleans has been represented by Dr. Andrew G. Friedrichs, and Dr. Chas. Chassaignac. These gentlemen represented the State and Parish Medical Societies as regular delegates. We presume that from the time of their return, they will endeavor to impress upon us who have been left behind how much we have missed, and will prove it by their familiarity with the Spanish.

Dr. H. W. Sawtelle, of our Marine Hospital here in New Orleans, was detailed to represent the Marine Hospital Service at the Pan-American Medical Congress.

The New York Medico-Legal Society had an interesting programme at its November meeting, held at Hotel Marlborough in New York. Papers were read on the "Rule of Forensic Medicine in Society," on "Compulsory Vaccination—Should it be Enforced by Law?" and on "Conceding the Utility and

Efficacy of Vaccination as a Preventive Against Small-Pox, Should it be Made Compulsory."

The American Association of Obstetricians and Gynecologists, at its ninth annual meeting held at Richmond, Va., elected the following named officers for the ensuing year, namely: President, James F. W. Ross, M. D., Toronto; vice presidents, George Ben Johnston, M. D., Richmond, and John C. Sexton, M. D., Rushville, Ind.; secretary, William Warren Potter, M. D., Buffalo; treasurer, Xavier O. Werder, M. D., Pittsburg. Executive Council: Charles A. L. Reed, M. D., Cincinnati; Lewis S. McMurtry, M. D., Louisville; A. Vander Veer, M. D., Albany; J. Henry Carstens, M. D., Detroit; and William E. S. Davis, M. D., Birmingham.

The next annual meeting was appointed to be held at the Cataract House, Niagara Falls, N. Y., Tuesday, Wednesday, Thursday and Friday, August 17, 18, 19 and 20, 1897.

The Editors of Mathews' Medical Quarterly announce that with the January issue of that publication its name will be changed to *Mathews' Quarterly Journal of Rectal and Gastro-Intestinal Diseases*. This is a change which has been deemed necessary for some time, as it is essential that the title of a medical journal should convey to the reader an idea of its contents, and this has not been the case with its name from the beginning.

There will be no change in the policy of the journal in the least. As it will continue to be the only English publication devoted to diseases and surgery of the rectum and gastro-intestinal tract, the articles which will appear in it will be limited to these subjects. The journal will continue to be edited by Drs. J. M. Mathews and Henry E. Tuley, and published in Louisville, Ky.

The Board of Health, State of Louisiana, in a special notice with reference to the examination of sputum, says: "It is well for physicians to know that that part of the blank form having reference to the name, personal and family history, etc., of their patients is considered as confidential between themselves and the bacteriologist, and that under no circumstance will this confidence be violated, whether for the purpose of com-

municating information to the officers of the board or for any other purpose whatsoever, and in statistics published from time to time this part will be scrupulously left out. Again, the result of the examination in each particular case is communicated only to the physician applying for the examination, not as in diphtheria for instance, to the proper officers of the board; and beyond advising and helping whenever desired by those in charge in the proper disinfection and sanitation of dwellings the board will take no action in tuberculous cases."

TOURO INFIRMARY AND THE CITY BUDGET.—Considerable objection was made by the representatives of the Touro Infirmary to the amount appropriated by the City Council for that institution. The plea made was that the present council had reduced last year's budget from $6000 to $2000. The argument was made that the Touro was the "up-town Charity Hospital," and that demands were being more and more made upon it, as the population in the upper districts increased.

Until the pay wards of Touro Infirmary are abolished, this claim is unwarranted, and the City Council can scarcely entertain the disposition to a larger appropriation of public funds toward a semi-charitable institution. The Touro Infirmary has accomplished much good, and deserves the consideration of the public, a consideration which last year was evidenced in a multitude of dollars and cents in response to the appeal made at that time.

"REV. C. H. JONES, Kansas, MAKES A SPECIALTY OF CHRONIC FEMALE DISEASES," is a striking card in one of our Western papers.

DR. JOHN J. LYONS died at his home in New Orleans on the 6th of November. Dr. Lyons was sixty-three years old and was well and favorably known.

DR. W. B. BROOKS, of Dallas, Tex., editor and owner of the Texas *Courier-Record of Medicine*, died October 4. His sons will continue the publication of the journal.

DR. W. E. PARKER, of New Orleans, was elected to the honor of vice president of the Southern Surgical and Gynecological Association, at the recent meeting at Nashville, Tennessee.

Dr. Joe S. Jones died October 23, at Baton Rouge, La.

Dr. Jones was born in Jackson, La., September 28, 1852. He received his education partly at Centenary College in his native town and partly at Emory and Henry College in Virginia. Shortly after reaching his majority he entered the law school in New Orleans, graduating with honors at the end of two years. He practised law in Clinton, La., for two years with success, but the profession of law not suiting his taste, he began the study of medicine. He graduated at Tulane University (then the University of Louisiana), in 1879, receiving the highest honors as valedictorian of his class. He practised medicine in Jackson from 1879 to 1889, when he removed to Baton Rouge. He was appointed resident physician at Quarantine Station in 1895 and held this position up to the time of his death.

The Appearance of Small-pox at Patterson, in St. Mary parish, has led the State Board of Health to urge the Southern Pacific Railroad to adopt regulations regarding negro passengers from this point. At a special meeting of the Board of Health, a resolution was passed asking the railroad company to instruct conductors and ticket agents to require physicians' certificates from such passengers, asserting that such person has not been exposed to the disease, and that the certificate shall state that any evident eruption is not from small-pox.

The Board of the Shreveport Charity Hospital has been appointed by Governor Foster, and is composed of Drs. R. A. Gray, J. W. Allen, J. P. Scott and Messrs. J. H. Jordan, J. H. Prescott and Isaac Barron.

Abstracts, Extracts and Miscellany.

PROGNOSIS OF VARIOUS ALBUMINURIAS.

[Continued from November Issue.]

B. *Composition of the Urinary Medium:*

1. *The Chemical Medium.*—A large proportion of albumin in a urine which is pale, abundant, of low density, wanting in urea, uric acid and mineral elements, always indicates chronic nephritis

in an advanced stage, and implies a prognosis of absolutely grave character. A small proportion of albumin in a urine which is colored, little or moderately abundant, of normal or more than normal density, rich in urea and uric acid implies a mild prognosis, for the present.

The variations of water and of urea in urine can furnish some information regarding prognosis.

The variations of the water in urine occupy the first rank regarding prognosis. In a case of albuminous urine it is more important to us, for the correct appreciation of the case, to know the quantity of urine passed in 24 hours than the proportion of albumin contained in thaturine.

In all cases of chronic albuminuria as soon as the quantity of urine decreases, the prognosis becomes worse; as soon as it increases the prognosis is bettered, for the present at least.

When the quantity of urine is less than half a litre, notwithstanding the milk régime, and the treatment followed, we should fear the appearance of grave uremic accidents or a fatal termination within a short time. As long as polyuria persists, as long as the quantity of albumin decreases or remains the same, we should deem that the lesion is localized or that it is compensated and stationary.

The variations of water in urine are, indeed, the best gauge of the arterial tension. In acute nephritis the prognosis stands in direct proportion with the degree of oliguria. As for urea, the determination of its quantity in urine can not safely furnish more information regarding prognosis than in the two following circumstances:

In the period of oliguria the prognosis is less serious, and the functional destruction of the kidneys less pronounced, when the total quantity of urea is high than when it is low.

In the periods of polyuria a large proportion of urea indicates a satisfactory condition of the system; a small proportion signifies, on the contrary, a tendency to cachexia.

2. *Anatomical Elements.*—The centrifugal method has demonstrated that the most normal urine, without a trace of albumin, may contain hyaline casts and blood corpuscles. This fact carries away any value that was attached to those casts as a means of diagnosis between the pathological albuminuria and the so-called functional albuminuria. However, the abundance and the

appearance of certain casts may inform us somewhat as to the extent of the tubulary lesions, or as to the nature of the renal alteration. For instance, epithelial and blood casts, when abundant in albuminous urine, indicate acute diffuse nephritis; but it is no argument, neither for nor against the gravity of the case.

Hyaline casts have no prognostical value whatsoever. They are found in abundance in albuminuria from venous stasis in cardiac and cardio-pulmonary diseases, and that albuminuria in itself is not serious. Whereas, in cases of contracted kidneys it is usually hard to detect any.

As for the waxy and granular casts, broad and short, they evidently carry a most unfavorable prognosis; they are found chiefly in cases of large white kidney. But, then, that supplement of proofs is hardly needed to settle our mind in such cases. The presence of blood when it occurs accidentally in albuminous urine, does not carry much importance as to the prognosis. It simply characterizes an acute inflammatory process, primitive or grafted on a renal alteration of some standing; it is that which gives the peculiar *feuille-mort*, or faded leaf color to the urine in acute nephritis.

Yet, with regard to the *feuille-mort* color of the urine in acute nephritis, we may remark that it is of a comparatively more serious import than the rutilant-red and plain red tints which are observed in similar conditions. This is probably due to the fact that in the former case it is blood itself which passes in the urine whilst in the latter case the color is mainly from the hemoglobine, or rather the methemoglobine, indicating thus a less profound alteration of the glomerulary vessels. For, that rutilant-red tint is often seen in nephritis accompanying acute microbean diseases, erysipelas, pneumonia, typhoid fever, and such a nephritis disappears rapidly and completely after the primitive disorder is over. Again, the urine of a rutilant-red color always contains less albumen than the *feuille-mort* urine.

Of course, when the rutilant-red color persists for weeks and months in a sort of chronic way, its bearing is altogether different. Indeed, a chronic blood-red albuminuria is always very serious, except in a few cases of oxaluria, where this symptom may be observed without consequence. But usually, indeed, it is seen in cases which terminate fatally in a few months—*i. e.*, some variety of tuberculous nephritis, renal cancer or subacute diffuse nephritis.

II.—Prognosis of the Different Varieties of Albuminuria.

1. *Febrile Albuminurias.*—If we want to express the prognosis of these albuminurias in general, we must say that as a whole they are connected with an acute process which is only transitory and rapidly curable. But if all may be cured entirely, all may also persist in a more or less chronic form, for the following reasons: The serious nature of the attack has impressed the renal parenchyma in such a way that the *restitutio ad integram*, or return to the normal state of all the parts affected, does not take place; or the attack has roused and quickened some pre-existing lesion; or, again, the passage of the toxins has created in the kidney a *locus minoris resistentiæ* which renders it more vulnerable to the many other causes of albuminuria.

2. *Cardiac Albuminuria.*—This albuminuria in itself has no value regarding prognosis. It merely indicates a condition which the concomitant symptoms, dyspnœa, pulmonary congestion, edema of the inferior limbs plainly demonstrate. It does not aggravate the primitive malady except where it is permanent during the intervals of the attacks of asystole. It then makes the prognosis worse. For it expresses the development of a renal lesion following a chronic course and consequently tells upon the already affected heart. In heart disease the kidney, like the liver, is subject to be disturbed, and there occurs at times in the kidney a sort of localized asystole, causing oliguria and albuminuria, whilst the edema and the other signs of the heart's weakness are absent, and this asthenia of the circulation localized in the kidney may not go beyond it if the general tendency which it indicates is properly remedied. But if this indication is overlooked and the remedial action neglected, a complete attack of asystole breaks out. Albuminuria in such cases is therefore an important warning preceding the other signs of the heart's failure, and thus it assumes a prognostical value which we ought not to forgot.

Unlike the mitral diseases, the aortic diseases, and, in particular, the aortic insufficiency with albuminuria, is from that fact of a more serious prognosis, chiefly so in cases of young people, and this for the two following reasons:

(*a*) Albuminuria appearing and steadily increasing in a urine which is already scanty and concentrated, indicates the fatigue and debilitation of the myocardium, and as the latter in Corri-

gan's disease is enormous and already overworked, it finally gives way entirely and its asystole is fatal.

(*b*) Or albuminuria appears and steadly increases in the urine, which is passed in quantity showing that the aortic insufficiency is compensated; but, then, it indicates a concomitant nephritis, a large or a contracted kidney, and thus the prognosis is made quite clear, it is bad.

3. *Saturnine or Plumbic Albuminuria.*—If we examine sytematically the urine of any individual who by profession has been exposed for some time back to a slow poisoning by lead, we seldom fail to find in it albumen at some time or other. It is of great importance to add that the complete absence of albumen in a case of saturnism does not necessarily imply the absence of renal lesions. Albuminuria is often transitory and intermittent in saturnism, chiefly in young individuals and at the age of from 15 to 20 years in particular. It is ordinarily only after the age of 40 years that the signs proper of renal atrophy become manifest, and in particular that sign which is most easily remarked, that of nocturnal polyuria.

The principal source of information regarding prognosis in saturnism, including albuminuria, is derived from the portion of time during which the professional poisoning has existed, and we may safely conclude that the lesion is much the more serious as the poisoning is of old standing.

(*To be continued*)

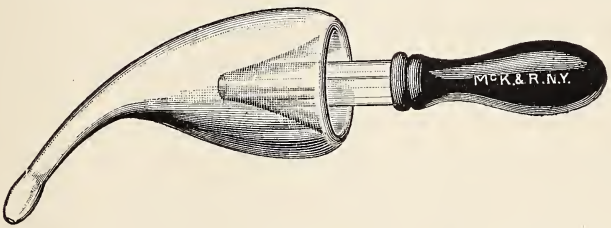
Miscellaneous.

An Aseptic Injector is described by Dr. Walter F. Chappell as follows: Some objection has been raised to the use of a camel's hair brush, as recommended by me, for the application of the new compound, oleostearate of zinc, to the nasal passages.

After considerable experimentation, the instrument shown in the illustration was suggested to me by Mr. William J. Evans. The construction is such that the medicine employed can not enter the rubber bulb, being prevented from doing so by

the cone-like chamber, formed on the principle of a safety ink bottle, thus making the injector aseptic. The rubber bulb limits the amount of force used, which is always an important matter in nose and ear work.

The use of the injector is not confined to semi-fluid preparations or to the nasal passages; in fact, any solution may be employed in it, and where a limited amount of force and fluid is



needed, this injector is available for any of the various mucous passages and also for eye and ear applications.

Directions for nasal use: Draw the fluid into the aseptic injector as you would into a medicine dropper; keep the rubber bulb upward and insert the glass tip into the nostril a short distance; then, tipping the head backward, hold the breath for a moment and press on the bulb. These directions apply to either nostril. When required for other purposes suitable directions will suggest themselves to the physician.—*N. Y. Medical Journal.*

Hydrozone in Gastric and Intestinal Disorders.—A period of nearly twelve years has elapsed since I first began the clinical use of hydrogen dioxide, generally referred to at that time as the peroxide of hydrogen. In 1887 I published a paper giving a detailed account of several cases in which it had been employed by inhalation, but even then I was thirty years behind the report of Dr. (now Sir) Benjamin Ward Richardson, of London, who had made a thorough investigation of its antiseptic, detergent and healing properties. Notwithstanding the fact that this preparation had been known to the medical profession for that length of time, it had achieved little or no reputation. This, however, may be explained by the fact that the discovery preceded the dawn of bacteriology. Indeed, I was one of the early contributors to medical literature relating to the clinical value of this product, and since that time I have published a number of arti-

cles, embracing practically every application, both medical and surgical, to which hydrogen dioxide is adapted.

In the present communication it is my object to direct the attention of the profession to its special value in the treatment of gastric and intestinal disorders. In gastritis, for example, there is no antiseptic which can be given with so much benefit as this remedy, because its effect is immediate, and even in considerable doses it is absolutely harmless. The same is true in regard to its employment in typhoid fever, cholera infantum and Asiatic cholera. In the latter disease its efficacy has been thoroughly demonstrated by a number of well-known physicians. and its applicability in cholera infantum is well known to those physicians who have given careful attention to the most modern methods in the treatment of this class of cases.

The following brief notes will be sufficient to indicate the availability of this remedy in the treatment of such disorders, although, in view of the fact that hydrozone is a more concentrated product, and withal a permanent solution, this latter remedy should have the preference. It contains at least double the volume of nascent oxygen which has heretofore been the standard for the medicinal peroxide of hydrogen.

In gastritis, either acute, subacute or chronic, we have to deal with an unhealthy condition of the lining membrane of the stomach. The inflammation is attended with an increased output of mucus, which seriously interferes with the normal functions of the peptic glands. By the introduction of a small quantity of hydrozone, in the strength of one part to thirty-two parts of boiled or sterilized water, this objectionable mucus is at once destroyed by the action of the oxygen which is released, and the contents of the stomach remaining are promptly discharged into the small intestine. A patient suffering from gastritis should take at least half an hour before meals two to four ounces of diluted hydrozone (one to thirty-two) and lie on the right side so as to facilitate the action of the stomach in discharging its contents.* The antiseptic properties of hydrozone thus used are sufficient to destroy the micro-organisms and leave the stomach in a healthy condition for the absorption of nutritive pabulum. All forms of fermentation are promptly subdued by the active oxidation resulting from the liberation of nascent oxygen. The patient is then in a condition to take suitable food,

which should be nutritious and easily digested, liquids being preferred until the active symptoms have subsided. Later, small portions of solid food can be ingested, but all food stuffs of a starchy character must be thoroughly masticated, in order to secure the action of the salivary secretion upon the starch granules, breaking them up, and lessening the tendency to fermentation in the stomach. After taking a meal, a patient with gastritis should follow it with medicinal doses of glycozone, which contain, in addition to the nascent oxygen contained in hydrozone, a percentage of glycerine which favors osmosis and assists in re-establishing the functional activity of both the peptic and mucous glands of the organ.

In the treatment of cholera infantum, typoid fever and Asatic cholera, the same general plan should be adopted in dealing with the stomach, always bearing in mind the necessity for having the patient remain in the recumbent position and on the right side for at least half an hour after the ingestion of the solution. In addition, however, to the preliminary treatment of the stomach, the same solution (one to thirty-two) is used as an injection into the lower bowel, care being exercised to insure its introduction as high as possible. This can be managed by having the patient lie on the left side, with the hips well elevated, and the employment of a long, flexible rectal tube. In this manner we secure and maintain an antiseptic condition in both the stomach and large intestine, the importance of which will be understood when we consider the large number of micro-organisms which grow under these favorable conditions with such remarkable rapidity.

When deemed advisable, the solution introduced into the lower bowel may be combined with large quantities of either hot or cold water, which enables us to obtain the benefits of irrigation in addition to the antiseptic effects. These irrigations may be employed as frequently as deemed advisable by the medical attendant, but they will usually prove satisfactory if administered at intervals of four hours.

Although brief, it is believed this communication will prove serviceable to a large number of practitioners who have hitherto found serious difficulties in counteracting the mephitic influences of bacteria in this class of disorders, and the clinical virtues of the remedy being now so fully recognized, no one will hesitate to adopt the methods suggested, which may be conveniently car-

ried out in addition to the usual routine treatment.—Aulde, *New York Medical Journal*, November, 1896.

Oleomargarine and Wasting Diseases.—"The problem of nourishment in wasting diseases is perennial. In most instances the balance between waste and repair is greatly to the credit account of the former, despite all the resources of the medical art. * * *

"In every-day life butter is very essential. Its free use by sufferers from wasting diseases is to be encouraged to the utmost in so far as it can be borne. All this seems very simple, but unfortunately an excess of butter diet, even in a healthy organism, is apt to give rise to butyric dyspepsia, and butyric fermentation is set up largely through the presence of a ferment—a residuum left by the buttermilk.

"Considering the foregoing, it seems strange that oleomargarine has not been thought of as a palatable and suitable article of diet for those suffering from wasting diseases. It is free from all objections, despite the idle and malicious tales industriously spread by parties interested in securing high prices for inferior and unwholesome products. Were the truth fully realized by all classes, bad butter would find no market, but unfortunately, the majority of the people have no comprehensive idea as to what oleomargarine practically is. * * *

"The resulting product, as a matter of fact, is a better and purer butter than nine-tenths of the dairy product that is marketed, and one that is far more easily preserved. * * *

"There are a large number also who imagine oleomargarine is made from any old scraps of grease, regardless of age or cleanliness, which is quite the reverse of fact; indeed a good 'Oleo.' can only be had by employing the very best and freshest of fat. This 'artificial butter' is as purely wholesome (and perhaps even better as food) as the best dairy or creamery product.

"Recently, Jollies and Winkler, who are the official chemists for the Austrian Government, after a thorough investigation, announced, through the colums of the *Zeitschrift für Hygiene*, that the only germs ever present in 'Oleo.' are the varieties common to air and water. Although carefully sought for, tubercular bacilli and other obnoxious bacilli were conspicuously absent. They also found that the dairy product is especially liable to be

contaminated, inasmuch as the best process of manufacture failed to eliminate all the lactic acid ferment, the action of which even salt can not neutralize, save for a very brief period.

"Products which are of rank character do not emanate from reputable factories (which are invariably connected with beef packing houses), but from petty manufacturers who accept fats of all kinds that are rejected by the regular oleomargarine makers. It is surprising the amount of fat that a consumptive finds it possible to consume when employing 'Oleo.' instead of butter."—*Scientific American Supplement, July, 1896.*

THE FOLLOWING CHEERING NEWS and useful information have recently appeared in the editorial columns of the *British Medical Journal:* "The reports published during the last twelve months in our columns show that in many parts of the United Kingdom the medical profession is taking vigorous action to put an end to the abuses of the cheap contract practice. Owing to conditions existing in the ranks of the profession, which have prevented union for mutual support, the fees paid for this kind of professional work have become so reduced that a reaction has at length come, and the profession is becoming alive to the importance of the question.

"The honor of having initiated the movement must, we think, be assigned to Cork, where the members of the profession resolved on united action some eighteen months ago. In Portsmouth and Bristol the efforts have been crowned with success; and in several other localities, although the struggle is not over, there is every reason to think the profession will be ultimately successful.

"This reaction has not come too soon. Cheap contract practice has been assuming such proportions of late years throughout the country as to threaten the very existence of a large portion of the profession. Although the number of medical men on the register has been increased considerably during the last twenty years, it is probable that all might obtain a fair livelihood, if only moderate fees were paid by the public for professional services; but if three-fourths of the practice in the country is to be undertaken by clubs, medical aid societies, etc., at the present rates, it becomes obvious that many practitioners must starve or abandon their profession.

"It is foolish of the public to shut their eyes to the fact that the quality of the work is most likely to deteriorate with the price, and when it is considered that individual members of the public are but little able to gauge the medical treatment they are receiving, is it not ill-advised to put temptation to scamp their work before poorly paid practioners, who after all are but mortal?

"The present underpayment of medical services is to be deplored for three reasons. In the first place the medical profession must cease to attract the best men into its ranks. In the second place the whole tone of the profession must be lowered; and, lastly, it would be absurd for the public to shut its eyes to the fact that excessive depreciation in value, whether of commodities or professional services, must inevitably be followed by deterioration in quality."

The Quality of Safety in a Hypnotic.—That the quality of safety is esteemed one of the most important in a hypnotic is well illustrated by the gradual but unmistakable wane in the popularity of chloral, which was once considered the ideal sleep producer. Pharmaceutical chemistry has now placed in the hands of the medical profession a drug which not only produces normal physiological sleep with great celerity, but is practically safe. Trional, to which this statement refers, has been recently submitted by Dr. H. Gieseler (Inaugural Dissertation, University of Halle, 1896) to a thorough investigation of its action upon the general nutrition. In an experiment undertaken on himself the author took four large doses of the drug in fractional dose, namely, 3.0 gm. the first time, and then after an interval of three days 3.0 gm. and 2.0 gm. respectively. To determine accurately the nitrogenous equilibrium the diet was regulated for several days before the period of experiment, which lasted thirteen days. The urine was examined daily for ammonia. This was done for the following reasons: It has been assumed that the disulfones (sulfonal and trional) give rise to the formation of acids in the system to which their effect is partially due. Gaethgins, however, has shown that a dog may be given more sulphuric acid than the amount of acids produced by sulfonal or trional in large doses, without deleterious effects. Kast has also administered ethylsulfonic acid for a long time to a dog without

producing effects similar to those of trional. Mayser, further, was unable to detect any diminution in the alkalinity of the blood after the administration of hypnotic doses of trional. In order to definitely decide this question the author proceeded according to a method suggested by Prof. Von Mering. It has been shown by Walter, as the result of experiments on carnivora, that these animals possess peculiar regulation mechanism, by which any acids formed are rendered innocuous by ammonia. Walter and Coranda have demonstrated on dogs and men that after introduction of hydrochloric acid into the system there is an increased excretion of ammonia at the expense of the uric acid formation. After taking the trional in the manner already explained, Gieseler found that the excretion of ammonia was not in the least influenced by the drug, and this was confirmed by an experiment made on a dog. It can, therefore, be positively stated that the formation of acids takes no part in the hypnotic action of trional. The author also investigated the excretion of nitrogen in the urine during the administration of trional and found it practically normal, so that, conformably to the experiments of Schaumann, this drug can be said to exert no influence upon the metabolism, the bodily weight remaining unchanged. Hence, the conclusion seems entirely justified that in the very rare instances where toxic effects follow the use of trional, these are not attributable to disturbances of nutrition, but simply dependent upon accidental predisposing factors. As Gieseler justly states it is not possible to administer uninterruptedly in large doses and for a long period any drug, without risk, especially in persons weakened by disease and whose organs, especially the nervous system, are impaired in their function. That under these unfavorable circumstances trional may act injuriously can be easily understood, and it is, therefore, advisable to give the drug in the proper manner, in an abundance of hot fluid, in the smallest effective dose (1.0 gm. pro die) and with the interruptions. On the ground of his studies of the action of this disulfone on the nutrition of the body the author, however, has no hesitation in awarding trional the first place among hypnotics.

A Valuable Anti-Catarrhal Remedy.—In the treatment of intestinal catarrhs of acute and chronic character, there is often an indication for some remedy which will exert an astringent effect

upon the inflamed mucosa, and stop the profuse exhausting evacutions. The intestinal astringents in common use have generally proved unreliable in action, because so much of these drugs is absorbed and decomposed in the upper portion of the alimentary tract that the quantity reaching the site of disease is insufficient to exert a full anti-catarrhal effect. Extensive and thorough investigations in the past two years have shown, however, that tannigen is entirely free from these disadvantages, as it is gradually decomposed in the intestinal canal, with the liberation of tannic acid. Among the latest observers who have tested this remedy is Dr. Palma, who employed it in various forms of intestinal catarrh. He gave it to five children suffering from diarrhœal troubles in consequence of improper feeding, in connection with an appropriate diet, and in three cases effected a complete cure within twenty-four hours. The remedy was administered in doses of O. I.—O. 2 Gm., in lukewarm milk or water, and as it is free from unpleasant taste, it was always taken without difficulty and well tolerated. Palma thinks it advisable to continue the administration of tannigen in smaller doses for two or three days after improvement has set in. In the case of two young girls who suffered from profuse diarrhœa following the ingestion of sausages a complete cure was obtained after the fourth dose of O. 5 Gm. Six adults suffering from chronic catarrh of the large intestine, chiefly due to dietetic errors, received O. 5 Gm. tannigen two or three times daily, with regulation of diet, and although the customary remedies had not afforded the slightest relief in these cases, a permanent successful result was derived from the use of tannigen for eight days. Experiences of this kind are certainly encouraging, and should lead to a more extensive trial of the new remedy.

Book Reviews and Notices.

A Manual of Obstetrics. By W. A. Newman Dorland, A. M., M. D. With 163 illustrations in the text, and six full page plates. Philadelphia, W. B. Saunders.

The author of this useful little work on obstetrics has aimed to be systematic and rational in his handling of this important subject. He has cleverly combined a clinical, physiological and pathologic basis upon which to work.

The first part of the book deals with normal pregnancy from conception to delivery. It also deals with the infant from its birth to the time of weaning. The information herein contained is reliable and the advice given as to the management of the mother and child is sound.

The second part is devoted to Pathological Obstetrics. This division of the manual displays a deal of obstetric learning and experience possessed by the author.

Although the book is small it contains much valuable information. MICHINARD.

Food in Health and Disease. By I. Burney Yeo, M. D., F. R. C. P., Professor of Therapeutics in King's College, London. New (2d) edition. In one 12mo. volume of 592 pages, with four engravings. Cloth, $2.50. Lea Brothers & Co., publishers, Philadelphia and New York, 1896.

This work is handily published in octavo size, and contains much that is new and more that will be valuable to the practitioner. Care has been exercised in showing the relation of food to disease and special diseases are discussed with their food requisites and the way to meet them. Tabulated diet lists for various conditions and dietaries are suggested in the back of the book, some of these as used in various hospitals. The book is acceptably edited and well written. DYER.

Proceedings of the Orleans Parish Medical Society for 1895.

There has been some delay in the appearance of these transactions, but the care evidenced is in large degree extenuating.

The compiled volume shows some valuable work done during the year, and the articles published throw much credit on the local profession. There are 241 pages in the book. D.

Transactions of the Louisiana State Medical Society, 1896.

Well bound, with 349 pages of printed matter, containing the proceedings and papers presented at the May meeting of the Louisiana State Society, the work reflects much credit on the secretary and publication committee. The papers read have appeared from time to time and need no comment here. D.

Feeding in Early Infancy. By Arthur V. Meigs, M. D. Saunders, Philadelphia, 1896.

This little work is an argument for the diffusion of cow's milk with water, sugar, etc., so as to approach the chemical relation of mother's milk. It is clearly written and full of sound argument. D.

PUBLICATIONS RECEIVED.

Physicians' Visiting List for 1897, P. Blakiston, Son & Co.

Opthalmic Operations as Practiced on Animals' Eyes, by Clarence A. Veasey, A.M., M.D. Edwards & Docker Company, Philadelphia.

Reference Book of Practical Therapeutics, by various authors. Edited by Frank P. Foster, M. D. (Vol. I) .D. Appleton & Co., New York, 1896.

Twentieth Century Practice of Medicine (Vol. VII), Diseases of the Respiratory Organs and Blood and Functional Sexual Disorders, edited by Thomas L. Stedman, M. D. Wm. Wood & Co., New York, 1896.

Over the Hookah, by G. Frank Lydston, M. D., Chicago, 1896.

The Practice of Medicine, by H. C. Wood, A. M., M. D., LL.D., and R. H. Fitz, A. M., M. D. J. B. Lippincott & Co., Philadelphia, publishers, 1897.

A Text-book of Materia Medica, Therapeutics and Pharmacology, by Geo. F. Butler, Ph. G., M. D. W. B. Saunders, Philadelphia, publishers, 1896.

Education and Patho-Social Studies, United States Bureau of Education, 1896.

The American Agriculturist, Southern edition, Chicago.

Bulletin of the Harvard Medical Alumni Association, 1896.

Transactions of the Louisiana State Medical Society, 1896.

Transactions of the Texas State Medical Association, 1896.

Proceedings of the Orleans Parish Medical Society, 1896.

Medical Jurisprudence, Forensic Medicine and Toxicology (Vol. IV), by R. A. Withaus, A. M., M. D. and Tracy C. Becker, A. B., LL.B. Wm. Wood & Co., publishers, 1896.

Treatise on Surgery, by American Authors, edited by Roswell Park, A. M., M. D. Lea Bros. & Co., Philadelphia and New York, publishers, 1896.

The Medical News Visiting List for 1897.

The Medical Record Visiting List for 1897. Wm. Wood & Co., N. Y.

Reprints.

An Exact Method for Determining the Capacity of the Stomach, by J. H. Kellogg, M. D.

Syphilis as an Etiological Factor in Locomotor Ataxia, by B. C. Travie Drennen, M. D.

The Diagnosis of Tuberculosis from the Morphology of the Blood, by A. M. Holmes, A. M., M. D.

The Surgical Treatment of Hemorrhoids; Intestinal Obstruction after Laparotomy; the Technics of the Buried Tendon Suture, by Hy. O. Marcy, A. M., M. D., LL.D.

The Etiology, Symptoms and Treatment of Rhinoliths; Keloid Tumors of the External Ear, by Wm. Scheppegrell, A. M., M. D.

The Non-Heredity of Inebriety, by L. E. Keely, M. D.

The Treatment of Tuberculosis and Other Infectious Diseases with Oxytoxines, by J. O. Hirschfelder, M. D.

When to Wear Glasses, and How to Choose Them, by Arthur G. Hobbs, M. D.

Public Health Reports, Treasury Departmeat, Washington.

A Series of Articles on Speech Defects as Localizing Symptoms, from a Study of Six Cases of Aphasia, by J. T. Eskridge, M. D.

MORTUARY REPORT OF NEW ORLEANS.

Computed from the Monthly Bulletin of the Board of Health of the State of Louisiana.)

For October, 1896.

CAUSE.	White	Colored	Total
Fever, Malarial (unclassified)	4	10	14
" Intermittent			
" Remittent	1	1	2
" Congestive	1	3	4
" Typho	2	2	4
" Typhoid or Enteric	4		4
" Puerperal		1	1
Influenza			
Measles			
Diphtheria	5		5
Whooping Cough	1	3	4
Meningitis	6	3	9
Pneumonia	14	14	28
Bronchitis	9	5	14
Consumption	36	28	64
Cancer	10	5	15
Congestion of Brain	3		3
Bright's Disease (Nephritis)	19	13	32
Diarrhœa (Enteritis)	4	4	8
Gastro-Enteritis	6	2	8
Dysentery	8		8
Peritonitis			
Debility, General		2	2
" Senile	20	6	26
" Infantile	2	7	9
Suicide	2	1	3
Heart Disease	14	14	28
Apoplexy	15		15
Tetanus, Idiopathic			
" Traumatic	4	1	5
Trismus Nascentium	5	7	12
Hepatitis	2		2
Hepatic Cirrhosis	5	2	7
Uræmia	3	1	4
Injuries	7	6	13
All Other Causes	128	49	178
Total	342	190	532

Still-born Children—White, 35; colored, 20; total, 55.

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

Death Rate per 1000 per annum for month—White, 21.66; colored, 29.10; total, 23.82.

METEOROLOGICAL SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure	30.05
Mean temperature	70.00
Total precipitation	5.14
Frosts	none

Prevailing direction of wind, northeast.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XLIX. JANUARY, 1897. No. 7.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the 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.]

ANTITETANIC SERUM.

By P. E. ARCHINARD, M. D., Professor of Diseases of the Nervous System, New Orleans Polyclinic; Bacteriologist to the Louisiana State Board of Health, etc., New Orleans, La.

Antitetanic serum, as prepared in the Pasteur Institute, of Paris, France, is the serum of horses immunized against tetanus, by means of hypodermatic injections of the toxines of the tetanus bacillus, much in the same way as the antidiphtheritic serum is prepared. The serum is considered sufficiently potent for use when a dose equal to the one-millionth part of a mouse's weight will protect that animal from a fatal dose of the tetanus toxines.

The introducers of this serum do not claim for it any but prophylactic virtues, and advise its use both in man and animals when wounds have been received which are liable to lead to the development of tetanus, from infection with the micro-organism of this disease, such as lacerated and punctured wounds, when the instrument or article inflicting the wound has been in contact with the soil or manure, or when the wound itself has been contaminated with those materials, or the wounds from splinters, or lacerated wounds contaminated with the dust or old plaster of walls, etc. The immunizing dose of this serum is from 10 to 20 *c. c.*, injected hypodermatically as soon as practicable after the traumatism, and repeated in a week if judged necessary. Of

course this treatment is not intended to dispense with the antiseptic treatment of the wound. As a curative, the antitetanic serum may also be used in at least 20 *c. c.* doses, repeated every day or oftener, *pro re nata*, until at least 100 *c. c.* of the agent is used. Nothing, however, can be promised for this remedy when used as a curative agent, and it behooves the progressive members of our profession to give this serum a full test in all cases, for the purpose of ascertaining its merit of diminishing as much as possible the frightful mortality of this disease.

Imbued with those ideas, I ordered and received from the Pasteur Institute, as early as November of last year (1895), a supply of antitetanic serum, the first, I believe, seen in this city; and, at regular intervals since, have had consigned to me fresh supplies of this agent. All, or nearly all, of these were used in the cases related below, more or less *in extenso*, the notes of which were kindly furnished by the internes of the Charity Hospital, and collected for me by my friend, Dr. H. B. Gessner. I give those notes exactly as transcribed by the different observers:

Synoptic Clinical Reports, Cases of Tetanus Treated with Antitetanic Serum.

Case I.—Ward 1, Charity Hospital; service of Prof. R. Matas.

M. R., colored, male, laborer, 16 years old; previous health good. Admitted December 14, 1895. History: Punctured wound of foot (from nail), plantar surface, right foot, inflicted one week before admission. On fifth day after injury stiffness of jaw muscles noticed; difficulty in opening mouth. On admission, general rigidity of all skeletal muscles. Rapid progress of disease; general convulsions following slight touch or noise. Jaws could be separated to the extent of one-fourth to one-half an inch during the entire course of disease; swallowing remained unimpaired. Temperature below 101 deg.; pulse rate not above 96. Treatment: Antiseptic local treatment; seclusion; potassium bromide and chloral hydrate, 15 grs. and 5 grs. respectively every four hours; nutritious diet; antitetanic serum injected hypodermatically December 14, 20 *c. c.* Patient began to show signs of improvement soon after injection; rise of temperature to 101 deg. Injection repeated in same dose

December 18. Chloral and bromide kept up two or three weeks. Patient practically well January 1, 1896.

CASE II.—Practice of Dr. H. B. Gessner.

C. B., white male, school-boy, 7 years old; previous health good. Date of call April 16, 1896. History: Got a splinter in left foot, plantar surface, about four weeks previously; removed April 15. Since the 12th inst. attempts to walk followed by falls; legs stiff; jaws partially locked, permitting introduction of finger; swallowing normal; general rigidity, especially noticeable in neck and abdomen, where pain is experienced. Temperature, 98.8 to 99.2 deg. Treatment: April 17, 20 *c. c.* antitetanic serum injected hypodermatically. Site of splinter slit up under cocaine and packed with iodoform gauze. Chloral hydrate 4 gr., potassium bromide 9 gr., every 2 hours (given carelessly and irregularly).

April 18, temperature 99.8 deg.; rigidity more marked; appetite poor. April 19, rigidity less, eating light food with appetite. Recovery uninterrupted. May 8, no rigidity anywhere, even that in abdominal muscles, most persistent, having disappeared.

CASE III.—Practice of Dr. Gustine, Kennerville, La., Prof. R. Matas in consultation.

—— P., white male, 12 years old, son of a dairyman. Source of infection: splinter in foot. Period of incubation, about four or five days; certainly less than a week. When seen, July 10, 1896, trismus and opisthotonos marked; general convulsions readily excited. Treatment: splinter removed; chloral and bromide administered; injections of antitetanic serum (Parke, Davis & Co.) hypodermatically—three in all. Continuous uninterrupted recovery, attributed by observers to the use of serum.

CASE IV.—Ward 4, Charity Hospital, service of Dr. James Leake. C. H., colored male, 18 years old. Admitted July 30, 1896. Source of infection: ulcer of foot, traumatic.

Period of incubation, about a couple of weeks. Duration of disease at time of admission, 3 days.

Symptoms on admission: Opisthotonos; *risus sardonicus;* jaws almost completely locked, permitting liquid only to be taken; muscular spasms at any noise, excited even by a gust of wind. Temp. 97.6 to 99 deg.

Treatment: Chloral hydrate 10 gr., and potassium bromide

30 gr., every three hours; August 2, 20 *c. c.* antitetanic serum hypodermatically; August 3, same injection; rise of temperature to 99.8 deg. Bowels kept open with salines; wound dressed daily. Discharged cured August 24, 1896.

Case V.—Ward 22 Charity Hospital, case treated by Dr. W. E. Parker. J. K., white male, 15 years old. Admitted October 9, 1896. Source of infection: A fall against a muddy plank, resulting in a wound of the lower lip, inner surface, by the teeth, and an excoriation of the nose and forehead, five days before admission. On admission: Opisthotonos; general muscular rigidity; patient unable to move at all; jaws nearly locked; liquid swallowed with difficulty; severe muscular spasms attended with much pain. Axillary temperature 102.4 to 104.6 deg.

Treatment: Chloral and bromide. October 20, 20 *c. c.* antitetanic serum. October 12, body, arms, legs covered with little red spots and small pimples, itching; spasms rare. Serum injection repeated October 12 and 19; after the latter injection the spasms were more frequent and more severe; there was much tenderness over the site of injection. October 20–24, gradual improvement, no convulsions occurring after that period. Entirely well October 26.

Case VI.—Ward 7, Charity Hospital; service of Prof. R. Matas; Dr. J. Laurans, Chief of Clinic.

F. L., white male, 18 years old, laborer, admitted October 2, 1896. Previous history: Incised wound of thigh, September 19, involving muscles; cleansed and sutured September 30; abdominal rigidity, with pain at insertions, followed by rigidity of jaw and neck muscles. October 2, on admission, wound treated antiseptically; 20 *c. c.* antitetanic serum injected; potassium bromide, 30 grains, and chloral hydrate, 10 grains, every four hours. October 4, improvement noted. October 7, twelve slight convulsions; antitetanic serum, 20 *c. c.*, hypodermatically. October 8, convulsions frequent. October 10, death. Temperature range, 99.2 to 102.4 deg.

Case VII.—Ward 4, service of Dr. W. S. Bickham.

J. H., colored male, 32 years, admitted October 15, 1896. Source of infection, pine splinter stuck in right foot on October 2, extracted immediately. October 13, slight trismus; morning of October 14, patient almost unable to open his mouth. On

admission, temperature 102.6 deg.; patient unable to open his mouth; muscle of back contracting violently at least touch.

Treatment: Local treatment by incision and antiseptic dressing; potassium bromide, 20 grs., and chloral hydrate, 10 grs., every two hours; ext. physostigma given later. October 17, 20 *c. c.* antitetanic serum: October 19, rigidity of jaw and trunk diminished, but strengthless, and swallowing impossible on account of spasms of muscles of deglutition. Temperature, 99.4 to 100.4 deg.; injection repeated in same dose; loss of strength progressive; death same day.

CASE VIII.—Ward 1, Charity Hospital; service of Prof. R Matas, Dr. H. B. Gessner, Chief of Clinic.

G. D., colored male, yard boy to baker, 11 years old. Admitted September 28, 1896, suffering from a severe laceration of the right hand, it having been caught in the dough-mixer of the bakery, September 22. This wound, a sloughing one, was treated antiseptically. October 6, the jaw muscles were found to be stiff; later the neck, abdominal muscles, the skeletal muscles in general. Temperature, 99 deg.

Treatment: No sedatives of whatever kind; 20 *c. c.* antitetanic serum, October 6. Result, slow, steady aggravation of symptoms, rigidity and pains more marked. October 10, muscular spasms on being disturbed. October 11, 22 *c. c.* antitetanic serum; in the course of twenty-four hours noticeable relaxation of muscles. Recovery uninterrupted, in spite of slow disappearance of rigidity. Injection repeated in a few days, making a total of three. November 4, boy up and about, eating freely; abdominal rigidity practically gone.

CASE IX.—Dr. John J. Archinard:

E. C., age 46 years, white male, residing in the lower district a patient of Dr. Renshaw, in the beginning of September, 1896 had stuck a splinter in his thumb, which he had himself removed several days afterward. On September 12 had begun to be affected with rigidity of the muscle of the neck and jaw, which gradually extended to those of the back, abdomen and lower extremities. Had light fever at first, but on September 14 when first seen by me temperature was about normal. On September 14 injected 20 *c. c.* antitetanic serum and ordered 10 gr. each chloral and potassium bromide every four hours. On September 15, though patient was somewhat better, again injected 20 *c. c.*

and reduced chloral and potassium bromide to 5 gr. each every four hours. On September 16, jaws very much less locked, rigidity of muscles of back and abdomen greatly diminished. On September 18, patient was able to sit up in bed and in few days more was up and about, resuming his occupation, that of a butcher, before long.

Here then is a series of nine cases, not selected, but treated as they presented themselves, with a mortality of two or $22\frac{2}{9}$ per cent. If to those cases are added four other cases for which the serum was furnished, but whose notes could not be found—some very severe, far advanced and hopeless cases, of which two died and two recovered—we have a total of thirteen cases with four deaths, a mortality of over 30 per cent. and a percentage of recovery of nearly 70 per cent.—comparing as we know extremely favorably with the most advantageous statistics for the treatment of this disease.

Now, when we add that this mode of treatment is attended with no bad after effect, except in some instances a slight urticarial rash following the injections, gives rise to little or no pain, and that the cost of the serum is not at all at prohibitive figures, I can see no reason which the medical practitioner can give for not availing himself of a therapeutic which seems to promise to greatly reduce the mortality in this painful and dreadful disease.

Before closing this article we would like to call the special attention to case No. VIII, a moderately severe one, which recovered though no internal treatment outside of the antitetanin was used.

THE NON-MEDICINAL TREATMENT OF ACUTE AND CHRONIC RHEUMATISM.*

By CURRAN POPE, M. D., Professor of Diseases of the Mind and Nervous System and Electro-Therapeutics in Louisville Medical College, Etc., Louisville, Ky.

When one approaches the subject of the non-medicinal treatment of acute and chronic rheumatism he feels that in the short compass of time allotted to him he can barely do more than mention the value of these remedies and point out some indications for their use.

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*One of a symposium of papers read before the Louisville Academy of Medicine.

It is surprising as well as disheartening to pick up the literature of the day and read how glibly the non-medicinal remedies are discussed in somewhat of the following fashion: "electricity can be tried;" "massage and gymastics useful;" "baths have been used with some benefit," and similar remarks of this character which are useless to the active practitioner. In making some general observations concerning this disease I feel that I must encroach slightly upon the fields of those who have read papers before me, but I will endeavor to avoid this at every point. Dujardin-Beaumetz, in a very critical review of the established methods of treating chronic rheumatism, says that external measures, such as massage, electricity and hydrotherapy are alone capable of curing this disease when coupled with an avoidance of ptomaine-producing foods or approximately a vegetable diet, and that attention to the bowels is usually a necessity with these cases.

My experience in the treatment of subacute and chronic manifestations of the rheumatic state has been very large, while with the acute it has been correspondingly small. Whenever a case of chronic lithic trouble comes to me I inform them at once that to obtain good results they must follow out a persistent long course of treatment, otherwise no good result can be obtained.

ACUTE STAGE.

In the acute stage I usually limit myself to the application of hot compresses packed around the joints. When the skin of the patient is cold and clammy, I have either a hot air tent made, or hot bottles placed around him in order to produce profuse sweating. The usual medicinal remedies are prescribed, and as soon as practicable sponging is commenced, care being taken to avoid the exposure of too much of the surface at once.

I have never treated a case of the dangerous hyperpyrexia that sometimes threatens to overwhelm the mentality of the patient, but I should not hesitate to place him in the continuous cool bath, starting at a 105 deg. and gradually cooling it to 70 deg., and keeping the patient in it until there is evidence that a constitutional effect is produced. It is, in fact, the only treatment that should be depended upon, and whenever necessary should be repeated. I would like to call the attention of the gentlemen present to a fact that is not generally known, that is that a cold bath 50 to

65 deg. F. is not a temperature reducing bath, but that warmer temperatures are much more effective in accomplishing the work.

Diet in Acute Stage:

The diet in the acute stage should be simplicity itself, and until there is a subsidence of the fever and acuter symptoms of pain, milk and lime water or seltzer or vichy should be allowed, cold but not iced. As the subacute stage approaches we may gradually add broths or soups which have first been allowed to cool and the fat removed from them and then rewarmed as needed. The patient should be induced to drink largely of water, in order to to assist in flushing the kidneys, skin and bowels.

I never allow any foolish cravings of the patient to interfere with my keeping him on a strictly fluid diet during the stage, and I believe that a great deal of after-suffering is saved by this means alone. As he approaches recovery we must keep him on a somewhat farinaceous diet.

Local Applications:

Topical applications in the way of medicines have never in my experience been of the slightest advantage whatsoever, with the exception of the hot compress, or continuous hot air bath, that I mention under another head. In the use of the hot compresses we may, if we desire, add a little bicarbonate of soda and tincture of opium, but I doubt their value and never use them. In my opinion the use of electricity or massage, locally, during the acute stage is contraindicated, and though highly praised by some foreign writers, is, I believe as a rule, in this country discountenanced, and rightly so.

CHRONIC RHEUMATISM.

By the term chronic rheumatism we mean a definite, well defined state, and not the ordinary accepted diagnosis of some practitioners, and especially of patients, but a state that has followed the acute or subacute attacks of true rheumatism. I differentiate clearly between lithæmia, gout, rheumatic arthritis, arthritis deformans, and chronic inflammatory rheumatism. When we have a clear history of a preceding attack, with the symptoms characteristic of the chronic state, we can then proceed to the application of non-medicinal treatment with

the full assurance that in these measures alone lies the possibility of permanent good to our patient.

Before commencing treatment I am always careful to exclude neuritis and thoroughly investigate the case for any obscure cerebral or spinal disease.

As to what particular mode of therapeutics I will adopt depends largely upon the result of the urinary analysis and an examination of the blood, together with the physical and nervous condition, and permit me to say in passing that the nerve element plays a large and prominent part in the chronic manifestations of this disease. Having satisfied myself as to diagnosis I choose some mode of procedure, to be hereafter described, first giving the patient some general instructions.

General Instructions:

I first regulate the bowels by giving him either a laxative pill, or water, preferably Hunyadi-Janos, Carlsbad or Rubinat. I then tell him that fresh air is an essential to his case and that it must be taken daily, preferably in the forenoon, and as far as possible in the sunlight. If he can not walk or ride, I tell him to sit in the sunlight as much as possible.

The longer I live the surer do I arrive at the conclusion that in the rays of the sun we have a powerful vitalizing agent that is sadly neglected by practitioners. That it produces considerable metabolism of tissue I am certain, and that it increases strength and resistance power in this disease is unquestioned. I also instruct him to drink freely of water, and if I think it is likely that he will not do so upon simple command, I may give him lithium tablets.

I next tell him that he must wear flannel next to his skin all the year round, the weight only being lessened during the hot months of the year. I believe many patients do themselves inestimable damage by going without the protecting influence of flannel in summer.

If there are small painful spots I may give him a topical application of iodine, aconite and belladonna, but whether I will give it or not depends entirely on the particular case.

Diet:

Arranging a dietary for these cases is absolutely necessary, and is a paramount factor in a prospective cure, that the

patient must be absolutely submissive to any dietary change, and must be in thorough and harmonious accord with his physician's desires.

Patient's prejudices, and what is more frequent, the prejudices of his family and friends must not be considered, and those who have dealt with these cases know with what arrogance some patients assert their knowledge of the value and harm of certain diets. Highly nitrogenized food must be abstained from, and of the meats, beef, mutton and pork should not be eaten, or, if allowed, should be understood as being allowed because of some individual advantage to be gained in a particular case. I really believe the average American thinks he will die if he does not have meat three times a day, so he eats his meat, meal after meal, and reads of porridge while the brawny Highlander eats his porridge and reads of meat, the one being strong in his digestive organs and the other a lithæmic dyspeptic. Not only must the nitrogenized food be lessened, but saccharine food must be reduced to the minimum, and alcoholic stimulants absolutely forbidden, and used only as medicine and under the prescription of the physician. As a general law the excessive eating of what is allowed should be avoided, and a vegetarian diet such as proposed by Dujardin-Beaumetz may be used He allows eggs, in all forms, boiled, scrambled, omelets, etc., the starchy foods, mashed potatoes, beans, farina with milk, chocolate, farina, rice, barley, maize, oatmeal gruel, bread soup, all forms of rice, noodles and macaroni. All green vegetables, such as carrots, turnips, cooked salads, spinach, etc, stewed fruits, small quantity of pastry, bread and toast allowed. Water, milk, but no wines, beers or liquors.

This diet is a varied one, and is really a mixed diet. The only objection to it is when patients have hyperpepsia, in one of its various forms.

All food must be plainly and nicely cooked. The question of water drinking must be reduced to a science, for the large ingestion of this beverage is absolutely essential for the satisfactory result in any given case. Tricks may be resorted to, especially in the shape of lemonade with a little sugar, cold but not iced. If the question of monetary advantage to the manufacturer were left out, and the value of mineral waters not so persistently drummed into our ears,

we would find that plain river water, or what is better, distilled water, possesses therapeutic value in proportion to the claims we might vaunt about it. The value of water is great, as the hydrogen combines with the effete materials of the blood and tissues to form ammonia, and the oxygen carries these same materials through to the formation of urea.

Stimulate the skin, kidneys and bowel by large quantities of water, and we will get rid of the rheumatic condition very much sooner.

Electricity:

I am not such an ardent advocate of electricity for this affection as might be believed, though I have seen excellent results from its use in well-selected cases. For the atrophy that frequently surrounds the joint I am fond of using the faradic current, but I do not believe as Danion and Drosdoff that it has any advantage in the acute stage in warding off atrophy. For the reduction of swelling and the relief of local pain, the galvanic current is sometimes of value, and should be given in from ten to fifteen milliampères from five to ten minutes through a rheostat, the electrodes being large and moistened with bicarbonate of soda, or some alkali.

It should be given every day for sixty days, and after that as is necessary. The faradic bath to the point of toleration of the current from the primary, or from a very strong secondary coil of the sinusoidal current applied in the full warm bath for ten minutes is productive of much good, and Lehr, in his "*Die Hydro-Electricher Baeder*," recommends these treatments strongly, especially if there are accompanying the state any neurotic manifestations. I have used these treatments for five years, and believe that in certain well-selected cases they prove of benefit. My experience, however, has been that in depressed cases more active stimulating measures are essential.

There is one form of electricity to which I am much attached in the treatment of chronic rheumatic states—that is the static. Its general and local action is of undoubted value in all these conditions, and where we can do so we should use both the sparks and milder procedures. The best mode to use is an application of sparks to the local manifestations of the disease, together with some sharp sparks drawn from the region of the liver and left iliac fossa, and from over the epigastrium, influenc-

ing by these means the local results of the disease, and establishing more perfect nutritive, absorbtive and eliminative conditions. The active use of the spark is best followed by either the head breeze, or insulation, in order to obtain sedative results and bring the patient to a better state of general nerve tone, there being a state of neural irritability in all these cases. The static cage or the static interrupted current are of great and undoubted value.

Massage:

The action of massage, whether it be manual or mechanical, and I consider in these cases *mechanical vibration* far superior to manual massage, is extensive, and it should be applied with a view to obtaining both general and local effects.

In those old cases in which there is a semi-solid exudate with whip-cord-like contractions, and bands around the joints or in the muscles, we find that the squeezing, kneading and mechanical breaking up that massage gives, together with a removal of the local congestion and an increase of the activity of the circulation, will result in a gradual, but as a rule steady removal of the conditions. The muscular fibres that have been ruptured and bound down by adhesions from myositis are broken up and replaced by the colloid condition that is natural to them. Massage together with Swedish movements are the best means of producing nutrition in the muscular and joint structures.

The use of massage will greatly enhance the application of medicine to overcome any symptomatic condition that may be present.

I am very fond of combining massage with other treatments, giving massage for its general stimulating, eliminative and reconstructive power, and some local electrical application to overcome the local effects of the disease.

Hydrotherapy:

In hydrotherapy we have a double-edged tool that may be of great value only when used by persons thoroughly acquainted with its rational use, its physiological action and its clinical application.

Its action is to improve the digestive and assimilative organs, increase the elimination of effete products, to support and enhance the patient's resistance. It seems to act as a rearranger of

the entire nutritive system and to divert it from its vicious tendencies by removing the products of tissue metamorphosis and stimulating nutritive reconstruction. Be the case anæmic or plethoric, we can by means of gentle and judicious application of this agent attain results that are marvelous. In the hands of the inexperienced these are dangerous treatments and may do great harm.

We may use reconstructive methods after educating the patient's skin, making the applications brief, rapid and stimulating either by the rain-bath, jet or fan douches of varying temperature, followed by rapid reactions. If a resolvent treatment is deemed necessary we may use the hot air followed by the douche, local and general, or the pack of long duration. I consider the Turkish bath, with its ignorant attendants, one of the most dangerous of all hydrotherapeutic measures. That pecular inactivity of the skin, a torpor or atony, which may act adjunctive to subacute or chronic rheumatism, is most favorably influenced by all stimulating forms of bathing.

As soon as patients can be educated to stand cold water they will reap considerable benefit, as it not only cures the rheumatism but acts as a tonic and preventive of the recurrence of attacks, imparting vigor and robustness to the physical frame. After patients have recovered they are apt by their own folly, carelessness and inattention to forget that the same causes exist in nature and perhaps in themselves as existed before they had the first attack, and that they ought to be very careful concerning their mode of life.

I tell them, however, that if they are threatened with an acute attack to come at once to me and I will endeavor by means of resolvent processes to prevent a recurrence. Patients must be warned that they are not going to receive benefit by a few treatments, but treatment must be carried out persistently and systematically.

A last word as to how these modes of procedure can best be applied to attain prompt and speedy results.

In the majority of instances the patient is crippled in many of the important joints and muscles and unable to labor in part or whole. To this class the regular regimen, careful dietary, constant supervision and care of thoroughly trained nurses, the daily, twice or thrice daily use of non-medicinal remedies, such

as are found in a well conducted sanatorium where individualized treatment can be given, result in cures which are little short of marvelous to those only accustomed to the unaided use of internal medicinal remedies. I have seen few failures when such cases were where I could control all their actions and their daily life.

I have left so much unsaid that might be said and have not had sufficient time to give the basis for the rational application of these methods, but I hope that in the discussion that follows they may be elicited for the benefit of our patients and ourselves.

SERO-DIAGNOSIS OF TYPHOID FEVER.

By E. M. DUPAQUIER, M. D., and O. L. POTHIER, M. D., New Orleans.

In the September issue of the JOURNAL was published an article about the novel method of diagnosticating typhoid fever, in which were stated the feasibility of the method and the peculiar import to us as to the possibility of setting a term to our interminable discussion on continued fevers.

Preparations were made at once to test the method in as short a time as possible, but the necessary equipment, though simple, was not obtainable as promptly as we first expected. It is only since December 10 that we were able to set to work properly.

This explains the unexpected delay.

A. *Widal's Method.* Mr. Fernand Widal, now physician to the Hospital La Rochefoucauld, Paris, has proposed a method of diagnosticating typhoid fever which is, properly speaking, *his* method, in a paper read before the *Société Médicale des Hopitaux de Paris*, June 26, 1896.

The full history of the method is found in Nos. 24, 25, 28, 29 and 31 of the *Bulletins et Mémoires de la Société Médicale*, and it will prove delightful reading to those who may care to read it in full. The paper of Mr. Dieulafoy on the same subject is also remarkable (*Bulletin de l'Académie de Médecine*, No. 27, 1896).

B. *What is Widal's Method?* A practical method for diagnosticating typhoid fever by simply determining how the serum of a patient acts upon a pure bouillon culture of Eberth's bacillus, the organism discovered by Eberth, which is generally recog-

nized as the pathogenic factor in the production of typhoid fever.

The serum of a man having typhoid fever *agglutinates* the bacilli of typhoid fever, or in other words, destroys their remarkable vitality and brings them together in motionless or dead clumps, while the same serum has no action whatsoever on other microbes.

The serum in each affection possesses a specific agglutinative property toward the specific germ of that infection. Hence, a general method of sero-diagnosis based upon this agglutinative phenomenon has resulted in two practical applications of great importance: First, the differentiation of the various microbian types by the serum of animals experimentally infected; and, second, the diagnosis of the nature of the various infections by the serum of patient.

In regard to typhoid fever there were noted by Achard and Beusaude, among other competent physicians, two causes of uncertainty.

There are specimens of Eberth's bacillus which are more or less apt to agglutinate than others, hence the practical deduction of using for the test specimens of Eberth's bacilli that are known from experiment to become easily agglutinated, in other words that are known to be very sensitive.

Also, there exist bacilli distinctly different from Eberth's, though resembling them very closely, giving rise to a disease resembling typhoid fever, yet different from it. They are, however, agglutinated by the serum of animals infected with Eberth's bacilli and the serum of animals infected with those bacilli agglutinate Eberth's baccilli. Those bacilli called, on that account, *paratyphic* bacilli, are: various types of bacilli coli, the bacillus of psittacosis (parrot's infection) and others.

This may seem to weaken the specific nature of the agglutinative process. But, practically, such a view should not be taken, because in all these experiments the serum used is a very strong one, from animals highly immunized; serum of animals so potently immunized with a paratyphic bacilli is strong enough to agglutinate Eberth's bacillus, which is a species nearly analogous to them, and *vice versa*.

In man, or, in other words, in practice, we do not find potent serum experimentally, or rather artificially made,

and it has been asserted that strong typhic serum in most severe cases of typhoid fever has never had any action on the cultures of the bacillus coli.

Practically, then, the specific of agglutination remains a safe principle in diagnosis and the sero-diagnosis of typhoid fever, discovered by Widal, has still a capital value clinically. Errors are exceptional, so that the general results of the sero-diagnosis method remain good and true, as stated.

C. *How is Widal's method carried on?* It was stated in the former article already alluded to that the procedure is a simple and rapid one, within the reach of almost everybody, not requiring much laboratory material. So it is, in fact. But, considering the isolation of the practitioners in the country and the distance of this city itself from other centres of great scientific activity, a bacteriological equipment as small as may be required to practise Widal's method is yet somewhat difficult to procure and onerous to maintain. Indeed, the proper microscope with its accessories for bacteriological work, the cultures and the indispensable material which they require are not in the hands of the majority of practitioners in the city and State. Our confrères will, therefore, be glad to hear that the Charity Hospital is now provided with a complete bacteriological laboratory and that they can obtain from the laboratory an examination of the blood serum of suspected fever cases.

The liberal invitation tendered by the officials to those who were desirous of doing scientific work in the laboratory is now addressed to such of our confrères of the city and State as may be desirous of being assisted in clearing up a knotty diagnosis. For the sake of the scientific instruction of all of us, we even solicit the specimens in question.

Specimens may consist of either blood or serum (from a blister, for instance), of pus, urine or milk. The test can be performed even after a day or two, the longest portion of time necessary for the specimens to reach this city from any part of our State.

D. *Instructions regarding specimens.* Of course it is better to send *blood* which is easily gotten from either a finger or the lobe of the ear. The finger is preferable, letting the arm hang down so that the drops of blood are easily collected.

Again, fresh blood is better when it can be had; but Widal himself, and Wyatt Johnson, of Canada, have been using, the former, *dry serum*, the latter, *dry blood*, with success. However, with a dry specimen, if the first result is negative, a second specimen should be sent; hence in the city and its vicinity it is better to send fresh blood at once.

In all cases, the finger or the ear of the patient are thoroughly cleansed and rinsed with water, dried, and then punctured by means of a large needle, which is first heated ret hot in the flame of a spirit lamp and allowed to cool. The first drop of blood is rejected, and other drops (eight to ten) are collected, slight pressure being made if necessary.

To collect the blood use a clean thimble or a deep, hollow-ground slide and a cover-glass, passed through the flames of a spirit lamp to sterilize them (Widal.)

Cover the thimble with a piece of cotton batting as a stopper or with a rubber cap. Cover the hollow-ground slide with the cover-glass, smearing a little vaseline around the hollow. Send specimen without delay.

Dry specimens from a distance. Write to us, we will send pieces of sterilized paper and sterilized cover-glasses or slides with directions.

Send specimens to the "*Charity Hospital Laboratory*" with a brief ciinical note always without delay.

Bear in mind that no specimen should be taken before the *seventh day* of fever. But at any time during convalescence, or after recovery, even years after, specimens may be taken, as they may may prove interesting for our object.

E. *Process of Testing.* For the satisfaction of our prospective correspondents, we will briefly state the necessary manipulations. The dry blood is moistened with a little sterile bouillon and mixed with from eight to ten drops of a pure bouillon culture of Eberth's bacillus from two to five days old. One drop of this mixture is examined under the microscope with a one-twelfth oil immersion objective, at different intervals, to make sure of the result. If the bacilli, which in the pure culture were surprisingly lively and independent, are now agglutinated in motionless clumps, so much so that the field is studded with these clumps (small and rare groups are not characteristic), then it is a case of

typhoid fever. If the cloudy bouillon culture, mixed with the specimen of blood or serum, after remaining twenty-four hours in the incubator, clears up, it is one more proof that it is a typhoid fever case. We repeat, a culture of bacilli coli mixed with typhic serum does not show any agglutination, and, after twenty-four hours in the incubator, not only no agglutination is seen, but the culture instead of clearing up is more turbid than before. Causes of error arising from the close relation between Eberth's bacillus and the paratyphic bacillus may occur, as stated, but this is exceptional in ordinary practice. And, again, from a practical point of view, errors under such circumstances would yet help the practitioner as indicating a typhoid infection, somewhat different from the pure Eberthian type, but a typhoid disease, at any rate, which should make us very cautious in our treatment.

Other considerations of importance might be entertained, but this will suffice for the present. A report of our investigations will follow, and credit will be given to every confrère who contributes specimens.

A CASE OF HYPERTROPHIC ROSACEA (PACHYDERMATOSIS), RESEMBLING TUBERCULAR LEPROSY, CURED WITH THYROID EXTRACT.*

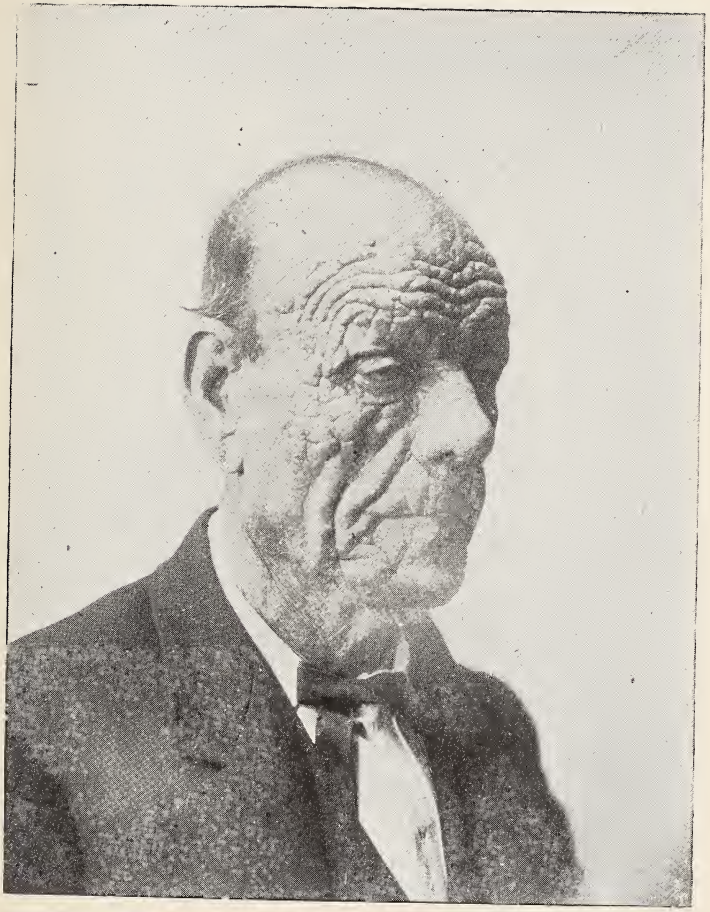
By ISADORE DYER, Ph. B., M. D.,

Professor on Dermatology, New Orleans Polyclinic; Lecturer and Clinical nstructor on Dermatology, Medical Department, Tulane University; Dermatologist to Charity Hospital, Etc., New Orleans, La.

The case I desire to report is, I believe, one of unusual interest, occurring, as it has, in a community in which leprosy is so endemic.

On January 21, 1896, the patient applied for treatment in the eye department of the Eye, Ear, Nose and Throat Hospital in New Orleans. The house staff suspected a case of leprosy, and the patient was placed in the out-yard of the hospital until I could see him. He had called to consult the oculist for the

*Read before the American Dermatological Association, September 9, 1896, Hot Springs, Va.



CASE OF HYPERTROPHIC ROSACEA.

everted lids, which burned and smarted and itched to a degree of great discomfort.

The patient is an Alsatian, 60 years of age, and has lived in the United States for fifteen years, almost wholly in Louisiana. The patient had been a farmer by occupation, and from boyhood had worked in the field exposed to wind, sun and weather.

Little of the earlier history of the case could be ascertained, as there had been almost no inconvenience or annoyance from the eruption, and the patient had suffered no concern from the mere cosmetic presence of the condition.

The first glance at the patient provoked a suspicion of tubercular leprosy, which a closer and detailed examination subsequently excluded. The nodose appearance of the skin, the marked ectropion, and the extent of the eruption on the face were misleading. The limitation of the eruption to the face and dorsi of the hands were the first points of exclusion in the differentiation.

The patient had always been healthy, and was in excellent general physical condition at the time of the examination. On the backs of the hands was a thickened keratosiform condition, scaling, but with no primary lesions. The skin of the face was much thickened, arranged, as the photograph shows, in rugæ, running for the most part in parallel lines, a pencil's breadth apart. These crossed at points an inch, half an inch, and less, apart, giving a tesselated appearance to the eruption. There was extensive scaling, with excoriations here and there, showing, as the patient affirmed, that itching was almost constant. The color of the skin was a dull red, but in nowise brownish, bronzed, or dusky, as one would expect to find in leprosy. There were no tubercles at any part of the eruption, and telangiectasis was nowhere present. The patient at all times seemed in good humor, a ready talker, with a happy tendency to accept the chronicity of his affliction with a philosophic smile. The habits of the patient were regular, his diet ordinary and his drinking limited to beer, of which he drank sparingly.

The marked infiltration, the thickening and elevation of the skin in regular nodosities, with persistent scaling, suggested the name of pachydermatosis for the condition, and this diagnosis was accordingly made. No local treatment was prescribed,

and four grains of salicylate of sodium were administered three times a day.

On February 4 the patient returned, with no perceptible change in his condition. The internal medicine was stopped and ten grains of iodide of potassium three times a day was substituted. On February 11 the scaling and itching had increased so as to be uncomfortable. An ointment of equal parts of olive oil and diachylon ointment was ordered. On February 29 the condition seemed to have been in nowise affected, so the following ointment was substituted for the one in use:

Resorcin	℈i
Olive oil	℥ii
Liquid tar ointment	℥ii
Oxide of zinc ointment *ad*	℥i

The iodide of potassium was continued.

On March 7, the condition was still unaffected. Just about this time a copy of the atlas of the plates made in copy of the wax models of the St. Louis Hospital Museum (in Paris) came to me, in which such a case was pictured, under the diagnosis of "hypertrophic rosacea." The early life of the patient under weather exposure and the usual history of a progressive rosacea, especially in neglected cases, forced me to the conclusion that my case was identical with the one illustrated. The pachydermatosis, however, was so marked that it must necessarily be considered a part of the condition, especially when the implication of the hands in the process is considered.

The external application was ordered resumed from this date, and five grains of Fairchild and Foster's thyroid extract was prescribed, to be taken three times a day.

On March 21, the patient gave no evidence of improvement and the thyroid was continued and resorcin ℈i, rose water ii, and lanolin ℥ii, was ordered for local use. On April 11 a noticeable improvement could be readily seen. There was less inflammation and less scaling. The treatment was continued.

On April 25, the patient was materially improved. The skin was paler and softer. The thyroid had been omitted for several days. This was ordered resumed and to be taken strictly.

On May 24, 1896, the patient had taken the thyroid extract, five grains, three times a day, regularly since last seen—that is, for one month. During the time he had not been observed. The skin of the face and dorsi of hands were soft and normal to

the touch. The rugæ had in large part undergone resolution. Everywhere the skin, formerly tense in its infiltration, was compressible, scarcely edematous under the finger. The morbid color had entirely disappeared, the softened skin being of a normal flesh color, slightly pink.

The suggestion of the diagnosis made, or even of a confusion with tubercular leprosy, had been entirely obliterated.

The patient's general condition was excellent, and at no time had he suffered annoyance from the medication. The ectropion had almost gone except for slight eversion of the lower lids, but these had become so much softened and relaxed as to be no longer uncomfortable.

The ready response under the thyroid medication and the prompt resolution of the chronic condition alone would make the case interesting. The possible confusion in the diagnosis adds much to the value of its report. The absence of anæsthesia, or tubercles as such, of telangiectasis in the nodose area, of the facial expression so characteristic in leprosy of leonine type, together with the duration of the eruption without further involvement of the skin—the condition was limited to regions exposed to view—and the absence of trophic changes, additionally excluded leprosy from the condition treated.

The thyroid medication was continued in the same dosage and the patient has been seen twice since, last in early July, when it was believed justifiable to discontinue treatment and to discharge the patient as cured, but with the injunction to return from time to time for further observation.

Clinical Reports.

I. ACCIDENTAL HÆMORRHAGE. II. INTRA-MENINGEAL CEREBRAL HÆMORRHAGE.

By B. A. COLOMB, M. D, Union, La.

Mrs. F. F., age 22; white. II.-Para. General health good. First pregnancy normal. When menstruation was re-established every other period was absent, so that exact month of gestation is now doubtful.

November 18, 1895, received a sudden jar from walking off the end of a plank, raised several inches. Felt at once a severe pain in the lumbar region, radiating around the hypogastrium. One hour later was having violent hypogastric pain, with paroxysmal straining, like a woman in the second stage of labor. Extremities cold, pulse and temperature normal. Complains of great pain and tenderness over the uterus, worse on the right side.

Sufficient morphia was given to quiet the pain, and absolute rest enjoined. This treatment was continued during ten days. The symptoms during that time were: paroxysmal attacks of uterine colic. Exquisite tenderness over the uterus referred mainly to the right upper quadrant. This tenderness was so great that even the weight of the bedclothes was unbearable, and the patient kept her knees flexed, to relax the abdominal muscles. For this reason also I could only palpate the uterus very lightly, which gave me little information as to its shape, though I noted the size and position and judged the pregnancy advanced to four and a half months. Fœtal movements were present and apparent to the patient throughout her illness. Repeated vaginal examination showed the os to be undilated, and there was no discharge. On the tenth day about half a pint of grumous blood was discharged per vaginam, when the flow stopped.

The os remained undilated and pain diminished very much. The following day another discharge of blood took place—about an ounce—and both pain and tenderness gradually subsided. There was no rise of temperature above the normal. Woman was delivered of a healthy infant on March 10, 1896, without complications.

The great difficulty lay in deciding between accidental hæmorrhage and rupture of an ectopic pregnancy. Diagnosis was based upon the following facts:

1. Uniform enlargement and correct position and shape of a normal, pregnant uterus. Bimanual examination.
2. Absolute freedom from symptoms to moment of injury.
3. Slight amount of shock and absence of symptoms indicating acute anæmia.
4. Traumatism such as would occasion placental separation.
5. Pain becoming localized to right upper quadrant, without

local swelling, and bearing down efforts indicating that the irritant was within the uterine cavity.

INTRA-MENINGEAL CEREBRAL HÆMORRHAGE.

T. D., aged 46; mulatto; carpenter; temperate; healthy. Father and grandfather both died of cerebral hæmorrhage. Brothers and sisters living; robust. Two years since received contused and lacerated wound of scalp in posterior right quadrant. Erysipelas of scalp and face; complete recovery.

October 16, 1896, took up his chest of tools, after a light breakfast, and carried it about twenty yards. Laid chest down, sat on it and fell over unconscious. Clonic contractions of limbs lasting a few seconds, when consciousness returned. Patient was helped back into the house, walking himself, vomited copiously and complained of great pain in nape of neck and over frontal region.

3 P. M.—Pulse 58, full, regular and moderately hard. Temperature 98 deg.; no paralysis or weakness of limbs. Consciousness normal, except some *slowness* of intellection. Complains only of intense pain over frontal region, with a feeling of pressure or tightness which was quite distinct, and some pain over nape of neck, increased by pressure. Pupils contracted somewhat and equally. Radial artery large and no evidence of atheroma. Temporals very tortuous and atheromatous. Examination of heart negative. Temperature rose to 99½ deg.; pain increased for a few days; pulse beats rose to 72; no sensitiveness to light or sound; intellection became normal.

Treatment—10 grs. aa. calomel and soda, followed by a full dose of liq. magnes. cit.; rest; ice bag to frontal region; liquid diet. Potassium bromide, gr. xx, and normal liquid ergot., ℥ xx, every four hours. On the third day a cantharidal blister was applied to the nape, which removed the pain in that region; the frontal pain subsided very gradually. An occasional dose of mag. sulph. was given, and potassium iodide, in 5-gr. doses, three times daily. This last only upset the patient's stomach, and was stopped. He is now restored to his former health.

I. A PROLAPSED OVARY INTO A HERNIA SAC. II. A CASE OF RECTAL POLYPUS.

By T. H. WATKINS, M. D., Lake Charles, La.

Rosa L., 33 years of age, married, no children, one miscarriage twelve years ago. Menstrual period every four weeks, lasting seven to ten days.

Hernia of right side, "inguinal" of six years' standing. Patient anæmic, and very much emaciated. She complained of great pain, and that same would become red and swollen during monthly epoch. Pain so great as to confine her to bed, and completely incapacitate her for work.

Upon reduction of bowels there remained an irreducible fluffy mass in canal, which, when palpated, would cause nausea.

Assisted by Drs. Martin and Moss, the sac was opened, exposing a cystic ovary about the size of a hen's egg.

The broad ligament was bound to ring by strong adhesions, which were separated sufficiently to remove ovary after thoroughly ligating broad ligament. The opening was closed by suturing stump into canal, superficial opening closed and healed nicely.

Examination of uterus shows several subperitoneal fibroids, which keep the organ displaced laterally.

A CASE OF RECTAL POLYPUS.

Robert A., four years old, strong, healthy, and rather large for his age.

Mother noticed for several months that a small quantity of pure blood would follow each stool. About September 1, a small, red, granular tumor, from which the blood oozed freely, would escape during each action. Examination showed it attached about 2½ inches above the sphincter ani by a pedicle about 3 inches long.

Removed same by clamp and cautery. Complete recovery.

Correspondence.

San Jose, Cal., November 28, 1896.

Dear Sir—We ask you to give publicity to this letter and accompanying resolutions, to the end that in all communities afflicted with the pestiferous practice of lodge doctoring, physicians may be encouraged to assert their independence through organization.

Here, in Santa Clara county, Cal., containing 70,000 population, all the physicians of the county, numbering 124, have entered the compact that has ridden us of a slavish evil and wrought independence and freedom for the practitioners of medicine. Investigation shows that medical compensation for lodge work averages about 15 cents on the dollar.

Even respectable lodge physicians feel a sense of degradation in giving their services for 15 cents on the dollar, and the ever-increasing spread of these alleged charitable institutions is absolutely destructive to the business of other physicians.

The main incentive of the persons who band themselves together in lodges is to get cheap doctoring; they are willing to take, but not to give. They belong to protective unions, and the same right should not be denied physicians. Ninety-nine per cent. of these people are able to pay reasonable fees to physicians, but will not do so as long as a few doctors in every community, for the sake of immediate gain, can be induced to stand as driven guys to lodge politicians. No preacher or lawyer would give his services to these people for 15 cents on the dollar. No grocery store or merchandise firm would contract to supply these lodges with goods at 15 cents on the dollar of actual worth.

The remedy indicated in the subjoined resolutions is simple, and manifestly efficacious, depending upon the personal honor and free will of those concerned. Where one doctor temporarily profits by contract work the business and ethical rights of fifty others are violated: hence an overwhelming *esprit de corps* is created among physicians which will sustain a strict observance of the pledge.

A. Jayet, M. D., *President.*

Lincoln Cothran, M. D., *Secretary.*

Resolutions Adopted by the Physicians of Santa Clara County.

Whereas, Rendering professional services at a stipulated fee per capita per annum is derogatory to the dignity of the medical profession, we, the undersigned physicians and surgeons of Santa Clara county, California, enter into the following agreement:

First—We mutually, jointly and individually pledge our word of honor not to enter into any contract or agreement, or renew any existing contract or agreement, either written, verbal or implied, to render medical or surgical services to any lodge, society, association or organization.

Second—We will not render medical or surgical services to the members of the above mentioned bodies for less compensation than we charge the general public for similar services.

Third—This agreement shall not be construed to affect existing contracts between physicians and surgeons and the above mentioned bodies.

Fourth—These pledges shall take effect and be in force for a term of three (3) years from and after May 22, 1896.

This agreement shall not apply to hospitals and purely public charitable institutions.

Ricord used to say, concerning the preparations of gold that certain practitioners had substituted for mercury as specifics in syphilitic diseases, that, everything else being equal, they produced better results when administered by the patient to the doctor than by the physician to the patient.

N. O. Medical and Surgical Journal.

Editorial Department.

Chas. Chassaignac, M. D. Isadore Dyer, M. D.

THE NEW YEAR.

All nature moves in a continuous circle. The season dies only to give birth to another, periodic in its cycle. The world moves on in its revolution, and time changes only to recreate.

Ideals are unsatisfied cycles, which the imagination is constantly in the act of fulfilling. If all ideals were realized, hope and aspiration would become obsolete. Success, achievement, ambition, competition, rivalry—all are the essentials of the ideal, each the corollary of the other.

At this end of the nineteenth century, discovery after discovery has startled the world, amazement has given place to anticipation, and even the millenium would scarcely be unexpected.

Progress has yielded or advanced according to the degree in which ambition has touched the temper of the times. From an empiricism of a graphic type, medicine has kept apace with other scientific development, until to-day a foundation has been established for an everlasting progress.

The few years past have seen exactness compel carefulness in the diagnosis, prognosis and treatment of disease. The microbic theory has grown from a flimsy idea into a demonstrable fact. Laboratories have increased and multiplied for the study of the habits and usefulness, as well as for the study of the antagonists of the host of micro-organisms which attack the human economy. More than this, the scientific purpose of it all has disseminated the tidings of discovery throughout the civilized world.

Old theories have grown older or have died for the new and newer ones.

Higher yet has the standard of medical education been planted.

Special researches are developing every line of medical education. The intelligence of the rank and file of the profession

has been stimulated to an effort at advancement. Pasteur's death has made an epoch among the stages of the cycle of progress. The evolution of the phagocytic theory has resulted in the birth of antitoxin, antitetanin, and the promise of other antimicrobic remedial substances. Already cancer and leprosy are on the table for experiment.

Sidelights have been thrown on surgery and surgical diagnosis by the Rœntgen X-ray.

To-day confraternization is encouraged by international congresses, where climatic, hygienic, as well as the medical conditions surrounding the patient's well-being are discussed in council.

The array of completed researches is large, and to-day finds us beginning a new page of the century's volume of science.

Are there any ideals left to be realized? Do we find ourselves at the peak of satisfied ambition? We are too wise to believe that the growth of science is so finite!

We are in fact on the eve of more discoveries which another year may see. We have yet to relieve ourselves of the burden of contumely, ever growing under the contamination of quacks and charlatans who have made the degree in medicine a stepping-stone to fraud. We have yet to throw formulated ethics to the winds and to work, *con amore*, for the good of all. Then the work of discovery, of invention, of development will be all the easier, and the end nearer at hand. Our ideals will grow the harder for the task to consummate them. Much, therefore, is on our hands, and another, and yet another, year may find us still at the problems, tried and untried, of our profession, of a moral and physical, as well as a medical kind.

And now our list of good resolutions shall be carefully filed away for ready reference when we feel that we are falling short of our aspirations, and the JOURNAL will make ready for another round of months and seasons, watchful of what the tide of change may bring, and ever careful of the highest ideals our profession may know.

Meantime, to each of our readers and to all of our friends, we send the wish for all that is best as the new year grows old.

CHARITY HOSPITAL RESIDENT SURGEONS.

Now that all vacancies have been filled and that nothing it may say can be construed to be in any manner personal, the JOURNAL

desires to express clearly its opinion in regard to the manner in which all appointments on the hospital resident staff should be made.

The objects of a public hospital are twofold: First, and foremost, the care and treatment of the indigent sick and wounded; second, the education of medical men—not only of students to make them doctors, but the doctors themselves in order that the public may have at its service a sufficient number of properly equipped physicians and surgeons.

This proposition being granted, it becomes evident that for this double purpose to be properly carried out, a system different from that which has up to now prevailed must be instituted. In other words, the appointment of hospital surgeons must be taken out of politics. A man must not be elected because he has a "pull," and must not be allowed to remain in office indefinitely, as long as he retains political influence and can control appointments on the Board of Administrators.

As long as the existing method continues, neither object is attained to the best degree. A surgeon depends for retention in office less upon his devotion to duty and the time and ability he gives the hospital and the destitute sick than upon the friends he makes outside, and the success he has in getting on the right side of the political fence. Hence, the indigent get less from him than they might, and, frequently, one individual remains in office for years chiefly for his own personal advantage, excluding other meritorious men from the opportunity of acquiring a fair amount of hospital experience.

The Board of Administrators at their last monthly meeting moved in the right direction. They have decided "that it is to the interest of the institution to exact the undivided attention of the assistant resident surgeons to the work within its walls," and that "they should be debarred from general practice and permitted only to perform operations and attend consultations when requested by colleagues in the city, providing it does not conflict with their duties in the hospital." They have imposed no restrictions on the *present* house surgeon, owing to his past faithful services during many years, especially as it is in their power to do so should it be deemed necessary in the interest of the hospital. They have also determined that "the next vacancy in the office of either assistant house surgeon shall be filled after

competitive examination which shall be confined to residents of the State, of good character."

The board is to be congratulated on its action. The salary, the board, lodging, service, etc.; and, especially, the vast field for serious medical and surgical research offer ample inducement for any man to devote his entire time, energy and ability to the hospital during a reasonable space of time. If he has made proper use of these advantages he is compensated by getting out well equipped for his life-work and assisted by an already established reputation. That the board should have made an exception in favor of the present house surgeon, on the plea of past services and a desire to take no action that might be considered retroactive, can be understood though some may question the consistency of such a course. At any rate the JOURNAL firmly hopes that it is only a question of time when the new rule shall apply to all resident surgeons.

The announcement that vacancies among the assistants are to be filled in the future after competitive examination will be hailed with delight by the medical profession; such a system is bound to redound to the public good. It should, however, be outlined in more detail and its scope enlarged. Here is the plan the JOURNAL would suggest: The position of second assistant surgeon should be given to the successful competitor in a thorough and practical examination, supervised by disinterested and competent members of the profession. The examination should be open to "residents of the State, of good character," alumni of the Charity Hospital having graduated within five years. The term of office should be two years. After this period, the incumbent having given satisfaction to the board in every respect, would be promoted to first assistant surgeon. After two years more, a promotion to the position of house surgeon would follow, this term to last two years also, always subject, of course, to removal for cause by the Board of Administrators. In this way a man would, if he desired, have a stay of six years at the Charity Hospital—long enough, surely, to acquire special ability if he be made of the right stuff, but not enabling him to shut out every one else indefinitely. There would be only one change in the resident surgeons every two years, and the hospital would be assured of the services of competent men, all of them with previous hospital experience as students, and never less than

two with respectively at least two and four years' experience as resident surgeons and operators. The incumbents being restricted to their hospital duties and in their term of office would put their whole soul in their work in order to give satisfaction to the board, to improve themselves, and to pave the way for a successful private practice and brilliant professional career. The patients would profit, the institution would be benefited, and the average standard of the profession would be improved.

These are consummations devoutly to be wished, and, while not unalterably committed to the details of the plan, the JOURNAL shall continue to battle for the adoption of its principle, for it feels that it is voicing the opinion of the profession of the city and State.

DATE OF THE NEXT PAN-AMERICAN MEDICAL CONGRESS.

The International Committee did wisely in selecting Caracas as the meeting place in 1899. That city is a beautiful one and the Venezuelans are reputed for their cordial hospitality. The members of the Congress can be sure beforehand of a sincere welcome and agreeable entertainment.

The month of December has been chosen, as it is one of the most pleasant and healthful in that section of the world. While summer is the time at which most of us can best take a vacation, it may be out of the question at different points for various reasons. However, in this instance, if it must be December, we sincerely hope that the intention of holding the Congress during Christmas week will not ultimately be confirmed. Should this be done the attendance from the United States would assuredly be quite small. If there is a time when all of us want to be at home surrounded by our children or those of others, it is during the Christmas holidays. One might be ever so anxious to improve himself, to have a pleasant trip, to aid in cultivating closer ties between the medical men of all America, while visiting new scenes and sojourning in enchanting climes, the ties of home are properly the strongest at that season and the attendance would suffer.

By all means let us have a date that will make possible numerous delegations.

Medical News Items.

The Orleans Parish Medical Society, at the meeting of December 12, elected the following officers to serve during 1897: President, Dr. John Callan; first vice-president, Dr. E. D. Martin; second vice-president, Dr. Isadore Dyer; third vice-president, Dr. J. M. Watkins; secretary, Dr. C. J. Miller; treasurer, Dr. F. Larue; librarian, Dr. S. P. Delaup, the last being the only one re-elected.

Manuel Carmona y Valle, M. D.—Dr. Carmona y Valle, who was president of the second Pan-American Congress, and had been vice-president of the first, was born in the City of Mexico over sixty-five years ago. He is dean of the Mexican

Medical Faculty and its director, occupying the Chair of Clinical Medicine since 1877. He is honorary member of the Mexican National Academy, and active or corresponding member of several medical societies at home and abroad. He has written a good deal, and pays special attention to ophthalmology.

Rafael Lavista, M. D.—Dr. Lavista was vice president of the Pan-American Congress, and was born in Mexico. Vice-President of the Mexican National Academy, he is sub-director

of the Medical Faculty, and has the Chair of Clinical Surgery. He has charge of the Museum of Pathological Anatomy, is quite

a writer, and is chief editor or the *Review of Pathological Anatomy and Medical and Chirurgical Clinics.*

Eduardo Liceaga, M. D.—Dr. Liceaga was general secretary of the Pan-American Congress. He was born in Guanajuato,

Mexico, 1839. He is president of the Superior Board of Health and professor of operative surgery in the faculty of the City of

Mexico, where he is noted as an operator. He has written frequently, principally on surgical subjects, and is director of the Maternity Hospital.

Dr. James Leake died suddenly on November 28, from a gunshot wound, inflicted by himself, while delirious from an attack of fever. Dr. Leake had only recently been appointed to the much coveted position of assistant house surgeon of Charity Hospital, and by his quiet demeanor, and his attention to work, had attracted the respect of the profession in contact with him. His death, at the time, and under the distressing circumstances, is a loss to the institution, to his friends and to the profession. Dr. Leake was born in Bayou Sara, La., and was only thirty-three years of age. He was a graduate of Tulane Medical College, an ex-resident student of Charity Hospital, and up to a short time previous to his election at the Charity Hospital, had successfully practised his profession in Bayou Sara. Feeling resolutions of respect for his memory were passed by the ambulance corps of the hospital, the surgical clinic, and by the board of administrators of the Charity Hospital.

Dr. Julius F. Schmittle has been elected first assistant house surgeon of the Charity Hospital, to fill the vacancy created by the death of Dr. James Leake.

Dr. Fred. W. Parham has returned after a month's tour of observation, chiefly of Eastern hospitals.

The Bacteriological Laboratory of the Louisiana State Board of Health has issued the following circular regarding the blood test for the diagnosis of typhoid fever, through Dr. P. E Archinard, the bacteriologist:

"The discovery of Pfeiffer and Widal has shown that the blood of persons suffering with typhoid fever, when mixed with young cultures of Eberth's bacillus has the property of arresting the active and characteristic motion of these bacilli and of causing their agglutination or clumping. This reaction occurs very early in the disease, it is found throughout its course, during convalescence, and for a considerable time after recovery. It does not occur when typhoid fever blood is mixed with any

other micro-organism, or when the blood from patients suffering from any other disease is mixed with typhoid bacilli. Wyatt Johnston, of Montreal, has demonstrated that this reaction takes place even when blood dried for several days is used instead of fresh blood and thus can be employed for diagnostic purposes. Following in the footsteps of the health boards of New York, Montreal, St. Louis and Chicago, the Louisiana State Board of Health has decided that this test would be carried on gratuitously in its bacteriological laboratory for the benefit of every physician so demanding it and carrying out the instructions as printed in this circular. For this purpose outfits, with blank forms to fill out, will be found by those desiring same at all of our diphtheria-tube and sputum-box depots.

Directions for Preparing Specimen of Blood.

Clean thoroughly the tip of the finger and prick with a clean needle deep enough to cause several drops of blood to exude; two drops are then placed, one at each end, of slide in outfit. Let the blood dry, then place the slide in holder, fill out the blank form and return to depot where obtained. On the following day a report of the result of examination will be mailed or telephoned to the attending physician.

N. B.—Use only the blood of fever patients; should the first report be negative and the case be suspicious, the physician in attendance is requested to send further specimens, in every case to notify the bacteriologist as to whether the laboratory diagnosis is finally in harmony with the clinical diagnosis, or at variance with it. One source of error must be remembered and is due in some cases to the persistence of the reaction for a number of years after a typhoid attack; so that a reaction may appear in health or in affections other than typhoid fever, if the person has previously suffered from the disease. In cases where the reaction is marked, it may apparently be positively stated that the patient has, or has had typhoid fever within a few years. If the reaction is present but not well marked, a probable diagnosis only can be made. If the reaction is absent in a patient sick seven days, the diagnosis of typhoid fever may be excluded.

The experiment has not been tried long enough in a sufficient number of cases to admit a positive statement as to the earliest date of the appearance of the reaction in typhoid fever.

The Tri-State Medical Society will hold its next meeting in Nashville on the second Monday in October, 1897. The States represented are Alabama, Georgia and Tennessee.

Upon Dr. More Maddern, the honorary degree of M. A. O. has been conferred. For many years he has been well known as an obstetric and gynecological practitioner, teacher and writer, and has received many honors in these branches of medical science. He has been president of the Obstetric Section of the British Medical Association and of the Irish Academy of Medicine, and was honorary president of the International Congress of Obstetricians at Brussels. From the Medical College of Galveston he has got the degree of M. D. *Honoris Causa.* Amongst his writings is "Clinical Gynecology: A Handbook of Diseases of Women."

The Western Ophthalmological, Otological, Laryngological and Rhinological Association meets in St. Louis, Mo., the second Thursday and Friday of April, 1897. Physicians desiring to read papers are invited to send subjects to the secretary at once. Railroads will give one and one-third fare on the usual certificate plan. The profession are cordially invited to attend.

For the Twelfth International Medical Congress, which is to take place in Moscow, August 19 to 26, 1897, Claudius A. Mastin, M. D., of Mobile, has consented to serve as one of the members of the American National Committee.

The Central (Moscow) Executive Committee consists of the following gentlemen: President, Prof. I. F. Klein; vice-president, Prof. A. J. Kojewnikow; secretary general, Prof. W. K. Roth; treasurer, Prof. N. F. Filatow; secretaries, Prof. P. I. Diakonow, Prof. W. A. Tikhomirow, Prof. I. I. Neyding; members, Prof. S. S. Korsakow, Prof. J. F. Ognew, Prof. W. D. Cherwinsky.

It is officially announced by Dr. A. Jacobi, Chairman of American National Committee, that preparations are being made for the reduction of transatlantic steamer and European railroad fares.

The American Medico-Surgical Bulletin will, after January 1, 1897, be published as a semi-monthly. We hope it will continue

in its sphere of usefulness, and that this esteemed journal will obtain the success it deserves.

The Pasteur Monument Committee of the United States, of which Dr. E. A. de Schweinitz is secretary, has recently issued the following announcement:

"It has been decided to erect in one of the squares of Paris a monument to the memory of M. Pasteur. Statues or busts will also, no doubt, be located at his birthplace and in other cities. The Paris committee has, however, wisely determined that the statue obtained through international effort shall be located at Paris, where it will be seen by the greatest number of his countrymen, and also by the greatest number of his admirers from other lands. The Paris committee has for honorary members the President of the Republic and his cabinet, together with about 160 of the most prominent officials, scientists and other distinguished citizens of France. The officers of the active committee are J. Bertrands, president, member of the French Academy, perpetual secretary of the Academy of Sciences; J. Simon, vice-president, member of the French Academy, perpetual secretary of the Academy of Moral and Political Science; Grancher, secretary, member of the Academy of Medicine, professor in the faculty of medicine.

"The Paris committee has kindly extended the opportunity to the people of the United States to assist in this tribute of appreciation and love, and has authorized the organization of the Pasteur Monument Committee.

"The members of this committee gladly accept the privilege of organizing the subscription, and of receiving and transmitting the funds which are raised.

"We believe it is unnecessary to urge any one to subscribe. The contributions of Pasteur to science and to the cause of humanity were so extraordinary, and are so well known, and so thoroughly appreciated in America that our people only need the opportunity in order to demonstrate their deep interest.

"All can unite in honoring Pasteur. He was such an enthusiastic investigator, so simple, so modest, so lovable, and yet so earnest, so great, so successful—his efforts to ameliorate the condition of humanity were so untiring that we anticipate an enthusiastic response from the whole civilized world. The

United States will vie with the foremost of nations in this tribute. No one is expected to subscribe an amount so large that it will detract in the least from the pleasure of giving. A large number of small subscriptions showing the popular appreciation of this eminent Frenchman is what we most desire."

"All checks or money orders should be made payable to 'Treasurer Pasteur Monument Committee.' The original subscription papers will be forwarded to the Paris committee for preservation.

"The amounts thus far subscribed by individuals vary from fifty (50) cents to ten (10) dollars. It is hoped that no one who is interested will hesitate to place his name upon the list because he can not give the maximum amount."

The JOURNAL will receive subscriptions and will have a receipt forwarded by the secretary of the committee to all subscribers.

The Journal of Cutaneous and Genito-Urinary Diseases begins the new year under new editorial control. Dr. Fordyce, who has certainly made the journal a credit to himself and to the publishers, resigns in favor of Dr. James C. Johnston and Dr. George Knowles Swineburne. The editors will have the active co-operation of the following gentlemen: Louis A. Duhring, M. D., Edward L. Keyes, M. D., Prince A. Morrow, M. D., Robert W. Taylor, M. D., James C. White, M. D., and John A. Fordyce, M. D., the retiring editor. The journal will be enlarged to a permanent forty-eight page number, so that more space may be devoted to abstracts of important original communications on both special subjects. In other respects the journal will be conducted as heretofore. All renewals, subscriptions, communications, exchanges, etc., should be addressed to Dr. Johnston, 115 West Eighty-fourth street, New York City.

A MEETING OF THE SHREVEPORT MEDICAL SOCIETY was called on December 5 to pass resolutions upon the death of Dr. Morgan Billiu. The resolutions were presented by the committee, consisting of Drs. Randall Hunt, F. S. Furman and T. E. Schumpert. Dr. Billiu was a respected member of the Shreveport Society.

DR. J. F. MORRIS, who has been a resident surgeon at the Eye, Ear, Nose and Throat Hospital, this city, has returned to Crowley, La., to practise his profession.

Abstracts, Extracts and Miscellany.

Department of Surgery.

In charge of Dr. F. W. Parham, assisted by Drs. E. D. Martin and F. Larue.

RELIABLE CATGUT STERILIZATION.

Catgut would undoubtedly be the ideal suture if it could be relied upon to possess the following qualities:

1. Sufficient tensile strength.
2. Absorbability, varying according to the wish of the operator.
3. Sterilizability.

All ligatures, except those of animal tissue, furnish the first and third requisites, but none, except the animal ligature, possesses the second property. The ease with which the aseptic unabsorbable ligature, whether silk, silk-worm gut, horse-hair or metal, becomes encysted in the tissues, and the certainty that it may be rendered aseptic by boiling, have led many to believe that nothing further is to be desired, but the recognition of the fact that all sutures and ligatures are foreign bodies until absorbed forces us to fear that trouble may at any time result from their presence. Such a suture as Halstead's mattress suture of silver wire, buried in the depths of a hernial wound, although it may seem even for years harmless, must be neverthless an ever-present menace of danger. That they remain often for years without making their presence felt is not a sufficient argument, for good-sized leaden balls have been known to remain encysted for years without causing trouble, but too often it has happened that an injury or failing health has been the determining cause of necrosis and suppuration about them.

It is very desirable, therefore, that we should find a ligature material that will last a sufficient time to accomplish firm union of approximated parts and then disappear, the non-absorbable materials being then reserved for those localities where they may be removed after serving their temporary purpose, or for

those wounds where the permanency of the suture is the only reliable safeguard against the reproduction of the disability.

No matter how much we may strive to convince ourselves that the retention of sutures will do no harm, nevertheless we all instinctively seek for some means of approximation of tissues that will insure permanent union and leave no foreign body behind.

The animal ligature is our only hope in our search for the ideal suture and ligature. We are agreed that it possesses two of the *desiderata* of a suture—tensile strength and absorbability, and we know, further, that it can be so prepared as to be efficient for the varying periods requisite for permanent repair of wounds.

The only unsettled question is the possibility of effecting reliable sterilization.

A method, to be reliable, must accomplish sterilization without damage to the gut. Have we such a method? Dry sterilization by the Kiliani process, Fowler's method by boiling in alcohol under pressure and other less efficient methods all fail to meet the demand for a satisfactory plan; so much so that many surgeons have abandoned catgut in favor of other materials. Two methods remain to be considered—the Cumol method and the Formalin method. The first furnishes a catgut which seems to be satisfactory in all respects. We have as yet no personal experience with it, but a recent trip through the East showed the writer that the Cumol gut was rapidly coming into favor, especially at Johns Hopkins Hospital, in Baltimore, and St. Luke's, in New York.

The other method is the formalin method of Hofmeister. Without going into the details of the method it suffices to say that the principle is simply the hardening of the gut in 2 to 4 per cent. aqueous solution of formalin, so as to permit its being boiled in water as long as may be necessary.

Dr. Senn, speaking in the *Journal of the American Medical Association*, December 12, 1896, of this method, commends it as reliable from every point of view. Numerous inoculations gave invariably negative results, and the catgut was in no sense impaired by the process, and he found the knot less liable to slip than that of ordinary gut. A very important point is also mentioned by Senn as having been ascertained by his experi-

ments, namely, "*that the formalin catgut can be reboiled any number of times without impairing its strength.*"

If these statements be correct, and they seem to be, then the question of catgut sterilization is definitely settled, because if it can always be boiled just before using, then it may always be relied on, since it is impaired thereby neither in strength nor in (ultimate) absorbability. If catgut be thus rendered sterile we can see no necessity of impregnating it with any antiseptic substance, as suggested by Hofmeister and commended by Senn, "to render it unfit as a culture medium for pathogenic microbes." There would be exactly the same reasons for impregnating the tissues of an aseptic wound wherein this impregnated gut was used, and we have all come to believe that in *aseptic* wounds antiseptics have no place. There would not be the same objection to Senn's impregnation with iodoform as to Hofmeister's corrosive sublimate, or to the carbolic acid of others, but the fact would be the same that *aseptic gut in an aseptic wound would need no antiseptic*, which might, perhaps, lower tissue-cell resistance by its irritant effects, unless it be actually true, as Senn asserts, that "the experiments made by Ewald have also furnished positive proof that sterile catgut often contains a sufficient quantity of an unknown toxic substance, which, by its destructive action upon the cells engaged in the reparative process, transforms them into pus corpuscles, resulting in the production of a limited aseptic suppuration and the formation of sterile pus." In this view the suggestion of Senn to use iodoform would be a decided advantage over that of Hofmeister. But as we have indicated the ideal method would be that which rendered the catgut simply sterile without requiring the addition of any antiseptic substance.

May these expectations be thoroughly realized is our fervent hope.

Miscellaneous.

PROGNOSIS OF VARIOUS ALBUMINURIAS.

[Concluded from the November and December Issues].

Gouty Albuminuria.—Under this denomination are included all the varieties of albuminuria connected with the different phases or stages of uratic nephritis, of which the small contracted red

kidney of Todd is the ultimate period, but not necessarily so. Albuminuria, indeed, is extremely frequent in the gouty. Transitory, intermittent or continuous, it may occur at all the periods of gout. Usually slight, the quantity of albumin fluctuates between one-half to one gramme per thousand.

As regards prognosis, we must first consider two great classes of cases. Those in which the urine is of average abundance or somewhat increased, strongly acid, high in color and density, rich in urea, uric acid, phosphoric acid and in mineral principles. Those in which the urine presents opposite characters, is pale, colorless, abundant, of low density, poor in constituent principles. The first category includes chiefly the young lithæmic and the gouty whose gout is regular, plain, the attacks terminating by complete resolution. In such cases albuminuria is always latent, and revealed only either by accidental or by systematic examination of the urine. To this class belong most of the cases described as cyclic or intermittent albuminuria in the young.

The characters attributed by Teissier, and his follower, Merley, to the urine presenting cyclic albuminuria, to-wit: excess of coloring matter, high density, excess of water and salts, are identically the same as characterize the pre-articular period of gout, according to Lecorché. From this fact, Teissier and Merley conclude that this cyclic albuminuria is of arthritic origin. We call it pre-gouty albuminuria, when observed at an early date in adolescents of gouty descent, but it is not proper to youth, for it may be seen in gouty adults having already had articular attacks. As long as the urine is rich in urea and uric acid, with density and color normal or above normal, the lesion is of small extent, and it is functionally compensated; consequently no immediate or proximate accidents are to be feared from the presence of albumin.

The second category includes the old gouty, or the gouty below 50 years, whose gout has from the start been abnormal and grave; with articular deformities, abundant tophic deposits. In such cases the urine is pale, watery, profuse, of low density, wanting in urea and uric acid, and the prognosis of albuminuria, immediate or proximate, is always distinctly bad.

Albuminuria in Diabetes Mellitus.—In most cases it is due not to diabetes itself, but to the coexisting gouty uricæmia. In other

cases it is due to heart lesions or to pulmonary tuberculosis complicating diabetes. Generally albuminuria in diabetes is of a gouty nature, and, therefore, its prognosis is comparatively good, as in this kind of albuminuria the processus is slow and the organism tolerant. But, of course, albumin must be and continue to be below 1 per 1000, for when abundant the diabetic albuminuria is naturally grave. When renal lesions shown by 2 and 3 per 1000 of albumin persist, the situation is so much the more grave that the regime in albuminuria is precisely most unfavorable to glycosuria and *vice versa*.

The former theory that the substitution of albumin for sugar in the urine was a sign of recovery is inadmissible.

Albuminuria During Pregnancy..—Nephritis prior to conception or nephritis after conception, due to some intercurrent disease that would have determined nephritis any way, is always the cause of albuminuria. As long as albumin does not rise above 1 gramme per 1000, the characters of the urine being otherwise normal, the immediate prognosis is that the albuminuria or renal lesion itself will not cause any accident; at least, during the first six months.

If albumin reaches or rises above 2 per 1000, particularly when accompanied by edema or anasarca, scanty urine of a *feuillemort* or sanguineous color, with tendency to dilatation of the heart and to uremic symptoms, the immediate prognosis is extremely bad, both for child and mother, premature labor and miscarriage occurring in three out of four cases.

The prognosis of albuminuria during pregnancy is complex. It is liable to vary under certain conditions proper to gestation, such as the undetermined condition termed eclampsia and two others; the pressure on the *ureters* by the gravid uterus and fatty degeneration of the tubular epithelium.

Eclampsia is, in all likelihood, due to some intoxication, which causes albuminuria. The latter exists only as long as the convulsions last or it persists after the convulsions. The prognosis of the co-eclamptic and post-eclamptic albuminuria is dependent upon the degree of eclamptic intoxication. The cause of eclampsia is not to be found in any renal lesion. The latter and the albuminuria which expresses it are *the result* and *not the cause* of the eclamptic intoxication. Practically, however, albuminuria is so frequently associated with eclampsia that whatever

may be the exact relation between the two, the prognosis of albuminuria during pregnancy, generally speaking, is considered rather grave. Pressure on the ureters and fatty degeneration do not cause albuminuria, but they are facts that necessarily bear upon the prognosis of any pre-gravidic or co-gravidic nephritis, impeding the excretion and secretion of urine. The extent of pressure or of degeneration is a capital factor.

Summing up albuminuria during pregnancy, as in other conditions, a fit is the alarm-signal, and should be watched closely, the circumstances either giving rise or adding something to a nephritis, the prognosis of which is subject to vary accordingly.

Albuminuria during labor passes away with labor, which caused it by stasis of the abdominal circulation. Post-partum and puerperal albuminuria are not to be included in gravidic albuminurias. They are infectious, febrile albuminurias, and their prognosis has been already considered. *(Vide supra.)*

Albuminuria in Tuberculosis.—It always exists more or less. Teissier's pre-tuberculous albuminuria is rather a prodromic albuminuria, for it is due to tuberculosis, as Teissier says, and there must necessarily be already a localization of the bacillus. It is usually intermittent, says he, appearing in the morning upon rising, which is contrary to the rule. The urine is rather pale, feebly acid, of rather high density; minerals, chiefly phosphates, are abundant, and its toxicity is stronger than normal. It appears, in general, in the young, persisting more or less before the evident signs of phthisis are present. It disappears without causing more lesions in the kidney (Teissier).

Analogous to the pseudo-chlorosis and anæmia called pre-tuberculous, it is the first manifestation of the effects of tuberculine on the organism, and it seems that its prognosis should be more serious than Teissier thinks, for like all albuminurias due to superficial lesions it may pass entirely, but the latter may persist and become ultimately of a very deep and grave character.

Albuminuria in Syphilis.—Nowadays no one doubts that the syphilitic toxin causes as early as the second period a light or grave nephritis, analogous to the nephritis of fevers, of scarlatina, for instance. Syphilitic nephritis is not due to the mercurial treatment, though mercury is known to cause albuminuria. Indeed, the most serious case of syphilitic albuminuria is radical-

ly cured by mercury, at times, particularly when the lesion is recent. But, usually, the lesion is already of some standing when treatment is begun and the benefit derived is only partial. Edema and other serious accidents disappear, the patient apparently looks well, but albuminuria persists.

Albuminuria Minima.—In youth the immediate prognosis is mild, whether the albuminuria be alimentary, functional, muscular or nervous. To explain the albuminuria following infectious cases, Bard says that the renal processus is arrested, but there remains a cicatrix. Now then if the lesion is healed how can albumin persist? The fact is that there remains a leak in the filter, which by repeated though transient exacerbations is subject to become larger and larger; therefore, in post-infectious albuminuria minima the prognosis is variable. The same applies to adults and old people. In old age, in many instances, albuminuria is almost as natural as pulmonary emphysema, the glomerular epithelium is worn out by age as the pulmonary elastic fibres are. But it does not follow that old people shall necessarily die of emphysema, so is death in albuminuria of old age not necessarily due to the renal lesion.

Brightic Albuminurias.—These are due to deep diffuse lesions of the kidneys and associated with edema, dilatation of the heart, with or without hypertrophy and uremia. Their prognosis is always grave, yet not to the same degree as to the immediate danger. Anuria is the threatening danger in acute forms; permanency of dropsy and of slow intoxication are the dark signs in chronic forms. As long as it is possible to raise and maintain arterial tension, all immediate peril is averted.

E. M. D.

Dr. B. Alex. Randall read a paper entitled *Rhinitis as a Factor in Phlyctenular Ophthalmia, with its Therapeutic Consequences.* Among the many causative factors in phlyctenular conjunctivitis and keratitis, inflammatory affections of the nose must not be ignored; for they can frequently be demonstrated to be of prime importance. In the great majority of cases, hyperemia and oversecretion of the nasal mucous membrane will be found more constant than eczema or any other of the more incidental accompaniments; and treatment limited to this alone will often bring a cure quicker than could be gained by any local

measures without it. Elaborate apparatus and skill are uncalled for. Mere illumination of the nares will usually show the condition, and simple sprays of alkaline and of oily solutions can do much to relieve it. Calomel insufflation can be more valuable than in the conjunctiva, and, instead of the iodine being a bar to its use, its combination with mopping the pharyngeal vault with iodine can be especially efficacious. The ophthalmologist must not neglect this field, which used to be his; and, unless he has some one at hand, better prepared than himself, to give it due care, should stand ready to study and treat in his patients these simpler nasal affections.

Discussion.—Dr. Ring has, for nearly two years, referred nearly all cases of phlyctenular conjunctivitis treated in his clinic at the Episcopal Hospital, to the Throat and Nose Department for nasal treatment.

Dr. Risley has been well satisfied with the results of rhinological treatment of obstinate cases.

Dr. de Schweinitz considers that in all these cases attention should be drawn to the condition of the nares. In his public clinics, when immediate nasal treatment was impracticable, he has sterilized the nose as well as the eye by the simple remedies that he kept on hand for the purpose, and the results had been the happiest.

[It seems strange that these gentlemen should apparently have lost sight of the general pathology of the disease in question. Phlyctenular ophthalmia is the "scrofulous ophthalmia" *par excellence*. It is true that the importance of mercury in minute doses, as the alterative, tonic and hæmatogenic agent in this condition should be generally understood. It makes little difference whether the mercury be applied to the phlyctenulous eye, the "scrofulous" nose or the unseen stomach, the result is the same—immediate improvement and permanent relief, with conspicuous gain in healthy color and body weight, if the treatment be long enough continued. This was emphasized by the present writer in an article published in this journal as long ago as

The pathology of the "Scrofulous Diathesis" is not now in question. In the clinic we all recognize these children easily

enough. The same experience should have taught us that in their cases the ferruginous tonics are of little avail; the mercuric of surpassing value. From this it would seem that we have to do with failure of the retrograde, rather than the constructive metamorphic processes. In the eye clinic of the Eye, Ear, Nose and Throat Hospital children with phlyctenular conjunctivitis (with scabby noses usually, also) are invariably put upon mercury bichloride, gr. 1-48, once, twice or three times daily, according to size and body weight. Locally no other remedy than mercury is used, careful experimentation having shown the folly of blinding with atropine or burning with silver nitrate these already most miserable little sufferers, neither remedy having a tendency to shorten the course of the disease. These experiments also establish the fact that the form in which the mercurial is used is unimportant. Sixty-eight cases treated with calomel insufflations alone recovered in (an average of) twenty-three days, while fifty-seven cases treated by local applications of yellow oxide of mercury salve only recovered in (an average of) twenty-four days.—Bruns.]

Psittacosis is an infectious disease of parrots or paroquets communicable to man. In the report of a commission, consisting of Nocard and Debove, on the work of Gilbert and Fournier, an extensive epidemic occurring in 1892 is studied. Nocard found a pathogenic organism in the bone marrow of parrots which had died of this disease. More than fifteen people were attacked. The disease is often mistaken for epidemic pneumonia.

Debove and Gilbert studied a limited epidemic which occurred in 1896. A man bought three parrots on December 30, 1895. One, which he sent to his mother, died at the beginning of January. A few days later the mother and nursemaid were seized with an illness, lasting three weeks before convalescence began. One of the two parrots which he kept himself died on January 3, the other on January 10, the symptoms being diarrhœa, ruffled feathers, refusal of food, etc. On January 15, the man was taken ill with fever, etc. On the 20th, there were rigors, a temperature of 105.5 deg. F., constant vomiting, constipation, intense thirst and headache, and insomnia. On the

22d a pneumonic patch was found at the right base. Delirium and carphology were marked and death followed on the 26th. His wife fell ill on January 22, the onset being sudden, with rigors. Rales at both bases found early. Death on February 1. Their son was attacked with malaise and fever on January 21, but rapidly recovered. The prognosis is good in young people, but bad in adults. Infection is easy, as the birds' feathers become soiled with discharges crowded with Nocard's bacilli.

Bacteriological examination by Gilbert and Fournier: (1) In the sputum of the wife numerous organisms were present, from which the pneumo- and streptococcus were isolated. The others were not pathogenic, and Nocard's bacillus was not found. Cultures made from finger blood remained sterile. (2) A parrot which had died a few days after presenting symptoms of psittacosis was obtained from the shop whence the three original parrots came. Several other parrots had died, probably of the same disease. Nocard's bacillus was found in the heart's blood, spleen, pulp, bone marrow and intestine. (3) Blood taken from a vein in the forearm of two patients—man and wife—inoculated on culture media produced no growth. Nocard's bacillus was not found in the sputum, pleural effusion or splenic blood drawn during life.

Post-mortem blood, however, from the woman's heart, produced a copious growth of a bacillus identical with Nocard's and with that found in the dead parrot.

Characteristics of the bacillus: Short, fairly thick, with rounded ends, a facultative anærobe, and very motile. It grows on most ordinary media if neutral or slightly alkaline. Does not stain by Gram, does not liquefy gelatine, or ferment milk-sugar, or coagulate milk, or turn litmus agar, or give the iodol reaction. On Elsner's potato medium it grows slowly. There are ten or twelve delicate flagella, which easily drop off. The addition of one drop of fresh broth culture of typhoid bacilli to ten drops of a culture of Nocard's bacillus causes a heaping up of the bacilli, but to a less extent than if they were Eberth's, and those between heaps remain motile. It is extremely virulent for mice, guinea pigs, rabbits and pigeons, which with its appearance on gelatine and potato, distinguishes it from Eberth's bacillus.—*Bull. de l'Académie de Médecine—Brit. Med. Journ.*

Book Reviews and Notices.

Ophthalmic Operations as Practised on Animals' Eyes. By Clarence A. Veazey, A. M., M. D. The Edwards and Docker Company, Philadelphia, 1896.

This book well covers the ground proposed by the author, and will prove a valuable aid to those wishing to make themselves familiar with this mode of operating upon the eye. It is concise. It is clearly written, and the illustrations are plentiful, giving one a very good idea of the instruments and apparatus used in the operative procedures. The type is large, and the book is neatly bound, and is altogether well worthy of a place in the medical library. REISS.

Transactions of the Texas State Medical Association, 28th Annual Session, 1896.

With customary care of detail, Dr. West, the secretary, presents the above Transactions. The list of papers is attractive and the variety ample. The next meeting will be at Paris, Texas, in April, 1897. Dr. J. C. Loggins, of Ennis, was made president, with Dr. A. N. Denton, Austin, Dr. J. S. Letcher, Dallas, and Dr. David Cerna, Galveston, vice-presidents. Dr. West was continued as secretary.

PUBLICATIONS RECEIVED.

Surgery by American Authors, edited by Roswell Park, A. M., M. D. (Vol. II). Lea Bros. & Co., Philadelphia and New York, publishers, 1896.

Obstetric Diagnosis and Treatment, by Oscar Schæffer, M. D. Wm. Wood & Co., New York, publishers, 1896.

Essentials of Physical Diagnosis of the Thorax, by Arthur M. Corwin, A. M., M. D. W. B Saunders, Philadelphia, publisher, 1896.

The Tonic Treatment of Syphilis, by E. L. Keyes, A. M., M. D. D. Appleton & Co., New York; Armand Hawkins, New Orleans, 1896.

Diseases of the Stomach, by Max Einhorn, M. D. Wm. Wood & Co., New York, publishers, 1896.

Diseases of the Male Urethra, by R. W. Stewart, M. D., M. R., C. S. Wm. Wood & Co., New York, publishers, 1896.

Twentieth Century Practice, edited by Thos. L. Stedman, M. D. (Vol. VII). Wm. Wood & Co., New York, publishers, 1896.

Principles of Theoretical Chemistry, by Ira Remsen. Lea Bros. & Co., Philadelphia and New York, publishers, 1896.

Cutaneous Medicine, a Systematic Treatise on Diseases of the Skin, by Louis A. Duhring, M. D. J. B. Lippincott Co., Philadelphia, 1895.

Reprints.

Description of a Few of the Rarer Complications During and Following Cataract Extraction, by Chas. A. Oliver, A. M., M. D.

Adenoid Vegetations in Vault of Pharnyx.—Acute Suppurative Inflammation of Middle Ear, etc.—Clinical Study of 21,000 Cases of Diseases of Ear, Nose and Throat.—Doctorate Address at Commencement of Illinois Medical College, by Seth Scott Bishop, M. D., LL. D.

Quinsy, Differential Diagnosis and Treatment, by J. Homer Coulter, A. M., M. D., Ph. D.

The Human Brain, an Appeal to Give it More Study.—Ligation of the Subclavian Artery for a Large Aneurism in Axilla, by J. Harrison Hodges, M. D.

Sub-conjunctival Injections of Sodium Chloride Versus Mercuric Chloride, by Clarence A. Veasey, A. M., M. D.

Cerebral Syphilis, Some Observations and Diagnosis and Treatment, by Daniel R. Brower, M. D.

How Hotel Keepers Can Aid in Preventiug the Spread of Tuberculosis; and How Persons Suffering from Tuberculosis Can Avoid Giving the Disease to Others, Pennsylvania Society for the Prevention of Tuberculosis.

Infected Atmosphere, by Guy N. Hinsdale, M. D.

Cross Knee-jerk, by Guy N. Hinsdale, M. D., and John M. Taylor, M. D.

Statement of Vital Statistics, month of October, Health Department, city and county of San Francisco, Cal.

THE LITTLE PEACH.

[The following little poem, which we now find in Lillard's *Medical Muse*, is well known. We should hesitate to reproduce it were it not that the author's recent death has renewed interest in his productions, and that Lillard wrongly credits it to the New York *World*. It is by the beloved and lamented EUGENE FIELD]:

A little peach in the orchard grew,
A little peach of emerald hue;
Warmed by the sun and wet by the dew,
It grew.

One day, passing that orchard through,
That little peach dawned on the view
Of Johnny Jones and his sister Sue—
Them two.

Up at that peach a club they threw—
Down from that stem on which it grew
Fell that peach of emerald hue.
Mon Dieu!

John took a bite and Sue a chew,
And then the trouble began to brew.
Trouble the doctor couldn't subdue.
Too true!

Under the turf where the daisies grew
They planted John and his sister Sue,
And their little souls to the angels flew—
Boo hoo!

What of the peach of the emerald hue,
Warmed by the sun and wet by the dew?
Ah, well, its mission on earth is through.
Adieu!

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Bulletin of the Board of Health of the State of Louisiana.)

FOR NOVEMBER, 1896.

CAUSE.	White.	Colored.	Total.
Fever, Malarial (unclassified)	10	2	12
" Intermittent			
" Remittent		1	1
" Congestive	3	4	7
" Typho	3	2	5
" Typhoid or Enteric	3	1	4
" Puerperal	1	1	2
Influenza	1		1
Measles			
Diphtheria	3	1	4
Whooping Cough			
Meningitis	3	3	6
Pneumonia	16	14	30
Bronchitis	10	4	14
Consumption	43	32	75
Cancer	8	3	11
Congestion of Brain	2	1	3
Bright's Disease (Nephritis)	21	10	31
Diarrhœa (Enteritis)	7	3	10
Gastro-Enteritis	6	1	7
Dysentery	4	3	7
Peritonitis	2	3	5
Debility, General			
" Senile	10	5	15
" Infantile	6	7	13
Suicide	7		7
Heart Disease	15	15	30
Apoplexy	13	5	18
Tetanus, Idiopathic			
" Traumatic	2	3	5
Trismus Nascentium	11	13	24
Hepatitis	2		2
Hepatic Cirrhosis	3	2	5
Uræmia	1	2	3
Injuries	16	10	26
All Other Causes	102	51	153
TOTAL	334	202	536

Still-born Children—White, 21; colored, 20; total, 41.

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

Death Rate per 1000 per annum for month—White, 20.55; colored, 30.30; total, 23.39.

METEOROLOGICAL SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure 30.15
Mean temperature 65.00
Total precipitation ..... 2.82 inches
Frosts ..... 9 (light)
Prevailing direction of wind, northeast.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XLIX. FEBRUARY, 1897. No. 8.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the 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.]

HISTORY OF THE MARINE HOSPITAL AT NEW ORLEANS.*

BY SURGEON HENRY W. SAWTELLE,

U. S. MARINE HOSPITAL SERVICE, NEW ORLEANS.

Early in the history of our country the attention of our government was called to the necessity of legislative action for the relief of sick and disabled seamen at this port.

In 1801, when Louisiana belonged to Spain, Mr. Evan Jones, in a letter to the Secretary of State, reported that a great number of American seamen and boatmen died here yearly for want of hospital accommodations, the Spanish Poor Hospital being insufficient to care for them. In consequence, he says, "they lie in their ships or boats or get into wretched cabins in which they die miserably, after frequently subjecting the humane among their countrymen to much trouble and expense."

The opening up of the western country naturally increased the traffic on the Ohio and Mississippi, which brought many boatmen to this port annually, in addition to the considerable number of sailors from the fleet of the deep water vessels entering the port.

During the year ended August, 1801, about 200 American bottoms arrived from sea, and from 350 to 400 boats came down the Mississippi. These vessels being manned, as a rule, by crews unaccustomed to the semi-tropical climate of New Orleans, suffi-

* Report to U. S. Marine Hospital Service.

ciently accounts for the large amount of sickness reported among seamen in port. The appeals made in behalf of American sailors by our philanthropic people to the people's representatives were not in vain.

In 1802, Congress authorized the President to take necessary measures to provide relief and to appoint a "Director" for the hospital.

Dr. William Barnwell, of Philadelphia, was appointed "physician" to the hospital, notwithstanding the law provided for a director. The doctor was instructed under date of May 3, 1804, to purchase in Philadelphia the necessary medical supplies for the equipment of a hospital and a suitable building was fitted up for use as such, no hospital having been established by the government. Prior to this date the sick had been cared for in the Charity Hospital.

Dr. Barnwell absented himself from the hospital without leave April 15, 1807, whereupon Dr. Blanquet was appointed to fill the vacancy temporarily. In 1809, sick seamen were again sent to the local hospital, which indicates that the temporary hospital provided for their care exclusively had been discontinued, and this arrangement appears to have been continued until the completion of the hospital authorized by an act of Congress of 1837, appropriating $70,000 therefor.

In those days medical officers of the army were detailed by the President, under the authority of Congress, to select sites and execute contracts for deeds subject to the approval of the Secretary of War, and on November 30, 1837, plans for the new hospital were submitted which were transmitted to Congress.* The hospitals of that period were all constructed upon plans which were usually without adequate appointments, especially in respect to ventilation and drainage, so necessary to insure the best results in hospital management.

The only official record obtainable relating to this hospital consists of the following item, namely, "Purchased or commenced in 1837—occupied in 1849†—cost $122,772—sold in 1866 for $300, but the amount does not appear to have been received." The following account is taken from the history of Algiers.‡

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* *Vide* government records.

† This date is incorrect. The appropriation for this hospital was made in 1837.—H. W. S.

‡ The Story of Algiers, by Judge W. H. Seymour, 1896.

"This hospital was situated at McDonogh, just above the parish line in Jefferson, and occupied a square, measuring 350 each way, which was enclosed by a good substantial fence. The edifice measured in front 140 feet by 78 feet deep, from the side of which two adjuncts extended fifty feet further back, leaving sufficient room between them for a spacious court, immediately behind the centre of the main building. The whole building was laid off into three stories. It was fifty feet from the ground to the eaves, and 130 feet to the top of the flag-staff, which surmounted the belvedere. It was built in the Gothic style; it was commenced in 1834, but many years elapsed before final completion. When finished, the total cost was $130,000, and it could accommodate 269 persons. The grounds laid out were embellished with shrubbery. As seen from the Mississippi river, or from the city front, the structure presented a very majestic appearance. It stood in a healthy position, elevated and dry, and from its great height commanded a complete view of the river, city, surrounding country and a whole forest of masts from the sailing vessels on the city side, affording at once a delightful and busy prospect that must have had a great tendency to cheer the hours of the convalescent within its walls. After the secession of Louisiana from the Union, the buildings were taken possession of by the government officer, or provost-marshal of the Confederates. In the grounds adjoining were established powder magazines. An explosion occurred there during the night-time, toward the close of December, 1861, which was heard for miles around, and the entire edifices on the ground were entirely destroyed."

Some of the oldest citizens informed me that the hospital was a brick structure and was located a few hundred yards from the river, nearly opposite the city.

Dr. Stanford E. Chaillé, dean of the Medical Department of Tulane University, in a letter to the writer, stated that he was appointed "resident physician" of the hospital in June, 1853, and held the position about one year. He also stated that the hospital was a commodious and excellent building for its day; had an unusually good basement and two stories with attic rooms; that there were usually from 100 to 150 patients in the hospital.

Several of the oldest river men, including an ex-patient, testify

that the hospital was abandoned in 1856, as it was considered unsafe and unfit for further use, probably owing to the gradual encroachment of the Mississippi; and, finally, the remains of the hospital were carried into the river some thirty years ago (1866), and the old site is now under water, about 200 feet distant from the river bank. In 1855, a site for the second hospital was purchased for $12,000, consisting of a square of ground of about five acres, located about two miles from the river front. The work of construction of the building was commenced soon thereafter, but only the exterior was completed. It was built of iron and is fire-proof. The building is of the Roman style of architecture, consisting of three parallelograms, the ends of the centre one meeting the sides of the other two.

The interior is unfinished, the walls and ceilings being simply covered with whitewash. The ceilings were constructed with brick arches resting on iron beams. The roof is made of concrete resting on brick arches; the roofs of galleries or verandas are built of corrugated iron.

The roof of each section is ornamented with a dome. The roof of the whole building and all galleries or verandas are surrounded with wrought-iron railings. The main or central portion has three stories, while the two wings have practically only two. The second story gallery and roof of same are supported with iron columns with moulded capitals. The roofs of wings form a large promenade, accessible from the third floor of centre of building.

The northwest wing is now (July, 1896) used as a House of Refuge, and the centre of building and southeast wing are occupied by negro squatters.

The unfinished building cost $530,090.84. The site was unfortunately in a swampy and unhealthy locality, and consequently it was deemed inadvisable to complete the building; accordingly work was stopped just prior to the war of 1861, and in 1873 Congress passed an act providing for its sale.

The land about the hospital at the present day (1896), while below the street level in places, is about as dry as in many portions of the city, the result of general improvements in the vicinity. It appears that some difference of opinion existed as to the advisability of completing this building, and, in 1882, a board of officers, after a thorough inspection decided that the

building "is in no single particular suitable for hospital purposes."* Moreover, it was reported that the money required to complete the work would exceed the amount appropriated for hospital construction at this port in 1882, namely $100,000. Hence, under the authority of the act of Congress referred to, it was sold to the city of New Orleans, the highest bidder, in August, 1896, for $25,000.

Had this hospital been completed in a suitable location and equipped with all modern appointments, it would have been one of the most imposing structures ever provided for the service. The construction of the present hospital was therefore authorized, the $100,000 appropriated in 1882 referred to above being available for the work. A commission, with the Surgeon-General of the service as chairman, selected the site September 23, 1883. The land consists of about 22 acres and the batture and is located on Tchoupitoulas street, between Henry Clay avenue and State street, two squares below Audubon Park. Electric street cars running between Audubon Park and the Custom House pass the hospital gate. The land was purchased for $35,000. The location is the best that could have been secured in the city and the property is valuable. It was formerly an orange grove, with a plantation house and six negro cabins of no special value on the premises. The grounds are enclosed on three sides by a brick wall seven feet in height, with a substantial iron fence along the levee on the river front. The hospital was completed and occupied in 1885 and now consists of three wooden one-story pavilion wards, with a capacity for 100 patients, constructed on plans similar to those at several other ports, except the wards are somewhat shorter and ridge ventilation was provided for.

The executive building is connected with the wards, kitchen and senior assistant surgeon's quarters by covered corridors. The other buildings include a house for the surgeon, the old plantation house, which is occupied by one of the assistant surgeons; stable, including necropsy rooms; six old cabins, used as storerooms, and a lodge house. It is lighted by electricity and is furnished with a system of electric bells. Wooden cisterns are provided for the storage of rain water, which is the only potable water available at the station. The water supply

**Vide* Report Marine Hospital Service for the year 1883, pages 32–35.

for ordinary use is pumped from the Mississippi river into two tanks, capacity 8000 gallons each, which stand on a trestle 31 feet in height, from which it is distributed to all the buildings after passing through a Hyatt filter. The sewage is collected in catch basins which are pumped out daily into the Mississippi river. A new brick power-house and laundry have just been completed, and a steam laundry plant has been installed.

CANCER OF THE BREAST.

BY L. L. HILL, M. D.

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Galen taught that tumors were the outcome of humoral accumulations. Boerhaave pronounced deteriorated lymph the chief etiological factor in the formation of cancer, and equally as grotesque theories were advanced by others.

It would be impossible to say that before the end of the eighteenth century the first principle of the pathology of tumors was even dimly comprehended. In the alembic of Hunter's marvellous mind then originated the idea of their "affinities with the normal tissues," from which he maintained "they arose by modification of the formative process." The pathology of tumors was afterward studied by Laennec, Richat and other great pioneers, but no material advance was made until Schwann, in 1838, applied the cell theory of Schleiden to the animal world and Müller demonstrated the cellular character of tumors. In 1859, Virchow published his great work on cellular pathology, in which he proclaimed that every cell was the offspring of a cell, and that they never originated *de novo* in a protoplasm—"*omnis cellula e cellula.*"

Thirty years later Cohnheim taught that tumors originated from the matrix of embryonic tissue, which had been isolated in mature tissue, and that these belated sequestrations would develop under the influence of irritation, injury, increased blood-supply or loss or combativeness of surrounding tissue.

There are excellent pathologists who believe in the parasitic nature of carcinoma. The micro-parasite or the *coccidium sarkolytus*, as it is called by Adamkiewitz, is thought to belong to the

class of protozoa, like the ameba. But they have failed to demonstrate the presence of the same micro-organisms in every cancerous growth. If their theory is correct they should be able to cultivate the carcinoma microbe *ab extra* upon an artificial nutrient medium, and by inoculation reproduce the disease. This they have failed to do, and the theory of the psorospermosis of cancer is incorrect. "Carcinoma is an atypical proliferation of cells from a matrix of embryonic epithelial cells of congenital or post-natal origin."

The ordinary mammary cancer commences in the acini and is termed scirrhus or encephaloid, according as the fibrous tissue or epithelial element predominates, and in the great majority of cases it is the former. There is another form of spheroidal-celled cancer called colloid, which is occasionally seen in the mammary gland. The villous carcinoma commences in the epithelial cells of the lacteal ducts and constitutes, according to Williams, only about 6 per cent. of the cases. The scirrhus, which is by far the most frequent form of cancer, may be circumscribed, diffused or atrophic. The withering or atrophic variety is caused by exsanguination of the cells, the result of contraction of the excessive fibrous stroma.

SYMPTOMS.—Near the periphery of the gland a hard, nodulated, painless, ill-defined tumor is discoverable. In a short while there is tegumentary dimpling, due to involvement of the fibrous tissue which connects the gland and the skin. Should the tumor be located centrally, retraction of the nipple occurs early. This is a symptom of great importance in making a differential diagnosis. The patient remains free from pain usually, and with the general health unimpaired for about fourteen months, when the neoplasm commences to invade other portions of the gland. The skin becomes contaminated, and as a result sharp, lancinating pain, increased by manipulation, is felt, and the lymphatic glands along the edge of the pectoralis minor are found enlarged; the breast adheres to the pectoral fascia and muscle. In twenty months from the time of the first appearance ulceration commences by the formation of a fissure, which gradually increases until the characteristic cancerous ulcer is developed. The cancerous cachexia becomes well marked, and the patient may die from exhaustion; death may be caused by secondary deposits in the viscera, especially if the

victim is young and the cancer soft, the liver being the favorite site.

Scirrhus "en cuirasse" was the name given by Velpeau to that form of cancer in which there is extensive involvement of the lymphatics of the skin, and is not, according to Senn, "a distinct anatomico-pathological form of carcinoma, as was formerly asserted." Atrophic scirrhus is usually found in old people, and is very slow in its progress. Centrally the cells undergo fatty degeneration from the contraction of excessive stroma, but peripherally the morbid process remains active. Death usually occurs as a result of secondary deposits in the internal organs The encephaloid having but little stroma runs a very acute course and causes death in about twelve months. It occurs generally in young women, and they are very liable to general infection. Sloughing and cachexia come early, but usually the pain is slight. The colloid is a much less malignant cancer than the scirrhus or encephaloid. If examined critically a portion will be found presenting the characteristics of a soft or hard carcinoma. It grows very slowly and involvement of the glands is always late. Instead of contracting the skin, it projects it. According to Professor Gross the patient usually lives about twelve years. Duct carcinoma was first described by Benjamin Brodie in 1846. It is found more often in old women, whose attention is first attracted by a sanious discharge from the nipple. Upon examination a small, firm tumor is found situated near the nipple. It grows very slowly, with slight tendency toward lymphatic contamination, and is less malignant than the acinous variety.

Professor Williams has well said that the differential diagnosis of mammary cancer in its commencement is most difficult, and a question of the greatest importance to decide.

From chronic mastitis we can usually differentiate by absence of the pain and tenderness in the early stages of cancer, and the extreme hardness and dimpling of the skin in the latter. Most inflammatory tumors commence during lactation, whereas cancer occurs about the menopause. Swelling of the skin is very suggestive of inflammation.

In tuberculosis the breast is contaminated in a number of places, which is not the case in carcinoma.

Adenoma remains small unless it undergoes cystic degeneration, when it is found elastic on palpation.

Sarcoma increases much more rapidly than scirrhus, and may occur at any period of life. It is smooth, and the axillary lymphatics usually escape infection.

When it is impossible to make the diagnosis, the surgeon is justified in making an exploratory incision, or, using Mixter's punch, to secure a specimen for microscopical examination.

The ordinary cancer of the breast is due to "proliferation of the epithelial cells in the acini," and the surrounding tissue is contaminated, according to Mr. Cheyne, by the cells developing and spreading along the lymphatic spaces and channels, and not by "fresh infection and fresh outgrowth from neighboring acini."

ETIOLOGY.—Cancer of the breast is found more frequently in cold climates. Especially is it prevalent in valleys and along the overflowing streams. Of 1879 cases of mammary cancer, collected by Roger Williams, only sixteen were found in the male, thus showing that the changes incident to puberty, pregnancy and lactation are important factors in the formation of cancer. Mr. Bryant found it about four times as frequent among multipara, as among nullipara. It occurs most frequently between 35 and 60 years of age, in fact only 4 per cent. are seen before or after that time of life. There can be no question but that traumatism frequently causes the disease. Of 600 cases tabulated by Mr. Bryant, he found a cancerous family history in 12 per cent.

Twenty-two years ago, Sir James Paget observed that mammary cancer was often preceded by eczema of the nipple. So often is cancer associated with eczema of the nipple, or malignant dermatitis, as it is called by some, that extirpation should be at once resorted to upon its appearance.

PROGNOSIS.—Of course some cancers are much more malignant than others; the scirrhus being less so than the encephaloid, and the colloid milder than either. Sir Ashley Cooper estimated that patients not operated upon generally lived about three years. Life is usually prolonged a little over a year by an operation—making four years. Dr. Dennis claims to have permanently relieved 25 per cent. of his cases. I don't believe this experience has ever been duplicated. As a rule, the older the patient, the less malignant is the neoplasm. Relapses occur within three months after the operation in 82 per cent. of cases. The mortality from the operation proper is about 6 per cent.

Treatment.—It would be frittering away valuable time to attempt the cure of mammary carcinoma by injections of the sterilized toxins of the streptococcus of erysipelas.* Treatment by caustics is unscientific, unjustifiable and barbarous. Upon the early and thorough use of the knife, in well selected cases, the surgeon must rely. There is nothing more unsurgical and culpable than the indiscriminate use of the knife in every case of mammary carcinoma. It may stiffen the surgeon's financial standing, it may increase his operative statistics and perhaps improve his manual dexterity, but it shortens human life, prostitutes the finer feelings of his nature, and upon his honesty places a sordid stain. "The surgeon has no moral right to become a legitimate executioner, under any circumstances," says one of the greatest surgeons of all times, when discussing this question. No prudent surgeon should countenance a radical operation where the internal organs had become contaminated, or the constitutional cachexia was well marked, or where there existed extensive infection of the lymphatics of the skin. After 70 years of age, the operation is rarely justifiable; no operation should be performed if the glands in the posterior cervical triangle can be felt, because the mediastinal glands have already become infected. Complication with other diseases, which would shorten life, is a bar to operation. In every case where an operation is not advisable it is the duty of the surgeon to preserve the skin as long as possible, and thereby prevent contamination by pathogenic micro-organisms. For the same reason, if ulceration has occurred, antiseptics must be freely used. Some have advised an attempt at closure of the malignant ulcer by skin grafts, but Professor Senn says it is doubtful if the gain of such short duration will over-balance the pain and inconvenience caused by the scraping and transplantation of Thiersch's skin graft. He suggests the use of a powder composed of one part iodoform and five parts boric acid, and if this fails, a 25 per cent. solution of the chloride of zinc. If chemical disinfectants fail, then, thorough currettement of the ulcerated surface, and application

[* We can not pass, without comment, the sweeping dogma in the author's unqualified condemnation of the erysipelo-streptococcus toxin treatment, and his vilification of caustics. The result obtained and recorded by Coley forever establish the usefulness of the erysipelas treatment in selected inoperable cases. The wholesale employment of pastes of arsenic and chloride of zinc by the best of the cancer surgeons (Dan'l Lewis notably) and in the special hospitals, should forbid their dismissal with a word.—Ed.]

of the Paquelin cautery is indicated. Sometimes, as a palliative operation where there is sufficient skin to close the wound, the breast may be removed and a subcutaneous cancer substituted for an open one. In morphine we have an assuaging balm to mitigate the sufferings of these unhappy creatures, until death, "with the wintry sterility of the grave," comes, and it is often welcomed by them as a sympathizing friend.

RADICAL OPERATION.—In operable cases, the entire mammary gland with the adipose and connective tissue and lymphatic glands to the apex of the axilla must be extirpated, as soon as diagnosis is made. Says Professor Treves: "I at one time cleared out the contents of the axilla in all cases of excision of the breast, including those in which no glandular swelling could be discovered in that space. This practice I have discontinued." I must say that such advice coming from so distinguished an authority is capable of doing incalculable harm, as we well know in more than 95 per cent. of the cases, the axillary glands are affected when the patient applies for treatment. The axillary glands were involved in twenty-one women whose breasts I extirpated for carcinoma, and I am satisfied that this experience coincides with that of other surgeons.

Every antiseptic precaution must be scrupulously observed in so extensive an operation. The patient lying upon her back, an assistant abducts the arm on the affected side to render tense the integument and muscles. The surgeon makes two curved incisions across the gland, inclosing the nipple and an elliptical strip of skin. From the upper angle a straight incision is made to the arm, posterior to the anterior axillary fold. The dissection should commence at the sternal end of the ellipse and extend upwards and outwards, removing the malignant neoplasm in its entirety. The hemorrhage, which is often excessive, should be controlled by hemostatic forceps until the operation is completed, when catgut ligatures may be used if necessary. When the axilla is reached, it is well to cover the wound already made with towels, wrung out in hot antiseptic solutions. As the dissection in the axillary space is often most extensive, it is well to expose the large vessels as early as possible, so as to avoid injuring them. Every structure that is in the least contaminated should be removed, even to taking out a section of the axillary vein. In removing glands, great care must be taken

not to crush them for fear of traumatic carcinomatous dissemination.

On account of the difficulty of removing the excessive oozing of so extensive a wound, Bergmann packs the wound for the first three days with iodoform gauze. Of course the sutures are placed in position at the time of the operation, but are not tied until the removal of the gauze. Strictest antiseptic precautions are followed in the after-treatment, and as a rule, the sutures are removed on the tenth day. In those cases where closure of the wound is impossible, on account of too extensive tegumentary contamination, tension sutures should be used, and the skin-grafts applied. It is wise to examine the patient every three months for recurrences.

Stiles' test for determining whether all diseased tissue has been removed is not reliable.

A MEDICAL SKETCH.

By B. F. JONAS, ESQ., Ex-Senator, U. S. A.

[Oration at the Annual Meeting of the Orleans Parish Medical Society, January 9, 1897.]

Mr. President and Gentlemen of the Orleans Parish Medical Society:

While I felt greatly honored by your complimentary invitation to address you this evening, I confess that I accepted it with great diffidence as to my ability to interest a distinguished body of scientific men, whose studies and professional duties are so far apart from mine.

Except from having been an occasional sufferer at your hands, and having thus far happily escaped with my life (bearing an honorable scar, however, from the scalpel of your distinguished retiring president), I must confess the most entire ignorance of your noble science, and my inability to discuss any of the abstruse problems, involving life and death, which engross the attention of your society, and the time of its individual members.

As this is as well known to you as to myself, I must assume that in your choice of an orator, you have gone rather in search of amusement than instruction, and that, tired of learned theses and homilies, you have determined to give yourselves a rest and

to borrow pleasure from the theories, blunders and quackeries of a rank outsider, whom you have tempted into your scientific midst.

There is little connection between the two (so-called) learned professions of law and medicine, except that almost from their earliest history to the present time they have been the mutual subjects of satire and merry-making, and, as such, have been caricatured on the comedy stage of nearly every nation of the earth. Molière and "Pickwick" have been their favorite biographers, and "Buzfuz," "Mark Meddle," "Dr. Pangloss" and "Olapod," their representatives on the stage. Every comedian and negro minstrel has his snap-shot at them, and doctor and lawyer are expected to laugh with hearty relish at the jokes.

On the principle that "he who laughs last laughs best," it is but just to say that compensation comes in the end to both professions, or would, were it not for the fact that they are incapable of making merry over the misfortunes of their fellows.

When financial or business troubles or complications arise, when the joker ventures within the dangerous limits of prohibitory laws, or is threatened with injury to either his personal or property rights, he ceases to joke and hurries to seek the advice and assistance of the lawyer, and to place in his hands the guardianship of his conscience, his honor, and what is to most of them of far greater importance, his fortune.

When disease threatens or sickness comes, the scoffer hastens to seek care and comfort from the physician, and asks at his hands, more than from those of a kind providence, the blessings of cure and health.

No jokes now at his nostrums, no criticism of his prescriptions or dietary recommendations.

No squirming at his scalpels, or doubts as to his diagnosis, and even criticism of his bill is postponed until after full and complete recovery.

Feeling therefore, that in a measure we both belong to the same brotherhood, that we are mutually engaged in keeping poor suffering humanity (suffering either in body or conscience) as long as possible out of the hands of the third learned profession, the clergy, to whom they are wont to turn only when lawyer and doctor can give no further hope, I shall endeavor to

say a few words complimentary to your profession, feeling that you would do the same for mine if ever compelled to do so under similar pressure and complimentary duress.

This Orleans Parish Medical Society, before whom I have the pleasure to appear to-night, represents an honored and distinguished ancestry.

I do not know the date of your society organization, but I know that the medical and surgical history of this country will bear testimony to the distinguished learning, ability, devotion and high sense of duty which has always characterized the medical profession of this city and parish.

Standing sentry, as it were, at the gates of one of the principal ports of entry of this great country during the century just expiring, in a semi-tropical climate with a population largely gathered from all of the countries of the earth and annually recruited with unacclimated strangers, with a trade extending to the tropics and to countries supposed to be the birthplaces of epidemic fevers, with imperfect drainage, an almost total neglect of all measures of hygiene, an imperfect system of quarantine for many years, and a blind fatalism among the people which taught that yellow fever must be expected and endured every other year, the medical profession of New Orleans have bravely fought against all of these untoward dangers, difficulties, prejudices and heresies, until they have in a large measure cured those evils which existed from natural causes, done away with those which were engendered by superstition and prejudice, and have brought all the lights of modern science and discovery to bear upon the health and hygiene of their beautiful city, until they have placed her in an equal rank with her sister cities, if they have not actually advanced her to the prominence of a health resort.

For all the improvements in the public health, and much of the increased beauty and prosperity of our beloved city, we are indebted to the medical profession.

They have demonstrated the fact that yellow fever was not indigenous to our climate, but was an imported disease, and that by a proper and effective system of quarantine it can be kept out of New Orleans as easily as out of New York or Philadelphia. Thus, instead of nearly every other year being visited with this dread disease, which formerly levied such a heavy tax

upon our mortality, and caused panic and desolation so often in our midst, thanks to a perfect system of quarantine, we have had no epidemic of yellow fever since 1878, and, I believe, scarcely an isolated case since that time, and New Orleans has become as healthy a home for its citizens, and a resort for strangers, in the summer, as well as at any other season of the year, and the credit for all this, I repeat, is due to the intelligent and persistent efforts of the medical profession of New Orleans.

The physicians of our city were once famous as yellow fever experts, but I fancy only the few gray heads which I see in this audience have had any practical encounters with the disease. The old creole nurse, who, according to popular theory, cured the patient, requiring the services of the doctor only to sign the burial certificate in an unfortunate case, she (like the old creole cook) has passed away, leaving, I fear, no representative behind.

And here a sense of justice compels me to diverge a moment to pay a merited tribute to the unselfish devotion to the cause of humanity thus exhibited by these doctors of a generation ago. Satisfied with the plentiful fees, with which the frequent visitations of Yellow Jack had enriched their pockets, they determined in a spirit of sublime abnegation, that their successors should levy no such tax on future generations, and therefore stamped out the time-honored orange visitant, leaving the "fin-de-siècle" doctors to harvest new fields, and to discover new and expensive diseases of their own, a pursuit (according to popular belief) in which they have been eminently successful.

How greatly superior to the other learned professions have the votaries of medicine shown themselves in this regard?

I humbly confess that I know of no instance in which my own profession has moved to close up a plentiful stream of litigation, or to interrupt the natural flow of civil trouble with its accompanying muniments to following generations of lawyers.

As for the clergy, I forbear to make the comparison.

What would become of them and of the world if the area of sin were to be contracted or closed by their efforts, and they were to be left without new armies of evil with whom to do battle and to conquer and destroy?

Coming back to the Medical Society of New Orleans, past and present, their triumph over yellow fever has not been their only victory.

They have been in the fore-front in every movement, not only for the stamping out and prevention of disease, but for the betterment of the hygiene, the drainage, the cleanliness, the morals and the government of our beautiful city.

Natural reformers, they have ever been found battling for good government, knowing that only through a good and honest administration of public affairs, those reforms can be secured, which are necessary to the cleanliness, hygiene and health of a great and growing city.

Natural politicians (as all doctors are) they have ever taken an active and vigorous part in the struggles of our people for self-government, and in every contest where their liberties, happiness and honor were at stake.

While claiming that all doctors are politicians, far be it from me to charge or insinuate that any of them are office-seekers.

On the contrary, it is well known that the so-called medical offices, from quarantine physician and coroner down to the inspector of drugs, have in all cases of vacancy *been compelled* to seek the man, and to compel him *when found* to accept the honors and burdens of ungrateful office.

It is not my intention to-night to single out and name any of the distinguished men who have honored the medical profession in this city during the forty years of my acquaintance with it.

Many of them are living and in this audience now, or absent on professional duties, who are the peers of any of their *confrères* now living or any who have gone before them, both professionally and socially, as doctors, as scientists, as citizens and as gentlemen. They are known and honored by their associates and by their profession not only in their own country, but beyond the seas, and it would be a work of supererogation for me to undertake further praise.

A great army of noble soldiers in the cause of humanity and science have passed away, leaving glorious names and blessed memories behind them. Many of them were friends of my youth and manhood, and it would be a labor of love could I pause to eulogize them. Their memories live in your hearts. They were your companions, your friends, your associates, your tutors, your professors, your guides.

They pursued the same daily walks which you are now following, of devotion to duty, and scientific investigation for the ben-

efit of suffering humanity, and if in the march of science and invention which is revolutionizing the world great discoveries have since been made in medicine and surgery, they have not served to belittle those great and devoted men who have passed away, who were always abreast, if not ahead of their times, who were faithful to their trust, and who laid or labored upon the foundations upon which science is building a superstructure never to be completed while the march of civilization and intellectual development goes on.

Far be it from me, as I said before, to particularize among the glorious names canonized in the memories of the Orleans Medical Society, or borne upon its rolls to-day.

Among them would be found those of the pioneers of the profession who, in a strange climate, without medical journals or schools, with few books, and fewer instruments, and a limited pharmacopeia, were called upon to battle, not only with local diseases incidental to a new country, but also with a foreign and relentless intruder, which defied the best medical science and appliances of the world. And yet these men conquered and throttled disease, and made New Orleans a healthy city and a far-famed winter resort.

In the list will be found the names of the founders and of the long line of distinguished professors who have given illustrious name and character to our medical colleges, and who have educated so many of the distinguished doctors and surgeons of this and other States, and who have made the diploma of the medical department of the University of Louisiana (now Tulane) an honorable passport to the highest medical societies of the world.

In the list will be found the names of the great surgeons and physicians who, from the opening of our noble institution, the Charity Hospital, to the present day, have contributed their unpaid services to the aid of the unfortunates, who have found care and shelter within its hospitable walls.

In the list will be found the names of those who, at their country's call, left home, family, and their private practice, to care for the sick and wounded soldiers in the field or hospital, and to whose bravery and devotion thousands of gray and grizzled witnesses still live to bear testimony.

It will show the names of those who have been instrumental

in establishing clinics and hospitals, where special and organic diseases are treated without charge to the poor, and with all the advantages, and with the use of all the instruments and appliances known to modern science.

In short it will show a great record, a great biography of distinguished ability, of advanced science, of unlimited charity and devotion, of lofty patriotism, of sublime sense of duty, and of the most unselfish loyalty to this beautiful city, in which your society has its home.

In no branches of human knowledge has greater progress been seemingly made than in the twin sciences of medicine and surgery, and the changes have been remarkable, even to those of us of middle age.

When I remember the practice of medicine in my boyhood, I often wonder how any one lived to tell the tale. And yet, I have just been delivering a eulogy upon the doctors of forty years ago.

I have no desire to retract anything I said, as the doctors of that day were abreast of the medical knowledge of their time, and were merciless in their criticism of their predecessors.

When I was about nine years of age I had the only serious sickness of my life, and I underwent a medical experience which should have qualified me for the profession. I was bled, cupped and dry-cupped. I was blistered from head to foot, and I was fed for weeks on calomel, rhubarb, jalap, salts and senna, magnesia and castor oil. From the simple statement of this treatment, my learned auditors will doubtless be able to diagnose my disease. Quinine and opium, fortunately for me, had not yet come into use, and consequently I recovered, but I was told that I would have gotten well sooner, had my constitution permitted me to take more medicine, and to have my cuticle a second time removed by blistering.

When twenty years of age I received the freedom in this city from Yellow Jack, after a moderately severe tussle, I lived to see the change in treatment brought about in twenty years.

I had one of the best physicians and nurses, and under their direction, after castor oil and mustard bath had been administered, I was kept in a close room, in the heat of summer, for over a week. The nurse was not permitted to change my bed or

my clothing until I was convalescent. Had the cholera been prevalent, I believe that I would have passed from one disease to the other. I was not bled then, but bleeding was the almost universal custom, and the cupper was as essential as the doctor at the bedside of a fever patient. In fact, the practice of Dr. Sangrado (minus the warm water) largely prevailed in those days.

Now, whether it is the influence of your homeopathic brethren, or whether you have discovered how to press a powerful dose into a very small capsule, it is certain that a patient no longer is required to swallow a whole drug-store, or to shed his skin like a snake at the instance of a Spanish-fly blister, or bare his arm or breast to the cupper or leecher, and he is no longer denied the blessings of clean linen and fresh air.

But we are told by the scoffer, and by the few remaining old-timers, that death has not been robbed of his tithes by the new improvements in medicine, and that, in despite of science, boards of health, cleanliness, hygiene, fresh air, and the bycicle, he still draws his bills upon our poor mortality to the same extent as of old.

Perhaps this is true, but can not it be accounted for partly because of the discovery of new diseases, to which I have alluded, and partly because of the unnatural conditions to which we have been brought by our so-called higher civilization, which substitutes the artificial for the real, the imitation for the genuine, in all of our habits of life, and especially in our eating and drinking?

In the good old times of calomel, jalap and blood-letting, if patients were able to get through occasionally it was largely due to the purity and excellence of the food furnished them to counteract the effects of their treatment.

Everything was good, pure and genuine, from the milk and sugar for the babes, to the whiskey for the adults.

Now, with the advance of science, all of our food and drink is chemically prepared with (if we can believe the experts) the largest percentage of imitation and the smallest of reality, seductive to the palate, mere apples of Sodom to the stomach.

The horrid microscope sits in judgment upon all that we eat and drink. It proves conclusively that our milk is composed of chalk and water; that our sugar and syrups are destitute of

saccharine matter; that our flour is mixed with plaster-of-paris; that our pork is full of trichina; that our butter is oleomargarine; that our cheese is made of grease and tallow; that our olive oil is made from cotton seed; that our coffee is mixed with beans and chicory, our spices with earth and wood filings; that our champagne is made from turnips and our claret from logwood; that our brandy is a delusion and a snare, our beer brewed of noxious drugs and innocent of malt; and our whiskey, the very "Ark of the Covenant" of our national taste and pride, so adulterated and tampered with that the most skilful analysis could hardly detect the elements of corn or rye in its composition

If all this is true, and we are told that the microscopic investigation of the modern doctor proves it, our special wonder must be that we live at all, and we must congratulate the profession on their success in staying the march of Death, as he distributes his commissary stores, so fraught with dyspepsia and disease.

But this is not all. In their intelligent search for new diseases the microscopists have explored the air, the earth, the water, and human, animal and insect life. Where they have failed to discover disease they have found its germs; where it was torpid and asleep they have awakened and galvanized its "*bacilli*," and these germs and bacilli, which, like the evil genii of the Arabian Nights, have been imprisoned and innocuous for thousands of years, are now awakened from their torpid sleep and turned loose, like the evils from Pandora's box, upon poor suffering humanity.

Let us hope that our learned and devoted scientists may be able to chain these "Frankensteins" of their own creation and to prevent them from preying on our imaginations by day and disturbing our slumbers at night, and from further discoveries of these sleeping demons may the good Lord deliver and protect us.

In the science of surgery no one can deny the enormous progress which has been made in our day and generation, and its practice has become as near an exact science as any known to humanity. Surgical operations are now made constantly which were formerly deemed impossible. The most secret and vital organs of the body are reached and treated, and by the skilful

use of anesthetics and the perfection of instruments the patient is almost completely relieved from suffering.

The great invention of Dr. Rœntgen, by which the concentrated rays of science are turned like a search-light upon the human body, revealing all the secrets hidden within its anatomy, and by which the surgeons can read the diagnosis of life and death, with almost positive accuracy, comes as the crowning glory of the nineteenth century, to shed its beneficent light upon the world, and to bring cure and health to millions of living sufferers, and millions yet unborn.

High upon the rolls of fame may his name be inscribed, as one of the greatest benefactors of the human race.

In the world of mechanical science and discovery the rewards of the inventor are great. His secret is zealously guarded until protected by patents from imitation and unlawful use, and is only furnished to the public for a monetary consideration to be fixed by himself.

Great and important inventions have thus brought immense fortunes to the inventor or his assignees.

This is not the case with the great discoveries which have been made in the field of medicine and surgery. To the honor of the votaries of that profession be it said, that from the earliest days their studies, researches and discoveries have all been given free to the cause of humanity. They have asked for no patent or brevet. They have sought to preserve no secret or private use of their valuable discoveries, but have hastened to lay them before their professional brethren, and to demonstrate their usefulness in the alleviation of human pain and suffering, happy and contented if they have succeeded in enrolling their names in the distinguished list of those who have served their fellow-men.

But I have detained you longer than I expected and must thank you for your patience.

If, in my discursory and inconsequential talk I have indulged in a little badinage, I assure you it was not meant seriously. No one has a more apprehensive and considerate appreciation of your noble profession than I have, and no one seeks its advice and succor more quickly than I do, when the alarm bell sounds. I may add that no one is more devotedly thankful than I am for all that you have learned in the last forty years, and I trust that

you may add largely to your stock of knowledge during the time which may yet be spared to me to profit by it.

If you can discover a cure for advancing age the whole world will "rise up and called you blessed." That would enable you to keep up with the progress of science, and thus to avoid the contemptuous criticism of another half century of doctors upon your boasted knowledge of to-day.

In the meantime "may you all live long and prosper." May your society increase in numbers, prosperity, knowledge and influence. May you continue to hold the gate of the Mississippi Valley as faithfully as you have done against the invasions of pestilence, and may your labors for the health and improvement of this city result in making it both the beehive and the sanitarium of the world.

SERO-DIAGNOSIS OF TYPHOID FEVER.

By E. M. DUPAQUIER, M. D, and O. L POTHIER, M. D., New Orleans.

This article will show all the value of Widal's method, as it includes the report of twenty-three fever cases, of which fourteen were typhoid, giving the characteristic agglutinative reaction, and nine were diseases simulating typhoid and giving no reaction whatsoever.

Of the fourteen positive cases one died, and the autopsy confirmed the diagnosis made by the serum test. Though limited, the number of our observations demonstrates a fact which for many years has been questioned by some of us—namely, the existence of genuine typhoid in Louisiana. Our report even shows that more than 50 per cent. of our continued fever cases are typhoid.

In spite of the clinical aspect, it is, therefore, not on clinic but on the serum test that one must rely hereafter to differentiate typhoid even at the outbreak, so to speak, from the various gastric fevers, enteric, infectious, malarial remittent fevers, acute tuberculosis, infectious endocarditis, streptococcic infection, la grippe and all diseases simulating typhoid.

The practical usefulness of the serum-test in suspicious cases is therefore as indispensable as the bacteriological examination

in diphtheria, and this novel mode of exploration will consequently render us the greatest service in daily practice.

We desire to review our last article* with respect to a few facts upon which more light has been thrown since it was published.

Firstly, with regard to the dry specimens of blood for the test.

From experiment we have learned that it is better to abandon their use. Dr. Wyatt Johnston, of Montreal, who at first praised with success these most undoubtedly practical specimens, has of late modified the technique of his process in such a manner as to actually give the latter no advantage over the original process and mode of using fresh blood. This may not be as convenient with respect to the difficulty in private practice of drawing enough blood and of transferring it for a distance, but it compensates these secondary considerations in point of importance by much more safety and surety in the process of testing.

Again, Widal and others have of late remarked great variations in the agglutinous reaction of the various serosities and fluids from typhic patients, viz.: blister serosity, pleural serosity, tears, milk and urine. Consequently, the most reliable specimen to be sent is fresh blood from a deep prick of the finger, of the ear, or better still from a small wet-cup.

Now, regarding the paratyphic infections and bacilli of MM. Achard and Bensaude, which we have mentioned last month, we have to-day something to add—a clipping from the minutes of a subsequent meeting of the society at which Widal reviewed the question. We regret that for want of space we can not translate here the whole of that admirable discussion, but we will give the essential conclusion in Widal's own words:

"In following strictly the directions given by M. Sicard and myself, one can, by the agglutinative reaction, differentiate with the greatest ease the bacillus of Eberth from those which resemble it so closely."

At the same meeting alluded to, Widal has also reviewed some important points of history with respect to the phenomena of agglutination, and he clearly established that the sero-diagnostic method is not at all an application of the veritable Pfeiffer phenomenon as MM. Achard and Bensaude had stated precedently.

*In January number of this journal.

In the first place, as early as 1889, MM. Charrin and Roger had remarked and reported the agglutinative action of the serum of vaccinated animals in pyocyanic infection.

In 1894 Pfeiffer brought the phenomenon which bears his name to the knowledge of the profession, and this is it, briefly: If a bouillon dilution of *spirilla choleræ Asiaticæ* is injected in the peritoneum of a highly immunized guinea-pig, inside of one hour, the spirilla are immobilized and transformed into spherical granules. Pfeiffer was seeking to explain the theory of immunity and to determine the presence of the choleric vibrio. He thought that the co-operation of a living organism was indispensable to the production of the phenomenon he had discovered, and his idea is fully conveyed by the single word "*immunitätsreaction.*"

Widal conceived the idea of an "infection reaction," and deducted from this the agglutinative reaction *in vitro* of the serum of man affected with typhoid in the course of the infection, with the practical view of determining the diagnosis of typhoid fever. Says Widal:

"I believe I can claim as my own the demonstration of the fact that the serum of man affected with typhoid in the course and even at the outbreak of the disease, possessed already some specific properties, that for instance, of agglutinating *in vitro* in certain proportions a culture of typhoid bacillus.

"In 1892 Mr. Chantemesse and myself have published in the *Annales de l'Institut Pasteur* that the serum of typhoid patients during the period of fever, before the stage of defervescence, possessed already some peculiar properties and could be used for actually immunizing animals, etc.

"In 1896, on October 9, Mr. Sicard and myself published that the agglutinative power of the serum of typhoid patients had decreased and even disappeared entirely at times, in the first days of convalescence—in other words, just at the time when immunity is the strongest. It showed clearly the existence of a reaction especial to infection, independent from the reaction of immunity. I have the satisfaction of stating that these facts have already been confirmed in Germany by Breüer,* who remarked that the 'infection' reaction weakened as the decline

*Zur Widalschen Serodiagnostic, *Berliner Klinische Wochenschrift*, November, 1896, Nos. 47 and 48.

of the disease was approaching. In giving an account of the historical side of the question I merely was bent upon the legitimate object of crediting each one with the share he is entitled to, as we should always endeavor to do in scientific matters."

We do not doubt our readers are thankful to us for reporting these interesting data as a preamble to our own report of cases:

Obs. I. Positive. Charity Hospital. White male, 40 years old. Had fever for over a week, probably due to bronchitis, but his case looked suspicious. Blood drawn directly from saphena interna vein with aseptic syringe, at about 11 A. M. At 2 P. M. one drop of the serum was mixed with 10 drops of pure bouillon culture of Eberth bacillus (extremely lively bacilli); one drop of the mixture about 20 minutes later is examined under the microscope with a 1-12 oil immersion lens. Agglutination takes place and the field is studded with clumps of motionless bacilli.

Obs. II. Positive. Charity Hospital. White male, 45 years old. Had fever for two weeks, reduced to normal by quinine. Relapse. Suspicious lungs. Blood taken from the finger. Blood corpuscles in the serum present; intracorpuscular bodies and motile free pigment were distinctly seen in the field. On the other hand a slow agglutination of the bacilli occurs. Clarification of the bouillon culture after twenty-four hours in incubator. This case presented simultaneously malaria and typhoid.

Obs. III.—Negative. Case of Dr. Matas. White female. Amputation case. Fever. Dry blood specimen for test.

Obs. IV.—Positive. Charity Hospital. Colored male, 18 years old. Has been sick about three weeks. Serosity from blister for test.

Obs. V.—Negative. Charity Hospital. Colored male, 20 years old. Has been sick about one week. Serosity from blister for test.

Obs. VI.—Positive, confirmed by autopsy. Charity Hospital. Colored male. Blood from finger for test. Autopsy revealed perforation of ileum about two inches from ileo-cecal valve, eight large ulcerated patches and a number of ulcerated follicles.

Obs. VII.—Positive. Charity Hospital. White child. Typical clinical case. Serum from blister for test.

Obs. VIII.—Positive. White male, 19 years old. Case of Dr. Charbonnet. Has been sick for nearly ninety days. First

case in a family where two other cases broke out subsequently. Serum from blister for test.

Obs. IX.—Positive. Case of Dr. Charbonnet. White boy, 10 years old. Second case in the family alluded to above. Serum from blisters.

Obs. X.—Positive. Case of Dr. Charbonnet. White male, 17 years old. Third case in the same family. Serum from blister.

Obs. XI.—Positive. Charity Hospital. Typical clinical case. Serum from blister.

Obs. XII.—Positive. Charity Hospital. Typical clinical case. Blood from finger.

Obs. XIII.—Negative. Case of Dr. C. Milo Brady, of Gretna. Serum from blister.

Obs. XIV.—Positive. Charity Hospital. Blood from finger.

Obs. XV.—Positive. Verified by clarification of bouillon culture after twenty-four hours in incubator. Charity Hospital.

Obs. XVI.—Negative. Case of Dr. Fenner. Plasmodium. Had typhoid fever five years ago.

Obs. XVII.—Negative. Case of Dr. Parham. Mrs. E. M., native of Louisiana, aged 25; married. Taken ill December 9; fever afterward shown to be salpingitis, with possible appendicitis. Her condition gradually responded to treatment, and she seemed convalescent, when on January 5, 1897, she had a sudden chill (severe) about 2 P. M. When seen that evening the temperature had run up to 104 deg. Since this time it has fluctuated between 102 deg. and 104 deg. until it was down to 100 deg. January 7, 1897. Antifebrin has been given when fever was high and she is now taking quinine sulph., gr. v., every four hours. There are now no local signs of pelvic trouble January 7, 1897. Dry blood specimen for test.

Obs. XVIII.—Negative case of Dr. Dupaquier. Mr. J. C., native of Italy, 18 years old. Has been sick for one week. When seen, January 2, had fever, 102 deg. in the morning, 104 in the evening. Looked stupid and prostrated. Tongue coated in the centre, red at the tips and on the sides. No plasmodium. Blood from finger for test. No clarification of bouillon culture after twenty-four hours in incubator; test thus confirmed in the negative. Gave one gramme fifty centigrammes of powder of ipecac in three doses, one every ten minutes, and plenty of warm water to facilitate vomiting; milk diet, copious irriga-

tion of the bowels; antisepsis of the mouth; frictions all over the body; no quinine; no drugs. Temperature normal on the seventeenth day of his sickness—January 12, 1897.

Obs. XIX.—Negative. Charity Hospital. Blood from finger for test.

Obs. XX.—Negative. Charity Hospital. Blood from finger for test.

Obs. XXI.—Positive. Charity Hospital. Blood from finger for test.

Obs. XXII.—Positive. Charity Hospital. Blood from finger for test.

Obs. XXIII.—Negative. Charity Hospital. Blood from finger for test.

Cases reported with a mere statement without notes present nothing important.

Clinical Reports.

A CASE OF INTESTINAL OBSTRUCTION FROM A DERMOID CYST.

By MARION A. YOUNG, M. D., Rayne, La.

The case below is interesting from several points of view. Not that a dermoid cyst is of itself so rare, but its diagnosis without a laparotomy, the peculiar way in which a positive diagnosis was reached, the long duration of the intestinal obstruction and recovery after such prolonged obstruction, all go to make it a peculiarly interesting case. It was a case in which a laparotomy, under the circumstances, was out of the question, and had it been possible the family of the patient would not have consented.

Mrs. L. B., white, aged about 37 years, married, multipara, each confinement having been very difficult; instrumental delivery once or twice, with mutilation of the child on another occasion. About ten months ago, some time after an early miscarriage, she noticed a tumor in the right iliac region. Her family physician was consulted, and she was at that time advised to have a laparot-

omy done, to which she would not consent. The tumor steadily increased in size, and at about one month before she took her bed the growth was very rapid.

On November 14, 1896, I was called to see her in consultation with the attending physician. I found her condition critical indeed. The bowels had been completely obstructed from pressure for nine or ten days; stercoraceous vomiting continuously day and night for five days. Pulse very thready and scarcely perceptible; pupils widely dilated. The gaseous distention was enormous, seriously interfering with respiration.

Palpation and percussion of the abdomen showed a tumor extending from the right iliac region across through the left and as high up as the umbilicus. To the touch it was very hard, much resembling a fibroid.

We at once decided to explore the tumor. The patient was given morphia sulphate gr. $\frac{1}{4}$, atropia sulphate gr. $\frac{1}{100}$, strychnia nitrate $\frac{1}{30}$ gr. With a large needle I explored. The first puncture was negative of result. A second was immediately made about one inch lower. This time about one dram of thick white pus was obtained. With an aspirator and with a large needle we withdrew six or seven quarts of the same quality of pus. Stimulants were given. At our second visit the same evening we found her condition but slightly improved. We decided to re-aspirate, thinking there still remained some pus. The tumor was now soft and presented a doughy mass to the touch. Nothing was withdrawn this time except a little matter resembling soft putty in color and consistency.

Upon withdrawing the needle, however, there came through the opening about *fifteen strands of hair*, about one or two inches long and blond in color. This argued certain diagnosis of a suppurating dermoid cyst. About two hours after she passed gases from her bowels and the vomiting ceased to a certain extent. A glycerine enema was then given with little result. Stimulants and nourishment were kept up as much as possible. On the morning of the 15th we again saw her and found her condition still but little improved. The same evening her respiration was better, vomiting had ceased and the pulse was stronger. That night and the next day she had several movements of the bowels She continued to improve and made an uneventful recovery.

December 12 I examined her and could detect a small tumor in right iliac region, but am satisfied the fluid was reaccumulating.

The interesting points in this case are first, the complete intestinal obstruction, as evidenced by stercoraceous vomiting for five days without a fatal result. Second, the peculiar way in which a diagnosis was reached without a laparotomy. Third, the amount of pressure sustained by the bowels for such a length of time without causing serious organic changes in the gut, and fourth, such *acute* intestinal obstruction from an abdominal tumor.

Translation.

THE INCREASE OF THE NATURAL CAPACITY FOR RESISTANCE BY THE PRODUCTION OF HYPERLEUKOCYTOSIS.*

BY DR. MARTIN HAHN.

(Abstracted and Translated from the *Berliner Klinische Wochenschrift.*)

Buchner has shown that this process can not be explained as a simple phagocytosis, for the exudates lose naught of their bactericidal power when the leukocytes are killed by freezing and then thawing out the liquid. We could not, therefore, be dealing with a phagocytic function of the organized cell; it must be rather the decomposition or secretion products of the leukocytes which impart a greater bactericidal energy to the exudate as compared with blood serum. It is clear that these observations are significant in their bearing on the views which determine the theory and practical treatment of the infectious diseases. The fact that the leukocytes, where they occur in greater number, impart to the respective medium, presumably through the products of secretion, a greater bactericidal energy, suggests the thought that we may possibly augment by artificial process the natural resistance of the human organism, which, in the main, is identical with the bactericidal energy of the blood. Of course, it is not to be expected that every increase in the number of leukocytes will possess the

*From the Hygienic Institute of the University of Munich.

same value in increasing the bactericidal action. The kind, origin, biological condition, etc., of the leukocytes will be important factors. Thus it is not to be supposed that the leukemic blood is a more energetic bactericide than normal blood, or that an old serous-suppurative pleural exudate is particularly rich in alexines. Assuming that the contents of leukocytes in the liquid is the primary factor influencing this bactericidal energy, two paths are open to us. First, a larger quantity of bactericidal substances, alexines, we will say, could be introduced into the human organism, by injecting leukocytic liquids produced in another animal. Secondly, the reserve fund of resisting power in the human being himself could be in a measure utilized for the artificial production of a hyperleukocytosis, provided the alexines circulating in his blood be thus really augmented. The first method did not seem very promising at the outset. Buchner showed long ago that the alexines of different species of animals destroyed themselves mutually. More recent experiments made in this direction by Professors Buchner with mixtures of human and dog's blood, as well as the blood of sheep and horses, have again demonstrated that the natural resisting powers of the human being are scarcely to be augmented by the introduction of liquids rich in alexines—for example, the fresh pleural exudate of the sheep.

The other method—the production of a hyperleukocytosis in the human subject—gave greater promise of success. The literature of the subject contained a number of isolated investigations which showed that it is possible to influence favorably, and even to cure, by production of a hyperleukocytosis, a severe and otherwise deadly animal infection.

Unambiguous results were obtained only when the experiments on dogs were begun. Blood was first withdrawn from the animals—the number of leukocytes in the arterial blood being counted—and they were then given subcutaneous injections of remedies stimulating leukocytosis. For this purpose we commonly employ albuminoids, such as albumose or nuclein, the latter in the form of a yeast nuclein solution, placed at our disposal by the firm of Parke, Davis & Co. We likewise obtained good service from a nucleinic acid, which was donated by the same firm. Since large quantities of such preparations can be administered to the dog—though they commonly cause local

irritation—it is very easy to double the original number of the leukocytes in a short time. This is usually accompanied with a rise in temperature, the latter varying according to the remedy used. In the dog the rise in temperature rarely exceeded 1 to 1½ degrees. When the number of leukocytes has risen to double the normal, blood is withdrawn a second time. While at first we waited five to six hours before the second blood-letting, we afterward permitted an interval of 12 to 15 hours to elapse between the injection and the second bleeding. If by that time the leukycytosis has receded somewhat, the results are not affected at all. The result of the experiments, of which the following shall alone be quoted as illustrative of the others (see Table I), in which the leukocytosis was produced by the injection of nucleinic acid, was perfectly clear.

The defibrinated blood, obtained in the stage of hyperleukocytosis, exerted a decidedly more energetic bactericidal effect than the normal blood of the same animal. This is sufficient to show that in the dog a decided increase in bactericidal energy can be effected by the production of hyperleukocytosis. It would seem unquestionable, also, that in dogs the course of infections may be very favorably influenced by artificial hyperleukocytosis.

As just remarked, a favorable action is to be expected from hyperleukocytosis. First, only in those cases where the bacteria do not remain localized and cause mischief by their toxins, but rather where they really pass into the circulation. In this respect the above-cited results of increased energy always exerted by the blood rich in leukocytes when tried with the staphylococci, is of decided significance.

Table II shows that in the human subject, quite harmoniously with the animal test, a decided increase is to be registered in the energy of the blood rich in leukocytes. The investigations are naturally not to be regarded as completed so far as the human subject is concerned; it is very difficult to find individuals who are suited to such experiments in every way. It will hardly be possible, even in future experiments, to avoid many failures. But in view of the results thus far obtained we may say at least: It is highly probable that the bactericidal potency of the human blood depends substantially on the number of leukocytes, and that it will be possible to augment the natural resisting power of the human subject through artificial hyperleukocytosis.

Of course artificial hyperleukocytosis will not favorably influence all bacterial affections. With respect to diphtheria, it seems to be almost established that a persisting increase in the number of leukocytes is not to be regarded as a favorable symptom, a fact which certainly calls for further explanation. And the case will be similar in other infections, where the bacteria remain localized and exert their harmful action, not by their direct presence in the blood, but rather by their locally-produced toxins—as in cholera and tetanus. Here we have less to do with the problem of destroying living bacteria—the only action thus far observed in hyperleukocytosis, but rather to deal with the problem of immunizing the body against the toxins. Here, then, antitoxic serum-therapy must continue to occupy the foreground of clinical interest. But very different is the situation with the respect to so-called septicemic infectious processes. The results thus far obtained in the treatment of the most familiar form of septicemia-anthrax, by passive immunization with serum, are by no means brilliant, despite varied and extended experiments. At all events they are far inferior to those obtained from immunization through attenuated cultures. And a similar state of things seems to prevail with respect to the streptococcic serum. Accordingly, in these infectious processes due to the presence of bacteria in the blood, we have still left to us a field of immunization through attenuated cultures, and for cure through elevation of the natural powers of resistance. This cure is, prospectively, to be achieved through the artificial production of hyperleukocytosis.

Summary of Tables.

Average of Percentages.

1. *Dog's Blood.* Staphylococcus pyogenes aureus.

The figures given are the percentages of germs remaining alive:

Normal blood after two hours, 19.5 per cent.; after five hours, 4 per cent. Leukocytic blood after two hours, 2.9 per cent.; after five hours, 1.7 per cent.

2. *Human Blood.* Bacterium coli.

Normal blood after two hours, 41.1 per cent.; after five hours, 7.5 per cent. Leukocytic blood after two hours, 16.1 per cent.; after five hours 0.6 per cent.

Communications.

To the Members of the Medical Profession: I would be pleased to have an expression of opinion from you, either personally or through some medical journal, as to the relations of the lay-publishing firms of medical journals and the profession. The request is suggested by the fact that Messrs. Wm. Wood & Co., of New York, refuse to permit the editors of the *American Year Book of Medicine and Surgery* to use in our abstracts of medical progress articles and illustrations first printed in the *Medical Record* and the *American Journal of Obstetrics.*

This decision seems to me to be wrong, for the following reasons:

1. *It prevents the dissemination of Medical Knowledge.* The *Year Book* condenses, systematizes and criticises the year's medical work in a shorter space and more permanent manner than the journals, and has thousands of readers no single journal can claim or hope to reach. Every physician writes and publishes articles in order that every member of the profession may, if possible, learn of his work, and that science and progress may thus be furthered and humanity benefited. To interfere with such dissemination of our literature in reputable publications is, I think, discourteous and unjust to the profession, and an injury to medical science.

2. This injustice and injury to medicine become all the more striking when physicians do not receive a cent of pay for contributions from the publication of which the lay-publisher is supposed to make financial profit.

3. No other publishers in the world, not even those who pay authors for their contributions, have in the least objected to our reproduction of quotations, abstracts and illustrations from their journals.

Do you wish to limit the dissemination of your contributions to medical science by such an exclusion of them on the part of publishers from reputable publications? *Is this literature the property of yourself and the profession or not?* Does your gift of it to a journal make it forever the private property of the pub-

lishers of that journal? Is it not rather a loan for temporary use only?

Will you not hereafter demand that there be printed with your article a statement that the right of abstracting the text or reproducing illustrations is guaranteed?

Sincerely yours,

GEO. M. GOULD.

119 South Seventeenth Street, Philadelphia, Pa., December, 1896.

NEW ORLEANS, January 12, 1897.

Mr. Editor—In the January number of the JOURNAL appears an editorial touching upon the manner of selecting resident surgeons of the Charity Hospital, which I am sure voices the opinions of the fair-minded men of our profession, who earnestly desire to see the "hospital out of politics."

There is, however, to my mind, a harsh note in your suggested plan.

You say: "The position of second assistant surgeon should be given to the successful competitor in a thorough and practical examination, supervised by disinterested and competent members of the profession."

"The examination should be open to residents of the State of good character, alumni of the Charity Hospital having graduated within five years." The harsh note consists in limiting the contest to "the alumni of the Charity Hospital." Why should these be considered better qualified than all others? And if they are so considered, why should their superiority be protected by the suggested limitation instead of being permitted to assert itself in the proposed "thorough and practical examination?" Are the atmosphere and food at the Charity Hospital so charged with latent medical and surgical lore that a mere residence within its walls can give to the favored recipient a knowledge of the essentials of his profession, so subtle as to escape the notice of an intelligent examiner?

I am quite sure, Mr. Editor, that the alumni of the Charity Hospital would not fear to compete, in a fair and open contest, with any outside barbarian who might present himself.

Respectfully,

QUITMAN KOHNKE, M. D.

[We have received a number of letters relating to our editorial on the Hospital resident surgeons, and from different parts of the State. All, without exception, commend the JOURNAL for the position it has taken. On one point only is there some difference of opinion; that is, about making only alumni of the hospital eligible for the competitve examinations. The above is published as it deals at length with the negative side of that question and the points are, in the main, well taken. We might say, however, that there are some reasons on the other side. Everything else being equal, a man who has just served two years as an interne is better prepared to render good practical service to the hospital than one who has not, although the latter might pass as good an examination. While the "atmosphere and food" may not be charged with any sort of lore (and more possibly with microbes), the frequent contact with patients, on the ambulance, in the amphitheatre and the wards, by night as well as by day, necessarily gives the advantage to the resident student over those otherwise his peers, though this might not be brought out in an examination.

At any rate, we repeat we are not wedded to the details of the plan. Many modifications could be made without changing the principle. It is for that we stand, and we are glad to see that, as we predicted, the profession stands likewise.—EDS.]

Society Proceedings.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

REGULAR MEETING, DECEMBER 8, 1896.

Dr. Landon B. Edwards, president, in the chair. Dr. Mark W. Peyser, secretary and reporter.

DR. STUART MCGUIRE read a paper on "Residual Urine of the Urethra."

DISCUSSION.

DR. J. W. HENSON said that there was such a thing as residual urine of the urethra, there could be no doubt, and it was a matter of considerable importance. While residual urine caused posterior urethritis, he was convinced that local posterior

urethritis might and did bring about the condition of residual urine in the urethra.

The surgical posterior urethra was emptied by the rhythmical action of the levator prostatæ, compressor urethræ, accelerator urinæ and the muscular fibres surrounding the urethra beneath the submucous coat. When there is a point of inflammation there is, of course, some swelling; but, added to this, the muscle at that point, or some of its fibres, assumes a spasmodic action, the rhythm above mentioned is interrupted and the deep urethra fails to be completely emptied. Question an intelligent man and he will tell you that after passing urine that is highly concentrated he is sometimes conscious of being unable to empty the deep urethra for ten minutes or more, when, the local irritation having subsided, the same muscular effort at first used easily accomplishes the act. Now, of course, when the local irritation is continuous, as in inflammation, the spasm is longer or continuous, with retention of urine back of the irritated point. Residual urine is oftenest only a few drops, but this, by decomposition, is sufficient to greatly intensify the inflammatory action and hasten the formation of stricture. He thought it not improbable that urine was retained by the sharp bending of the urethra which occurs just in front of the scrotum when the penis is pendulous. This would occur, of course, only when the organ is replaced before being thoroughly emptied after urination.

In order to properly grasp the situation of affairs in posterior urethritis, or any urethritis of a chronic character, and intelligently treat the same, the use of the endoscope is necessary. To attempt to manage a case without this instrument would be a much more serious blunder than treating a sore throat without inspection. Many a patient has been told he had nothing the matter with his sexual organs, while the fact was he had, and, as a result, nearly or quite became a lunatic. The reverse is equally true. It is a serious matter. He congratulated Dr. McGuire upon his paper.

Dr. W. T. Oppenhimer agreed throughout with Dr. McGuire regarding the employment of the endoscope. The urethra was a closed tract, not admitting of air, and the folds might be seen closing behind the instrument. Minute inflammatory points as results of gonorrhœa, uric acid crystals, etc., residual pus,

mucus that might be mistaken for urine, all could be found. The urethra should be fully dilated with the instrument so that ulcerations might not be hidden by the folds. The endoscope was certainly a great advance in the treatment of urethral troubles; but it must not be introduced in acute inflammations. In his experience, deep injection of a solution of atropine stopped secretions, and in the more acute forms he used it in combination with other remedies.

Dr. Stuart McGuire, in closing the discussion, said that the paper he had read had been hurriedly written, and that it was merely intended to be suggestive. His object in reading it was to endeavor to establish a clinical fact, namely, that in certain cases of chronic posterior urethritis there was a retention of a considerable quantity of urine in the urethra, which was either the cause of the trouble, or a complication which made it difficult to cure. He dwelt upon the importance of using the urethroscope in such cases, and exhibited various electrical illuminating apparatus and demonstrated, practically, their operation. He concluded by urging the profession to be more accurate in their work, and begged that in future they would not diagnose urethral symptoms as neuroses until by a careful examination of the entire length of the urethra they had demonstrated the fact that it was free from abnormalities.

REPORTS OF CASES.

Dr. Jacob Michaux spoke of a case treated for diphtheria, although the diagnosis was obscure, and it was some time before he was satisfied as to its nature; but he quarantined it from the beginning. The membrane on the left tonsil disappeared in a day or two, and as there were no symptoms of depression, the patient was allowed to get up. In a week, the membrane on the right tonsil began to disappear. Monsel's solution, undiluted, was applied, marked and decided improvement resulting. The case ended in recovery. He did not claim originality for the treatment.

Dr. Arthur Jordan described a case of tinea versicolor, which was said by a former attendant to be syphilis. If there be any doubt, an examination of the scales (which could be scraped off with the finger nail) under the microscope would show the mycelium with spores. The direct cause is purely

parasitic, and is the *microsporon furfur* which grows in the epithelium; and the characteristic feature is the network of mycelia in which may be seen the spores. In treating the disease he advised thorough boiling of the clothing, the application of green soap and the local use of—

℞. Hydrargyri chloridi corrosivi ..... gr. vj.
Alcohol ..... ℥v.
Hydragyri ammoniatis ..... gr. x.
Aquæ rosæ ..... ℥vj.
M.

In three days the patient was well.

Dr. Oppenhimer said that it was of importance to the general practitioner to recognize skin diseases. This particular one, sometimes known as "liver spot," is quite common. If the most minute point were left, it would be the nucleus for a new growth. The spots become red after a bath, and iodine, which is good treatment, colors them brown.

In answer to a question Dr. Jordan said these spots do not often appear on the face. Other diseases were xeroderma and chloasma or leucoderma, which by the laity might also be called "liver spots."

Dr. Henson reported a case with one particular feature. The patient had obscure pains about the chest and sometimes in the legs. He could make out nothing but *dyspepsia*. At times there would suddenly occur nausea, and when the patient was about to vomit, he would sneeze and be immediately relieved.

"All the World's a Stage."—One of the visiting surgeons finding the amphitheatre at the Charity Hospital occupied and desirous of ascertaining when it would be free, asked what was going on.

"Dr. X. is performing," said one of the nurses.

"Comedy or tragedy?" was the next question.

Prompt came the rejoinder: "Which would you call it, doctor? It is a case of necrosis of the humerus."

Editorial Department.

Chas. Chassaignac, M. D. Isadore Dyer, M. D.

THE PURPOSE OF MEDICAL LITERATURE.

A circular letter from Dr. George M. Gould is going the rounds of the medical press. We have carefully noted the occasion for the letter, and realize the purpose aimed at by its author. We have elsewhere in this number reproduced the text of the communication. The whole success of medicine as a profession to-day has emanated from the wide dissemination of medical discovery, and mainly through the medium of the medical press.

International exchange of thought in the broad field of scientific research has promulgated knowledge acquired in remote sections.

Individual physicians have expended time, labor and money in the endeavor to wipe out the clouds of ignorance with which the study of medicine has for ages been surrounded. The whole purpose of this investigation has been directed at the better equipment of the physician in his struggle for the benefit of humanity.

As in all good efforts, or in all efforts for the good of humankind, the speculator has seen the opportunity for personal emolument, and the publisher has realized the opportunity afforded for pecuniary profit. Medical journalism has grown entirely out of proportion to the demand for such literature. A just and purposeful enterprise, directed at elevating the intelligence of a noble profession, has, at the hands of some, been prostituted to a commercial advantage.

There is another side to the question, and we must admit its claim to a hearing, while the argument grows. Copyright laws were enacted for the protection of the publisher, and from a purely business standpoint he has the right to step within the pale of their protection. When articles of direct scientific research, or of literary merit, afford a possible pecuniary profit to the publisher, we can readily understand the claim for restriction in their distribution. Here, however, we are at a loss to

see wherein this argument obtains, for it is certain that a duly accredited abstract can only redound to the ultimate benefit of the periodical from which excerpt has been made.

If the publisher maintains his right on the ground that the articles may be abused by advertising druggists, commercial agents, manufacturers of instruments, etc., we find the question settled beyond argument. The evil, however, begins with the author of such contributions, and not with the publisher—except that he is culpable in the publishing.

On what other ground can such a position be maintained?

Truth is as broad as space, as free as air, and belongs to those who seek it. It is a perversion of human right to misdirect the dissemination of knowledge, by fencing it in with a quasi-legal *noli me tangere*. Medical men work constantly for the publisher, grind ever their mill, are satisfied with a chance spark of reputation, and entirely renounce pecuniary emolument, so long as the purpose of their discoveries, or the expansion of their originalities are recognized in the arena of science.

We are not willing to make a personal attack on any one publisher or publication. We do recognize, however, that Dr. Gould's remonstrance in the principle is timely, and that it opens the way to a systematic organization of the profession in the protection of itself in its own circle.

The rapid accumulation of medical investigation to-day is a direct result of the stimulus which medical thought expressed in print has given to the rank and file of the profession. The proneness of some of us to seek notoriety, the weakness of others for well placed adulation, and the supreme ego of others still have provoked an excrescence of *soi-disant* medical periodicals which live only by the circulation of questionable advertisements. And yet we let them live! Cyclopedic editions on all branches of medicine demonstrate the tendency of to-day in the concentration of the knowledge available for distribution. The highest class of medical journals the world over recognizes this fact, and the columns of these are more and more arranged accordingly. It is almost time for us to be our own publishers, our own editors, our own dispensers of the fruits of our labors!

We can not change the copyright laws by forcing special

legislation along a moral and ethical line. Commercialism is too rampant to sleep while our Quixotic effort dares the growing breeze. We can direct the publication of our work, and we can restrict the publisher, so that all the world can profit by our labors. We need not lay up our talent in a napkin and bury it!

THE NATIONAL CONTROL OF LEPROSY.

In October next it is projected that an international convention shall be held in Berlin, Germany, at which all noted leprologists in the world are expected. There it is intended that the aspect of leprosy throughout the civilized globe shall be considered from every conceivable standpoint.

The purpose of the convention is altogether aimed at the eradication of leprosy from the face of the earth. Meanwhile the whole field of the therapeutic possibilities in the disease is to be reviewed and will be supplemented by the discussion of all recent and purposed advancements in the treatment.

This is not the first time that the protection of future generations has been considered where leprosy is concerned.

Moses promulgated laws of precise and far-reaching method, which were strictly enforced. In France to-day, ruins of leproseries remain in strong evidence of the efforts made in the middle ages at the extinction of the malady.

The chapel of the Tower of London carries still a long corridor, which gave the lonely leper a view of the priest at the forbidden sanctuary. Within the past five years the British government in India and in the West Indies has directed attention to the leper asylums in these colonies. Comprehensive investigations have been made, not without profit. The government of the Sandwich Islands has systematically studied the best methods of controlling and of ameliorating the disease.

Havana, Cuba, has a creditable leper hospital, admirably maintained. Meanwhile, the United States government has remained indifferent to the threatenings of the disease.

From the time that France owned Louisiana effort has been directed at the control of leprosy in this State. Minnesota colonized a few Norwegian lepers, imported a few years back. California has attempted a segregation without success. Civilized New York has barbarized herself by isolating a few spo-

radic cases on lonely North Brothers' Island, where they have lived as objects of horror. In 1894, Louisiana, through its Legislature, established a home for lepers. Notwithstanding the fact that leprosy has been endemic in the State since the seventeenth century, few of the many lepers in the State have found their way to this institution, and only a small percentage of the present inmates have been legally committed. The Board of Control, as at present constituted, comprises a working majority of laymen, in no way whatsoever in touch with the medical equation in such an institution, and prone to throw open the doors of the home to the empiric charlatanism of every self-vaunting quack. The medical profession is either flagrantly indifferent or is unwilling to damage professional prestige by assisting any law directed at the control of leprosy, while the courts themselves have to be stimulated to enforce the enactment of it, a truly difficult task without medical aid.

The first wave of public investigation directed at any leper community, or community in which lepers live, is met by a prompt removal of residence on the part of those afflicted. This removal may be within the city or within the State, but more often the emigration occurs into a neighboring State, in which no legal act controls the disease. Isolated legislation, then, begets only added increase in the disease. In their attempt to escape legal observation the lepers only establish new foci for the spread of the infection—expose new communities to the horrible affliction.

The Congress of Physicians and Surgeons in session at Washington in 1894 drafted a memorial to Congress begging governmental recognition of the existence of the disease and urging a national commission to investigate its prevalence in the United States.

This resolution has not yet been resurrected.

While the medical profession is always in the advance guard of any movement for the good of the public health, it is not just that they should work alone. The public is more concerned than we, and are intelligent enough to realize the necessity for legislation if the demand for it is rightly and righteously placed before them.

Louisiana, California, Minnesota, Texas, New York, Ohio, Pennsylvania are some of the States interested; occasionally a

stray leper is found in one of the other States. Before the Berlin Congress convenes let the medical profession of this country, through its press, urge some formulated action upon its representatives at the national capitol. Just how this is to be made tangible we can not assume without discussion. The question of States rights will always enter a consideration where the individual citizen is affected. With other infectious, and contagious diseases, however, every State is ready to act in self-defense.

The slow incubation and the comparatively small numerical occurrence of leprosy has not yet awakened the general public to the necessity for its surveillance.

A shudder passes over the whole world at a magazine description of a leper colony, or at the horrors of their segregation, but the shudder dies in passing.

It required only a few dozen years for leprosy to spread over all Europe, but it took three centuries to remove it from public sight.

Careful sanitary and quarantine regulations have controlled the importation of yellow fever and cholera; have checked epidemics of the contagious exanthemata, yet we sit idly by and watch a contagious disease, with an insidious course, grow in its proportions.

How can we stop it?

When Congress starts the investigation and sufficient publicity is given to the effort, all cases can be ferreted out and recorded.

Localities of infection can be outlined and gradually a tabulation of the needful measures can be made. This done, a federal commission—properly under the guidance of the Marine Hospital Service—can devise the plans for fulfilling these exigencies in a national asylum.

Local officers, appointed from the medical profession, adjunct to the Marine Hospital Service, could locate individual cases, and when consent to removal failed, the federal courts could exercise the necessary jurisdiction. The person afflicted could be apprehended and removed. The process would be slow, but the result would be in time the fulfilment of the end desired.

When the Berlin Congress is over, those who have already worked in the cause of the control of the disease will only be stimulated to more interest and effort.

Nothing can be lost by getting ready the equipment for the execution of the radical suggestions which such a convention must eventuate.

Medical News Items.

Janus is the title of an original bimonthly appearing for the first time at the end of 1896 for the months of November and December. Published in Amsterdam, it is printed in French, German and English, the articles appearing in the language in which they have been written.

The first number has a dainty cover, carrying the title and list of editors. These with the collaborators promise a bright future for the periodical, if the same standard is maintained in the numbers to follow.

The Electro-Therapeutist, a new journal devoted exclusively to electro-therapeutics, but intended for the general practitioner, has been received. In its present shape it is quite modest in size, but it promises to be enlarged and improved.

The New York Polyclinic suffered the loss of its buildings by fire during the month past. It is regrettable that this has occurred just at this season, but the Journal trusts that arrangements may be made by the faculty to conduct the clinics so that the classes may not suffer.

E. B. Treat, of New York, announces the issuance early in 1897, of his *International Medical Annual*, being the fifteenth yearly issue of that well-known one-volume reference work. The prospectus shows that this volume will be the result of the labors of upwards of forty physicians and surgeons, of international reputation, and will present the world's progress in medical science.

The Ninety-first Annual Meeting of the Medical Society of the State of New York took place at Albany, January 26, 27 and 28, 1897. There were at least forty papers on the program, besides several discussions on important subjects.

The New Orleans Polyclinic began its tenth annual session on January 11, with a good list of matriculants. The class promises to be creditable for the session, considering the earlier date at which the first term has begun. The new building is used regularly for instruction.

The State Insane Asylum, at Jackson, has lost the services of Dr. A. Gayden as superintendent, through resignation. The board, at a meeting held January 4, elected Dr. G. A. B. Hayes to fill the vacancy. While we regret that Dr. Gayden has seen fit to sever his connection with the asylum, we congratulate Dr. Hayes upon his appointment.

Dr. J. S. Letcher, of Dallas, Texas, died in December last. He had been elected vice president of the Texas State Medical Association at its last meeting and was among the prominent physicians of the State.

The State Board of Dental Examiners have organized and elected Dr. A. G. Friedrichs as president and Dr. Vignes as secretary.

Dr. Marion Souchon, of New Orleans, was united in matrimony to the charming Miss Dolly Burthe, likewise of New Orleans, at the St. Louis Cathedral, January 4. The Journal joins the many friends of both in congratulations.

Abstracts, Extracts and Miscellany.

Miscellaneous.

The Iodine Test for Seminal Stains.—Florence of Lyons has shown that there is a substance in the semen which gives a precipitate with a solution of iodine. A suspected stain is soaked in distilled water for a few minutes, to this is added a saturated solution of iodine in iodide of potash (iodine, 1.65, iodide of potash, 2.54, aq., 30). An immediate precipitate of

iodine crystals takes place (similar in shape to the hæmin crystals in Teichman's test for blood). No other secretion of the body gives this reaction, although many of the alkaloids do. It is regarded as of the same value as the guiacum test for blood.—*Jour. Boston Soc. of Med. Sc.*

Dermatitis Venenata from Fur.—Dr. Carter reports two cases of dermatitis venenata occurring over the neck and shoulders, following the wearing of sable collarettes. The whole area in the first case was bright red, infiltrated and papular, with here and there excoriations produced by scratching; the margins were ill-defined, the inflammation merging into the adjacent healthy skin. The eruption obviously was due to an irritant cause. It was believed that the arsenic used in curing the fur was responsible.—*The Lancet, December, 1896.*

Quinine Amaurosis.—The first case was that of a little girl, 3 years old, poisoned by the administration of quinine per rectum, five grains every three hours until thirty grains had been taken. The child was seen September 30, 1886; there was total blindness; the pupils were widely dilated and the ophthalmoscope showed very pale optic nerves with exceedingly narrow retinal vessels. On October 2, 1886, the pupils were slightly smaller and light perception had returned. About October 7, 1886, decided improvement seemed to set in rather suddenly, and by November 9, 1886, the normal appearance of the eyes and vision seemed to the attending physician completely restored. February 23, 1887, patient was again seen by Dr. Bruns, who found the pupils still more dilated than normal, the optic disks pale, the retinal vessels small and sight by no means perfect. May 22, 1896, the child being now 13 years old, and a serious refractive defect being corrected, the vision with each eye, through the glasses, was 20-40, and with both eyes 20-30; the patient read the finest print when the book was held about six inches from the eyes. The pupils were about one-third larger than normal, but sensitive to light; the optic disks were very bluish white and the retinal vessels very small.

The second case was that of a man who was poisoned with quinine in 1878, when about 15 years old. The symptoms had been wide dilatation of the pupils and total extinction of vision.

An examination of the eyes in March, 1895 showed both optic disks very pale bluish white, as though the nerves were atrophied and the retinal vessels much attenuated. With the glasses that correct his refractive defect he could read the finest print and his vision was 20-20—normal—each eye. The central perception of red and green was perfect in each of these patients. The value of the observations is in the length of time over which they extend. While confirming the favorable prognosis in quinine amaurosis they show that the normal sensibility of the pupils is not recovered, while perfect vision coexists with a blanching of the optic disks and an ischæuria of the retina, the like of which is found only in far advanced atrophy of the optic nerves.—Bruns. *Am. Journal of Ophthalmology*, 1897.

Dr. Max Olny publishes in No. 12 of the *Therapeutische Monatshefte* on pages 676 to 677 the results obtained in a series of experiments with phenocoll hydrochlorate, entitled "Phenocoll Hydrochlorate in Acute Articular Rheumatism." The remedy was used at the Clinic at Halle, Germany, in sixteen cases of acute articular rheumatism in single doses of fifteen grains, forty-five grains per day. The writer was very well pleased with its prompt action. In three cases the remedy failed; in all other cases, some of which had been treated without success with sodium salicylate, it reacted promptly. In cases of recent standing the pain diminished after taking 9 grammes, and complete recovery occurred after taking 21 grammes. The average time of treatment was thirty days. In recurring cases on an average 25 grammes of phenocoll were required and treatment lasted thirty-three days.

Of salicylate of sodium, however, it was necessary to prescribe 41 grammes in daily doses of 6 grammes, and if only 4 grammes per day were taken, 49 grammes were required to relieve the pain. When the first mentioned dose was administered, on an average thirty days were required to a case; with the smaller daily dose forty-six days were required. Relapsing cases were given a daily dose of 6 grammes, averaging 48 grammes of salicylate of soda for a period of forty-four days, and 4 grammes per day required 55 grammes and treatment for thirty-nine days.

Better results were therefore obtained with phenocoll hydro-

chlorate than with salicylate of sodium. It is necessary to still continue with phenocoll for a few days after the pains have subsided, giving every second day one gramme, to be taken in the morning and evening. If after a period of seven or eight days no relapse has occurred, which can not be entirely prevented any more than with salicylate of soda, a lasting cure can be depended upon.

The influence of the remedy on the temperature is quite variable. Temperature becomes normal as soon as the affection of the joints has disappeared. Considerable perspiration was observed with weak patients; other side effects, such as cyanosis, collapse, etc., were never noticed.

Book Reviews and Notices.

Medical Jurisprudence, Forensic Medicine and Toxicology. By R. A. Witthaus, A. M., M. D., and Tracy C. Becker, A. B., LL. B., and a staff of collaborators. In four royal octavo volumes. Volume IV, Toxicology. New York: William Wood & Co., 1896.

The volume on toxicology, by Professor Witthaus, forms the last volume of a splendid work. The introduction gives a very interesting historical sketch of the art of poisoning, which was brought to a high pitch during the days of Venice's greatness, which did not scruple to hire poisoners to get rid of inconvenient political rivals. The record of Alexander VI as a poisoner is well known. The march of civilization, however, caused the gentle art of poisoning to be banished from the domain of legitimate warfare, and to assume its rightful position as an abominable crime.

Toxicology really began with rational chemistry and pathology, and its progress has been measured by the progress in the other two branches of science.

The early attempts at the detection of poisons are inextricably entangled in the superstitions of the times; but the dawn of exact science shed light on the nature and action of poisons, and now a very important branch of medicine and law bears

witness to the industry of workers engaged in the task of unraveling truth from the tangled skein of superstition and ignorance.

Professor Witthaus has given us a thorough, systematic presentation of toxicology as it exists at the present day. The work is worthy of its authors, whose high standing in the chemical world is well known. Witthaus and Becker have, with the assistance of a staff of able collaborators, produced the most extensive work on medical jurisprudence and toxicology published in the English language. All the volumes are of a high order of merit, and the entire work will, we think, long hold the foremost position as an authority on the subjects discussed.

A. McS.

The Principles of Theoretical Chemistry, with Special Reference to the Constitution of Chemical Compounds. By Ira Remsen, Professor of Chemistry in Johns Hopkins University. Fifth edition. Lea Brothers & Co., Philadelphia and New York, 1897.

The fact that a fifth edition of this admirable work was demanded is sufficient proof of its popularity, and a perusal shows its success is well earned.

It is a very lucid explanation of theoretical chemistry, chiefly from the standpoint of the structure of chemical bodies. This, to a less philosophical mind, is a great improvement over the German treatment of the subject, which is usually from the standpoint of physical chemistry—a method of importance but much too deep for the average reader.

The book is equally adapted to the student of chemistry or the practitioner, who desires to broaden his theoretical knowledge of chemistry.

ARNY.

Diseases of the Stomach. A Text-Book for Practitioners and Students. By Max Einhorn, M. D. New York: Wm. Wood & Co., 1896.

The book is dedicated to that excellent physician and teacher, C. A. Ewald, of the University of Berlin, It is the first original work of its kind published in the United States; and Dr.

Einhorn has done a service to the profession in America by writing it. No physician in America is better qualified to write a treatise on the subject, as he has both knowledge and long practice in this specialty. The different subjects are written in a clear, concise manner, showing a thorough knowledge of diseases of the stomach.

A good index adds much to the value of the book, the subject matter being well written and divided into sixteen chapters.

Dr. Einhorn is the inventor of a number of instruments which are described and the mode of application of which are explained.

The reviewer has used most of them and has found the gastrodiaphane in very stout patients to be of questionable diagnostic value; the use of the gastric spray has proven of inestimable value in certain diseased conditions; the stomach bucket is only applicable when a small quantity of the gastric contents are required for examination; the gastro-kinesograph is an ingenious instrument which has not yet proven of much practical value. The chapter on diet shows careful study and is well written. Any one reading Dr. Einhorn will be convinced of his conservatism regarding drugs. The author's original observations on erosions of the stomach are very interesting, and much light is thrown on the condition known as achylia gastrica. STORCK.

A Text-Book of Materia Medica, Therapeutics and Pharmacology. By George Frank Butler, Ph. G., M. D. W. B. Saunders, Philadelphia, 1896.

This work fulfils in an admirable way the purpose its title states. The arrangement of the material is convenient, and so practically defined that the usefulness as a text-book is much increased. Much that is new has been noticed in the book, and an excellent "Clinical Index" is placed at the end for ready reference to the body of the volume. The distribution of the type is carefully done to make the points of leading importance prominent, and altogether the text and type are creditable. The book is made up of 858 pages. DYER.

Transactions of the American Dermatological Association, 20th Annual Meeting, 1896.

The type customarily seen in the *Journal of Genito-Urinary and Cutaneous Diseases* has been selected for this report. The contemporaneous journals have, since the meeting of the association in September, reproduced most of the papers read, with their discussion. Many happy suggestions are practically presented in the president's address, which deals with the privileges of the specialist in his treatment of general conditions, particularly the dermatologist. A statistic table for the preceding year concludes the report. Dr. J. C. White, of Boston, is the president for the coming year; Dr. Duhring, of Philadelphia, vice president; Dr. J. T. Bowen, of Boston, secretary and treasurer. D.

The Tonic Treatment of Syphilis. By E. L. Keyes, A. M., M. D. D. Appleton & Co., New York, 1896.

Dr. Keyes has once more made a plea for the logical and rational tonic treatment of syphilis. The ground covered in the little work of seventy-eight pages is practically the same as that first argued by the author some years ago. The subject in places is treated rather at random, but in the main is a strong presentation of the argument for the systematic tonic treatment of syphilis. D.

PUBLICATIONS RECEIVED.

A Practical Treatise on Materia Medica and Therapeutics, by Roberts Bartholow, M. A., M. D., L. S. D. D. Appleton & Co., New York; A. Hawkins, New Orleans, 1896.

Leprosy and the Charity of the Church, by Rev. L. W. Mulhane. D. H. McBride & Co., Chicago, publishers.

Transactions of the Medical Society of the State of North Carolina, 1896.

Artificial Anesthesia, by Laurence Turnbull, M. D., Ph. G. P. Blakiston, Son & Co., Philadelphia, publishers, 1896.

Biennial Report of the Alabama Bryce Insane Hospital, 1895 and 1896.

Third Annual Report of the Board of Craig Colony, 1896.

Autoscopy of the Larynx and the Trachea, by Alfred Kirstein

M. D. The F. A. Davis Company, Philadelphia, publishers, 1896.

Transactions of the Mississippi State Medical Association, 1896.

Addresses on the Hospital Question and on Medical Ethics, by D. Campbell Black, M. D., 1896.

Transactions of the American Orthopedic Association, 1896.

Clinical Examination of the Blood, by Richard C. Cabot, M. D. Wm. Wood & Co., New York, publishers, 1897.

Transactions of the American Surgical Association, 1896.

Report of Dr. H. H. Haralson, Quarantine Inspector, Port of Biloxi, 1896.

Anomalies and Curiosities of Medicine, by Geo. M. Gould, A. M., M. D., and Walter L. Pyle, A. M., M. D. W. B. Saunders, Philadelphia, publisher, 1897.

Transactions of the American Dermatological Association, 1896.

Reprints.

Remarks on the Causes of Glaucoma, by Leartus Connor, A. M., M. D.

An Improved Surgical Bed, by Aug. Schachner, M. D.

Transfusion, Infusion and Auto-Transfusion, by Aug. Schachner, M. D.

History of Case in which Piece of Steel was Removed from Vitreous Chamber, by Chas. A. Oliver, A. M., M. D.

Foreign Literature.

The Etiology of Acne.—Lomry has investigated the causation of acne from a number of typical cases, including those manifesting suppurating pustules and comedones. Numerous cocci were found among other micro-organisms. These cocci were outside the cells, sometimes singly, sometimes in small collections, but never in chains. The cultivations made showed in every case the presence of a micrococcus, which was the only constant organism, and was present in overwhelming numbers. There was present a large bacillus resembling the hay bacillus.

Numerous inoculation experiments were tried on animals. The author concluded that in the pustules of acne one finds constantly and almost exclusively the staphylococcus pyogenes albus.

The examination of the comedones showed like organisms. In cultures, as with the pustules, there was found a micrococcus resembling the staphylococcus pyogenes albus, but there were numerous other organisms present in the specimens, including a rosy red coccus.

Experiments were carried on with scrapings from the skins of those with and without acne. Microbes were found as frequently in one specimen as another, from which the author concluded that there could be no difference noted. In these scrapings, however, the yellow staphylococci and streptococci were found, which was never the case with either pustules or comedones. The staphylococcus found in the scrapings and in the lesions mentioned were identical.

The author discusses the transformation of the comedo into a pustule. This he says is not due to the microbes alone; the soil must in some way be prepared. He believes that the reason why the comedo does not become a pustule is its dry condition, and the fact that there are several layers of horny cells around the microbes which must limit their influence on the tissues. He believes that this depends on a modification, either quantitative or qualitative, of the secretion of the sebaceous glands. He supports this statement on the following facts: 1. That acne appears at the period of puberty, when the sebaceous glands are active. 2. That it does not affect elderly people, when the activity of the organs is diminished and the skin dry. 3. That the wearing of certain articles of apparel often produces an eruption of acne. Where there is irritation, if glands are present, there is hypersecretion. 4. That certain articles of diet which irritate the skin, as well as certain drugs, such as iodine and bromine, can produce acne. 5. That the skin of those affected with acne is always greasy. This moisture supplies increased nourishment to the microbes, and softens the epithelial layers which surround them, the tissues around are impregnated with their poison and react accordingly. The results of the diapedesis is that the non-pathegenic varieties of organisms are destroyed, while the pathogenic organisms enter into active strife with the leucocytes. This is confirmed by the fact that in the comedo there is a mixture of organisms, while in the pustule the staphylococcus is found almost alone.

It is not so easy to understand how the comedo itself develops. It must, in some way, be the result of closure of the hair

follicle, but whether this is the result of microbic development or rather due to anatomical or functional causes is doubtful. He tends to the latter view, though not denying the former, since anything which tends to introduce microbes into the follicle must have an important bearing on acne. And he notes that acne is especially common in students, clerks, and, in general, those who do not require to use both hands, and thus have one free to rub the face with. But he favors the view that it is due to an anomaly of secretion. The follicles are stretched, dilated, and seem to secrete more than normal. This accumulates, and thus the upper part is dilated.

In connection with the anatomical theory, he notes that the skin is usually thick, and consequently the openings of the glands are longer and more winding. He explains Unna's argument as to the non-passage of acne into furuncle being in favor of the difference of organisms, by the fact of the little virulence of the staphylococcus albus. He says it can merely vegetate in the comedo, but does not attack the tissues.

His conclusions are: (1) The staphylococcus albus is present in almost every pustule. (2) It is very little virulent. (3) It can be made virulent by a passage through animals. (4) Along with the staphylococcus we frequently find a yeast and a small bacillus, but always in small numbers. (5) In the non-inflamed comedo there is always abundance of microbes among which the staphylococcus albus is always present, but not in the same abundance as in the acne pustule. (6) That in the comedo one can see, at the commencement of the inflammatory process, an intermediate stage of development between that of the pustule and that of the non-inflammatory comedo. (7) The skin of people without acne is as rich in microbes as that of those with it. (8) In the comedones and pustules of those who have not acne, we have the same microbes as in those who have. (9) The presence of certain microbes is not sufficient to explain acne; there must be a preparation of the soil. (10) It is not necessary to assume a specific cause of acne; as a fact, the staphylococcus albus is found in many other skin affections. (11) The clinical arguments which Unna uses to distinguish acne from other staphylococcic affections of the skin may be explained by a difference in the virulence of the microbes. (12) Unna's bacillus is a little virulent variety of the bacterium coli commune.—*Dermat. Zeitschrift.—Brit. Journ. Dermatol.*

A Family Affection of Hair and Nails.—The authors record a unique observation upon a series of cases of dystrophic disorders of the hair and of the nails, hereditary and congenital, and extending through six generations of one family. The description of the patient who formed the starting point of the inquiry is given in detail. This patient was an idiot, with absence of, or atrophied thyroid. The hairs of the scalp were scanty, short, slender and pale, and easily epilated, as were also those of the pubis and axillæ. The nails of the fingers, attacked in different degrees, were hypertrophied, "wrinkled," and with a tendency to incurve at the extremities. Many were longitudinally striated, others horizontally. They were extremely friable and often broken, and with a tendency to become detached. The distal phalanges of all the fingers were swelled, red and edematous, and around most of the nails was a border of foul ulceration, giving rise to a fetid odor. The lesions of the nails of the toes were like those of the less marked of the fingers, but without edema or ulceration of the surrounding parts. Clinical analysis excluded all idea of leprosy or of hereditary syphilis, and the case was diagnosed as congenital dystrophy with periungual lesions, the result of injury or secondary infection. Further inquiry discovered that certain of the patient's ancestors and brothers and sisters presented analogous lesions. The great-great-grandmother had been the subject of dystrophy of the nails and hair, but whether of congenital origin was unknown. From this source the malady could be traced downwards through six generations, attacking in all thirty-six out of fifty-four known individuals. In the later generations the disease tended to attack fewer members of each branch of the family; the lesions of the nails were somewhat more constant than those of the hair; the thirty-six individuals attacked included twenty-two males and fourteen females. That the lesions indicated were not the sole stigmata of decadence in this family of degenerates seems to be shown by the facts that the patient himself was an idiot, a sister was of feeble intellect and had strabismus, a cousin was an alien, and an uncle was a hysteric, and that numerous children in each generation had died in infancy. A complete genealogical table and a plate accompany the article.—Nicolle and Halipré, *Annales.* — *British Journal of Dermatology.*

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Bulletin of the Board of Health of the State of Louisiana.)

FOR DECEMBER, 1896.

CAUSE.	White.....	Colored...	Total.....
Fever, Malarial (unclassified)	2	6	8
" Intermittent			
" Remittent	1		1
" Congestive	1		1
" Typho		1	1
" Typhoid or Enteric	7	4	11
" Puerperal	2		2
Influenza	2	1	3
Measles			
Diphtheria	6		6
Whooping Cough			
Meningitis	4	1	5
Pneumonia	32	16	48
Bronchitis	8	8	16
Consumption	58	32	90
Cancer	9	5	14
Congestion of Brain	7	3	10
Bright's Disease (Nephritis)	26	13	39
Diarrhea (Enteritis)	20	11	31
Gastro-Enteritis	4	2	6
Dysentery	4	6	10
Peritonitis	4	2	6
Debility, General	1	2	3
" Senile	14	19	33
" Infantile	7	7	14
Suicide	4	1	5
Heart Disease	21	14	35
Apoplexy	12	9	21
Tetanus, Idiopathic			
" Traumatic	1	1	2
Trismus Nascentium	6	5	11
Hepatitis	2	1	3
Hepatic Cirrhosis	4	4	8
Uremia	3	3	6
Injuries	10	11	21
All Other Causes	111	58	169
TOTAL	391	245	636

Still-born Children—White, 32; colored, 22; total, 54.

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

Death Rate per 1000 per annum for month—White, 24.06; colored, 36.75; total, 27.75.

METEOROLOGICAL SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure 30.23

Mean temperature 55.00

Total precipitation ..... 3.77 inches

Frosts ..... 5 (heavy)

Prevailing direction of wind, northeast.

DR. LERCH'S CASE OF ANEURISM, SHOWING RUPTURE.

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.]

A CASE OF ANEURISM OF THE DESCENDING AORTA WITH AUTOPSY.

BY OTTO LERCH, A. M., M. D., PH. D., NEW ORLEANS, LA.

On the 7th of November I was called to M. B., colored, 38 years of age, born in Mississippi. He was for fourteen years laborer on the levees of this city. He claims that he never has been sick beyond some attacks of malarial fever; that he is not a drinker, not a smoker, temperate in all his habits, married ever since he has been in New Orleans, and father of three healthy children. No syphilitic history could be obtained. He is a man about 5 feet 8 inches in height, weighing 160 pounds, and of very muscular build. On questioning him he stated that he had been ill and had been treated for pleurisy and dengue three months previous to my visit; that he had been well up to about ten days before this date. When seen he was sitting in a chair, with his hands over his epigastrium, and complaining of severe pains in the stomach, radiating from the cardiac end over his abdomen. He described these pains as cutting, and that they stopped him from work; that they were most severe, however, at night, commencing in the evening. His face was drawn and showed that he was suffering. The temperature was found to be 99½, pulse 100, strong and full; tongue clean; insomnia caused by the constant pains, anorexia and nausea present,

but so far no vomiting. Strictures of the esophagus were indicated, "his gully was closing up fast," as he described it. Respiration easy. Examination showed lungs normal, a heaving over the pericardium, liver somewhat enlarged and tender, stomach tender, especially at the cardiac end; spleen normal, walls of abdomen relaxed and not especially painful on pressure. The patient stated that he urinated regularly and without difficulty, but that he was constipated and had not been to the closet for the last five days. An examination showed the urine to be normal. There was no tumor to be felt anywhere, nor could a murmur be heard. There was no difference in the pulse, in the radial, brachial or carotid arteries; no difficulty or disturbance of speech, nor a difference in the pupils, nor could any disturbance of the functions of the facial nerves be detected. The face appeared emaciated, otherwise the man was well nourished. Motion and sensation perfect. The foregoing symptoms left me in doubt whether I had before me a case of carcinoma of the cardiac end of the stomach or an aneurism of the descending aorta.

I ordered him at once to his bed, prescribed a saline cathartic, administered morphia hypodermically, and ordered the same drug to be given in small doses, as required. Diet, liquid and nutritious. Quiet and perfect rest. When calling the next day, the patient told me that he had had a free discharge from his bowels, that he had rested easier, and had slept, and that he felt better. He was lying on his right side, and told me that on account of the pain in his stomach this was the only position in which he could rest.

No marked change in temperature and pulse rate now nor hereafter until the time of my last visit. He complained, however, more and more of the esophageal strictures. On the 9th he had vomited during the previous night, and with the matter a large piece of coagulated blood, looking like a piece of liver, as he described it. The vomited matter was examined for free HCl, and none was found. Vomiting from now occurred at various times for the next two days, generally mixed with some blood. He was much weakened, praying me to "cut his throat open." The heaving over the heart was pronounced, and I detected a slight bruit. Coughing commenced now to trouble him, and continued throughout the disease.

On the 10th his condition had not changed, except that he told me his "gully" was now completely closed. I had him swallow some milk, which he immediately threw up. I ordered crushed ice and iced brandy with water, strychnia, and rectal alimentation. The ice seemed to relieve him considerably. On the 11th Dr. H. P. Jones accompanied me. We found the patient in the condition above described, and, notwithstanding his condition, prayed to have an instrument passed. We desisted from doing so.. On the 15th, my friend, Dr. Hermann Gessner, saw the patient with me. The heaving over pericardium was still present, the bruit could not be heard. We concluded to pass a sound. This was done with the greatest caution. At the lower third of the esophagus an obstruction could be felt through which the sound slipped on slight pressure. No tumor could be found at the cardiac orifice. Dr. Gessner then passed the sound cautiously and agreed with me that no tumor could be detected. This procedure relieved the patient and from now on he clamored for the sound. I desisted, however, in further passing the instrument. The treatment with some variation was continued. On the 29th he died from internal hemorrhage, having thrown up about four pints of blood.

Permission to make a post-mortem examination was obtained and this was performed on the same day by Dr. H. B. Gessner in the presence of Dr. Jones and myself.

POST-MORTEM EXAMINATION.—Emaciated. No post-mortem rigidity.

LUNG.—Normal. No pleural adhesions.

HEART.—Left ventricle hypertrophied. Large aneurism of descending aorta *with erosion of bodies of third, fourth and fifth dorsal vertebræ, which formed posterior wall of aneurism—rupture through esophageal wall (about one inch by three-fourths inch)*. Large mass of fibrous deposit and more recent clot in aneurismal sac, additional pocket apparently ready to burst.

STOMACH.—Normal, *distended with blood.*

I have reported this case believing that it may be of interest to the profession. The aneurism in a location as found in the patient is of rare occurrence and the symptoms found hardly admit of a positive diagnosis.

The following symptoms account for the presence of an aneurism:

I.—The occupation of the patient.

II.—A cough (pressure cough).

III.—The rather sudden onset of the disease, though this can not be taken as diagnostic. Dr. Hamilton Jones and myself have only a few months ago diagnosed a case of carcinoma of the cardiac and of the stomach in a German, who stated that he had always been well in his life, and that his troubles had commenced three weeks before his admission to Charity Hospital after drinking a glass of ice-cold beer when overheated. He had been treated for acute gastritis. The port-mortem examination verified our diagnosis.

The heaving over the pericardium and the bruit was, however, not constant.

The presence of a carcinoma of the stomach was evidenced by such symptoms as impaired appetite and later complete anorexia; acute pains, radiating from the cardiac end of the stomach over the abdomen, the position he constantly was found to rest in, lying always on his right side; nausea and vomiting mixed with coagulated blood, constipation, no tumor discoverable. The esophageal stricture and the immediate regurgitation of food after ingestion unchanged; the difficulty of swallowing even small quantities of fluid and absence of HCl in vomited matter, which had been held for some time.

Symptoms common to both diseases are (*a*) the age of the patient; (*b*) the emaciation; (*c*) rapid loss of weight; and (*d*) the strictures of the esophagus, though rarely as complete in a case of aneurism as in the case under consideration. This case teaches that if there is even but one symptom present that calls for an aneurism, the greatest caution is required in introducing bougies into the esophagus.

REPORT OF A CASE OF SALPINGO-OOPHORITIS AND APPENDICITIS—OPERATION—RECOVERY.*

By P. MICHINARD, M. D., Professor of Obstetrics and Gynecology, New Orleans Polyclinic, New Orleans, La.

The report of this case is made not because it is specially unique but because it presents an opportunity for discussion of interesting points in abdominal and pelvic diagnosis and opera-

*Read before the Orleans Parish Medical Society.

tions—points that to-day occupy a great deal of the attention of associations and journals devoted to abdominal and pelvic surgery.

CASE.—About one year ago there was referred to me by Dr. Parham an unmarried young lady who for quite awhile had been suffering with dysmenorrhea and almost constant pains in both iliac fossæ, especially marked in the *left*. Before, and even during, the menses the suffering was sometimes unbearable. There was generally a rise of temperature during the first day of the flow. There was no history of a sudden onset of the disease accompanied by epigastric pain. In other words, there was a good history of inflammation of the uterine appendages and none of the appendix vermiformis.

Examination discovered tenderness in both iliac fossæ and a mass on either side of the uterus, larger and more tender on the left than on the right. The objective symptoms indicated disease of the ovaries and tubes.

After three months of ineffectual conservative treatment, ablation of the diseased structures was recommended and accomplished.

The first step in the operation to decide upon was the route by which the offending organs were to be removed. Being familiar with what has been called the abdominal route, I made a two and one-half inch incision in the abdominal wall in the *linea alba*. The left ovary was found much enlarged and firmly imbedded in a mass of thickened lymph. It and its accompanying tube were removed. The right ovary was atrophied, and the tube somewhat enlarged and fluctuating. These were removed. But here came our surprise

In teasing away this tube from its bed of adhesion I had to have recourse to inspection, and I discovered that its end was glued to the appendix vermiformis. I saw then that this structure was enlarged and was fluctuating. It also was adherent in a mass of lymph, but less so than its companion. These two were separated and removed. Both tube and appendix contained a few drops of a pus-like fluid. During the process of detaching, the vermiform appendix was deprived of nearly all its layers of tissue at the point of attachment, showing that it was weakened at this spot. Its mucous membrane was considerably swollen and dark. I had here a typical appendicitis that I had not expected. The next interesting point was the selection of

material for the method of closing the abdominal wound. For reasons that I will give later on, and that will bear discussion, I selected silk worm gut as suture material, and the one row through and through stitch as method of closing. I made the suture penetrate the peritoneum and skin with all the tissues between them. The sutures numbered one to every half inch. The usual antiseptic and aseptic dressings were applied, and the abdominal wall steadied with three strips of adhesive plaster and a firm bandage. At the end of fourteen days the sutures were removed, and at the end of three weeks the patient left the bed. She was instructed not to walk about for three or four weeks later, and to wear a good abdominal bandage for months.

As the union of the wound was primary, it required no special attention.

To-day, nearly nine months after the operation, there is not the slightest indication of hernia.

As I said at the beginning of this report, there is not so much in the case itself as there is in the opportunity for discussion which it presents.

The first point which presents itself is that of diagnosis. Is there any way by which we can determine the existence of appendicitis where there is salpingitis or ovaritis, providing there is no previous history of appendicitis?

Given a case of inflammation of the uterine appendages, do we know of any means of determining positively that the vermiform appendix is free from serious disease? I do not, and I have failed to ascertain that any other person does.

The next question is, can the diseased appendix be more readily or more safely removed through an opening in the vagina than it could through one in the abdominal wall? In other words, is the vagina route preferable to the abdominal route for such work? I do not believe so. I think it almost impossible to remove a diseased appendix by the vagina, excepting in such cases of anatomical peculiarity where it is in the hollow of the sacrum behind the uterus.

In my case I think that death from peritonitis would have resulted had the opening been made in the vagina, because there would have been a post-operative escape of pus from the torn end of the appendix. Had the vaginal route been selected and the complication recognized an incision in the abdominal wall would have been required to complete the operation.

Now, if it be impossible in the diagnosis to exclude disease of the appendix where inflammation of the tubes and ovaries exists, and if the vaginal route is not the proper one for the removal of the appendix, why have recourse to it at all for salpingotomy and ovariotomy? I wish here to call attention to this possible and unexpected danger of the vaginal route, a danger which has not received sufficient attention.

The vaginal route has been selected and recommended because with it convalescence is shortened and all danger of ventral hernia is avoided. While I grant the truth of such argument I believe that a slightly prolonged convalescence is better than the risk of death. That hernia does occasionally follow abdominal section is true, but I am inclined to think it is either because we do not properly apply our sutures, or, what is more probable, because we are in too great a hurry to remove sutures to allow our patients to leave the bed. I believe that by permitting the suture to remain fourteen or twenty days, and by keeping the patient quiet forty days, we would obtain firmer union and have less disposition to hernia. Nor do I believe that the buried suture in the least prevents hernia where the union is poor, and it certainly does no service where the union is good. Where there is suppuration in the abdominal wall after the operation the buried suture is a great menace, because to get at the particular offending suture it is frequently necessary to open up the entire line of superficial union. Where the abdominal wall is very fat we are compelled to use the buried suture, but I can not see the wisdom of making it a routine practice. I can not see how the suture, whether of silk or fish-gut, or of any other material, can serve the purpose of a splint. A good, firm union in the *linea alba* makes about the safest splint.

In this reported case I used silk-worm gut because it is a material easily cleaned, does not, by capillary attraction, carry infection from the surface to the deeper tissues, and because its removal is not so painful as is the case with silver wire. But wire, I presume, is more reliable because it is less apt to break.

I would certainly not like to bury in the abdominal wall any material but silk, silk-worm gut or silver wire. But this question of suture material will probably never be solved to any

operator's satisfaction, for those who succeed with catgut or fish-gut will continue to use such in preference to any other; and the same holds true with those who succeed with silk, wire, silk-worm gut or kangaroo tendon.

In conclusion, I believe that in all operations in the pelvic cavity we should burden the tissues with as few sutures as possible, and they should be of a material that will least tend to irritation or suppuration. Wherever it is possible we should here select a method that will not only give us command of the sense of touch but will also permit us to bring to our assistance that of sight.

FORMALIN—ITS USE IN DISEASES OF THE STOMACH.

By J. A. STORCK, M. D., M. Ph., Assistant to the Chair of Clinical Medicine New Orleans Polyclinic; Visiting Physician, Charity Hospital, New Orleans, La.

For some time past the attention of the medical profession has been directed to the germicidal and antizymotic powers of formalin. It occurred to me that it might prove of value in the treatment of certain diseased conditions of the stomach, which allowed stagnation of the ingesta with its consequent fermentation, also in conditions where a large quantity of mucus is present. I concluded to give formalin a trial.

In a great many instances when treating patients with dilated stomach, or those suffering from catarrhal disease of the organ, complaint is made of the distention of the stomach produced when hydrogen dioxide, or preparations of its kind, is used; even though the organ be irrigated with water after their use.

To my mind, this was the class of patients on whom to use formalin. Since using it, I think it applicable whenever hydrogen dioxide or its preparations is indicated.

I have used formalin in ten cases of chronic mucous gastritis and in three cases of dilatation of the stomach, the results having been most gratifying; better, I will add, than I have ever secured with any one agent in the conditions mentioned. Whether I will continue to get the same good results, time and a more extended experience with the agent will tell.

The manner in which I use it is as follows: In cases of chronic mucous catarrh, about five or six hours before eating the principal meal of the day (dinner) 1000 *c. c.* of a ¼ per cent. solu-

tion of salt at 40 deg. C. is introduced into the stomach through a stomach tube and then withdrawn; the same quantity of plain water of the same temperature is then introduced and also withdrawn; 1000 *c. c.* of a one per mille solution of formalin is now allowed to slowly flow into the stomach and allowed to remain two to five minutes; after its withdrawal the organ is again irrigated with plain water.

In cases of dilatation where fermentation is marked I wash out the stomach before breakfast when the organ is empty. First use plain water 40 deg. C., allowing it to flow until it is free from fragments of food and flakes of mucus; then introduce 1000 *c. c.* of a one per mille solution formalin as before; again use plain water 40 deg. C. after its withdrawal. This agent (formalin) is not recommended to supplant the use of drugs or other measures in the treatment of diseases mentioned, but only for its germicidal and antizymotic powers.

The use of formalin in ulcer of the stomach might prove beneficial, also in fermentative intestinal disorders and typhoid fever.

NOTE.—Formalin is a 40 per cent. aqueous solution of formaldehyde gas.

TWO CASES OF AMPUTATION AT THE HIP JOINT BY WYETH'S METHOD.

BY W. E. PARKER, M. D., VISITING SURGEON TO THE CHARITY HOSPITAL, NEW ORLEANS.

It is with the wish to put the following cases on record to assist in making tables of cases rather than with the idea of presenting anything new or of special interest that this report is made. The introduction of Wyeth's pin and tube method has certainly been one of the great advances in surgery.

In a table of cases, recently published in the *Annals of Surgery*, Wyeth gives the results in sixty-nine cases reported by various operators. Of these cases fifty-eight recovered and eleven died, making a mortality of 15.9 per cent. Five of the fatal cases were operated upon for injury and not for disease.

I might mention the fact that not one of the cases of primary operations for injury has recovered. He highly recommends saline infusion at a temperature of 170 deg. for shock. I can not state positively what the temperature of the solution used in

my fatal cases was, but it was pretty hot. While it acted as a good temporary stimulant, it simply delayed the result. I doubt if the operation could have been done without it. It may be said that this was a very unfavorable case to start with, but in reply I could say that the only possible chance was to operate quickly and at once.

A long time ago I learned that to wait for shock to pass off in such cases was to wait to sign a death certificate. As to the technique of the operation I can not make the details clearer than Wyeth has done in his excellent article, so will quote him:

The method is as follows:

"The patient should be placed with the sacrum resting upon the corner of the operating table, the sound limb and arms being wrapped with cotton batting and thoroughly protected from unnecessary loss of heat. The limb to be amputated should be emptied of blood by elevation of the foot, and by the application of the Esmarch bandage, commencing at the toes. Under certain conditions, the bandage can be only partially applied. When a tumor exists, or when septic infiltration is present, pressure should be exercised only to within five inches of the diseased portion for fear of driving the septic material into the vessels. After injuries with great destruction, crushing, or pulpifaction, one must generally trust to elevation, as the Esmarch bandage can not always be applied. While the member is elevated and before the Esmarch bandage is removed the rubber tubing constrictor is applied. The object of this constriction is *the occlusion of every vessel above the level of the hip joint, permitting the disarticulation to be completed and the vessels secured without hemorrhage and before the tourniquet is removed.* To prevent any possibility of the tourniquet slipping, I employed two large steel needles or skewers, three-sixteenths of an inch in diameter and ten inches long, one of which is introduced one-fourth of an inch below the anterior superior spine of the ilium and slightly to the inner side of this prominence, and is made to traverse superficially for about three inches the muscles and fascia on the outer side of the hip, emerging on a level with the point of entrance. The point of the second needle is thrust through the skin and tendon of origin of the adductor longus muscle half an inch below the crotch, the point emerging an inch below the *tuber ischii.* The points should be shielded at

once with cork to prevent injury to the hand of the operator. No vessels are endangered by these skewers. A mat or compress of sterile gauze, about two inches thick and four inches square, is laid over the femoral artery and vein as they cross the brim of the pelvis; over this a piece of strong, white rubber tubing, half an inch in diameter when unstretched, and long enough when in position to go five or six times around the thigh, is now wound very tightly around and above the fixation needles and tied. If the Esmarch bandage has been employed, it is now removed. Excepting the small quantity of blood between the limit of the Esmarch bandage and the constricting tube, the extremity is bloodless, and will remain so.

"In the formation of the flaps, the surgeon must be guided by the condition of the parts within the field of operation. When permissible, the following method seems ideal:

"About six inches below the tourniquet a circular incision is made down to the muscles, and this is joined by a longitudinal incision commencing at the tourniquet and passing over the trochanter major. A cuff that includes everything down to the muscle is dissected off to near the level of the trochanter minor. At about this level the remaining soft parts, together with the vessels, are divided squarely down to the bone by a circular cut. At this stage of the operation the central ends of the divided superficial and deep femoral veins, as well as the arteries, are in plain view and should be tied with good-sized catgut. This done, the disarticulation is rapidly completed by lifting the muscular insertions from the trochanters and digital fossa, keeping very close to the bone with knife or scissors, and holding the soft tissues away with the extractors. The capsular ligament is now exposed and divided, and by forcible elevation, adduction, and rotation of the femur, it is widely opened, the *ligamentum teres* ruptured, and the *caput femoris* dislocated. If properly conducted up to this point, not a drop of blood has escaped, except that which was in the limb below the constrictor when this was applied. The remaining vessels which require the ligature should now be sought for and secured. There are, first the *saphena vein*, which, on account of its proximity to the main trunk, should be tied; the *sciatic artery*, which will be found near the stump of the sciatic nerve; the *obturator*, which is situated between the stump of the adductor brevis and magnus,

usually about half-way from the centre of the shaft of the femur to the inner side of the thigh, the vessel being on a level with the anterior surface of the femur; the *descending branches* of the *external circumflex*, two or three in number, usually found about an inch and a half outward and downward from the main femoral vessels beneath the rectus and in the substance of the crureus and vastus externus. The *descending branches* of the *internal circumflex* are insignificant, and are usually found on the level of the femoral vessels in the substance of adductor longus and between it and the adductor brevis and pectineus.

"In tying the larger femoral vessel, I make it a rule to dissect both the superficial and deep femoral stumps back from one-half to three-fourths of an inch, so that I can apply the ligature behind any of their branches which may have been divided close to their points of origin, and I do not hesitate to include the large veins in the same ligature in order to save time. With the vessels I have mentioned quickly secured, there is really no necessity for even temporarily loosening the tourniquet. If the operator is not sure that he has found and securely placed the ligatures upon these larger vessels, it is a simple matter to loosen slowly the grasp of the tourniquet until the pulsation of the larger trunks is perceptible. No attention should be paid to the general oozing from the large muscular surfaces which have been divided. If every oozing point were ligatured, from half an hour to an hour would be consumed in securing a dry wound in the majority of cases. In order to hasten the operation and stop the oozing, I introduced a snug packing of sterile iodoform-gauze ribbon into the cavity of the acetabulum and the space between the muscles from which the bone has been removed, leaving one end of the ribbon to pass between the flaps for the purpose of its removal. With a long, half-curved Hagedorn-Fowler needle, armed with good-sized catgut, deep sutures are passed through the stumps of the divided muscles in such a way that large masses of muscle are brought tightly together when these sutures are tied, taking two to four inches in the grasp of each suture. The needle is not passed in the proximity of the large vessels or the sciatic nerve, but in all other directions the muscles are rapidly quilted together. This effectively and rapidly controls all oozing. Nothing remains but to close the flap with silkworm-gut sutures, and cleanse it off thoroughly

dry, seal it with collodion in its entire extent to prevent any infection from the genital or anal region, apply a large, loose dressing of iodoform and then sterile gauze, and a light bandage over the first light dressing. The pins are then removed and the remainder of the dressing completed. Preliminary pressure of the light dressing prevents oozing and the wound remains dry."

CASE 1.—White girl, æt. 8; was brought to the Charity Hospital December 8, 1895, suffering from a railroad injury of the left leg and thigh, the parts being pulpified well into the middle third of the thigh. She was much shocked; pulse 144. The elbow was scrubbed and hot saline infusion was used. When the pulse reached 120, ether was commenced, and the parts were prepared. The infusion was continued until the pulse fell to about 100. I made the mistake, and I believe that it is a common one, the first time that one does this operation, of putting the outer pin too low. This delayed disarticulation somewhat. The operation lasted about forty-five minutes, and except for a small amount of venous oozing was practically bloodless. She was sent to the ward in fairly good condition, but did not react, and, notwithstanding active stimulation, died about ten hours later. I was indebted to my friend, Dr. S. M. Fortier, for material assistance in this case.

CASE 2.—Jesse W., æt. 25; born in Louisiana, white male; came to hospital in July, 1896, giving the following history: Nothing of note in family history; he had always enjoyed good health until seven years before admission, when a small tumor appeared on the inner side of his left foot. This grew rapidly, and when it reached the size of a hen's egg a physician was consulted and he removed the growth. It returned in something over a year and was again removed. When admitted a tumor, having the appearance of a sarcoma, was found on the inner side of left foot. This diagnosis, subsequently confirmed by the microscope, was made and the leg amputated in its middle third. The wound did well and in a short time he returned to his home in north Louisiana. October 29, 1896, he again applied for admission. The end of the stump was enlarged, somewhat nodular, and painful. He also complained of pain in the shaft of the femur. After consultation with Prof. Edmond Souchon, before whose class I performed the operation, I de-

cided to amputate at the hip joint. The operation was performed November 2 before the medical class of Tulane University, my assistants being Drs. Marion Souchon, C. L. Horton, and Messrs. King and Pollard of the resident staff of the Charity Hospital. Chloroform was used as an anesthetic and the patient stood the operation well. Almost no blood was lost before the tube was removed and but little afterward. Pulse at completion of the operation was 100. For four days gr. $\frac{1}{30}$ strychnia sulph. was given every four hours. Temperature rose to 102½ deg. twelve hours after the operation, but did not again exceed 100⅖. Bandage was removed and wound dressed at the end of forty-eight hours, on account of a slight sero-sanguinolent discharge. The intermediate silk sutures were removed on the sixth day, and the silkworm gut sutures on the twelfth, the union being perfect except where the drainage tube had been. At the end of the first week the drainage tube was removed and a small gauze drain substituted, as there was a slight discharge from the cavity. The patient was discharged, with the wound perfectly healed, on the 2d of December. I have recently had a letter from this patient, in which he tells me that the stump looks very well, but that he occasionally suffers with pain in the chest. Possibly he is developing a malignant growth in his lungs.

I am under special obligations to Mr. Charles J. Pollard (R. S.) for assistance during the operation, the excellent way in which he conducted the after treatment, and for the notes from which these histories were written.

THE CARRASQUILLA SERUM-CURE OF LEPROSY.

BY ALBERT S. ASHMEAD, M. D., NEW YORK.

I recently sent a consignment of Carrasquilla's anti-leprous serum to Col. G. M. Bowie, the Mayor of White Castle, Louisiana. Dr. Hooper, late physician of the Louisiana Leper's Home, had died suddenly, and the lepers being in the care of Sister Hyacinth, I did not know who had been appointed to succeed as Medical Superintendent of that hospital. I received a letter from Dr. G. Willard Jones, dated February 9, who, as attending physician, had received for Colonel Bowie this serum, and who

wishes to obtain particulars as to how the serum is to be used, etc. He says he has spoken to some of his patients, who are very anxious to try it. He intends to make a report to me of the results he will obtain. I may add here that although Carrasquilla claims to have obtained cures, still his method has not yet been acknowledged as scientifically accurate. Havelburg, of the Hospital dos Lazaros, Rio Janeiro; Goldschmidt, of the Funchal Leper Asylum, Madeira; Hansen, of the Lungaardes Hospital, Bergen, Norway; Alvarez, of the Experimental Hospital, Honolulu, etc., have expressed to me very skeptical views on the subject.

The following are Dr. Carrasquilla's rules for the use of the serum:*

"It remains for me to describe the sero-therapeutic treatment, that is the manner of applying the anti-leprous serum to the patients. So far I have followed the hypodermic method only, which, in spite of its great drawbacks, has real advantages, and perhaps its use is improved in the majority of the cases. When the patient has been bled, five days are allowed to elapse before the second bleeding, if it is deemed fit to do this operation a second time; if it is not so deemed, when the five days have passed, the patient receives the first injection of serum, and the dose is of one to five cubic centimeters, according to the class of the serum, constitution and age, and other circumstances of the patients; the period of the disease, etc. Before making the first injection the physician must, in the days which precede that of the injection, examine carefully the patient, note all the lesions which he may have, and above all observe and note the pulse and temperature (axillary) several times a day, in order to be able to appreciate later on the modifications which may be produced, and the physiological action of the medicament or the reactions which are made manifest. In making the injection, I follow the practice and the important precepts of Dr. Roussel, which I shall extract in few words from his writings and which I recommend because my experience has shown them correct and convenient. I have used the syringe of Dr. Roux, in spite of some drawbacks, which

* *Tercera de comunicacion sobre un procedmiento seroterapico aplicado al tratamiento de la Lepra Griega, presentada la Academia Nacional de Medicina de Bogota (Republica de Colombia) el 24 de Junio de 1896, por el Senor Dr. Juan de Dios Carrasquilla, L.*

it has for this object. I have used it on account of its incontestable advantages, among which are: It can be heated without suffering any alteration; it is very well graduated and it has broad and very fine needles. Dr. Roussel says that he had been aware for some time of the insufficiency and the grievous practical drawbacks of the short needles, of those of two centimeters—the only ones then used—and had replaced them by broad needles of four or five centimeters, which having been neglected for some time are to-day the only needles in use. The drawback of the short needles, in the opinion of this author, consists in this, that the injected liquid remains encysted in the thickening of the dermis, which is painful, or that a part of it escapes, forced out by the elasticity of the skin. The injections can not be put in distinctly in any part without exposing the patient to accidents. The places which the author has elected and which have been taken by me, are: The space comprised between the crest of the ilium and the transverse line which passes under the trochanter fossa, or better behind the great trochanter; others prefer the vertebral border of the shoulder blade (Armand); in the arm, where they also used to be put they are painful and produce very considerable swellings; in the muscle the same thing happens; in the forearm and in the leg they must not be put because there is a risk of hurting a muscle, an aponeurosis, a tendon, or a vessel, and lesion in this way one of the delicate apparatuses of the functions of the hand, of the foot. The needle must not be passed through the flame, under pretext of sterilizing it, because thus it may contain still some solid particles which, after desiccation, penetrate with more facility under the dermis. The needle rapidly passed through a flame and made blue does not remain at all sterilized if it has been infected by virus or septic microbe, whose vitality resists to all but red heat. The red hot needle remains unsteeled and unpolished, rough; its point does not prick any more, it is a needle forever lost. A simple washing of the needle in antiseptic solutions, secures its asepticity, better than the flame (Roussel). The needle must be kept in a small bottle where it is bathed in aseptic oil, or in a sterilizing solution of carbonate, or borate of soda. Thus it is moistened and it deposits on the border of the pricking an aseptic circle which is sufficient to remove from the needle the

contagion of an infected skin, from which there is no danger of putting off with the needle any septic particles.

"Dr. Roussel thinks that no injection must pass five cubic centimeters, and, in accord with his way of thinking, he says that it is a mistake to use syringes containing more than five *c. c.*, for they must be very narrow of calibre relatively to the fine eyes of the needle, which has for result that the propulsion of the liquid requires a very exaggerated pressure, which takes from it all delicacy to the hand of the operator and makes the needle tremble, producing in this manner a motion which tears the tissue and causes the coming out of small drops of blood, the latter producing subdermic ecchymoses. The injection thus made requires a long time, which tries the patience of the victim by the continuity and repetition of the local pain, however small it may be, produced by the needle, and especially by the distention of the meshes of the subcutaneous fibro–nervous tissue. To administer ten *c. c.* of serum it is better to make two injections of five *c. c.* each, because a large quantity of serum applied at one time, in one point, exposes the patient to swellings, indurations and even very painful abscesses.

"The technique of Dr. Roussel is as follows: The syringe, full and armed with its needle, is taken in the right hand like a pen. The left hand lifts in the middle region of the "cadera," a large fold formed of the whole dermis, comprised between the thumb before and the other fingers behind. The syringe, located parallel with the general surface of the "cadera," presents the point of the needle under the nail of the thumb, horizontally, and consequently in a direction perpendicular to the fold which has been formed. With one rapid motion the needle is pushed against the fold, making the whole to penetrate to the heel ("talon"); the fold is smoothed, the skin returns in place, and the needle is leaning over the aponeurosis, under the dermis in the space virtually free, which allows the sliding of the skin over the muscles.

"The fold of the skin must be pricked in the medial part of the length of its basis in the acute angle formed between the flat skin and the skin lifted by the fold; in this point, one is sure that the skin, where remaining free, will take again its normal position, and that the needle has pricked neither the aponeurosis nor the deep surface of the dermis. When the needle is intro-

duced through the extremity of the fold, there is much risk that it may penetrate obliquely and that its point may remain in one of the latent walls of the fold; in this manner the injections would be put in the thickness of the dermis and too near to the surface of the skin, which would constitute a painful fault. The needle having thus been put under the dermis, the index of the right hand is placed over the head of the piston ("embolo"), and pushes it softly with continued pressure, so that the whole injection penetrates at one time. The liquid remains in this manner injected to a distance of four or five centimeters from the pricking of entrance, and when the needle is withdrawn the canal of perforation formed in the skin stretched by the traction which occurs at the formation of the fold is stopped when the various capes ("capa") of the dermis return in their place. Not one drop of the liquid injected at such distance can find an issue, nor insinuate itself in the thickness of the dermis Anybody can observe that a given solution which causes absolutely no pain in the subcutaneous cellular tissue causes sometimes a very sharp one followed by inflammatory redness, when it is put in contact with nerve cells, with the lymphatic filaments or with the blood capillaries contained in the thickness of the dermis. This is what necessitates broad needles, often hardly broad enough to be able to be inserted flatly under the very thick dermis of fat subjects. If the liquid is injected only under the epidermis it lifts the same and forms a very painful phlyctena like to that of a burning. On the contrary, if the needle is put to a great depth, it passes through the aponeurosis and introduces the injection into the thickness of the muscle, which reacts by a painful contusion which embarrasses the motions of the limb, and there is moreover the risk that the liquid may penetrate into a blood vessel, which is not the object of the subcutaneous injections, whose absorption must be progressing through endosmosis and not sudden intravascular. The injections have been made rapidly if the syringe contained one centimeter, slowly if it contained four or five; the practitioner will put one of the fingers of his left hand over the traject of the needle up to before the heel, in order to close the canal of perforation, and with the right hand he withdraws rapidly the syringe, which he must not have ceased to hold from the moment he has taken it from the operation. With

the finger of the left hand, which must not have left the point under which was the canal of the dermis, and the invisible perforation of the epidermis, must now press a little more strongly over the skin, make a local massage; the object of which is to prevent a liquid "abolludorio," and scatter the injected liquid at a distance in the meshes of the cellular tissue, putting it in contact with the capillary net-work of the aponeurosis, which absorbs it by endosmosis in less than a minute.

"Before making the injection the skin of the patient must be cleaned in the part where the pricking is to be made, by passing over it softly a sponge soaked in an antiseptic solution, and then it must be dried with disinfected cotton. The practice to which Dr. Roussel objects must be necessarily made here among the poor, who do not sin by excess of cleanliness; but as it is necessary to use it the part must not be rubbed, otherwise would happen what the author so much objects to—that is, that the clearest and directest effect would be to redden the skin, to make it more sensible and turgid, to attract the blood, and cause the appearance at the point of affraction of a drop, or the extension of the blood under the skin, producing an ecchymotic stain. Over the wound caused by the needle in the skin must be applied a drop of collodion to shut and protect it against infection, or the sponge moistened in the antiseptic solution is again passed over the place; the solution may be liquor of Von Swieten, lysol, bichloride of mercury, phenic acid, etc. When the needle is kept in oil, or in aseptic or sterilizing solution, as I have already said, there is no necessity for a disinfection of the skin, neither before or after the injection. There is a precaution which the physician should never neglect before making the injection; it is to satisfy himself that the serum has suffered no alteration. This may be seen by the smell, or by the appearance. If on approaching the bottle containing it to the nose, one perceives an odor of sulphuretted hydrogen or sulphhydric acid (smell of rotten eggs), the serum is to be avoided, because some reaction has taken place in it, some new combination has formed which probably has given it characters different from those which it had before, or perhaps one of the principles in which reside its medicamentous virtues has been destroyed. Another frequent alteration of the serum consists in the formation of albuminoid clots, which float in the liquid, or of certain filaments in the

manner of microbian colonies, which disturb its transparence or change its color, making it opaline. Sometimes precipitates are formed on the walls or the bottom of the bottle. They consist of hematic globules.

"When albuminoid clots are observed floating in the liquid, the serum may be used, if the clots are carefully eliminated, before the injections; the elimination consists in passing the serum through filter or through aseptic cotton. When the alteration consists in filaments of various and opaline coloration, the serum must not be used. When these are precipitated the serum may be used, if it is possible to take the liquid part without agitating the contents of the bottles, so that the portion which forms the precipitate is not again dissolved or suspended. It is, in any case, dangerous to use these serums, and it would be better to condemn them than to expose the patient to the consequences of a vitiated serum. Moreover, every time when horse serum is prepared it is prudent to make with it a hypodermic injection on a small animal, guinea-pig, rabbit, etc., in order to avoid the risk of injecting in the patient septic substances, because one can never be absolutely sure that all the prescriptions of the most vigorous asepsis have been complied with in the preparation, and even if they had been observed, some noxious germ may have introduced itself, which, developing at once, may cause infection. The previous injection in animals gives thus the certainty that the serum contains no toxic substance, whose effects might be felt in the man, if the animal has revealed them to us. If, on the other hand, the dosis of toxic substance keeps due relation with the weight of the animal, if a cubic centimeter is injected for a kilogram of animal, we can, without any danger, inject a strong dosis in the man.

"To know the dosis of serum which has to go to the first injection, it is necessary to know the time of preparation which the horse has had, and the quantity of human serum which has been inoculated in it at that time, because, as I have already said, the power of the serum depends to a great extent on these factors. It increases with the time which has passed between the first injection and the last bleeding; so that the dosis will be the smaller the more time the horse has had in preparation. The most prudent way is not to pass a cubic centimeter in the first

injection, and to go measuring the susceptibility of the patient in those following, increasing cautiously the dosis in every new injection—that is, if no contraindication is given by the examination of the patient, which is always necessary before the injection for reasons which will presently be explained. When the first injection has been made, one day is supposed to pass before the second one, and the condition of the circulation and of the colorification is examined; if there is exhilaration of the pulse, or elevation of the temperature, or both, or any symptom of reaction, the physician must make no new injection and wait till the patient returns to his normal condition. When the first injection has produced no reaction, or when the latter has ceased, the second injection may be made three days after the first, and so on for the third, fourth, fifth, etc. What mostly happens is that the reaction appears only after the third or fourth injections; exceptionally there are patients in whom the serum reacts only after the fifth or sixth, while there are others in which it reacts immediately after the first, or after the second. Hence, it is necessary to work with the greatest caution in order to spare the patient the violent reactions which might occur through the application of too large doses, through the application of the injection when the reaction has already commenced, or because not sufficient time has been allowed between one and another injection, because the reaction can be belated.

"The physician must never neglect to examine attentively the state of the circulation, because it is the pulse that best reveals the effect of the serum; the condition of the pulse will serve him as a guide to let him know whether the injection is to be made or not and to tell him the dosis. As a general rule, make no injections when the pulse is accelerated or indicates great arterial tension; when the axillary temperature is more than normal, or when there is a symptom of reaction; in one word when the patient is not in the condition in which he was before the beginning of the treatment in regard to general phenomena." (Juan de Dios Carrasquilla, L.)

Dr. Roman, the commissioner sent by Panama, to study this treatment in Carrasquilla's Institute, says that he has obtained good results from the use of chaulmoogra oil with alkalines, with nux vomica and also with gurjun balsam with alkalines, especially in anesthetic cases. Oil of chaulmoogra without the

alkalines had little effect. He says that Hardy has cured lepers with Carlsbad and Vichy water. He attributes Hansen's good results with salicylates of soda to the clear antecedents of arthritism in his patients. I may add here that Azevedo Lima and Havelburg of Brazil ascribe the efficacy of erysipelas serum as recommended by Impey, of South Africa, to the fact that many antecedents of lepers are cancerous. This commissioner, Dr. Roman, verifies Carrasquilla's observation as to the cure of leprosy by Carrasquilla serum. Six weeks he says are necessary to effect a cure, which I think you will find passing remarkable. From eight to twelve injections were found necessary. Lepromas disappear by resorption or suppuration, ulcers cicatrize, maculae pale, and eventually obliterate, sensibility reappears, appetite and sleep return, and the whole moral nature is manifestly improved.

Dr. Roman reports a cure effected by him of a boy 14 or 15 years old, after five injections. Two months after the last injection the ulcers had cicatrized, the lepromas had been reabsorbed, and sensibility was restored. He declares this case cured, although he made no bacteriological examination, and has not waited a reasonable time for a possible relapse. This patient was not isolated during treatment, nor is he to-day. He reports as cured a young lady whose face, neck, arms and hands are in such a condition as if they had never suffered of the disease. No bacteriological examination again, nor is there any other evidence of cure except the appearance.

The first patient treated by Carrasquilla, with his serum, was a woman who had lost eyebrows and lashes completely. She is reported cured, because she has them now, "beautiful, new and well furnished. The skin of her cheeks, where existed formerly voluminous lepromas, has been replaced by a fine and soft texture like the skin of a little girl, sensibility restored; there remains only a slight shadow over the left ciliary arch." No bacteriological examination.

Roman reports as cured another case, who after five injections left the hospital and returned in about six weeks with sensibility restored. The enormous ulcers were completely cicatrized; eyebrows were growing again; the facial lepromas had disappeared to such a degree that at the present day he walks freely about the street without molestation. However,

he needs his hat "to hide the only lepromas which remain on his forehead and which are on the road of rapid regression."

The looseness of the Colombian authorities in leper cases is again shown by the fact that this man (who formerly could make no use of his hands) is suffered to work with healthy people in Santa Barbara.

Another cure, "a really monstrous case," named Quiroga. The proof of that cure is that "people do not know this man to-day, he has improved so much."

Dr. Rojas, the Commissioner of the Government of Costa Rica, who was sent to Colombia to study the Carasquilla method, was given to experiment on the case of a "double" leper—that is, Arab elephantiasis from the trunk downward, with monstrous feet and legs, full of excrescences; from the middle of the body upward, Greek elephantiasis, sensibility absent from the whole body. After eight days' treatment with the serum, the results were found astonishing; sensibility reappeared, the lepromas of face and arms suppurated, some flattened, some lost color, the excrescences disappeared, the swelling in the feet vanished. Dr. Rojas, in consequence, claims that the serum is also efficacious in elephantiasis.

The weakest point in the reports from Colombia, as to the Carrasquilla serum, is that Carrasquilla himself recommends that, "in those cases which do not yield readily, the thermo-cautery shonld be used, and in those which result in abscesses, the same doses of serum should be given by the stomach." He says that the same reactions follow this method of administering the serum as by the hypodermic way.

In a recent letter from Dr. Alvarez, of Honolulu, I find that he has found no reactions either in man or in horse after the use of the serum. He had manufactured his own article. The criticism made all over the world of the Carrasquilla cure is that no bacillus being in the blood, and animals being refractory, no cure, theoretically, can result. However, Carrasquilla sticks to his point, and says he *has* effected cures. We shall see.

Clinical Reports.

RUPTURE OF ALVEOLAR ABSCESS INTO THE LARYNX—EDEMA OF THE GLOTTIS—LARYNGOTOMY UNDER DIFFICULTIES.

BY B. A. COLOMB, M. D, UNION P. O., LA.

P. M., white, male, age 25. Lower left wisdom tooth began aching on October 29, 1896. On 30th, was thoroughly wet by cold rain; jaw became very painful and began swelling rapidly. On 31st could not separate teeth more than a half inch. Inflammatory swelling and induration over left lower jaw extending to neck and under chin. Ordered poultices and morphia for pain. Was called at 2 A. M. on night of 31st on account of dyspnea. Respiration was quiet and noiseless, though patient could not lie down. He suddenly jumped out of bed and staggered into the next room where I was, clutching at his throat and evidently suffocating. He made no sound whatsoever, became cyanosed and in a few seconds he laid his apparently lifeless body on the bed. I doubled a pillow under his neck, and while my non-medical assistant steadied the head, quickly cut down to the crico-thyroid membrane, incised it and slipped in a tracheotomy tube. Respiration was gradually re-established by blowing into the tube. Considerable pus was coughed up and he seemed to be doing so well that I imprudently removed the tube in a few minutes. The crowing inspiration indicative of edema-glottidis came on at once, but the patient managed to get enough air and steam inhalations relieved him in a few hours. Poulticing was continued. The swelling gradually subsided. The patient recovered without further trouble. The operation was done by the light from a small coal oil lamp, with no instruments, except a scalpel. My chief assistant kept continually assuring me that he was certainly going to have a chill, while No. 2 suggested several times that the man was dead and we had better let him alone.

I report this case, that it may encourage some confrère to do likewise under similar circumstances, and thereby save a life.

Communications.

AUDI ALTERAM PARTEM.

Mr. Editor—In the February number of the NEW ORLEANS MEDICAL AND SURGICAL JOURNAL I published an article on "Cancer of the Breast," and in discussing the treatment said: "It would be frittering away valuable time, to attempt the cure of mammary carcinoma by injections of the sterilized toxins of the streptococcus of erysipelas. Treatment by caustics is unscientific, unjustifiable and barbarous. Upon the early and thorough use of the knife in well selected cases, the surgeon must rely." In your criticism you said, "We can not pass without comment the sweeping dogma in the author's unqualified condemnation of the erysipelo-streptococcus toxin treatment, and his vilification of caustics. The result obtained and recorded by Coley forever established the usefulness of the erysipelas treatment in selected inoperable cases. The wholesale employment of pastes of arsenic and chloride of zinc by the best cancer surgeons (Dan'l Lewis notably) and in the special hospitals should forbid their dismissal with a word."

It is clear, that my condemnation of erysipelas toxins was confined to operable cases, and did not include inoperable cases, as one would infer by reading your criticism.

As the subject has been opened, I will state my reasons for ignoring the sterilized toxins of the streptococcus of erysipelas in speaking of the treatment of inoperable cases.

I. The disappointing results obtained by this treatment by such honest, conscientious, persevering investigators as Professor Senn, of Chicago, and Professor McBurney, of New York, in those cases of malignant tumors considered by its advocates most amenable to treatment.

II. Doctor Coley says in one of his latest publications:* "My results in carcinoma, while far from ideal, are still such as to lend encouragement to the belief that we are working along the right lines, and that at no very distant day we shall attain in carcinoma some measure of the success that has already been

**The American Journal of Medical Sciences*, September, 1896.

achieved in sarcoma." In closing the article he states that he has found the antagonistic and specific influence of the toxin of erysipelas slight in most cases of carcinoma. Professor Dennis says the method is too immature and the technique too little understood to express an exact opinion as to its merits. Dennis says: "Coley himself has only advocated its use in inoperable sarcoma." Now, Mr. Editor, I fail to see how your statement that "The result obtained and recorded by Coley forever established the usefulness of the erysipelas treatment in selected inoperable cases" can be made to harmonize with Dr. Coley's, its most sanguine promoter, and Dr. Dennis' statements, as you must remember we are discussing the treatment of carcinoma and not sarcoma.

III. In Dennis' System of Surgery, Vol. IV, page 49, we find a report of cases of carcinoma, treated by Professor Czerny, of Heidelberg, by Coley's method with "very little effect."

IV. In Parks' Surgery, published only a few months ago, we find that no case of carcinoma has ever been reported as cured by this method.

V. In *The New York Medical Record*, October 17, 1896, we learn that this question was discussed in one of the New York medical societies and the "unanimous opinion was reached that this method of cure should no longer be held out to sufferers from cancerous diseases."

VI. A committee was appointed March 27, 1895, by the New York Surgical Society, composed of three of its most scientific members, Drs. L. A. Stimson, A. G. Gerster and B. F. Curtis, to report upon the use of erysipelas toxins in the treatment of malignant diseases. This report was published in the July number of the "*Annals of Surgery*, 1896," and is as follows: "Both before and since our appointment as a committee we have been able to observe, individually and together, a considerable number of cases treated by this means, and in no case have we found any amelioration which held out a prospect of ultimate cure. We have on the contrary observed in some cases that the rate of growth of the disease was much more rapid during the treatment. The treatment also imposes a very severe tax upon the strength of the patient and apparently hastens the cachexia in most cases. We believe that in the instances of apparent cure or marked improvement the correctness of the diagnosis is open to doubt. We therefore submit, (1) that the

danger to the patient from this treatment is great; (2) moreover, that the alleged successes are so few and doubtful in character that the most that can be fairly claimed for the treatment by toxins is that it may offer a very slight chance of amelioration; (3) that valuable time has often been lost in operable cases by postponing operation for the sake of giving the method of treatment a trial; (4) finally, and most important, that if the method is to be resorted to at all, it should be confined to the absolutely inoperable cases."

Let us examine into my "vilification of caustics," and see about "the wholesale employment of pastes of arsenic and chloride of zinc by the best of the cancer surgeons (Dan'l Lewis notably), and in the special hospitals, should forbid their dismissal with a word."

We are discussing the treatment of cancer of the breast, and not cancer located in any other portion of the body.

In Professor Agnew's Surgery, Vol. 3, page 713, I find he says, with reference to treatment of carcinoma of the breast by caustics, "The amount of suffering they occasion is inconceivable to any one who has not witnessed their use. Even were they free from the objection of causing atrocious pain, these agents possess no peculiar efficacy, which render their employment desirable in eradicating the morbid structures; indeed, in every sense, the knife more certainly follows extensions of the disease, and shortens immensely the time of recovery."

Investigating a little farther, I find W. Roger Williams, F. R. C. S., in his admirable monograph on diseases of the breast, page 368, saying, "As a curative means the treatment of mammary cancer by caustics is in every way inferior to the knife, it is a blind agency, the limits of whose action we can not precisely determine."

Professor Senn, in his Pathology and Surgical Treatment of Tumors, page 271, is very plain on this question: "Caustics should be used only when patients object to the use of the knife; and their use should be restricted to small carcinomata of the skin."

I could mention the names of a number of other surgeons taking the same positions; but, perhaps these are not "the best of cancer surgeons."

This is merely a matter of opinion or personal preference.

Very respectfully, L. L. Hill, M. D.

Society Proceedings.

NEW YORK MEDICO-SURGICAL SOCIETY MEETING, JANUARY 4, 1897.

Diastase in Therapeutics.

By C. C. Fite, M. D., New York.

Not until disastase was discovered could we understand why a seed after being placed in a moist soil began to develop into a plant after having lain dormant perhaps for years.

The sprouting of seed is a very interesting subject for scientific study—this awakening of the germ life, by the influence of heat and moisture, and the action of the diastase in converting the starch of the seed into maltose, which afterward becomes fibrous or cellular tissue.

Let us now leave the plant and refer to the important factor in the growth and development of animal life; the ptyalin of the saliva, a product in many respects analogous to diastase. Just as nature places diastase in the grain to produce the changes leading up to a higher growth, so she gives animals ptyalin to convert the starch and perhaps other foods into assimilable material for nourishment, for heat, and a reserve supply of fat. I use the words nourishment, heat, and fat, advisedly. The starch so converted is nourishment, and it is the basis of our caloric energy. Our supply of fat comes mainly from the starch changed into maltose by the ptyalin, supplemented by the pancreatic secretions, and it is changed into oil later on in the process. This oil is not only utilized for heat but stored in the tissues as a reserve supply.

It is well to bear in mind that few carnivorous animals take on a great degree of fat; grain eating animals do. Give swine all of the fat and oils they can eat, and they will not gain in weight half as quickly as when fed on grain alone.

The function of ptyalin is to convert starch into dextrin and maltose, this being the preliminary step, and goes on in the normal stomach for from thirty to forty minutes, after the close of an ordinary meal, when the acid peptic digestion stops the diastasic process. The duodenum holding the pancreatic

and other secretions takes up the partially changed starch and completes the conversion. We need not follow the process beyond this point.

It has long been observed that we do not get altogether satisfactory results in the treatment of amylaceous indigestion with pancreatic extracts. This is probably due to the fact that the amylopsin of the pancreatic juice and the other various duodenal enzymes are intended more for completing and finishing the changes already begun by ptyalin before the peptic digestion supervenes, and are not adapted for this preliminary conversion in the stomach. In other words, they are not suitable for beginning the conversion in the food mass as found in the stomach—acting we might say on the mass later when it is an acid body, during the time it is being changed from an acid to an alkaline reaction, instead of on the alkaline or neutral mass when it is being changed into an acid mass. We see, therefore, that while ptyalin and amylopsin are practically identical in their action on starches, nature intends them to act under different conditions and at different periods of the digestive process. Therefore, we should not give pancreatic extracts with the expectation that they would render desirable service in the stomach, but we should rely upon either increasing the supply of ptyalin by slowly masticating the food, or by giving a ferment having similar properties to ptyalin; this we have in diastase.

From the discovery of diastase in malt, until quite recently, many attempts have been made to produce it in an isolated form economically enough to be used freely in medicine, without having to give it in the form of the semi-solid malt extracts which have been the reliable form of it readily obtainable by the profession, as the liquid malt extracts do not contain an appreciable amount of diastase.* The disadvantage in its use in malt extracts is that we have to give a large bulk of the extract to get a very small quantity of diastase; then, too, the extract contains fermentable sugars and extractive matters which may not only be of no value, but may give rise to fermentation in the stomach or intestinal tract.

So far the only chemist who has succeeded in producing an

*See The *Boston Medical and Surgical Journal* for December 31, 1896, page 669.

isolated diastase economically and on a large scale is Jokichi Takamine, the Japanese chemist. (See the *London Lancet*, May 25, 1896.) This investigator received his scientific education at the Glasgow University. He devoted some years to the study of malting and the production of diastase and other ferments, and upon his return to Tokio was fortunate enough to find that eurotium oryzæ was what he desired. The process he finally perfected is in brief as follows: The seed of the eurotium is sown on moistened and sterilized wheat bran. The growth is rapid, and after the plant has reached maturity he calls the bran with the growth on it "Taka-Koji." Upon examining this growth under the microscope it is found that the roots of the eurotium which have penetrated the bran are covered with crystals of pure diastase. These diastase crystals have the property of converting the starch of the bran for the nourishment of the plant. Takamine named the diastase so produced, Taka-diastase. In preparing this diastase for use in medicine it is necessary to get rid of the spore. This is done by percolating the Taka-Koji with water, and adding to this solution of diastase, alcohol when the diastase is precipitated and the activity, of the spores destroyed. It is then a simple matter to further purify the diastase and preserve it in a dry powdered form indefinitely.

This diastase, owing I presume to it being an isolated substance, acts much quicker than the diastase found in malt extracts. It will convert 100 times its weight of starch in ten minutes under proper conditions; if the process is continued for three hours, 1500 times its weight. It is therefore evident that its amyloltic-converting power is quite marked, and the theoretical position that it would prove of value in the treatment of amylaceous indigestion has been verified by careful observers many times over.

Professor Leo, of Bonn, claims that this diastase exerts its action in a higher degree of acidity than was first claimed by those of us who had experimented with it, and that it is, therefore, superior to ptyalin in its starch-converting power. He has employed it with benefit in cases of deficient salivary secretion, as also in hyperacidity of the stomach.

Dr. W. S. Christopher, of Chicago (*Therapeutic Gazette*, March, 1896), holds that flatulence is due to micro-organisms

which attack unchanged starch and give rise to fermentation, and that it is therefore important in these cases to predigest the starch in the stomach, and the more complete this process, the less food there is for the micro-organisms to act upon in the duodenum. He finds that the administration of diastase in these cases gives satisfactory results.

Dr. R. W. Wilcox, of this city, has given very close attention to the therapeutics of this question, as shown by two papers he read some months ago. One before the N. Y. State Medical Society, January, 1896, and one before the N. Y. Academy of Medicine, February 18, 1896; both papers being published in the *Medical News*.

Other favorable clinical reports which have attracted my attention which may be mentioned here are—in the Journal of the American Medical Association for August 15, 1896, by Dr. T. H. Allen; in the *Medical Age* for July 25, 1896, by Dr. F. Spencer Halsey; and in the *Therapeutic Gazette* for September 15, 1896, by Dr. Wm. A. Walker.

In the practice of some friends, who have reported the matter to me for elucidation, this form of diastase seems to have other properties than its action on starch. In one notable case in which pepsin and other methods of treatment failed to give any benefit, although every symptom and test seemed to indicate that it was an undoubted case of albuminous indigestion, the result was not only palliative but curative. I have endeavored to have this matter settled by laboratory experiments, but so far the results have not been entirely conclusive, so any theory on this question for the present must be based mainly upon clinical evidence. This diastase does, as was shown by the experiments referred to, *disintegrate* albumins, but the proteolytic action *apparently* stops short of the production of albumoses and peptones. As to what takes place in the intestinal tract, of course we can not yet say. It is altogether probable that the benefit in these cases is due to the promptness with which the first period of digestion is carried on and the conversion, instead of the fermentation of the starchy foods, leaving the second process, the acid peptic digestion, to go on normally without being interfered with by deleterious products, and the partial disintegration above referred to doubtless promotes the activity of the gastric juice by giving it freer access to the particles of albumin.

We should always bear in mind that we have from thirty to forty minutes after the close of an ordinary meal in which the action of ptyalin or diastase will continue before the acidity of the stomach contents reaches the point at which such converting power is impaired or destroyed. The proper theory for the administration of diastase is that it supplements the ptyalin of the saliva, and the more thorough the preliminary digestion in the stomach the less work there is to be done in the duodenum. The formerly prevalent theory that pancreatic extract and diastase ought in some mysterious way to find their way through the stomach into the duodenum, and there begin their work is too absurd to be entertained (see Dr. Walker's article above referred to). I am indebted to Dr. Henry Dwight Chapin for information in this connection (*N. Y. Medical Journal*, September 16, 1893), the results of some elaborate experiments which he had made in the Post-Graduate Laboratory in 1893. The experiments were made with a product containing diastase; the stomach was washed out and after the subject had been properly fed the diastase was administered in certain cases and omitted in others. The report made to Dr. Chapin by the chemist in charge of the work was that when the stomach was emptied forty minutes after the administration, the percentage of food remaining in the stomach at this time averaged, when diastase was not given, 52.02 per cent.; with diastase, 29.2 per cent. This showed very conclusively the action of the diastase in the stomach. An analysis of the solid food remaining in the stomach showed that when diastase had not been administered 7.02 per cent. were undissolved; when it was given only 3.45 per cent.

Experiments with diastase have not up to this time been as satisfactorily conducted as those made with pepsin, for the reason that diastase is a sensitive body, and the value of any laboratory or test-tube experiments are apt to be contradictory, unless proper precautions are preserved as to the degree of heat used, and the various brands of starch found in the market vary in reaction and in their sensible properties. It is to be hoped that we will soon have definite tables in use for this work, so that all experiments being made by a uniform standard, the results can be more intelligently compared and studied.

DISCUSSION.

Dr. W. L. Stowell—I wish to express my pleasure at listening to this paper.

For the last five or six years I have been greatly interested in the various forms of indigestion and the remedies supposed to overcome them. Most of the diseases we are called upon to treat, if not due to direct infection, are due to some difficulty in the digestive tract. These difficulties are either fermentation from pathogenic organisms or deficiency of digestive ferments. Antiseptics, while they prevent the formation and development of germs, and so prevent indigestion to some extent, do not assist the digestion of food in a weak digestive tract. Therefore, we need to help the patient by first selecting suitable food, and secondly, by helping him to digest what food is taken in.

For a long time I have used the various malt extracts for their diastatic properties, some claiming them to have great diastatic power, and others not. As a matter of fact, the malt extracts go far toward increasing nutrition, if not nutritious in themselves. Unfortunately if large quantities of malt are given, indigestion arises from this cause. I find many patients rebel against malt; adults often objecting to the taste of it, to say nothing of the effect upon the stomach.

Another useful remedy for starch indigestion is Taka-diastase, as it is claimed to have the power of digesting over a thousand times it weight. Certainly a dose of two or three grains will very materially aid in converting the starch, and so minimizing the flatulence and indigestion, and the accompanying disagreeable symptoms.

For some time I did not obtain as good results as I have more recently, probably because I had not learned to distinguish between starch and proteid indigestion. Patients who complain of bloating and pressure an hour or two after meals, and who complain also of constipation most of the time, can as a rule be greatly helped by diastase alone. If this does not work well alone, it will do better when combined with salol or some similar antiseptic. The more I have used these remedies the better I have been pleased with them.

I have been interested in the great variety of symptoms exhibited by different individuals and different constitutions.

It requires much close questioning in the case of a child to determine what article of food is chiefly responsible for the indigestion. Diastase is just as good for the nervous individual with indigestion as for a person of phlegmatic temperament, with sluggish secretions and indigestion.

I recall an interesting case of vomiting during pregnancy. The patient suffered from inability to digest both proteids and starches, but particularly the latter. She suffered very greatly from the resulting distention, but this was overcome by the administration of Taka-diastase. After awhile the stomach rebelled, but then by washing the stomach it became possible to return to proteids. One or two patients have come to me from a distance suffering from an aggravated form of starch indigestion, and these have done exceedingly well upon diastase. One of them improved with diastase alone; the other did better when it was combined with salol. Our trouble with the digestive ferments is that we do not pay sufficient attention to the different forms of indigestion, usually preferring to depend chiefly upon a routine dose of rhubarb and soda.

Dr. William A. Walker—I desire to express my gratification at being present to-night and listening to this very interesting paper. We certainly owe Dr. Fite a good deal for having brought forward so clearly the scientific side of this subject. Most of us are not in a position to study the scientific side. Laboratory work should go hand in hand with our clinical work, but most physicians must depend upon the regular laboratory workers for such knowledge. It is the physician's province to put this knowledge into practice at the bedside.

In general practice we certainly meet with a large number of cases of dyspepsia. Americans have the reputation of being a dyspeptic race, and this is certainly true. It is not unusual for a business man to come to us complaining of an attack of indigestion, coming on—not in the morning, as a rule—but in the afternoon after the mid-day meal. They usually complain of heaviness, stupor and languor, and inability to concentrate attention on the work before them. In many of these cases the trouble is due to weariness after the morning's work, the taking of a hurried luncheon and the hasty return to work. Generally the articles of food for the mid-day meal are not well selected, but we can not get them to make a proper selection. What are

we to do for these people who complain of distention and bloating an hour or two after the meal? I have had the most satisfaction from the use of the Taka-diastase. One advantage is that it is tasteless. I prefer to give it in capsules, because if administered in the dry form, the patient usually complains of a dryness in the throat. The malt extracts have the disadvantage, as has been said by Dr. Stowell, that the patient very soon tires of them; they become disgusted with the sweet taste, and the bulkiness of the dose. This holds good, no matter in what vehicle the physician may direct that the malt extract be administered.

The question is often asked: What is the advantage of giving the diastase? It has been argued, principally on theoretical grounds, that the giving of an artificial digestive agent can not produce a cure, but that it simply does a certain amount of work which the stomach should perform. I think Dr. Fothergill spoke of this practice as "pauperizing the stomach." This may be true in long-standing cases, but it certainly does not apply to the more acute cases. Most of its good effect is produced by supplementing the digestive ferments of the stomach. I have found in certain cases that after washing out the stomach there would be left over from the previous day portions of the food. I have then given the diastase, and have found, on subsequent washings, that a good portion of the food had been digested. The cure is effected, I suppose, in this way. Most of the trouble in dyspepsia is probably due to the leaving over of some undigested food from one meal to another. The diastase prevents this.

Again, it is often very difficult to know how to feed children who have just been removed from the breast or the bottle. Mothers are not usually very particular about what the child takes at this period. Here we often find a furred tongue, a bloated stomach, constipation and an unhealthy child. If we can induce the mother to restrict the diet, and give some form of diastase, we are likely to restore the child to health. I have found it a good plan to soften zweiback with water—not milk—and then sprinkle a little Taka-diastase over it. Or, a little diastase can be stirred up with almost any of the ordinany morning foods, and given to the child without its knowledge.

Dr. George Tucker Harrison—This is a subject in which I have taken a great interest for some time. Like most clinical

observers, I often meet with these cases of indigestion, which in former times we erroneously looked upon as due to proteid instead of to amylaceous indigestion. I, therefore, hail with pleasure, as a great addition to our therapeutical resources, this new diastase—a substance which certainly appears to be worthy of extended and careful trial. The surgeon has of late been giving more attention to this subject, because he has learned that something more is necessary than to perform a brilliant laparotomy for appendicitis, or extra-uterine gestation, or what not. Doubtless patients have been lost from ignorance of the physiology of digestion.

Only two or three years ago I saw in consultation with a friend, who had performed a Cesarean section, a case in point. The patient was very nearly lost because of an enormous distention of the abdomen, due to the development of gas in the intestine. Fortunately, the distention was relieved by lavage of the stomach. But in many of these cases we must pay more attention to the physiology of digestion, in order to be able to choose a proper diet for them.

Since Dr. Fite called my attention to the new diastase, I have used it considerably, and have been much gratified with the results of my observations. In one case which comes to my mind—a lady of 55 years had taxed my therapeutic resources to the utmost. I had used, among other things, a preparation of nux vomica, pancreatin, and fel bovis inspissatum. This utterly failed. I began then the use of Taka-diastase, and the result was truly brilliant. The woman suffered from the usual symptoms of intestinal indigestion, flatulence, colicky pains after eating, mental depression, insomnia, etc. In other cases, I have met equally good success.

I was particularly interested in Dr. Walker's remarks on the use of diastase in infant feeding. These cases have perplexed me beyond measure. Probably there is not a practitioner present this evening who can not recall a number of cases in which he has felt that the child must starve to death because he was unable to feed it.

My friend Dr. Wilcox says that the trouble with these liquid malt extracts is that, owing to the quantity of alcohol they contain, and the development of acids consequent upon fermentation, the action of the diastase is inhibited.

Last summer I had a child who had to be artificially fed. I made use of the Walker-Gordon method of feeding with no success. I used sterilized milk and barley water with no benefit whatever, and a similar result followed the trial of all the usual preparations. The child was emaciated to skin and bones. I then resorted to milk with a superior quality of malt extract. I have never seen a child thrive as this one did. I believe it was entirely due to the action of what diastase was contained in the malt extract.

Dr. Henry Dwight Chapin—Unfortunately I was unable to get here in time to hear Dr. Fite's paper, but I am familiar with his views on this subject, particularly as regards infant feeding. The remarks of Dr. Harrison have interested me especially, for his clinical experience makes these observations carry much weight, although theoretically I can not understand how the results were obtained.

There are two well-known methods of acting on the casein of cow's milk for infants, viz.: (1) the mechanical; and (2) the physiological. The mechanical method consists in adding some diluent, such as barley water, or the old "flour ball." I think that, on the whole, we get better results by mechanical means than by peptonizing the milk. When the method of peptonizing milk was first brought out, most of us thought that the problem of infant feeding had been largely solved. I tried the method with much enthusiasm, yet I found that the simple peptonizing of milk did not, on the whole, give very good results. In some difficult cases it certainly does succeed, but this has not been the rule in my experience.

This has led me to go back to the old method of attenuating the milk by the addition of cereals. We all know that young infants can not digest starch, although they can digest some by means of the mouth secretions and the secretion of the intestinal mucous membrane. I made a series of experiments at the laboratory, and at the bedside regarding the action of diastase on barley. I think we succeeded in this way in getting the good effect of the attenuating qualities of the barley, and at the same time, in reducing to a minimum the bad effects of the starch. Clinically, this method gives good results in very many cases. The process is not a difficult one, and it is in itself a recommendation for the method, for in infant feeding it is highly

important that the rule for the preparation of the food shall not be complex. Even skilled nurses often make mistakes in the process of peptonizing milk. At times there may be trouble from a weakness in the ferment itself.

In many cases, by diluting fresh cow's milk with barley or wheat flour, after the starch has been treated with diastase, we shall get about as satisfactory results as from any other method of artificial feeding.

Dr. Morris Manges—My own experience strongly corroborates that of Dr. Walker as to the value of diastase in infant feeding. How it acts, I do not know, but I know that it does act. With children who do not thrive on breast milk, or substitutes for it, I can say that the addition of ten drops of maltine, or more recently the use of Taka-diastase, has given me uniformly good results. This is a simple clinical fact.

I believe the use of preparations of diastase has been of service in one way particularly—*i. e.*, in calling our attention to the importance of the saliva in digestion. We had almost lost sight of its value, notwithstanding the fact that it is secreted in such large quantities. We must admit that so far as experimental work has added to our knowledge, we are still much in the dark regarding this important fluid. Just to what substance in the saliva the action on the starch is due, aside from the ptyalin, we do not know. Certainly it is not the ptyalin alone. The experiments of Jawein, of Vienna, and of others, have shown that the ptyalin was lessened in certain acute infectious diseases, diabetes, renal and cardiac diseases; but strange to say, it was not at all lessened in tuberculosis. On the other hand, experiments by Friedenwald have shown that saliva can be boiled and the ptyalin thus killed, and yet the saliva will have a beneficial action in promoting starch digestion. It is evident, therefore, that other constituents besides ptyalin are at work.

Now, by giving Taka-diastase, can we really replace the saliva? That a ferment is, after all, not the original digestive fluid is a point which is very often lost sight of. Every single digestive juice shows us that there is something more than the ferment which is active. Just what important role is played by the carbonates, and by the nascent oxygen in the mouth is not yet known. This recalls to my mind an experience with a chemist in Berlin, who was working with very delicate test papers for

nascent oxygen. He found that if he used large quantities of saliva, by means of chewing gum, he obtained a most delicate reagent for nascent oxygen.

However, there are other factors to be considered. In the mouth there is a condition of fermentation going on, often leading to acidity. We must be sure of the condition of the mouth before resorting to the administration of ferments. To one who has not investigated this subject, the condition of the mouth is surprising. Dentists understand this matter better than physicians. Another important factor is the selection of the food. If we can accept the term, "amylaceous dyspepsia," it is rational: (1) to take care of the mouth; (2) to select proper food; (3) to insure the secretion of a large quantity of saliva by Nature's means—through mastication of the food, and (4) to resort to ferments. I would not resort to ferments before that, because the pernicious habit of "bolting" the food would then be rather encouraged. I think after all Fothergill was right in saying that these remedies are crutches—although certainly very valuable ones—and hence, that they should be used only as temporary agents. It would be well for all of us to repeat the old experiment of adding saliva to starch and then comparing this with the effect of adding diastase. I think we should hold the diastase preparations in reserve until other methods have failed. Alkalies ought to be associated with diastase, especially in cases of hyperacidity, in order to neutralize some of the excessive hydrochloric acid in the stomach to permit the continuation of the action of the ferment on the gastric contents.

Dr. William Henry Porter—I do not quite know why I consented to come here to-night and take part in this discussion, for I am afraid I am not in a position to discuss Taka-diastase—which I have no doubt is the best preparation of diastase yet produced—or even diastase as a therapeutic agent. The subject of indigestion, and of intestinal indigestion in particular, is one of the most interesting ones in medicine, to my mind, but I must confess that I have had very little experience with any of the diastasic ferments. If I wish to correct starch indigestion, I get rid of the starch first of all. In the adult it is a comparatively easy matter to get rid of the starch. In my own practice I rely very largely upon the proper regulation of the diet—a

proper regulation of the food as regards both quantity and quality. I think we must admit that the animal organism is capable of digesting a certain quantity of material if put up to the physiological par, and that if below this point, it is not able to digest such a quantity. In such a case, we must cut down the quantity to be digested. If we do this, we shall find that the indigestion will disappear. I believe that the statement that Fothergill makes, that it is wrong to use artificial ferments, is a wrong view; for, in my opinion, when an individual has fallen below physiological par, in the ability to produce ferments, there is also a deficiency, and that they never can digest enough food to keep the system up to par, and so repair the damage. By using these ferments we can aid the stomach so that a proper supply of nutritive pabulum is taken into the blood. By doing this we increase the ability of the digestive organs to manufacture ferments of their own. We can then materially cut down the artificial ferments used, and the individual will quickly return to the normal condition.

Dr. Fite closed the discussion. He said: I wish to thank you, gentlemen, for the interest you have shown in the subject presented in my paper. Dr. Manges alluded to the good work of Dr. Friedenwald, of Baltimore, with saliva. I have had the pleasure of discussing this matter with Dr. Friedenwald recently and I would say that he has been experimenting with Taka-diastase for the last few months. I think the results of his work will be found to be exceedingly interesting and important. Dr. Friedenwald is high authority in this line of work. So is Dr. Manges.

N. O. Medical and Surgical Journal.

Editorial Department.

Chas. Chassaignac, M. D. Isadore Dyer, M. D

IN RETROSPECT.

One year ago the present editorial staff assumed the management of the Journal. We have grown out of our uniform and adopted a new dress in the meantime, and have in many ways tried to attain a close proximity to the current advancement in medical literature. Editorially we have watched the needs of the community and of the profession, and have not hesitated to make our comment in passing.

In our own personalities we have strutted at our own reflection, and at times, perhaps, have felt the impulse of the responsibility which so important an organ as a medical periodical of our age has imposed upon us.

With this number we begin the second year of our management. At our first effort we promised to uphold the dignity of our office, and, moreover, that punctuality should be our motto. In the latter we rest easy, of the former we are too modest to be ourselves the judge. The Journal is in the prime of life, and our little efforts have made it grow one year older in fact, while we trust that the wisdom we have disseminated has grown apace.

Few of the rank and file of the great medical profession stop to think of the detail of the editor's office. When the freshly printed periodical drops on his desk, it is only the table of contents and a possible leading article of more or perhaps less merit which attracts the physician's attention. If he could only read between the lines, and see the confessions of a medical journal, in its passage from the embryo to the offspring of the printer's art. How scratched and scarred each page has been in the evolution. How often the weary brain of the editor, printer and the devil alike has been tormented in the struggle with obstinate copy, until every line has fallen into harmonious

place, and the cover hides with its bold announcement the periods of anxiety and of anticipation. The intervals of rest come as balm to the editor and his staff. The goad of the brevity of time and the infinity of art is laid aside for a nonce, and the audience is given a chance to say "well done."

We have in one year's time learned the true reason for editorial sympathies, and understand why it is seldom that rancor finds its way into the columns of the honest medical publication. But we have already perhaps disclosed too much of the mysterious sanctum, have allowed the machinery to go dry for lack of exercise, and digressions such as these are full of evil influence, as they only make us the less practical and the more wistful after impossible eventuations.

Some day editors will be born, or raised in lots to suit, and then apologectics will be useless, for their efforts will be according to rule, and therefore beyond comment.

We are not resigning our office, nor are we sorry for anything we may have said. We simply wished to remind our readers that it is just one year that we have been with them, and that the year has not been profitless. We have learned much, and we hope they have learned as well.

THE STATE MEDICAL SOCIETY.

The next annual meeting of the Louisiana State Medical Society is now only a little over two months off. It behooves us all to consider what we propose doing to assist in making it a success. Those whom the spirits move or who have the proper material should be getting their papers in shape. They must not wait for the last moment—something may keep them from devoting sufficient time to the work later on, and either the society would be disappointed by not having the proposed articles or the latter, by not being retouched, would not do the credit they should to their respective writers.

Members of committees should bestir themselves. Too often are chairmen away and their reports missing. This should not be. Appointment as chairman or member of a committee is an honor, but it entails a duty, and if that duty is ignored, the honor becomes an empty one.

We are aware that the committee of arrangements are planning

to obtain agreeable quarters and to make the members comfortable, but we would like to have more evidence that the chairmen of sections are working to obtain papers for their departments. We will gladly publish such notices as they wish to insert, although they should not wait until next month to put in their best work.

All the members should begin making their calculations, arranging their appointments, and collecting some necessary bills, in order to put themselves in the best position to attend this next meeting. The last few meetings have been very successful, and we must make the coming one still more so, if possible. Each man must put his shoulder to the wheel, and not let the others do the pushing. If every one could be made to think that the success of the meeting depends in great part upon his attendance and his efforts, we would have a rousing assemblage.

Remember that the society is practically a State institution. It must recommend each year some one to be appointed by the Governor on the State Board of Medical Examiners. This alone is an important and a serious matter.

Scientific progress, good fellowship, the proper observance of medical laws in the State can all be aided by a good meeting. We must have it.

THE PASTEUR MONUMENT FUND.

The profession of this city and State does not seem to have responded to any extent to the request for contributions toward the fund now being raised for the purpose of erecting a monument to the illustrious Pasteur in the city of Paris.

We realize that the demands of charity, notably for our drought sufferers, have been great and that other worthy objects have divided the attention of every one, yet we feel that no city, parish or State can afford to be unrepresented when the final summary of subscriptions is made up. Louisiana has sent pupils to Pasteur. She has profited directly or indirectly by the teaching he gave them and is benefited constantly by the advance in scientific medicine due to the lamented worker. Let her show that all is appreciated. Patient as well as doctor can

contribute through the JOURNAL. We shall take pleasure in having official receipts sent to those who may remit their mite through this office.

Medical News Items.

THE SHREVEPORT MEDICAL SOCIETY held its annual election of officers on February 3, 1897. Dr. D. H. Billiu was elected president; Dr. Randell Hunt, vice president; Dr. F. S. Furman, recording secretary; Dr. T. J. Allen, corresponding secretary; Dr. J. J. Scott, treasurer.

The installation of the above officers will take place at the regular meeting on March 2, 1897.

At a called meeting held on February 11, the following report on the death of Dr. Hartwell Allison was received and adopted:

Mr. President and Gentlemen of the Shreveport Medical Society:

Your committee appointed at your regular meeting held Tuesday, February 2, 1897, beg leave to report as follows:

In the death of Dr. Hartwell Allison, of Bayou La Chute, the medical profession of the parish of Caddo has sustained an almost irreparable loss.

The announcement of his death, which occurred on January 21, 1897, at his late residence, Campo Bello plantation, has carried deepest grief to the hearts of the many in North Louisiana to whom he was the loved physician, friend, and in its broadest sense, brother.

For almost the entire fifty years of his life Dr. Allison was a resident of our State.

An Alabamian by birth, at a tender age he became a Louisianian by adoption, of which the State may well be proud.

Scarce more than a lad when the conflict of the States occurred, he served during the last year of the war as a member of Company C, Eighth Louisiana Cavalry, and fought in defence of Louisiana soil at the battle of Mansfield.

For twenty-four years of his useful life Dr. Allison was a resident of Caddo parish, and the place he made in our midst as

a man, a citizen and a physician, is one that may not be filled by another.

At the time of his death, and for many years previous, Dr. Allison was a member of the State Medical Society.

During the period of its existence he was an honored member of the Caddo Parish Medical Society, and whereas that organization has ceased to exist, our own society deems it proper that we who know our deceased brother physician should give some expression of our high regard for him.

Therefore we, the committee appointed at the regular meeting of the Shreveport Medical Society on February 2, 1897, herewith submit the following resolutions:

Resolved, 1st, That Dr. Hartwell Allison exhibited in the highest sense the characteristics of the conscientious, Christian physician.

Resolved, 2d, That appreciating his worth, we deplore his loss to ourselves, to the profession and to the community.

Resolved, 3d, That we extend our heartfelt sympathy to his bereaved family, and to his patrons, who have sustained so great an affliction in his death.

Resolved, 4th, That a copy of these resolutions be spread upon the minutes of this society; that a copy of the same be tendered to the members of his family, and that the New Orleans Medical and Surgical Journal be requested to publish them.

(Signed) J. C. Egan, M. D.
T. J. Allen, M. D.
J. J. Scott, M. D.

The Laryngoscope, published in St. Louis, has been selected as the official organ, for the year 1897, of the Laryngological Section of the New York Academy of Medicine.

Dr. David Cerna has been appointed to take charge of the consulate of the United States of Mexico at the port of Galveston, Texas. Dr. Cerna is a member of the faculty at the Texas University Medical Department in Galveston, and we are pleased to notice this preferment.

The Southern Section of the American Laryngological, Rhinological and Otological Society will meet in this city

at the new St. Charles Hotel, on Wednesday, March 3, 1897. According to the programme we have received, the morning session will be at 10 o'clock, at which about a dozen papers are promised. The evening session will take place at 7, at which time Judge A. G. Bryce will deliver an address on "The Division of Labor and the Development of Specialism."

Members of the medical profession are cordially invited to attend the meetings.

THE TREASURY DEPARTMENT has issued the following regulations to prevent the introduction of the plague:

In view of the prevalence of the bubonic plague in India and China attention is called to the United States Quarantine Regulations, Treasury Department, 1894, to be observed at foreign ports, and particularly to Art. IV, par. 4, relating to cargo, and Art. V, par. 6, relating to passengers, crew and baggage.

Your attention is also called to Art. X, par. 4, United States Quarantine Regulations, to be observed at domestic ports, and to certificate therein required that all regulations have been complied with, and that the vessel, when granted free pratique, will not carry quarantine disease.

In addition to the above precautionary measures, the following regulations are hereby promulgated:

Quarantine Regulations to be Observed at Foreign Ports and at Sea.

Art. IX. At all foreign ports and places infected, or suspected of being infected, with plague, the United States Quarantine Regulations, Treasury Department, 1894, relating to cholera, shall be observed with regard to vessels and cargoes bound to the United States. Passengers and crews of said vessels who have been exposed to the infection, or liable to convey the disease, shall be detained a period of not less than fifteen days from the last possible exposure to infection, under the same regulations as those relating to cholera.

Quarantine Regulations to be Observed at Ports and on the Frontiers of the United States.

Art. XIII. The regulations heretofore promulgated with regard to cholera shall be observed with regard to vessels, cargo, passengers and crews infected, or suspected of being infected,

with plague, but persons who have been exposed to the infection, or liable to convey the disease, shall be detained for a period of not less than fifteen days from the last possible exposure to infection.

[The regulations above referred to are:

Art. IV, par. 4.—Articles of merchandise, personal effects, and bedding coming from a district known to be infected, or as to the origin of which no positive evidence can be obtained, and which the consular or medical officer has reason to believe are infected, should be subjected to disinfection prior to shipment by processes prescribed for articles according to their class.

Art. 5, par. 6.—Steerage passengers from districts not infected, shipping at an infected port, unless passed through without danger of infection and no communication allowed between passengers and the infected locality, should be treated as those in the last paragraph (which provides for detention, disinfection and isolation), etc.]

The Medical Department of Tulane University has a total of 361 matriculates for this session, a favorable showing for a year of bad financial conditions generally. Of the number, about 100 are expected to present themselves for final examination and graduation. The commencement exercises will take place on April 14, 1897.

The New Orleans Polyclinic have already matriculated about forty physicians, who are taking various post-graduate courses, although this is only the beginning of the second of the three terms making up the session of 1897.

The Charity Hospital of Louisiana Alumni Association will meet in this city on April 13 and 14. We hope to see a good contingent from the country parishes.

Abstracts, Extracts and Miscellany.

Department of Surgery.

In charge of Dr. F. W. Parham, assisted by Drs. E. D. Martin and F. Larue.

AIR-DISTENTION OF THE BLADDER IN SUPRAPUBIC CYSTOTOMY.

F. Tilden Brown, in the *Annals of Surgery* for February, advocates in a forcible article the use of air instead of water for facilitating the extra-peritoneal incision of the bladder. Some three years ago he addressed the surgeons of New York City to learn their method of doing the suprapubic operation, and tabulated their answers as follows:

1. The number inclined to operate without any artificial aid..... 3
2. The number employing Trendelenburg's position only..... 1
3. The number who never employ Trendelenburg's position, but use some other aids..... 4
4. The number who employ Trendelenburg's position or some modification and some other artificial aids..... 12
5. The number who never use Petersen's rectal bag, but do resort to some other aid..... 10
6. The number who use Petersen's bag with fluid distention of the bladder..... 14
7. The number who use water rather than air for vesical distention, with or without other artificial aids..... 23
8. The number using only air-distention of the bladder..... 3

It appears from this table that very few surgeons operate without *some* artificial aid, the vast majority, at least in the city of New York, resorting to some means for elevating the vesical reflection of the peritoneum, and thus increasing the area of prevesical space.

Tilden Brown, after further experimentation and a thorough consideration of the whole subject, now argues that the "effective but cumbersome and not wholly safe method of Petersen, which has served its purpose, and served it well, should be retired in favor of simple air."

The method was first systematically proposed by A. T. Bristow, in June, 1893, and first applied by Keen to the investigation of rupture of the bladder one month later. In his paper Bristow showed conclusively that in the cadaver the peritoneal reflection could be lifted from one to two inches higher by using air alone than by rectal bag and water-distention combined.

The arguments he urged were in substance these: (1) That water is absolutely non-compressible, while air is extremely elastic and very compressible, and, therefore, much less liable to produce rupture; (2) that water is heavy, tending to depress the bladder, while air is light and tends to raise as well as to distend. Water seeks the lowest level and at first drags down the bladder, the distention continuing, the bladder rises; with air distention it begins to rise at once, since the air seeks the highest point. The bladder being first elevated by rectal distention, water distention becomes much more efficient, but with air this elevation is well accomplished without the rectal distention. This is an advantage, as we know that the rectal bag has actually produced rupture of the bowel.

A further advantage of air is that the soiling of the wound is much less than when the bladder is full of water. This is certainly a great desideratum in such rare cases as those of Richardson, of Boston, where the peritoneal reflection was down in the cavum Retzii, and necessitated the opening of the peritoneal cavity, in order to reach the bladder. When the bladder is opened, the contained air at once escapes into the atmosphere; whereas water rushes out and fills the whole abdominal wound.

To sum up, then: If air is even *equally* as efficient as water in enlarging the physical space, then its advantages urge us to use it; the argument gains much additional strength from the demonstration that air does the work much *better* than water.

A further argument might be found in the convenience of air, being always present. It simply needs an apparatus for throwing it into the bladder. By the Peterson method, a rectal bag, a syringe and water are needed; by the Bristow or air-plan, only a syringe, or in a push, the lungs of the operator.

A Davidson syringe will answer the purpose, as the present writer has demonstrated in the cadaver, and he has seen Dawbarn distend the bladder quite easily by blowing in the air from the lungs. Dr. Brown has devised a cylinder filled with

sterilized cotton to be connected with an ordinary bicycle pump. This meets the objection of throwing in air that may be contaminated. Keen's plan was to place sterile cotton over the sucking end of a Davidson syringe. But, in the opinion of the present writer, this precaution is quite unnecessary, for several reasons: First, that we all, every day in our operations, disregard the atmosphere as a source of wound infection since were uttered the famous words, "Fort mit dem Spray;" second, that the bladder in most cases is already infected; third, that the injected air will at once escape in the opening of the bladder; and fourth, that even where we use water the wound will become contaminated, if that be possible from the atmosphere, as soon as the suprapubic opening is made.

We have just operated on an old man of 84 years of age, from whom we successfully and expeditiously removed by the suprapubic route, under air distention alone, a phosphatic stone weighing 1050 grains. In this case we used a simple soft rubber bulb with a metal valve at one end, and connected by a tube with a Nélaton catheter in the bladder (Politzer bag). The apparatus was simple, but more efficient than the ordinary Davidson syringe, constructed, as it is, for the purpose of injecting air into the Eustachian tube.

Dr. Brown has done the profession a distinct service by again directing its attention to this method, for any one can easily convince himself of its advantages by experiment on the cadaver if he be unwilling first to do it on the living. In rupture of the bladder, moreover, nothing could be simpler and safer, and we are glad to commend the method to our readers.

Book Reviews and Notices.

Over the Hookah, the Tales of a Talkative Doctor. By G. Frank Lydston, M. D., Professor of Genito-Urinary Surgery in the Chicago College of Physicians and Surgeons, Professor of Criminal Anthropology in the Kent College of Law, etc. The Fred. Klein Publishing Company, Chicago, 1896.

Dr. Lydston has written some six hundred interesting pages. One finds a little of everything in his book, from jokes and

dialect stories to deep philosophy. The jokes are of all types, some new, some old, some a little far-fetched, but all amusing, which is not always the case with jokes. The dialect stories are, perhaps, the weak points of the book; the subject matter is usually good, some of them are full of feeling, but the doctor does not always catch the "vernacular," particularly when he makes the Southern negroes talk; there may be some darkies who speak as the doctor makes them, but it is not the "nigger" in the South.

Early in the book good advice is given to young practitioners about wives and the kind to select. The description of "various kinds of doctors" is true to life, amusing, and contains hits at some of the fads and fakes of the day. One of the best chapters is "The Rhodomontade of a Sociable Skull," a series of conversations between a doctor and a skull on his mantel, the latter doing the honors and reviewing all sorts of subjects in and out of the professional line, which turn out to have all come out of the doctor's brain from the effects of hasheesh.

We regret Dr. Lydston says "from whence" and persists in spelling a certain science, "opthalmology," but we can assure our readers that his book is entertaining. C. C.

Twentieth Century Practice, an International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by Thos. L. Stetson, M. D., New York. In twenty volumes. Volume VII, Diseases of the Respiratory Organs and Blood, and Functional Sexual Disorders. Wm. Wood & Co., New York, 1896.

This is the eighth volume issued, number eight having preceded it, being ready earlier. It contains chapters on diseases of the pleura, on asthma, hay fever, diseases of the mediastinum, of the diaphragm, of the blood; on rachitis, disorders of menstruation, functional disorders of the male sexual organs, and on chemical and microscopical examinations of the urine. They are all comprehensive and systematic. We regret that Dr. Whitney, in his able article on the pleura, speaking of resection of the rib with thoracotomy, does not mention that this procedure was originated by Dr. Warren Stone, of New Orleans.

The chapter on disorders of the male sexual organs, by Dr.

Chas. W. Allen, is well written and practical. The distinction, so often misunderstood, between impotence and sterility is clearly drawn at the beginning of the article, yet a little later we find this unfortunate expression: "stricture may so impede the course of the semen at the time of ejaculation that it constitutes a cause of impotence." In this instance *sterility* would be the word; stricture *can* cause impotence, but in a different manner.

As a whole the volume is creditable and makes a useful addition to the encyclopedia. C. C.

Report of the Quarantine Inspector of the Port of Biloxi. By H. H. Haralson, M. D., 1896.

This is a report to the State Board of Health of Mississippi, going to show the necessity for the establishment of a quarantine at Cat Island, by the State, to prevent the introduction of infectious diseases, chiefly yellow fever, by way of Biloxi into Mississippi. It points out the dangers of the present United States Marine Hospital quarantine at Ship Island, and urges a removal to Chandeleur Island or other safer point. Its points seem well taken, and the pamphlet can prove interesting reading to all believers in States' rights, and in the opinion that communities are justified in protecting themselves independently of the general government. C. C.

The Physician's Vest-Pocket Formula Book. McKesson & Robbins, 1897.

It contains a table of weights and measures, antidotes to poisons and various tables of reference, which should prove valuable to the physician in cases were attention to dietary is necessary. The book also contains notes on some of the new pharmaceutical preparations, and a complete list of formulæ of the McK. & R. Gelatine Coated Pills. A copy will be sent free of charge to any of our readers on application to McKesson & Robbins, 91 Fulton street, New York.

A Treatise on Appendicitis. By John B. Deaver, M. D. Philadelphia: P. Blakiston, Son & Co.

This is a work of value, though, of course, somewhat disap-

pointing, since so little of the author's personal experience in five hundred cases, which he states is the basis of the work, is here given the expectant reader.

We can not review this work at length as it deserves, but we feel sure that the candid reader will find much to commend, although much ground for severe criticism might be discovered. A man making a diligent study of appendicitis can not afford to be without this work, since the writer is regarded as one of the foremost of American surgeons and enjoys most abundant opportunities for clinical work, and the volume furnishes his views if not his actual experience. We bespeak for the work a more kindly consideration than some of the harsh criticisms of the reviewers would invite. PARHAM.

Hare's Practical Diagnosis. The Use of Symptoms in the Diagnosis of Disease. By Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. In one octavo volume of 566 pages, with 191 engravings and 13 full-page colored plates. Lea Bros. & Co., Philadelphia and New York, 1896.

The purpose of the book is to discuss the symptoms which are used to make a diagnosis. Their application to determine the character of the disease comes afterward. Thus the plan of the work is seen to be different from the average treatise on medical diagnosis.

The division of the work is really in three parts: General diagnostic considerations, the manifestation of disease in organs, and the manifestation of disease by symptoms.

The author has labored faithfully, and has done as well as it is possible in some 500 pages, to give a clear and practical explanation of the significance of various symptoms. While we can not admit with the author that "in this book the discovery of any marked symptom will lead directly to the diagnosis," we believe that the volume will prove one of convenient and useful reference.

The engravings are nearly all borrowed and ordinary in finish, while the colored plates are only fair. C. C.

A Manual of Anatomy. By Irving S. Haynes, Ph. B., M. D. In one volume, with 134 half-tone illustrations. W. B. Sanders, Philadelphia, 1896.

Author and publisher are both to be complimented upon this volume. It is convenient, neat and attractive. The illustrations are nearly all new from photographs of Dr. Haynes' own dissections.

The author has avoided surgical references, but has used his experience as a teacher of anatomy in making his descriptions comprehensive and comprehensible. Facts in anatomy can scarcely be new, but they are presented in a new and acceptable manner.

The index is a feature of the work. It is complete and handy, taking up thirty double columned pages of small type.

C. C.

PUBLICATIONS RECEIVED.

High Altitudes for Consumptives. By A. Edgar Tussey, M. D P. Blakiston, Son & Co., Philadelphia, publishers, 1896.

Twentieth Century Practice of Medicine (Vol. X), edited by Thomas D. Stedman, M. D. William Wood & Co., New York, publishers, 1897.

Diseases of Infancy and Childhood. By L. Emmett Holt, A. M., M. D. D. Appleton & Co., New York, publishers, 1897.

American System of Practical Medicine, edited by Alfred L. Loomis, M. D., LL. D., and William G. Thompson, M. D. (Vol. I). Lea Bros. & Co., New York and Philadelphia, publishers, 1897.

Transactions of the American Otological Society, 29th Annual Meeting, 1896.

Transactions of the Medical and Chirurgical Faculty of the State of Maryland, 98th Annual Session, 1896.

Transactions of the American Ophthalmological Society, 32d Annual Meeting, 1896.

Reprints.

Reviews of Some Points of Interest in Abdominal Cases.—Interesting Points in Surgery During Six Months Ending June 1, 1895, by Edmond J. A. Rogers, M. D., C. M.

New Method of Performing Intestinal Anastomosis, by J. A. Bodine, M. D.

The Therapeutic Value of Hydrobromate of Scopolamine in Plastic Iritis.—A Brief Note Upon a Perfected Series of Test Words, by Chas. A. Oliver, A. M., M. D.

Gonorrhea, Its Ravages and Its Prophylactics, by Albert H. Barr, Ph. B., M. D.

Vingt Cas de Fractures de la Clavicule Traités par le Massage, by Dr. Dagron.

Le Role de la Graisse dans les Hernies, by Dr. Just. Lucas-Championnière.

Remarks on the Management of Glaucoma, by Leartus Connor, A. M., M. D.

Gonorrheal Iritis and Non-Suppurative Gonorrheal Conjunctivitis, by Wm. Cheatham, M. D.

Anterior Soft Hypertrophies of the Nasal Septum.—Solutions Dobell.—Colono-Enteric Irrigation in Intestinal Obstruction, by Edwin Pynchon, M. D.

Treatment of Stricture, Granulated Urethritis and Prostatis, by G. W. Overall, M. D.

Notes on Newer Remedies in Diseases of the Skin, by L. Duncan Bulkley, A. M., M. D.

Actinomycosis, by Parker Syms, M. D.

Value of the Pulmonic Second Sound.—Three Cases of Phthisis Pulmonalis Following Scald of the Chest.—Study of Cicatrices with Reference to Right and Left-Handedness, by J. N. Hall, M. D.

Surgical Clinic at St. Mary's Hospital, September 23, 1896, by H. O. Walker, M. D.

Intoxication and Insanity.—Insanity in the South.—Athletics, by J. T. Searcy, M. D.

Résultats de l'Examen Histologique de 64 Végétations Adénoïdes, by Dr. Brindel.

Empyème du Sinus Maxillaire chez les Enfants, by Dr. E. J, Moure.

Can Physicians Accept Commissions from Orthopedic Instrument Makers? by H. Aug. Wilson, A. M., M. D.

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Bulletin of the Board of Health of the State of Louisiana.)

FOR JANUARY, 1897.

CAUSE.	*White*	*Colored*	*Total*
Fever, Malarial (unclassified)	3	5	8
" Intermittent			
" Remittent	2		2
" Congestive	1	1	2
" Typho	2	1	3
" Typhoid or Enteric	7	3	10
" Puerperal	2		2
Influenza	14	5	19
Measles			
Diphtheria	5		5
Whooping Cough			
Meningitis		1	1
Pneumonia	50	36	86
Bronchitis	12	11	23
Consumption	49	32	81
Cancer	8	6	14
Congestion of Brain	5	1	6
Bright's Disease (Nephritis)	31	14	45
Diarrhea (Enteritis)	16	4	20
Gastro-Enteritis	1	1	2
Dysentery	1	2	3
Peritonitis			
Debility, General	2		2
" Senile	23	11	34
" Infantile	4	2	6
Suicide	5	1	6
Heart Disease	23	17	40
Apoplexy	10	9	19
Tetanus, Idiopathic	3		3
" Traumatic	8	10	18
Trismus Nascentium			
Hepatitis	4		4
Hepatic Cirrhosis	4	2	6
Uremia	1	1	2
Injuries	14	15	29
All Other Causes	105	47	152
TOTAL	415	238	653

Still-born Children—White, 26; colored, 22; total, 48.

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

Death Rate per 1000 per annum for month—White, 23.54; colored, 35.70; total, 28.49.

METEOROLOGICAL SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure 30.21

Mean temperature 51.00

Total precipitation ..... 1.92 inches

Prevailing direction of wind, northeast.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XLIX. APRIL, 1897. No. 10.

Original Articles.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the 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.]

SIXTEEN YEARS' EXPERIENCE IN THE TREATMENT OF SYPHILIS BY THE HYPODERMIC INJECTION OF BICHLORIDE OF MERCURY.*

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

The treatment of syphilis hypodermically is by no means new, nor is it endorsed by many of our leading syphilographers; yet it unquestionably possesses many advantages over other methods when used by men bold enough to disregard the dosage recommended by most writers on therapeutics. The only test in giving medicines is the effect, and the dose should be increased until that is obtained.

In 1868, Scarenzo and Ricordi were awarded at Brussels a gold medal for their joint paper on the subcutaneous injection of mercury in the treatment of syphilis. They used the insoluble mild chloride, which produces abscesses almost invariably and is not altogether free from danger. In spite of these drawbacks this new treatment at once commended itself to physician and patient alike mainly on account of the rapidity and certainty of the action of mercury in curing a disease heretofore so tedious and intractable.

The *Archives of Syphilis and Dermatology* of 1870 are especially rich in papers on the subcutaneous treatment of syphilis.

*Read before the Orleans Parish Medical Society.

About this time Lewin published his very able and convincing monograph on the subcutaneous use of the bichloride.

His work was a most exhaustive one, and is filled with the minutest details, giving the pros and cons with absolute impartiality. This work, on account of the author's position in Berlin, at once brought the method into great prominence in Germany and France.

England and the United States did not so quickly appreciate the method.

Lewin gives three strengths for the aqueous solution, three grains to one ounce, four grains to one ounce and six grains to one ounce. The first he seldom used on the ground of its being too weak, and the third he never used except in very urgent and severe cases; hence four grains to one ounce is the solution recommended by Lewin ordinarily. He claims to have cured some cases by the administration of only half a grain of the bichloride, while he found others required five grains. He cites one case, to whom he gave five additional grains, after having previously given five and a half grains in the preceding seventy-five days.

In 1869, Dr. Oscar Van Mous, of Pachéco, reported to the Royal Society of Medicine and Natural Sciences of Brussels, five cases of secondary syphilis which he claimed to have cured in three weeks time by the administration of three injections only. This is well-nigh incredible.

Diday reported to the Lyons Medical Society twelve very obstinate cases, which had resisted all other treatment, but which yielded very promptly to the subcutaneous injection of one thirty-second of a grain administered two or three times a day as recommended by Liégeois and many other writers of that time—1868 to 1872. They could not get away from the three times a day method, as rife then as now. No notice is taken of the time from 6 P. M. to 6 A. M. by routine medicos.

Dr. McEwen, in the *Glasgow Medical Journal* of February, 1870, writes very enthusiastically of one case he had cured rapidly.

In 1871, Professor Sigmund, of Vienna, who, before this, had been the champion of the inunction method, reported over 200 cases treated after Lewin's method—four grains to one ounce. He reported two abscesses, but denied their causation by the

bichloride. He claims never to have seen any circulatory or respiratory disturbances; nor did he see any cases of stomatitis or ptyalism except in patients who had neglected their mouths.

He usually gave each patient thirty grains at intervals of one or two days. But few of his patients complained of pain. He disapproved of the addition of morphia.

Dr. R. W. Taylor is quoted in the *Transactions of the N. Y. Dermatological Society* of 1872 as recommending this method very highly. He claims the administration of one-eighth of a grain every other day will cure the average case in two months. He, however, states that relapses are as frequent and severe as in cases treated by other methods.

According to Dr. Taylor the great advantages of this method are: small amount of mercury needed; rapidity of action; absence of systemic action.

In the *London Lancet* of July 20, 1872, Dr. Staub has a very interesting article on the subcutaneous injection of an ammoniochloro-albuminous solution of mercury, made after the formula laid down by Gubler and Mialhe, which is as follows:

℞ Hydrarg. Bichlorid. } ..... aa ℈i.
Ammon. Chlorid. }
Natrii Chlorid. ..... gr. lxii.
Aquæ destillæ ..... gr. xx.

Mix and filter. Add white of one egg dissolved in distilled water, ℥ ivss. Sig. 20 minims subcutaneously.

This is the equivalent of one-sixth grain of bichloride. This is a most excellent formula. Dr. Staub's results were so gratifying as to lead him to discard all other methods of treatment.

The albuminate peptonate and formamide of mercury have also been used by some, but they possess no advantage and some disadvantages over the bichloride.

Dr. W. Hale White, physician to Guy's Hospital, contributed to the London *Lancet* in 1891 a highly interesting paper, based upon ten cases, on the use of the bichloride injection, especially in syphilis of the nervous system.

It is well known that, in this class of patients, mercurialization must be quickly accomplished, else irreparable injury may occur. Calomel vapor baths and inunction are both very valuable here, but they are neither as quick nor as accurate as the subcutaneous method. Dr. White recommends a grain to the

drachm solution, of which he injects eight minims every evening, combined with an eighth of a grain of morphia.

His ten reported cases include one death—not due to the treatment. The most interesting cases reported are those of hemiplegia, paraplegia, ptosis, blindness (due to septic neuritis), and absolute deafness; all of whom recovered very speedily.

Dr. White's assistants in Guy's Hospital had direct charge of the cases and commend the treatment highly.

Dr. Guido Bacelli, in the *Medical Record* of April 21, 1894, claims brilliant results from the intravenous injection of bichloride.

Dr. J. Wm. White, of Philadelphia, contributed in May and June, 1893, two articles to the *University Medical Magazine* mainly on the adverse aspects of this subject. He has ransacked Europe and America to find objectors to this method, which, he says, possesses no advantages but many disadvantages. He has found quite a formidable number of well-known men who do not use it, among them being Kaposi, Newmann, Fournier and Hutchinson. He says that patients flock from the Du Midi and Lourcine hospitals, in Paris, where the subcutaneous method is exclusively used, and to the St. Louis Hospital, where it is never used. Yet he is compelled to admit that he resorts to the hypodermic method in many cases, notably those wherein an immediate diagnosis is needed and in those of great and imminent gravity.

The versatile editor, in the *Medical Record* of July 8, 1893, concludes a review of these excellent articles from a different standpoint by saying that he supposes they will effectually put a quietus on the *fad* of the subcutaneous injections of the bichloride. How often has the *fad* of vaccination been dealt death blows only to reflect with greater lustre Jenner's name with each recurring decade? Koch's great name could not keep his tuberculin from a premature grave, nor could Brown-Séquard long foist his Elixir of Life upon the world.

"By their deeds shall ye know them," might be written of medicines as well as of men. Well might hypocrites exclaim: "Facts are far superior to reasoning!" Not all the Shradys, Kaposis and Whites in the world can dispose of a treatment that stands upon the foundation of twenty-eight years of experience of physicians of undoubted ability, honesty and judgment.

Having thus briefly sketched this treatment as pursued by others from 1868 to the present date, I will report seven cases, taken at random, from my case book.

CASE I.—E. W., German brewer, aged 29, well-marked secondary eruption covering entire body and complaining of rheumatism, which his business greatly aggravated. Anemia, icterus and anorexia pronounced. I at once, January 26, 1880, ordered an aqueous solution of the bichloride of one grain to the drachm, and injected with a stout steel needle fifteen minims just under the skin below the deltoid of the left arm. This was repeated on alternate days, increasing the dose minim by minim up to twenty-one minims, until February 25, on which date he received his tenth and last injection. He was then discharged, after a treatment lasting twenty-nine days, free from rheumatism, eruption and every tinge of icterus, with a ravenous appetite and with a net gain in weight of nine pounds. He never lost an hour's time in his business, which kept his feet and clothes constantly damp. He never at any time complained of pain. This being my first case, I kept him under my surveillance, seeing him once a month, for two years, at the expiration of which time he married. Four healthy children attest the permanency of the cure.

CASE II.—On November 19, 1884, Wm. C, aged 18, suffering from secondary syphilis, and literally covered with a multiform syphilide, presented himself. He was first ordered potassium iodide in 15-grain doses three times daily, but having taken eight doses without any visible effect, the remedy was discontinued, and the solution of bichloride—eight grains to the ounce—was ordered. I would state that this has been the strength of the solution used by me in all cases treated, hence hereafter the strength of the solution will not be mentioned. On November 26, six minims were injected; November 27, eight minims. On November 28 the eruption had markedly diminished, and the boy's appetite, which had been heretofore very poor, had become voracious. The wonderful tonic effect of the mercuric chloride administered thus can not be too strongly dwelt upon.

You will perceive the rapidity of the results and the infinitely small amount of the mercuric salt used when you reflect that these phenomena were observed within forty-eight hours, and

the total amount of the bichloride administered was less than one-fifth of a grain—eleven minims. From now on the injections, gradually increased to fifteen minims (¼ grain), were administered three times a week until he had received ten in all. On December 29, as the patient was suffering from follicular pharyngitis, he was ordered eight doses of 22½ grains each of iodide of potash, to be taken well diluted. He was then discharged cured, and so remained one year, when I lost sight of him.

Case III.—On December 7, 1894, Thomas C., Italian, aged 15, suffering from secondary syphilis, consulted me. He was ordered iodide of potash in 10-grain doses, but after the fourth dose the stomach revolted, and the remedy was discontinued. On December 8, eight minims were administered and ten minims on the 13th. He then refused to take further treatment, alleging the pain to be intolerable.

Within the past three years I have been called on to treat his two children for hereditary syphilis, one of whom died of cerebral syphilis.

Case IV.—O. R., aged 28, of magnificent physique, presented himself at my office in Kansas City, suffering from secondary syphilis of three months' duration. This case illustrates the value of the hypodermic method better than any I have ever treated. This man was never sober, and was an incessant smoker and chewer. He never cleaned his teeth, and at times he would not taste food for several days together. His habits made his attendance very irregular, and as mercury and alcohol do not go together his recovery was slow and the number of injections had to be increased to nineteen, the largest number ever attained in any case treated by me. I found it necessary to give this large number of injections to thoroughly combat the disease. His tobacco habit aided me somewhat by causing large crops of mucous patches to cover his buccal, lingual and labial surfaces. His mouth being on these occasions badly handicapped for drinking, smoking, chewing, or even his favorite pastime, swearing, he would seek my advice from necessity. I never had any difficulty in curing the patches; one, or at most two applications of the solid nitrate of silver always effected a cure. You will perceive from the foregoing that this man's mouth was too much occupied for medicine-taking and his

stomach too full of whiskey for the proper absorption of medicines.

On November 30, 1887, he received his first injection of fifteen minims, and on March 21, 1888, his last one of twenty minims, the dose having been speedily increased to that amount on account of the nature of the case. This man required three months and three-fourths before he was cured. I kept this case under observation two years, and I am satisfied his recovery was complete. I would remark, in passing, that during these three and three-quarter months, my treatment was somewhat interfered with by an intercurrent urethritis, a case of chancroids, with suppurating buboes, an attack of epididymitis and an old stricture, which I cured.

CASES V AND VI.—In January, 1888, two cases of tertiary syphilis of long standing, ten, and twelve years respectively, came under my care; ten injections of twenty minims each were administered to each. Both of these men were wealthy. Both had taken medicines of all kind, *ad nauseam*. Both had taken long treatments at Hot Springs, and both had abandoned all hopes of ultimate recovery. One of these patients was a physician, and he told me that he and his friend came to me on account of the wonderful results obtained by my treatment in the case of O. R. Both cases were promptly cured and one of them married six months afterward, and I had the pleasure of delivering his wife in due time of a healthy full-term boy.

CASE VII.—In February, 1894, T. C., night watchman, aged 28, suffering from a most pronounced form of secondary syphilis, consulted me after he had spent all his loose change elsewhere. He had been under the care of two reputable physicians, one or two pharmacists, and had, on the side, so to speak, been a liberal patron of such remedies as S. S. S.; but, not finding anything Swift enough—as he wished to get married—he came to me. My servant answered the bell, and she—being versed in the Scriptures—exclaimed, when she saw me: "Doctor, go in the office and you will see Lazarus, come to life!" His face, arms, chest and body were covered with many kinds of syphilides, with now and then a pustular syphilide three inches in diameter—I measured several—and one a fourth of an inch in height. These monsters stood out in *basso relievo*, so to speak, and added picturesqueness, if not beauty, to his face. Between his thighs

and on his genitalia the massive condylomata abounded. "Truly," I said, "this is Lazarus *redivivus*."

His mouth, not to be outdone, had a very liberal allowance of mucous patches, and he told me, sadly and sorrowfully, that the beastly sore mouth had kept him on a mush and milk diet for a number of days. And yet, this man wanted to marry; and, stranger still, a fair young girl was not only willing, but anxious, to contract matrimony, and mayhap more, with him.

He told me frankly his wedding was only three months off, and could, under no circumstances be postponed. It is needless to say that I endeavored to show him the folly and danger of such "marrying in haste and repenting at leisure," and it is needless to state that my arguments were useless; for when love invades the heart, brains forsake the head. I commenced the treatment of this case by injecting 25 minims for four consecutive days. After that 30 minims were given at intervals of three days until ten injections, containing 4⅔ grains of the mercuric chloride, were taken.

At the expiration of forty-eight hours a marvelous change was clearly perceptible; the eruption had decreased greatly and the pustular syphilides were becoming loose at their bases. In five days all these large scabs fell off, leaving a large red base, which in time gradually faded away. This patient was so delighted with the rapidity with which all outward, visible signs of an inward, invisible disease disappeared that he actually hastened his wedding and was married forty-two days after the inception of his treatment. A child at full time has been born to this rashly importunate suitor, and it gives no evidence of being otherwise than perfectly healthy.

I had forgotten to mention that serum-therapy had been tried in syphilis as in everything else. Lewin's twelve cases in the Charité settled, in my opinion, this treatment, but it taught us how to produce urticaria at will.

Let us now weigh the objections and the advantages of the treatment by subcutaneous injections.

The objections raised against the method are:

(1) Unnecessary pain; (2) Subcutaneous infiltration; (3) Large indurated and painful swelling; (4) Inflammation; (5) Abscesses; (6) Stomatitis; (7) Ptyalism; (8) Disturbances of circulation and respiration.

That pain does occur, in some cases, can not be denied; but as a large majority of syphilitics suffer from partial or complete cutaneous anesthesia, this objection holds good but in comparatively few cases.

In hyperesthetic cases it is hardly admissible and can not be recommended. In sixteen years' experience I can recall but three cases where pain acted as a deterrent factor—one boy and two neurotic women. In every other case the patients maintained that the pain was less objectionable than the taste of medicines. The addition of alcohol, recommended by some, adds much to the pain and detracts from the efficacy of the bichloride.

Injections of morphia before or in conjunction with the mercury is to be condemned for two reasons: (1) Because it in no wise alleviates the pain, which does not reach its acme for three or four hours, and (2) as it may lead to the opium habit —highly probable in this class of patients.

What objection there can be to cellular or subcutaneous infiltration, I am at a loss to understand. We use the loose cellular tissue as a storehouse whence the mercury is slowly given off. The indurations are painful when roughly handled just as those of vaccination are, though I have yet to hear that objection raised to preventive measures of small-pox, and why should it be a valid objection to curative measures of pox. When the needle is not plunged deeply enough, quite an area of inflammation is, in some instances, set up.

It has been my misfortune to cause two shallow abscesses, but in each instance the abscess was due to neglect of asepsis, and not to the injection of the greatest of all known antiseptics. I also have broken off a needle in a young gentleman's arm. This needle caused no inconvenience whatever.

So far, I have seen no untoward circulatory or respiratory disturbances, unless the increased pulse rate and the rise in the cutaneous temperature which *always* accompany the *continued use of mercury* could be classed under that head. Ptyalism and stomatitis may unquestionably be produced by the administration of mercury in any manner; but I happen never to have witnessed those lamentable effects in any case treated hypodermically; whereas, I have rarely ever seen a case treated by other methods without them. At Hot Springs tincture of myrrh for

the mouth and gums is almost as important a part of the treatment as the inunction of mercury and the large doses of the iodide.

Advantages.—The advantages claimed for this method are (1) accuracy of dose, (2) exactness in intervals between doses, (3) rapidity of action of medicine, (4) small amount of mercury and the short time needed to effect a cure, (5) the constant, never ceasing effect of the mercury day and night, (6) the personal supervision of the physician, (7) the certainty of the patient's getting the right medicine, of its being properly administered at regular stated intervals and of his inability to get your prescription refilled or to give your knowledge to a friend or sell it to some charlatan, (8) profit to the physician and economy to the patient on account of the saving of the drug bill of four years. The doctor with this method is sure of two very important things—his fee and his patient's gratitude for his speedy cure, quick delivery, so to speak; (9) absence of gastro-intestinal disturbances; (10) last, though not least, quick diagnosis in questionable cases.

The *modus operandi* is as follows: First, you must be careful to avoid all joints, glands and blood-vessels. The best sites for the injection are the chest walls, back, gluteal region, and the upper and outer portions of the arms. The site chosen should be well soaped (green soap) and washed and dried, then rubbed briskly a few seconds with alcohol. The needle and syringe should be immersed in hot water before each injection. The needle should then be plunged quickly through the skin and well into the cellular tissue, care being taken to avoid invading adipose or muscular tissue (though some authorities advise deep muscular injection). The injection should be very slowly made, care being taken not to use too much force. As soon as the bichloride solution comes in contact with the albuminous serum, the soluble mercuric chloride immediately becomes the albuminate, which is not very soluble, and herein lies the efficacy and safety of these large doses of this highly corrosive poison. By means of this chemical metamorphosis we can store up in the cellular tissue mercury that can be taken up by the secretions and distributed throughout the entire system in such dilution as to do no harm to the most delicate structure. How different is the result, say, when given by the mouth in pill or

solution. Here the medicine coming in contact with the daily ingesta may form insoluble combinations and pass through the bowels as an inert mass, or it may, through the presence of malic, lactic, citric or other acid, form highly soluble or irritant salts, and thus bring on free catharsis, and be thus swept away before reaching the systemic circulation. One of the most striking effects of the hypodermic injection of the bichloride is the way it tones up old broken down syphilitics. This tonic effect is at times so strikingly shown as to cause much surprise to the patient as well as the physician.

This treatment does not entirely do away with the iodide of potash, for this remedy, though it never cures but only subdues, may after be used in conjunction with the injections, especially where the throat, brain or spine are involved. Wherever mucous patches occur I apply the solid argentic nitrate. Sulphate of copper crystals are highly recommended by many authors, but they are not as quick nor as efficacious as lunar caustic.

I feel that I have in this treatment a scientific, accurate, rapid and absolutely safe method of mercurializing my patients and of keeping them under the never-ceasing influence of mercury as long as a vestige of syphilis remains.

I no longer dread to face a syphilitic seeking my advice, for I feel absolute confidence in my ability to cure him in a definite time. How I used to dread to tell those unfortunates that four years was the shortest time possible for a cure! Is it any wonder that the hope of speedy cure held out by the thermic baths in the lovely Ozarks, coupled with the rapid mercurialization by inunction and the huge doses of iodide of potash built up Syphilopolis, the greatest monument of the age to the inefficiency of the routine treatment of syphilis?

A golden harvest has been gathered there by the army of doctors, whilst we from the sunny South to the frigid North, from the cultured East to the Golden Horn have, like Rachel of old, been weeping—not for our first-born—but for our lost patients, and, inferentially, for their ducats. Hot Springs no longer robs me of my patients, but, on the contrary, furnishes me yearly with her quota of uncured cases, mainly of the tertiary form.

PRESENT STATUS OF THE ETIOLOGY OF DENTAL CARIES.*

By GEORGE J. FRIEDRICHS, M. D., New Orleans, La.

I desire to call your attention to some new facts that have been brought before the dental profession by Dr. J. L. Williams, of London, and corroborated by Prof. G. Z. Black, with whose scientific labors in this field for the past quarter of a century you are all familiar. Dr. Robertson first pointed out that caries of the teeth was due to the action of acids, but could not explain how this was brought about.

Half a century elapsed before the facts demonstrating the *modus operandi* of the formation of acids as a product of decomposition by germs was clearly demonstrated by Dr. Miller, of Berlin, by classifying the micro-organisms, character of fermentation and the particular acid that they formed, which caused decalcification of the teeth. But the question of how the process of first attack upon the sound and normal enamel was effected was still undefined and undemonstrated. Both Drs. Williams and Black have shown that when the teeth are attacked by micro-organisms, they are massed under a film, or agglutinated together upon the surfaces of the teeth; that in this condition the acid is formed, and if left undisturbed and free will exert their decalcifying power upon the tissue involved. Dr. Williams has found the means of showing all this, as it occurs under natural conditions in the human mouth, together with the immediate effects upon the enamel. By the use of certain hardening fluids he has fixed this film of micro-organisms in the gelatinous matrix formed by them, and has made this sufficiently hard to be ground down upon a stone with the enamel to which it clings, forming sections so thin that both the micro-organisms and the enamel rods come clearly into view, together with immediate effects upon the enamel tissue. The action of decalcification is limited by the film of micro-organisms. So constant is this the case that Dr. Williams is of the opinion that the beginning of caries occurs in no other way. In other words, acid saliva has no influence in causing the beginning of caries. Acids distributed in the saliva have no influence in causing caries. It is solely acids

*Read before the Louisiana State Dental Society.

produced beneath these films of micro-organisms and protected from dissipation into the saliva by these films, which are responsible for the beginning of caries.

The conclusions arrived at, after an exhaustive study of ten years, by Dr. Williams, are the following: That the highest type of perfection is not found continuously in the enamel; the most persistent imperfection is partial failure of the cement substance which unites the rods together. This latter produces the white spots often seen in the enamel; that carious teeth were not necessarily those of imperfect enamel; that the structure of the teeth is not a factor in their liability to caries, further than that pits, grooves, fissures and roughness of surfaces give opportunity by inviting lodgements and facilitating the growth of micro-organisms at particular points; that the predisposition to caries is to be found in the environment of the teeth. The question of hard teeth and soft teeth has been found to have no relation whatever to the occurrence of caries. In all cases in which the teeth seem to have improved in quality or depreciated in quality, the changed condition has not been in the teeth themselves, but a change has occurred in their environment—in the secretions and fluids which have affected the active agents producing caries, in the one case tending to immunity, and in the other increasing its activity. The particular conditions of the secretions constituting a predisposition to caries, or inducing immunity from caries, is as yet unknown.

Further, intensity of predisposition to caries is not constant, is most likely to occur in youth, and when properly treated will abate 95 per cent. of cases, while not a few become wholly immune, so far as may be at all practicable (we can not always use it). The treatment should be with gold and gold only. To quote the words of Dr. Black himself, "My experience with amalgam in the past condemns it in all cases when the predisposition to caries is intense and generally for young people. In the few cavities occurring in cases of low intensity of the predisposition to caries, any tyro may succeed. It is the bad cases that call for wise planning and skilful technique."

Clinical Reports.

CELLULO-CUTANEOUS ERYSIPELAS INVOLVING HAND, FOREARM AND ARM, SUCCEEDING SLIGHT INFECTED WOUND OF FINGER—SKIN GRAFTING—RECOVERY.

By HENRY W. SAWTELLE, M. D., Surgeon U. S. Marine Hospital Service, New Orleans, La.

Some of our older physicians will remember that erysipelas was formerly more frequently observed than now, and that it was considered a most formidable enemy when encountered in their clinics, particularly in connection with traumatisms. This much dreaded disease was known to the ancients, but we have only reliable reports of epidemics from the latter part of the eighteenth century, namely: Great Britain, 1777, 1800, 1821, 1832; France, 1750; Scotland, Denmark and Germany in 1843, and America in 1842-43. The historical accounts given of these epidemics show that the disease in those days was of a more serious character than is seen at the present time. This change for the better has been made practicable because of a more complete knowledge of the etiology of the malady brought about by modern experimental investigations, resulting in more rational methods of treatment and improved hygienic conditions both in regard to private dwellings and public institutions. The nature of the organism responsible for the disease was discovered by Fehleisen, who was the first to isolate the streptococcus of erysipelas, and the bacteriological researches of Koch, Rosenbach and other observers fully confirm his observations. It appears that authorities differ in regard to the identity of the erysipelas coccus with *streptococcus pyogenes*. Baumgarten thinks that the erysipelas coccus and the streptococcus show different degrees of activity in the same species; that they are the same organism which under different external conditions act differently. When situated in the superficial firm layers of the skin it acts with less virulence, causing sero-cellular or fibrinous exudation, while in the loose structures of the subcutaneous tissues it acts vigorously, causing suppuration. But the question of identity of the two organisms remains *sub judice*. However, as I only desire

DR. SAWTELLE'S CASE OF SKIN GRAFTING.

to refer particularly to the phlegmonous variety, I conclude without further reference to the pathology of the disease by giving a narrative of one of my cases with photographic illustration showing the affected parts after recovery of the lesion.

J. J., aged 24 years, a vigorous seaman, nativity Norway, applied for treatment, stating that prior to his application, nine days, while engaged in cutting rope with an ordinary sailor's knife, he accidentally cut the left ring finger on the dorsal surface, at the first phalangeal articulation. The wound was very slight, and he paid no attention to it. Four days subsequently he was seized with a chill, followed by a febrile movement, after which the paroxysms recurred several times, and he had considerable pain in the finger and hand. Upon arrival at the hospital the hand and forearm were swollen, tense and extremely painful, the pain extending to the axilla. The inflammation advanced rapidly, and on the following day the arm was likewise involved nearly to the shoulder. Temperature, 39.6 deg. C. Free incisions were made at once to relieve tension at various points, which gave exit to more or less serum from the areola spaces. The whole limb was enveloped in sublimate gauze, and this was kept moist with a sublimate solution 1-5000. Iron and quinine ordered with small doses of tincture aconite sufficient to control the action of the heart, together with milk diet. In the course of a few days livid patches and the characteristic soft boggy feeling imparted on pressure indicated extensive infiltration of the connective tissue. The incisions already made were enlarged, and with forceps and scissors large masses of necrotic connective tissue were removed from time to time from the hand up to the superior third of the arm. The parts were thoroughly cleansed twice daily by immersion in a bath of warm carbolized water, and the limb isolated with sublimate gauze. The bath was continued as required for about a week, after which the parts were irrigated by means of a fountain syringe.

The undermined skin thus left without proper nutrition become gangrenous, and the diseased portions were trimmed off at different times, leaving the limb finally denuded of skin and connective tissue, exposing the muscles to the extent of about two-thirds of the entire surface of the forearm and arm. The tendons of the extensor communis digitorum were also destroyed

in the gangrenous process. At the bend of the elbow, over the median cephalic and basilic veins, a portion of the integument, about the size of a half-dollar, retained its vitality, being connected by vessels and nerve filaments, but the connective tissue under it was destroyed. Special attention was given to this patch, and thorough cleanliness was maintained by carefully isolating it with sublimate gauze separately, and it was subsequently utilized as a graft. The outlines of this patch are shown in the accompanying figure. Skin grafting was commenced about five weeks after admission by clipping six grafts, each about the size of a millet seed, from the right arm, and inserting them into the granulations about three-quarters of an inch apart, after the method suggested by the late Professor John T. Hodgen, of St. Louis, the distinguished and beloved surgeon of the Southwest. This operation was repeated at intervals of several days until the whole surface was planted. About 100 grafts were implanted. The points where the skin grafts were implanted were well shown in the photographs, particularly at the upper portion of the arm. The scar on the ring finger marks the seat of the original wound. The patient remained under treatment about six months, when he was discharged fully recovered, but there was some stiffness of the fingers and elbow, which under massage and passive motion improved, and the power and usefulness of the limb was finally restored.

It is worthy of remark that notwithstanding the extensive involvement of the connective tissue in suppuration, there was no sign at any time of septicemia.

Upon examining the limb some little time later, I noticed that the stiffness of the elbows and fingers, noted at date of discharge, had almost wholly disappeared.

Communication.

WINNSBORO, La., March, 1897.

Mr. Editor: * * * While writing I mention that the physicians with us, and I suppose all over the State, are served with notices of licenses due for several years passed, with damages and court expenses. It seems that, after we have worked hard to get a diploma from any college, our examinations commence, we go to State committees, and pay them, pay State license, pay parish license, pay town license, and in the Legislature we can not have a law passed to have the mortuary and vital statistics carried into effect. I make no complaint about the laws, only I do say that our physicians, as a body, have so little to say in politics that we are passed over without cognizance as to rights, privileges or protection. Meanwhile we are expected to explain the laws of health and to be medical advisers in many public ways, to stand between epidemics and the people and to sacrifice our lives in their behalf.

Let us commence in our parish societies, formulate rules in behalf of the medical profession, and have them studied and talked over by the profession until the next election. Then send a man, by the support entire of the medical profession in each parish, to the Legislature, who will have the moral courage to give the medical profession its dues in the matter of law. It seems to me much could be done in our behalf if we could select a man, or help to select one.

Medical men are not ambitious in a political way; they will not suffer themselves to be placed before the people as candidates for legislative honors. Being few in number, they are supposed to remain at home, look after the health of the people, while they have discounted their annual income to the merchant, who finds himself protected in the law by mortgage rights.

Pray tell us, what can the doctor in the country do to realize a fair proportion of his labor's profits?

Respectfully,

W. M. GUICE, M. D.,
Health Officer, Franklin Parish, La.

Society Proceedings.

ORLEANS PARISH MEDICAL SOCIETY.

Dr. Jno. Callan, president, in the chair.

Dr. Michinard read the report of a "Case of salpingitis and appendicitis; operation, recovery." (See page 496, March, 1897, Journal.)

Dr. Parham, in comparing the vaginal and suprapubic methods of hysterectomy, said that the general opinion of the profession was in favor of the latter. In many instances the diseased condition was confined to the appendages, and in the interest of conservative gynecology he believed with Dr. Price, of Philadelphia, that the direct or suprapubic route was indicated. The ability to thoroughly eradicate all offending structures per vaginam was strenuously denied by hosts of prominent operators. Jacob's results were related to show the uncertainty of the vaginal methods. It was not claimed that the suprapubic was inferior to the vaginal operation. The bone of contention was the safety.

The question of sutures was still unsettled. Buried sutures could only be considered foreign bodies, and unquestionably the ideal material should be absorbable.

The various methods of introducing abdominal sutures were explained. Edebohl's plan had many merits, and was demonstrated in full. For buried sutures chromicized catgut had many champions. The recent cumol and formalin preparations of catgut were nearer an ideal suture. Hours of boiling did not affect the texture, and rendered the catgut perfectly aseptic. The ligature was absorbed in about forty days. In introducing abdominal sutures, Dr. Parham favored through and through stitching, except in cases of very fat or extremely thin walls. In this instance the tiers should be united separately.

Dr. Dabney called attention to seven cases of pelvic disease reported recently in *New York Medical Journal*, in which appendix involvements were unexpected until the abdomen was opened.

Dr. Souchon compared the methods of operating as followed by American and European surgeons.

European operators favored visual inspection of the field of work, and therefore were partial to ample incisions, in contradistinction to Americans, who preferred the smallest opening permissible. Dr. Michinard was asked to state the average length of incisions.

Dr. Michinard made incision vary according to whether pus was suspected or not. In simple non-infectious cases an incision two to three inches in length was sufficient, but if pus was a factor three to five-inch openings were made.

Dr. Martin did not favor the tendency toward so-called fancy and modified operating, and thought bad results in some instance of abdominal work due to it. The simplest method was always best and the results equally favorable.

Meeting of February 13, 1897.

Dr. T. S. Dabney read a paper on Sixteen Years' Experience in the Treatment of Syphilis by the Hypodermic Injection of Bichloride of Mercury. (See page 549.)

Dr. Chassaignac had listened with interest to the many advantages offered in favor of hypodermic medication in treating syphilis, but could not endorse such comparatively severe measures when under most circumstances a milder plan gave similar results. There were instances, however, when it should be resorted to, as in acute cerebral, spinal or visceral involvements. Here a few days' delay meant irreparable loss and we could as a rule expect prompt action from this plan. Other methods of mercurialization had been attended with about as rapid effects as related in the paper in Dr. Chassaignac's venereal clinic. Inunctions, while disagreeable, are painless and act usually very fast. The general adoption of the method at any time in the future was doubted. The prime disadvantage was the intense pain following the injection, which was at its height two or three hours after treatment.

Cocaine, because of its merely temporary anesthesia, would not relieve it, and the contraindications to morphia were obvious. Another objection often raised by patients was the short and fixed intervals of treatment. The trend of the paper was toward a routine practice, which should be avoided in this as well as other things. The quick cures related are a little questionable. He certainly would not pronounce a patient

cured where a few weeks' medication had removed all outward signs. In his experience, the relapses, so-called, following hypodermic treatment were as numerous as after other forms. He could not grasp the object of Dr. Dabney in giving iodide of potassium at the outset, and comparing the lack of result with that obtained from the mercurial injection. It is generally conceded that mercury is the more useful in early syphilis.

Dr. H. Kelly asked Dr. Dabney if the cases *were really* cured in three months.

Dr. Dabney could answer in the affirmative from all signs. He had seen no symptoms of the disease after four years in some of his cases.

Dr. Joachim resorts to hypodermic medication when rapid and decisive effects were desired. He is partial to deep intramuscular injections, generally in the gluteal field, discharged with brisk pressure. In acute syphilitic processes involving the upper respiratory passages its administration was followed by very gratifying results. He prefers salicylate of mercury, and gives it twice a week in two and one-half grain doses. Abscesses seldom followed its use. A written report of several cases treated hypodermically was made by Dr. Joachim.

Dr. Storck questioned the short period of treatment stated in the paper, and related Taylor's opinion as to the necessity of two years' medication.

Dr. Gessner called the attention of the society to the diversity of opinion still existing as to whether syphilis was really curable or not, and asked further discussion of the point.

Dr. Salter had used biniodide of mercury hypodermically in several cases and related his results. Ptyalism had been of frequent occurrence. Two months after treatment hard nodules were present at point of injection in nearly every instance. He could not, however, consider his cases a fair trial of the method.

Dr. Dabney, in closing discussion, explained why the small doses of potassium iodide were given. Little effect was expected from it, and it was discontinued after the injections were instituted. His patients had made no serious objections to the pain caused by the method.

C. J. Miller, M. D., *Secretary.*

N. O. Medical and Surgical Journal.

Editorial Department.

CHAS. CHASSAIGNAC, M. D. ISADORE DYER, M. D.

THE PHYSICIAN AND THE LIBERAL PROFESSIONS.

We belong to the generic group of "The Liberal Professions," and categorically enjoy the same plane of distinction.

Alike with the minister and the priest, we are a part of the ceremonies which introduce the human being into existence, a part of the process which prepares him for the several stages in the arena of life; and we help, and sometimes hasten, the function of his demise.

With the lawyer, we officiate at the necessary rites during the various periods of man's existence, and often testify *pro bono publico* when the death warrant has some time past been executed.

The sentiment of the liberal professions is by custom and tradition, and by experience, ours.

In this latter day we sometimes, even ofttimes, chew the cud of reflection, and ponder at the inequalities of the lines which define our legal and spiritual brethren and ourselves.

The former begins his career in an open field in which honor is attained *pari passu* with the golden lucre. The latter grows sleek after a period of starvation and slippers and slides down the shorter end of life with a full purse and an assortment of assistants to do his work.

Meanwhile the dispensers of physical comfort, we gaze at our host of uncollected bills, reflect on our broken slumber, recall our infrequent opportunities for relaxation, and wonder at the smallness of our bank accounts beside the long credit account of actual service.

Yet the ranks are constantly being filled with would-be martyrs at the Esculapian altar!

While a straggler drifts out into the tide of charlatanism, or finds more lucrative employment in the patent or proprietary

medicine trade, we feel as if a strong wave of opinion were rolling away much of the false sentiment among us.

It is a grand, nay a noble idea—in theory—that bids the physician respond to every call upon his medical skill, and then lets him wait interminably or in vain for the necessary recompense.

The lawyer does not do this: the retainer is in evidence. The minister gets most, if not all, his salary, no matter what amount of work he does.

And while we annually discount our earnings by a fractional receipt, the public demands services of us which we alone are placidly content to grant *gratis*.

Here in Louisiana, barring a qualifying reduction, we pay the license to State, parish and city, as does the tradesman, and from the commercial point of view this is right.

But why should we be made to register births, record deaths or sign our names to legal vouchers for these without a recompense in turn?

Public hospital services attest the liberality of the staff of physicians and servants, yet the recognition is only within the conscience and personal satisfaction of the individuals of that staff itself.

All of which points with a certainty to the evolution of the justice due to the medical profession at the hands of the public which abuses it, the public which cringes for it, and which smiles in its sleeve when the day of reckoning comes.

Ethics are fast yielding place to an enforced competition directed by the business instincts of a growing generation of men in the profession of medicine, who realize that the glory of investigation is not lessened by the strict attention to the justice of each man's obligation to pay for what he gets.

Protective and mutual aid associations are everywhere cropping out in our behalf. Their object is quite patent, viz.: to prick by threat of notoriety the consciences of those members of the critical public who are slow to remember that the fiddler must be paid by those who dance.

A Correction.—On page 501, Dr. Parker's paper should read "He highly recommends saline infusion at a temperature of 120 deg.," instead of "170 deg.," as printed.—Ed.

A HOSPITAL FOR PHYSICIANS WITH TUBERCULOSIS.

It has required a crusade of fully one decade to create enough popular knowledge of the danger of infection from tuberculosis for the present legislation against it.

At first only a slight impression was carried from the medical to the lay press notwithstanding the multitudinous efforts of the former in the direction of establishing general action.

Sanatoria have arisen for the special care of the victims of tuberculosis in all sections of this country and in many localities of Europe—particularly along the Mediterranean. Medical attention has been supplied at these, but for the most part intended as incidental and not for specific care of the sick. The evolution of serum treatments and of so-called specifics has brought with it a number of institutions, at which patients, with means to pay for it, can receive the routine administration of said medication.

Legislation in the United States has not yet made provision for the indigent consumptives.

Medical men are constantly exposed to the contagion rife in the air which the patient with tuberculosis exhales.

The contact in the office, at the bedside and in the clinic is a source of continual menace.

A leading article from the pen of Dr. Gibier, in the *Bulletin of the New York Pasteur Institute*, elaborates the fate of the martyrs of the profession who fall by the wayside or who are buried incognito in some out-of-the-way hospital, gradually surrendering their existence as a payment of the debt the privileges of their profession have imposed upon them.

As adjunct to the New York Pasteur Institute, a sanatorium is soon to be established near Suffern, New York.

It is intended to open the first accommodations to physicians in reduced circumstances suffering from pulmonary tuberculosis.

Admission will only be granted to patients presenting Koch's bacilli in their sputa and not having reached the period of tubercular cachexia.

The treatment is to consist of the scientific application of the most modern therapeutic measures, serum-therapy included.

Full attention is to be directed at the conditions of hygiene, climate and diet.

"*No remuneration whatever will be asked for professional services, board or room.*"

If several rooms remain vacant for more than two months they may be placed at the disposal of other persons (not physicians) similarly afflicted and belonging to the liberal professions.

Applications for admission must be sent to the director of the New York Pasteur Institute.

If ever a laudable effort at a worthy purpose was conceived, this meets the qualities fully.

Confraternity consideration is to-day only too seldom indulged in, and any evidence of charity *con amore* and within ourselves is a sign of better times.

"The only conditions required of the patient will be that after his recovery he joins, as an active member, the Association Against Tuberculosis, and that he become an advocate of the prophylaxis of contagious diseases through the prevention of misery and misprocreation."

We are earnest in wishing this effort a full measure of success.

THE AGE LIMIT FOR ENTRANCE INTO THE NAVY.

We understand, and on good authority, that of our congressman from the first district, the Hon. Adolph Meyer, who for several years has been a member of the naval committee, that there is a constant difficulty in keeping filled the junior positions in the medical corps of the United States Navy. Those in charge of the service are naturally anxious to have all the posts occupied and express surprise that there are not a larger number of successful applicants for the vacancies. It is true that the inducements of fair pay, reasonably rapid promotion, retirement under salary, besides a fine opportunity to see the world, should tempt a good proportion of graduates.

The difficulty lies, we believe, in the age limit. At present it is twenty-six years; that is, entrance into the medical corps of the navy is open only to men less than twenty-six years of age. This, it seems to us, positively disbars a large percentage of the best educated physicians; a young man does not get out of college ordinarily until after he is twenty-one; a course of study in most of the best medical colleges is of four years; conse-

quently, if the young graduate wishes to acquire the least bit of hospital or other practical training before presenting himself for examination, he has reached the age limit and is no longer eligible. It must be remembered too that the examinations for the service are rather difficult, so that, after all, it is not so surprising that vacancies should remain unfilled since antiquated rules render many of the best men ineligible.

The only argument we have heard mentioned in favor of retaining the low age limit is that men in order to take kindly to life on ship-board must begin young, before their habits are framed. The proposition is probably correct, but to-day most men under thirty are properly considered young men and have not formed fixed habits either in their physical or intellectual life.

Dr. Sternberg, the scientific and progressive Surgeon General of the Army, raised the age limit for entrance into the army to 29 years, instead of 28 years, as he found it. In the Marine Hospital Service the entrance age limit is 30 years. We see no valid reason why the latter should not be selected equally for the navy. Were this done the majority of those presenting themselves for examination would have enjoyed superior educational advantages, and a better proportion could, in consequence, pass a successful examination.

We presume that, in the natural order of things, we can expect a new Surgeon General of the Navy. His attention should be drawn to this point by the medical press in order that he should raise the age limit, if he has the authority, or recommend such action to Congress.

Our senators and representatives are requested to consider this question and to use their influence to improve the state of affairs. Vacancies in the medical corps of the navy could then be filled, the navy would acquire the services of a better proportion of first-class men, and many competent young medical men would have the opportunity of entering a branch of their calling for which they have a fondness.

Medical News Items.

The Decoration of the French Legion of Honor has been conferred recently upon our friend and collaborator, Dr. A. W. de Roaldes, of this city. The good reasons leading up to the decoration, and the pleasure it produced in this community, were so well expressed a few days ago at a social function by Dr. Just Touatre, that we reproduce them as completely as possible:

"My Dear de Roaldes—All of your friends were delighted by your nomination as Knight of the Legion of Honor.

"Mentioned in the general orders of the French army for courageous conduct in 1870, you were to have been decorated at that time; but, guided by a sentiment of generous friendship, you asked that your good war record should be counted with that of one of your friends who was decorated. Cardinal Perraud, who had seen you at work, our great poet, Francois Coppée, our eminent consul, George d'Anglade, and the former minister of the navy, Mr. Barbey, were your sponsors on the occasion of the award of your cross.

"You have not only won it on the field of battle in caring for our wounded, you have also deserved it for services rendered to the French in New Orleans.

"As physician of the French Benevolent Association, as house surgeon of the Charity Hospital, as surgeon-in-chief of the hospital which you have created, organized and which prospers under your direction, you have always given your good services to our sick and needy compatriots. The hospital* which you have founded, and which is rendering valuable services, is a philanthropic work which does you great honor. It has not its equal in the United States. I insist on proclaiming it, as it seems to me that a due meed of justice and gratitude is not rendered to this magnificent institution and its eminent chiefs of service. You and Dr. Bruns, as well as your distinguished collaborators, devote many long hours daily to the treatment and cure of a large number of indigent patients, who, deprived of your devotion and science, would become chronics or incurables.

*Eye, Ear, Nose and Throat Hospital.

"It is through your mental energy, your feverish activity, your wonderful power of organization, and especially the authority which your character and learning give you, that New Orleans has been endowed with not only an admirable hospital of medical charity for the poor, but also with a centre of instruction for young physicians.

"You have, then, my dear friend, well deserved of France and of Louisiana the Cross of the Legion of Honor, which on your breast will always feel the beating of a brave and noble heart."

We heartily echo every sentiment expressed in the above.

The Physicians of Texas are once more struggling for the passage of a bill to regulate the practice of medicine and surgery. It provides for the appointment by the Governor of a Board of Examiners representing the different schools of medicine. We trust that this effort will prove successful and more far-reaching than the act now in force.

At the Annual Meeting of the Board of Administrators of the Charity Hospital, the various officers of the institution presented reports as to the condition of their various departments. An interesting and novel detail is that the registrar reported the filing away of 325 clinical histories during the previous month. Dr. E. S. Lewis was unanimously re-elected vice president of the board and other officials of the hospital were elected for another year.

The Medical Record of Mississippi is the title of a new periodical which Dr. H. H. Haralson, of Biloxi, Miss., announces will appear on April 1.

At a Recent Meeting of the Board of Trustees of the Jefferson Medical College, Philadelphia, Dr. J. Chalmers DaCosta was elected Clinical Professor of Surgery. Dr. DaCosta has been connected with the college for many years, and has recently been Demonstrator of Surgery and Chief of the Outpatient Department. The new appointment is made in recognition of his long service and his valuable contributions to surgical literature.

Small-pox in Japan.—This disease has been quite prevalent in Japan. From January to September, 1896, 3800 cases were

reported from all districts, of which 1234 died. By the end of November fully 5000 in aggregate had been noted. The most of these cases were observed in the districts most proximate to China and Formosa.—*Sei-I-Kwai for December, 1896.*

The Journal of the Boston Society of Medical Sciences is issued, for the present, for free distribution. It will contain authors' abstracts of papers presented at the meetings of the society, and will be published promptly after each meeting. The Biological and Physiological Departments of the Massachusetts Institute of Technology, Clark University and the Experimental Laboratories of the Massachusetts General and the Boston City Hospitals will furnish contributions. Papers, or abstracts of papers, upon subjects connected with the Medical Sciences will be welcomed from persons not members, and will be given a place in the journal of the society.

The Transatlantic Steamship Companies refuse one and all any reduction of the usual charges to those who will attend the twelfth International Medical Congress, to take place in Moscow, August 19 to 26, 1897. The French, Spanish, Swedish and Hungarian railroads promise a reduction of 50 per cent., and the Italian for a distance of 500 kilometres. The Mediterranean lines grant from 25 to 50 per cent. Extracts of papers to be read before any of the sections ought to reach the Secretary General before June 1 in order to be printed in the preliminary volume. A special prospectus containing the final details referring to traveling, lodging, festivities, etc., is promised for a near future.

Gude's Pepto-Mangan emphasizes the ethical way the product is introduced to the profession in a striking circular issued through their New York agents. We mention the fact to commend the pains taken to notify the profession that no lay advertising is done, and that the product must find its way to the public through the manufacturer, the agent and the profession.

The Congress of American Physicians and Surgeons will be held in Washington, D. C., on May 4, 5 and 6, 1897. The various sessions will be held under the direction of the several special associations making up the Congress.

The Franklin Parish Medical Society at a recent meeting framed a fee bill, and elected a delegate to the State Medical Society.

The Seventh Annual Meeting of the National Confederation of State Medical Examining and Licensing Boards will be held at the Hotel Waltham, in Philadelphia, May 31, 1897. A cordial invitation is extended to all members and ex-members of State medical examining boards, and to physicians, sanitarians and educators who are friendly to the objects named, to attend the meeting and participate in its proceedings.

The Tri-State Medical Society, of Iowa, Illinois and Missouri will meet in St. Louis April 6, 7 and 8, 1897.

The Missouri State Medical Association will meet in St. Louis on May 18, 19 and 20, 1897.

Abstracts, Extracts and Miscellany.

Department of Surgery.

In charge of Dr. F. W. Parham, assisted by Drs. E. D. Martin and F. Larue.

AN OPERATIVE PROCEDURE FOR EXTENSIVE PELVIC CARIES FOLLOWING COXITIS: EXARTICULATION OF THE THIGH WITH CORRESPONDING HALF OF THE PELVIS.

Oscar Wolff, assistant to Professor Bardenheuer, of the Cologne City Hospital, reports in *Centrbl. f. Chir.* for February 20, a remarkable operation performed in the hospital by Bardenheuer for extensive tuberculous disease of pelvis and thigh, necessitating the removal of thigh and one-half of pelvis.

The case was that of a 46-year-old woman, who had suffered for four or five years of tuberculosis starting in the hip. Admitted into Bardenheuer's service January 13, 1897.

Present Condition.—General appearance relatively good; lungs normal; liver slightly enlarged downward; spleen not palpable; urine strongly albuminous. A transversely running fistula 5 *c. m.* long and 2 *c. m.* wide, surrounded by dirty granulations and discharging abundantly, is seen over right. Poupart's ligament. On the posterior aspect of femur at the junction of middle and upper thirds there is a glistening, white retracted cicatrix; on the inner side of the thigh in upper third, a round, actively discharging fistula. The upper fistula leads, as shown by probing, into the iliac fossa. This fossa bulges distinctly forward and fluctuation is made out deeply seated. The right leg is 12 *c. m.* (five inches) shorter than the left. In walking, the right foot is brought into equinus position; the gait, aided by a stick, is strongly limping. The right A. S. P. is decidedly inclined and the vertebral column is correspondingly scoliotic. The thigh is fixed in the position of flexion and adduction. The flexion angle is about 110 deg., with marked inward rotation. The femoral head stands 5 *c. m.* (two inches) above the Roser-Nélaton line on the iliac bone and is immovable.

DIAGNOSIS.—Tuberculosis of the right hip-joint with fistula formation and pathologic dislocation; caries of the pelvis, with perforation of acetabulum and abscess formation in the iliac fossa; atrophy and interference with growth of the whole bone. Amyloid degeneration of the kidneys, perhaps also of the liver.

Operation, January 15, 1897. Chloroform narcosis. Avoiding the fistula, a large external skin flap and a small internal flap were marked out with the knife. An oblique cut was now made above Poupart's ligament from the A. S. P. to the horizontal ramus of the pubis. The incision embraced the fistula lying about midway. The peritoneum was dissected away from the iliopsoas without injuring it. This procedure was on account of adhesions not very easy. The search for the vessels was difficult, being pushed strongly inward by the uplifted psoas, and were hard to reach on account of the flexion of the thigh. The external iliac artery was ligated twice and cut between, likewise the hypogastric artery and vein (internal iliac). Exarticulation of the thigh without noteworthy bleeding,

The horizontal ramus of pubis was now isolated from the obturator foramen outward and separated by means of Gigli's saw quite close to the symphysis pubis, likewise the descending

ramus of the ischium. The iliopsoas muscle was loosened up, partly by sharp, partly by blunt dissection, from the os ilii and from the abscesses underlying it; the muscles attached to the crest of the ilium were severed. The iliac bone, together with the attached parts of the pubic and ischial bones (ramus horizontalis pubicus et descendens ossis ischii) was by the employment of great force luxated out of the sacro-iliac synchondrosis. The ascending branch of the os ischii was shown on closer investigation to be likewise tuberculous, and was removed. Hemostasis, buried muscle suture, skin closure and drainage completed the operation. Duration of the operation, 60 minutes. Pulse good.

The pathological examination of the specimen disclosed that the original acetabulum was very flat and filled out with granulations. The femoral neck was directed strongly outward and was carious, the head conical in shape likewise carious. Carious foci in the os pubis and ischium. At the bottom of the old acetabulum, at the upper and inner aspect under the ilio-pubic ligament a perforation into the iliac fossa was found; between the innominate bone and the psoas there was an abscess of the size of the fist.

The progress of case was without reaction, the temperature running normal, until the first change of dressing on January 18, three days after operation. The temperature at this time was 38.1 deg. (100.5 deg. F.). The wound looked well and appeared to be healing by first intention. The three drains were changed. The urine showed still some trace of albumin. January 20. Urine free of albumin. No wound reaction—wound nearly healed. The patient at the middle of February is reported doing well. Wound healed with the exception of two granulating surfaces as large as dollar pieces. Albumin has entirely disappeared.

In commenting upon this case Wolff especially insists upon the preliminary ligature of the external and internal iliac arteries and veins. After this, the typical exarticulation is done, followed by the removal of the diseased half of the pelvis. The horizontal pubic ramus is then laid bare by the elevator on the inner edge of the obdurator foramen and sawed through with Gigli's saw. The same was done with the under and external arm of the descending ischial ramus. He counsels against the chisel, so often attended with much shock in these pelvic sequestrotomies.

Finally, to cover the wound and protect against hernia the the peripheral end of the psoas is sutured to the preserved stumps of the thigh adductors. He advises in the future that the glutei be also preserved to be used for covering in the peritoneum.

DISTANT SUPPURATIONS IN APPENDICITIS.

M. Emile Piard has contributed to the *Archives de Médecine*, a thorough article on certain complications of appendicitis, consisting in distant suppurations, the etiological diagnosis remaining obscure.

These distinctly located abscesses are separated from and have no apparent connection with the appendicular focus, deserving the name of metastatic abscesses. These abscesses have various locations; they are intra or sub-peritoneal, are found in the abdominal wall or in remote organs. In the first variety we may mention the abscesses forming in the sub-peritoneal cellular tissue; some communicating directly with the appendix whilst others constitute independent secondary foci. The lumbar variety is the most frequent, demanding a posterior incision. In the crural type the abscess points in the upper part of the thigh, following the iliac canal or femoral sheath. The iliac form is often mistaken for intra-peritoneal collections.

Clinically these abscesses form insidiously, with slight temperature at a period more or less remote from the attack of appendicitis. These metastatic abscesses sometimes are found in the peritoneal cavity, between loops of small intestine, in the pelves, the upper portion of the bladder, the left iliac fossa and under the diaphragm.

The acute type closely resembles acute peritonitis from appendicular perforation, calling for immediate surgical intervention. The chronic type terminates successfully by spontaneous or surgical evacuation, or ends fatally from peritonitis or septicemia.

The abscesses occupying the abdominal wall form slowly, one to three months after a mild or severe appendicitis. The patient's general condition not being satisfactory, although the local symptoms have entirely disappeared, there then appears a tumefaction of the abdominal walls, diffuse at first with no redness of skin, but which soon points externally, with more or less fluctuation.

Suppurative hepatitis constitutes the fourth category of distant abscesses from appendicitis, assuming the multilocular areolar type generally appearing after the appendicular crisis.

The hepatic infection arises suddenly with chill, fever, subicterous tint, bad general condition and enlargement of the liver, with fatal ending in three or four weeks.

Besides the above cited distant suppurations, we may mention the pleuro-pulmonary form. These are almost always encysted, variable in duration and resulting from a pleuro-peritoneal lymphangitis.

In conclusion, we may specify the pulmonary, cerebral and splenic abscesses, etc.

We thus conclude that an inflamed appendix may often give rise to a local or general septicemia, with metastatic abscesses, constituting a class of auto-infections originating inwardly.

CHRONIC TRAUMATIC TETANUS.

Dr. Paul Brion, in "*Journal de Médecine et de Chirurgie*, reports a case of chronic traumatic tetanus lasting thirty days, with recovery.

On August 17, 1895, while in the country Mrs. A., aged thirty years, stepped on an iron pitchfork, which had been used in rummaging manure, causing a one-half inch penetrating wound of left plantar region. Daily superficial carbolized washings.

Up to August 24—Cicatrization complete. Patient goes cycling without fatigue.

August 25—Another and longer cycling outing; the same evening at dinner patient masticates with some difficulty; she feels her jaws stiff but not painful.

From the 17th to the 25th, no prodromes whatever; no elevated temperature.

August 26—Sole apparent sign is the unceasing contraction, especially on right side. Normal sleep. Wound and limb indolent.

August 27—Mouth completely closed, only liquids can be taken; walking is slightly painful—patient experiences sensation of wooden legs.

August 29—First visit of physician—patient still walks, although legs are stiff. Complete trismus dysphagia, normal respiration, some vague pains in legs and back, no fever, pulse 70, normal urine.

Treatment—Bromide of potassium, 6 grammes daily.

August 30—Epigastric pains every five or six minutes. Patient sits in low chair with knees touching the chin. These attacks renewed at slightest emotion or movement. Slight headache, dysphagia, legs more stiffened.

August 31—Twitches in legs, epileptoid tremor, especially on right, on slightest contact; temperature, 38 deg. C., anuria, constipated, profuse perspiration; very violent abdominal pains, especially referred to left side; troubled breathing; morphia (hypo.), 2 centigs.; chloral, 4 grammes.

September 1—Condition worse; twitches every two or three minutes; tonic contractions of legs, intermittent in external oblique muscles; epigastric pains so intense that morphia gives no relief; temperature, between 38 and 39½ deg.; obstinate constipation; six hypodermics morphia, 1 centig.; chloral, 6 grammes.

September 2—Tonic contractions of abdominal muscles; distended abdomen; pectoral and dorsal muscles contracted and those of legs; spasms every minute, lasting five to six seconds; constipation, urine scant, very profuse sweating; patient nourishes plentifully, milk, broth, lemonade.

September 3—Spasms every five minutes, but abdominal pains and meteorism increasing.

September 4—Same treatment: morphia, 6 centig. (hypo.); chloral and bromide, 6 grammes daily; 60 grammes castor oil per rectum.

September 5—Spasms, still violent, are less numerous; temperature, 39 deg.; a metallic tinkling is perceived in abdomen, and Hippocratic succussion, as is found in hypo-pneumo-thorax; impossible to depress abdomen, so great is distention; this condition probably due to intestinal paresis; constipation, morphia diminished, naphtholated powdered charcoal, chloral and bromide, 6 grammes; spasms, less frequent, continue, involving other muscular groups.

September 11—During paroxysm threatened apnea; patient fears heart failure; respiratory muscles contract; dysphagia;

liquids swallowed with difficulty; oxygen inhalations; syrup of ether; same treatment, gradually diminishing morphia and increasing chloral and bromide to 8 grammes daily.

September 17—The abdomen progressively sinks; bowels and kidneys acting freely; patient remains one-quarter to one-half hour without an attack; persistent pains, especially in right leg; temperature 38 deg.; morphine discontinued.

September 24—Localized spasms in back and legs; left leg beginning to be normal.

September 26—No more spasms; trismus persisting with slight separation of teeth, allowing freer feeding; chloral 3 grammes; end of the month no trismus; patient does not remember her great sufferings; during the administration of morphia she was unconscious of her surroundings. When convalescent she still had a slight dorsal hump; extreme weakness and emaciation. Patient seen since then several times and has never presented any further inconvenience of her painful illness.

Department of Therapeutics.

In charge of Dr. J. A. Storck, New Orleans, La.

Subcutaneous Injection of Creosote in Pulmonary Tuberculosis.—Professor Gilbert recommends the following mixture:

Creosote (beechwood)	374 gr.
Camphor	225 gr.
Aristol	150 gr.
Eucalyptol	450 gr.
Sterilized neat's-foot oil, q. s	8 fl. oz.

Each cubic centimeter of this solution contains a grain and a half creosote, six-tenths of a grain of aristol and three-quarters of a grain of eucalyptol.—*Practical Druggist and Review of Reviews.*

Itrol is the name given to the salt (silver citrate) recommended by Dr. Crédé, together with actol (silver lactate). Some practical objections being found against actol, Dr. Crédé introduced this citrate with success. It has less irritating effects

than actol, is non-toxic, and acts as a very efficient surgical antiseptic, when used both as an ointment and in the powder form.

It is described as a fine, dry, odorless powder, only slightly soluble in water. Dr. Oscar Werler, of Berlin, reports having used it, beginning with solutions as dilute as 1 to 8000, both as an injection and by irrigation, with very gratifying results in fully fifty cases of acute and chronic-gonorrhea, in three cases of gonorrheal urethritis in women, in gonorrheal inflammation of the vulvo-vaginal glands and in a few cases of chronic cystitis. He finds that it is a powerful agent to destroy the gonococcus, acts well upon the urethral mucous membrane, and is penetrating in its action, reaching deeper than the surface, thus acting as an efficient remedy, especially in gonorrhea.—*Ephemeris*, Vol. IV, No. 5.

Mercuric Silico-fluoride as a Bactericide.—In antiseptic action silico-fluoride of mercury is, according to Hallion, Lefranc and Poupinel, the most powerful of all known substances. Experiments on cultures of various pathogenic bacilli show that this substance is at least twice as active as corrosive sublimate, while it is at the same time less toxic. Experiments at the Bichat Hospital show that the silico-fluoride in 1 per cent. aqueous solution, or in a vaseline ointment containing 1 in 2000, has a remarkable and rapid action on surgical wound abscesses, eczema and other skin affections, without any appreciable drawbacks.—*The Retail Druggist.*

Strychnine Poisoning.—This may be antidoted with full doses of chloral. Patients thus poisoned can and do endure full doses of chloral with excellent results. As strychnine is a powerful excitant of the cord, and as chloral is a strong depressant of the cord, the latter antidotes the former with a physiological degree of certainty. Conversely, however, strychnine is not antidotal to any certain degree to over-doses of the chloral. The latter is a powerful dangerous depressant of the great centre of respiration and circulation, the medulla oblongata. Chloral is a dangerous remedy in large doses, even when given to antidote strychnine poisoning, yet one must be bold and alert in such cases to succeed.—Joseph Adolphus—*The Medical Age.*

Euquinine.—This name has been applied to an article described by Prof. Von Noorden (*Centralbatt f. innere Med.*) as the ethyl-carbonic-acid ester of quinine. It occurs in white needles, which are soluble with difficulty in water, but readily soluble in alcohol, in ether and in chloroform. It has an alkaline reaction and forms crystalline salts with acids. The chloride is readily soluble in water, the sulphate dissolves with some difficulty, and the tannate is almost insoluble. It is claimed that this derivative of quinine has the characteristic remedial virtues without any of the unpleasant properties of that drug.

Ulcers of the Nasal Septum.—These are often a source of epistaxis, and are best treated by applications in solid form of potassium permanganate. A probe wrapped in slightly dampened cotton is dipped in finely powdered permanganate and applied to the affected surface, the surplus being washed away. Varicosities of the septum often yield to this treatment.—*General Practitioner.*

The Prevention of Pitting from Small-pox.—

Iodoform	2 parts.
Collodion	30 "

To be painted on the pustules of the face, neck and hands frequently.—*Progrès Medical.*

Tanosal, a New Preparation of Creosote.—This new drug is a synthetical tannic-acid ester of creosote. It is described as an amorphous, dark brown, very hygroscopic powder having a faint odor of creosote. On account of its proneness to deliquesce, it can not be dispensed in powder. It is on the market in the form of a watery solution and in that of pill. Each pill contains about five grains of tanosal, equivalent to three grains of creosote. On account of the ready solubility of tanosal, it is easily administered in water, and it is not irritating to sound mucous membranes; yet because of its harsh taste, the solution should be freely diluted—a tablespoonful with a half glass of water. Dr. Kestner, of the civil hospital in Mulhausen, thinks that tanosal is better borne by the digestive organs than any other preparation of creosote. Kestner has used it in more

than seventy-five cases. The usual dose is a tablespoonful of the solution three times a day, gradually increased in some cases to double that amount.

Among the patients there were 33 with pulmonary tuberculosis, 15 with acute bronchitis, 1 with chronic broncho-pneumonia, 5 with bronchitis incidental to infectious diseases, and 10 with simple catarrh of the throat and bronchi, and it was in the last mentioned class of cases that the best results were obtained. —*New York Medical Journal.*

"Tasteless" Castor Oil.—Probably the most agreeable way to administer the oil is in an emulsion, and a formula for producing one is as follows:

Castor oil	1 ounce.
Yolk of egg	1 "
Syrup	2 drams.
Tincture of orange peel	1 "

Water to make 3 ounces. Mix and make emulsion.

Another—

Castor oil	1½ ounces.
Powdered gum arabic	2 drams.
Sugar	2 "
Peppermint water	4 ounces.

Mix and make emulsion.

It has also been stated that hot milk affords a vehicle which does away with the unpleasant taste of the oil to a certain degree.—*Druggist's Circular.*

Miscellaneous.

THE PLAGUE.

The Spread of the Plague and its history formed the subject of an address before the Epidemiological Society of London, by James Cantlie, M. B. Aberd., F. R. C. S., England., late of Hong Kong. As the subject is so timely and attracting properly so much attention just now, we reproduce an abstract of it published in the *British Medical Journal* of January 9, 1897.

After some preliminary remarks on the names which have been applied to the plague, Dr. Cantlie further considered the

TERMINOLOGY.

The term "bubonic" so frequently applied to the disease is not so appropriate as would at first sight appear. A bubo is essentially the swelling of a gland caused by the entrance of septic materials in the tract of lymphatics over which the gland presides. This can not be said to obtain in plague, for the so-called bubo of plague can in no sense be regarded as a lymphatic swelling, but merely the outcome of a blood poison. If it is to be classed a bubo at all, it must be distinctly understood to be an "idiopathic" bubo, a true *bubon d'emblée*. One never speaks of the buboes of tertiary syphilis nor of scrofulous buboes. The terms may be clinically correct, but they are not in common use; they have, however, as much right to be called bubonic as the glandular enlargements in plague. With these considerations before us I would venture to name the disease "Malignant Polyadenitis," in the hopes that attention may be drawn to the naming of the disease by more competent students than myself.

Plague or malignant polyadenitis we may define as "an acute febrile disease of an intensely fatal nature, characterized by inflammation of the lymphatic glands, marked cerebral and vascular disturbances, and by the presence of a specific bacillus."

GEOGRAPHICAL DISTRIBUTION.

The basin of the Mediterranean and the strip of country which runs parallel to that sea across the Asian continent from Turkey to China, may be roughly taken as its present belt during the nineteenth century, but the Mediterranean part of the belt has disappeared almost wholly within the present generation. A map of the plague-stricken districts within the last fifty years shows plague astride the Himalayas with giant limbs reaching on one side the Red Sea and on the other the shores of the Pacific.

THE INFECTION OF ANIMALS.

The animal which above all others is known to be affected by the plague is the rat; but the wide geographical area throughout which this animal is met would seem to frustrate any attempt to determine a collateral distribution. On looking a little more closely, however, we find rats (the murinæ) divided into two

great sections—the mures, inhabiting the Old World (except Madagascar), and the sigmodontes, inhabiting the New World and Madagascar. Of the mures one sub-family, that of the Nesokia, is met with, reaching from Palestine to Formosa across the northern part of India. The southern limit in India seems to be where the great bandicoot, or pig rat, exists, and here plague is unknown. This is the only animal which presents a geographical distribution well-nigh corresponding to the present distribution of plague, and it is the animal above all others which is looked upon as being liable to be attacked by plague.

We find that pigs, dogs, rats, snakes, jackals and pigeons are affected by a fatal malady, whilst plague is epidemic among human beings. Pigs and dogs are believed to be attacked only after consumption of plague flesh. Snakes by the swallowing of rats, and, possibly, jackals are infected in the same way. None of the purely herbivorous animals—horses, donkeys, oxen, sheep, goats or rabbits—are attacked. It is the flesh-eating animals which are the sufferers. Of course, the rabbit, guinea-pig and a number of animals can be inoculated experimentally, or made to consume plague-diseased food, but no herbivorous animal acquires it by the natural processes of infection. If it is by consumption of flesh that animals are infected, how do human beings get it? The animals affected seem to become infected from flesh—the snake from the rat, the jackal, pig and dog from eating the flesh of persons dead from plague; but how does the rat become infected? Could we find that out we would likely know how man is infected. One animal missing in the scale is the cat; if rats perish from plague, surely their mortal enemy, the cat, would be diseased. In Hong Kong during 1894 many cats died in a peculiar way; the chief symptom being paralysis of the hind legs.

PESTIS MINOR.

Is there a disease of an epidemic character, attended by a low death rate, characterized by polyadenitis and showing in the blood and tissues a bacillus met with in typical plague (malignant polyadenitis), and yet so apart clinically that it is either a separate disease or caused by the same bacillus in a lesser or non-toxic form?

From all hands we have evidence of such a disease—namely, a *pestis minor*, benign polyadenitis. (1) The Russian outbreak at Astrakan in 1877 was probably, nay certainly, of this nature, the low rate of mortality being sufficient to stamp it other than true plague. It is to be noted that the typical plague which raged in the same province appeared not amongst the community affected with *pestis minor*, but in a district 150 miles away where *pestis minor* was unknown. (2) In Calcutta six years ago a form of fever existed among the British troops there, which in all points resembled the present form of bubonic fever which exists there now—namely, fever with specific glandular swellings. (3) We have it also from Calcutta that the natives are frequently afflicted with glandular enlargements during malarial fever. (4) In the far East, from Singapore, the Straits and along the coast of China as far as Shanghai, between the years of 1892 and 1896, we have accounts of a singular affection of the inguinal glands, which occupied the attention of the Singapore and Hong Kong branches of the British Medical Association. The correspondence was carried on between the societies, and there is no doubt the affection at both places was identical in its nature.

I am compelled to draw attention to this subject in consequence of a paper which appeared in the *British Medical Journal* of September 26, 1896, by Surgeon C. C. Godding, R. N. Surgeon Godding refers to many cases of chronic glandular swelling, attended by fever and anemia, and he gives us a careful clinical account of several such cases as having occurred in Hong Kong. This is the first notice to the profession generally of a type of ailment with which all practitioners in the far East are but too familiar.

When I brought the matter before the Hong Kong Medical Society in 1893, I mentioned that I employed the term *bubon d'emblée* to designate the condition, and that I had treated thirty-eight cases in thirty-two months. My account of the ailment was as follows: "A slowly developing non-venereal bubo occurring in one or other groin, attended by general weakness, anemia and fever. The groin glands affected are discrete at first, but gradually the swellings amalgamate, and a large mass as big as half an orange or larger presents. At the end of about twenty days points of boggy softness occur, and if the bubo be left to itself the skin becomes undermined and the pus finds its

way to the surface through two or three or more fistulous openings. The swelling, when cut into early, shows a periglandular serous infiltration, and when pus occurs the gland will be found lying detached except by shreds of tissue at one or two points. The gland when cut into shows many focal points of suppuration, and breaks down quite easily beneath the fingers." Surgeon Godding advocates arsenic as almost a specific, but my own treatment latterly was early incision. It is necessary to make a clean sweep of every gland that can be felt or seen, as there is a great tendency to recurrence in any gland or piece of a gland that is left. Seeing that glands, except strumous glands, are not excised for any other disease, I examined the records of the Government Civil Hospital in Hong Kong in connection with the excision of glands, and I found the following: In 1891, nineteen buboes were scraped and excised; cervical glands, one. In 1892 I have not the record. In 1893, twenty-seven buboes were scraped or excised. In 1894, twelve buboes were scraped or excised; 1894 was the plague year, and the list of operations is said to be incomplete. Taking this evidence in conjunction with Surgeon Godding's and the private practitioners in Hong Kong and Singapore we have weighty evidence of a widespread affection, be its cause what it may.

Another form of idiopathic glandular disease is seen in what may be styled an epidemic form in children. In the year 1891 I reported twenty-three cases at the Medical Society at Hong Kong, and since that date cases have frequently occurred. The affection consists of an enlargement of one gland (seldom more) in the necks of children over the sterno-mastoid, about the middle of its length. The swelling is seen upon the sterno-mastoid, but it might be found to commence, were it met with early enough, in a gland on its anterior border. The disease appears infectious, and is attended by feverishness. There is no throat affection, nor is the seat of the disease in the parotid. We, the medical practitioners, styled the condition, for convenience sake, mumps; but we all admitted that neither the parotid nor the submaxillary glands were the seat of the trouble. It will be remembered that the term "peculiar form of mumps" was employed by some to designate the Astrakan disease in 1877.

In the years 1893-94 and since, in Hong Kong, cases of fever of a typho-malarial type frequently presented in the third or

fourth week a general enlargement of lymphatic glands, which lasted for a week or ten days and then subsided. They were deemed interesting cases at the time, but with the fresh light thrown upon them by recent investigation, more especially the researches in Calcutta, they assume a new aspect.

To sum up the evidence before us it would seem: (1) That a fever with glandular enlargement, *pestis minor*, a "benign polyadenitis," is an established disease; (2) that it may be independent of plague or malignant polyadenitis; (3) that the two may coexist; and (4) that the one may exist independently of the other.

INFECTION AND CONTAGION.

We have here two opposite conditions before us, namely, plague entering a house and seizing practically all the inmates; and, on the other hand, medical men, nurses and native students acting as clerks and dressers escaping completely.

Gathering the evidence from Hong Kong together, we find that the soldiers who were affected were exposed—if there is any truth in intensity of the contagion at all—to the most concentrated form of the poison. They worked not in the streets in the open air, but in reeking hovels for several hours together. Intimate and prolonged contact with the contagium in an active condition seems to be the explanation of their infection. The same is to be said of the two European nurses who were seized. Both attributed their ailment to intimate and prolonged contact with a generating source—namely, a child carried in the arms not for a few minutes, but for several hours daily extending over several days. The immunity of the medical men and Chinese students does not annul the theory that prolonged and intimate contact is a means of spread; for it must be remembered that the medical man "visits" only, he does not stay for a day beside one case as does a nurse. In this way, also, the immunity of the Chinese students is to be accounted for. They performed their task in a newly built, commodious, and roomy mat shed. Freely ventilated by being raised three feet from the ground, and its lofty roof constructed so that the air swept across between the side walls and the roof, with large apertures in the roof itself, the chance of contracting the disease from a form was reduced to a minimum.

DISTRIBUTION OF THE INFECTION.

The rat seems to be infected before the human being; and the fact of the dead rats being found about the house during the plague epidemic is a true warning that the inmates of the house will in all probability be affected. How is the rat infected? Experiment proves (*a*) that the rat is inoculable and dies from a disease identical with bubonic plague in man; the inoculation of both the blood and inflammatory fluids of the plague infected is effective; and further, a pure cultivation injected hypodermically also sets up signs and symptoms of rat plague and causes death within a few days; and (*b*) that supplying the animal with plague-infected food, whether flesh or cultivated germs, causes plague in rats. How does the rat in its natural state become infected by inoculation? We can not assume that every rat has a scratch or open wound by which it is infected. It is more likely he inhales or imbibes the poison either as a miasm in concentrated form or he ingests it with his food. It may be both forms of infection are at work; and, further, it must not be forgotten that rats are cannibal in their habits, and direct contagion must play a large part, if not the major part, in the general infection of their tribe. That it is some general infection and not a chance inoculation is manifested by their sudden and simultaneous seizure—a seizure so sudden that scores of dead and diseased rats will be found in a single house of any size within a few hours.

What we may conclude from the study of the infection of animals is: (1) that the rat is the animal most likely to be attacked by plague; (2) that rats suffering from, or dead from plague, may infect other animals, such as snakes and jackals, who consume them; (3) that rats are always affected by a disease similar to plague at the same time man suffers; (4) that the rat may infect men, but the means of conveying the contagium is not known; (5) that during the prevalence of benign plague (*pestis minor*) rats do not die.

INCUBATION PERIOD.

The time intervening between exposure and the development of plague has been carefully observed and noted throughout many epidemics of this century. The conclusions arrived at by all who have written an account of their Hong Kong experi-

ence give from three to six days as the period of incubation. Dr. Lowson makes it seldom under three or over six. Professor Aoyama gives it at from two to seven days. If by that statement he means from the end of the second to the beginning of the seventh day, his recorded observations agree exactly with Lowson's and others. Be it observed, however, this extends only to plague infection during an epidemic.

In the *British Medical Journal* of December 12, 1896, page 1737, we find a notification of two or three cases of plague as having occurred at the Seamen's Hospital, Greenwich. The dates given would show the vessels, in which the infected persons were, left Bombay about the end of August. The earliest official intimation of plague in Bombay was when Dr. Viegas reported, at the meeting of the sanitary committee on September 23, 1896, that the disease had prevailed in the locality for a fortnight, thereby assigning September 9 as the date of commencement. The first case, therefore, at the Greenwich Hospital could apparently not have been infected from that source, as the vessel could not have been less than seventeen days on the way. I find, however, in the *Times* of India, September 30, 1896, the following statement: "In Bombay, for two months certainly—in all probability longer—the native inhabitants of the neighborhood of Maudvie, when plague broke out in Bombay, seemed to have been alive to the fact of the existence of a malady resembling plague before the malignant type developed. They had organized processions in August to propitiate the Goddess of plague. This either proves that true plague was present long before the authorities knew of its existence, or that a disease resembling plague was mistaken for the malignant type. According to this evidence plague may have existed in Bombay in July, 1896. The first case dealt with and reported upon in Calcutta, gives an instructive history. The patient, a lad aged seventeen, came from Bombay, where, evidently, he had been exposed to infection, as his sister, who accompanied him, had seen several cases of plague in Bombay. Fifteen days before leaving Bombay he had noticed swellings, first in one groin and then in another, but never felt ill until his arrival in Calcutta on September 24. He was seen and carefully examined in Calcutta by honest observers, and a diplobacterium identical with the Kitasato bacillus was found in his blood. Not only so,

but the clinical symptoms of plague were most manifest. It would therefore seem from these two well authenticated cases that glandular swellings may attack a dweller in a district where true plague rages, and that at a subsequent period (a period which in the Calcutta patient was not less than twenty days, and in the Greenwich Hospital case could not be under seventeen days) may become virulent and kill the patient by a true plague; in fact, that a *pestis ambulans* may become a malignant polyadenitis in the same person, even although the patient is removed from the infected zone. This may be true, although it is not at all a comfortable doctrine, but I can come to no other conclusion, having regard to the evidence before me. The incubation period of plague, therefore, may be fixed as from three to six days whilst an epidemic rages, but the evidence to hand within the last few weeks from Calcutta and from London renders the period of incubation of ambulatory plague uncertain."

BACTERIOLOGY.

The bacteriology of plague began by the advent of Kitasato from Tokio during the Hong Kong epidemic of 1894. On June 14, 1894, Kitasato demonstrated the bacillus, and this was confirmed afterward by Dr. Yersin, of the Pasteur Institute in Saigon, working in an independent manner. Dr. Yersin undertook some experiments to test the truth of the nature of the bacillus. He found (1) that a bacillus in some respects resembling in its appearance that met with in the human body was found in the soil of Hong Kong during the plague epidemic; (2) that the bacilli of the soil and body occasionally behaved similarly in culture experiments, and (3) that the cultured specimens of soil bacilli were, however innocuous, possessing no virulence when injected into mice or guinea-pigs. Dr. Yersin further found that in his culture of human plague bacilli there were microbes of different virulence, some mildly powerful and some altogether powerless to infect either mice or guinea-pigs.

PLAGUE AND SOIL INFECTION.

Bearing closely upon this subject is the question of the medium of the spread of plague. Plague is perhaps the slowest traveling disease known; it may take months and even years to

extend a few miles. From the city of London it took nine months to reach Soho, and more recently it took ten months to travel from Hong Kong to Macao, a distance of thirty miles. The lines of communication will not explain this, for in Macao thousands of persons sought shelter in 1894 when Canton and Hong Kong were plague-stricken. Steamers and Chinese junks and fishing boats passed freely between the ports, yet Macao did not become infected until nine months after Canton and Hong Kong were pronounced clear. How did the parasite reach Macao, by sea from Hong Kong or by land from Canton? If by sea it would in all probability have been in Macao long before. If by land, how did it travel, by human or animal carriage or by the soil? If by human beings it means intimate prolonged contact of the carriers; if by soil it means a bacillary infection of the soil, spreading from a centre and extending by a continuous margin of active growth along paths favorable to its nutrition. Were the soil only the producer or infector, all islands in the area ought to be immune. This not being so, it comes that the poison must be carried by human beings, by animals, by clothing or by food. That the poison conveyed by them may require the soil as a medium to reproduce the infecting bacillus may be quite possible, but that some other medium than the soil is capable of transmitting the disease is quite evident.

CLIMATE AND PREVALENCE OF PLAGUE.

In southeast China the epidemic of plague developed at the end of a prolonged and exceptionally dry season. The rainfall was so deficient that most of the wells throughout the district were exhausted, and the crops suffered severely. Without driving the argument of drought too deeply home, it must, however, be observed that in Bombay we find a similar condition of things before the outbreak. The rainfall over a wider area of country has been so greatly deficient that widespread famine has followed.

In Canton the plague commenced when the temperature averaged about 60 deg. F., and continued when the average daily temperature reached 90 deg. Further, it must be noticed that the disease disappeared when heat and moisture were about 90 deg. throughout the district, so that with regard to the common statement that it thrives best at a temperature between 80 and

85 deg., it must not be forgotten that while thriving it also disappears at the same temperature. It dies out when the conditions which we believe to be suitable for its propagation, heat and moisture, are at their best. But heat does not seem to be an essential to the appearance of the plague. In Russia it has appeared again and again in winter, with deep snow on the ground and the thermometer in the neighborhood of zero. In Astrakan, in 1878, the disease raged during severe winter weather. We are at a loss, therefore, to connect warmth with plague or cold weather with its check.

The argument of overcrowding might be at once set aside by the sweeping statement that just as plague flourishes in crowded cities, so likewise it flourishes in barren deserts, where the population is sparse in the extreme. But overcrowding may take place in a country house as readily as in a town house, and the poorer the country the greater the overcrowding. The rains in warm climates drive the inhabitants within their poor dwellings, the snows in winter do the same in colder climates, and the ailments attending overcrowding are most likely to appear. In other countries, as in Mesopotamia, the cessation of rain brings the cessation of plague, as the people can issue forth to sleep, and open their casements without fear of being drenched. The close, intimate contact believed to be necessary for the propagation of plague is, therefore, brought about by two entirely opposite conditions, which have overcrowding in common; and, taking all the effects of weather into consideration, it would seem that not the meteorological conditions but the mechanical results of weather generally are to be reckoned with.

PLAGUE AND FAMINE.

Plague is ever associated with scarcity and want. Sometimes it is famine caused by the destruction of crops by floods, sometimes by drought; but from whatever cause, plague and scarcity of food are frequently allied. Not only is the grain scarce, but it has often been remarked upon that it is bad, musty, covered with blue mould and fermented. The two conditions may be to each other as the cause and effect. The grain is gathered before it is ripe, owing to the people's necessity, and the unripe grain not only yields insufficient nourishment, but is apt to undergo fermentation and to be attacked by vegetable parasites.

PLAGUE AND FILTH.

The preceding remarks prepare the way for the recognition of all possible sanitary evils and neglects as accompaniments of plague. Chinese towns are at all times ready to generate any filth disease; Hong Kong itself is but little better. The city was hastily built about fifty years ago, when the sudden inroad of tens of thousands of Chinese sought occupation and habitation under the British rule. From that rush of people and feverish haste to build without proper control the city never recovered, and to this day presents sanitary aspects of the most flagrant description. The public sewers are well built in the separate system; the water supply is most excellent in quality, although when rains are delayed deficient in amount; the public latrines are under government control; the removal of excreta is by the bucket system and is admirably controlled. Here, however, the bestowal of praise must cease, for beyond them there is much to condemn. House overcrowding is rife and surface crowding to the extent of 2500 to the acre holds sway over the chief area of the native quarter of the town. Dr. Lowson states graphically what is known to every resident in Hong Kong: "The majority of the houses of the infected district being in a most filthy condition * * * when to a mixture of dust, old rags, ashes, broken crockery, moist surface soil, etc., is added fecal matter and the decomposing urine of animals and human beings, a terribly insanitary condition of affairs prevail."

The evidence from Bombay is similar to the Hong Kong report, and but confirms the state of overcrowding and filth to which Oriental cities, even when partially under British control, may attain.

CONCLUSIONS.

The conclusions drawn from the study of the spread of plague are:

I.—Varieties: (1) The varieties of plague known under the names (*a*) fulminant, (*b*) typical and (*c*) *pestis minor* are allied. (2) The cause of fulminant and typical plague is a diplobacterium, in the blood and tissues. The cause of *pestis minor* may be an allied diplobacterium, but with a lesser toxic power. (3) An appropriate name for the fulminant and typical plague is "malignant polyadenitis." An appropriate name for the mild variety (*pestis minor*) is "benign polyadenitis."

II.—Infection and Contagion: (1) Plague is infectious chiefly from the dust arising during the cleansing of dwelling houses which plague patients have occupied. (2) Plague is contagious by prolonged and intimate contact with the plague-stricken, as in the case of a nurse carrying a child ill of the disease.

III.—Distribution: (1) Plague is met with in a definite area of Asia, which may be termed the "plague belt." (2) That the home of plague is at the present day in Mesopotamia and the countries adjacent. (3) From Mesopotamia as a focus the plague may spread northward to the Caspian Sea, westward to the Red Sea, southward as far as Bombay, and eastward as far as (Formosa) the China Sea. (4) During the present century plague has shown a western retrocession and an eastern accession of virulence.

IV.—The Bacillus: (1) Typical plague (malignant polyadenitis) is associated with *pestis minor* (benign polyadenitis.) (2) A bacillus of somewhat similar appearance microscopically is reputed to be found in both. (3) The bacilli differ in their toxic powers only. (4) A benign polyadenitis may run its course without being preceded or followed by the malignant variety. (5) Malignant polyadenitis may run its course without being preceded or followed by the benign variety. (6) The bacillus of the benign variety attains malignancy by passing through some intermediate host, possibly, but not probably, the rat.

TWO CASES OF DERMATITIS FROM RŒNTGEN RAYS.

Case I is reported by Dr. H. R. Crocker, of London, in the *British Medical Journal*, of January 2, 1897.

An apprentice, aged 16, was exposed by his employer, a surgical instrument maker, to the X-ray for a radiograph of the spine. The Crooke's tube was placed five inches from the epigastrium, a flannelette shirt intervening between the tube and the skin. One hour's exposure.

The next day the skin felt irritable and was of a deep red color in the area subjected to the rays from the tube.

Six days later, the irritability had increased and the skin felt stiff when the body was bent. Three days later vesicles began to form, increasing in size and number up to the time of the author's observation.

The inflammation increased in intensity, radiating beyond the original patch involved, namely, the size of the hand. The general surface was purplish or dusky red, with flat vesicles extending to within one-half or three-fourths of an inch wide of the red margin, and forming an irregular band three-fourths of an inch wide around the umbilicus.

Under treatment the vesicular portion lost its epidermis, leaving the surface raw. The surface required fully two months to heal.

An interesting point in the case is that the downy hair persisted, no evidence of involvement of the hair follicle being evidenced; in fact, even over the area of raw surface the hairs were distinctly present.

The conclusions drawn by the author are that the dermatitis produced resembles severe sunburn, and further, that the ill effects are only produced when the exposure is very prolonged and the Crooke's tube is placed very close to the skin, or when exposure is frequently repeated, as for public demonstration.

Case II.—In the *Johns Hopkins Hospital Bulletin* for February, Dr. Gilchrist tabulates twenty-three cases so far reported, and includes his own.

The patient was a man of 32 years of age, engaged in operating and demonstrating an X-ray apparatus. After exposing his hand for three weeks for four hours daily, he noticed that the skin of the back of the hand, wrist and forearm began to turn very red and became "puffed up," although he suffered no pain.

The inflammation stopped his occupation, and gradually spread over the the hand, wrist and lower fourth of the forearm, as gradually became more inflamed and swollen, the lesions spreading to the fingers.

The points in the case, as summarized by the author, are:

1. The lesions were hyperemia, edema.

2. Subsequent subjective symptoms, viz., aching, throbbing and shooting pains, increasing in severity.

3. The gradual deepening of the color of the skin; the exfoliation.

4. The osteoplastic periostitis, evidenced by comparative X-ray photographs and by the interference with the movement of the fingers, together with tenderness on pressure.

5. The conclusion that proximity of the ray is responsible for much injury, while idiosyncrasy plays a prominent part.

Book Reviews and Notices.

The American Year-Book of Medicine and Surgery. Collected and Arranged by Eminent American Specialists and Teachers. Under editorial charge of Geo. M. Gould, M. D. W. B. Saunders, Philadelphia, 1897.

Progress in medical science is so marked from year to year that it is an impossible task for the busy man in practice to keep pace with it simply by buying a few monographs and receiving a few journals. It takes much time on the part of a man specially fitted in order to gather all that is new in a special branch, digest and assimilate it, and finally present the gist of it in an attractive form to the general reader.

Mr. Saunders has done this through the agency of Dr. Gould and some thirty American writers, all more or less eminent in their special departments. The work has been well done. These gentlemen have not only gathered facts and condensed them, but have not hesitated to comment upon them, so that the reader not only gets the data in an easily absorbable condition, but profits at the same time by an expression of opinion from an authority.

A good point is that all the contributors are American, but it is unfortunate that two-thirds are from one city. A better idea of the general opinion in medical matters might have been secured by inviting contributions from different sections.

The volume is larger than that of last year, containing about 1200 pages. The paper, typography and binding are excellent.

A complete analytical review would require more space than we have at our disposal, but we can note that most subjects have received the attention they deserve. It is a little surprising, consequently, to find no mention of Pfeiffer and Widal's agglutination test for typhoid fever under the head of the diagnosis of that disease. In discussing Fort's method of electrolysis in stricture of the urethra, the editor states that it will diminish the number of external urethrotomies; better had he said the *internal* urethrotomies, for while the operation can preferably be employed in the majority of cases where internal urethrotomy would have formerly been resorted to, yet it can not replace

external urethrotomy where the latter has up to now been thought strictly indicated.

The Year-Book is sold at $6.50, cloth, and $7.50, half morocco. Either amount would be well invested in its purchase.

C. C.

The Report of Board of Administrators of the Charity Hospital, for 1896, to the General Assembly of Louisiana.

The year past shows the changes in the Board of Administrators, the change in the house staff, and a new chief nurse in the training school. A munificent legacy of from $60,000 to $70,000 has been duly acknowledged, coming from the estate of the late Mr. Richards. The customary reports of officers and committees are displayed. The usual tabulation of cases fills the latter half of the report.

A Practical Treatise on Materia Medica and Therapeutics. By Roberts Bartholow, M. A., M. D., LL. D. New York: D. Appleton & Co.

This the ninth edition of this popular work. The first edition appeared in 1876, and the eighth edition in 1893. Like the preceding editions it is well printed on good paper. The work has been enlarged by forty-five pages. Most of the new matter consists of accounts of the synthetical remedies. Under the head of electricity appears the following: "Arrangements are now available for utilizing the public sources of electric lighting and power." This is late news to many who have availed themselves of this means of supply for the past three or four years. It is disappointing to notice an entire absence of any mention of Kola or any of its preparations, also of diastase, especially of Taka-diastase and of Formaldehyde. Taking the work as a whole it deserves its popularity.

Storck.

The Year Book of Treatment for 1897. A Critical Review for Practitioners of Medicine and Surgery. Crown octavo, 488 pages. Cloth, $1.50. Philadelphia and New York. Lea Brothers & Co., 1897.

The thirteenth issue of this work is before us. An excellent list of contributors assures a competent handling of the digest of the year's work in the several lines embraced in the table of

contents of the book. The chapter on diseases of the lungs and organs of respiration is particularly comprehensive, and space is given to the consideration of serum-therapy as curative and for diagnostic purposes.

Under the caption "Anesthetics," ample description has been given to Schleich's method for local anesthesia.

Serum-therapy in syphilis is mentioned and particularly extolled for late manifestations, while it is rather discountenanced in the earlier stages. Calcium chloride in urticaria—formalin for ringworm and weak solutions of chromic acid for intertrigo are noteworthy suggestions in the chapter on diseases of the skin.

Carrasquilla's serum for leprosy and thyroidin for prurigo, are noted. Every branch of medicine finds discussion and suggestions of service are indicated. A list of new remedies, advanced during the year, is given at the end of the work with brief mention of their indications. The same general scheme is followed as in the preceding editions and the work is equally as useful.

One fact derogates the popularity of the work in this country, and that is the fact that the whole edition is the work of English reviewers, although published by an American house—rather a sad and uncomplimentary commentary (*sic!*) on the profession in the United States. DYER.

An American Text-Book of Applied Therapeutics. For the Use of Practitioners and Students. Edited by J. C. Wilson, M. D., assisted by August A. Eshner, M. D. Philadelphia, W. B. Saunders, 1896. Cloth, $7. By subscription.

The different subjects have been written by forty-three different contributors. With the exception of the articles on Malaria by Professor Laveran, and that on Leprosy by Dr. Rake, the articles are by American writers. The respective articles are well written. The one on Food Infection, by Victor C. Vaughn, is replete with information. The article on Malaria, by Professor Laveran, deserves special mention. It is the best article on the subject the reviewer is acquainted with. The contribution of Dr. Parvin on the disorders of pregnancy is well written. The work is eminently practical in every detail. It is made up of 1326 pages. The typographical work and binding are good, as is usual with this firm. STORCK.

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Original Articles.

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THE PRACTICE OF MEDICINE AS A MONEY-MAKING OCCUPATION.

AN ADDRESS TO THE GRADUATING CLASS OF 1897 IN THE MEDICAL DEPARTMENT OF TULANE UNIVERSITY.

BY PROF. STANFORD E. CHAILLÉ, A. M., M. D., DEAN.

Graduates of 1897.—You will find inclosed in the diploma of every one of you a copy of the Code of Ethics of the American Medical Association. This code commands the allegiance of the most reputable members of the medical profession; it admonishes the physician of his obligations to the public, to his patients, to his fellow-physicians and to himself; it maintains in all things the honor and dignity of the medical profession, and it upholds a standard emblazoned with the sacred command: "Do unto others as you would be done by." If you are to be esteemed as worthy members of the medical profession; if you are to be cherished as beloved sons of this college, you will subscribe to this code and honor it in your careers, as the soldier honors the flag waving at the front of his command.

The unusual brevity of my report to the president, the lack of a valedictorian to occupy your time, the rereading of the code and the persisting financial depression have all united to tempt me to address you at greater length than usual, submitting some

considerations pertinent to the subject, now of greatest interest to you, the practice of medicine as a money-making occupation.

Our Code of Ethics denounces, in the maintenance of morality, all pretension, deception and trickery as devices of quackery. None the less, these devices of quackery often gain the quickest success, and sometimes the greatest fortunes. The reputable physician is forbidden not only to puff himself, but also to consent that others, including his wife and the newspapers, shall puff him. However remunerative to quackery is its monopoly of the advertising field; however damaging this is to the people, no reputable physician can condescend to any compromise with quackery in the pretentious and deceptive advertisements that every day gravely delude the public.

There are two other money-making expedients that widen the abyss between the quack and the reputable physician. Whoever makes money his first and humanity his second consideration violates the code and is guilty of quackery; hence, whoever makes an invention or discovery, calculated to relieve human suffering, and maintains, for his own profit, a greedy and inhuman secrecy, violates the code and is guilty of quackery. He who has a secret remedy is no friend to humanity, and is no better than a vile trader in life and death, deserving the contempt not only of every physician but also of every philanthropist.

Has the medical profession proved that humanity is its first consideration? Physicians have ever been the chief and, for the most part, the unpaid supporters of hospitals for the destitute; they have ever rendered to the poor gratuitous services, as does no other profession undedicated to this work; and they have ever been the leaders in unceasing efforts for sanitation, whereby the ravages of disease, and, at the same time, the profits of the medical profession have been enormously curtailed. And if a very large proportion of the sickness and premature deaths still afflicting mankind has not been prevented, this incessant tragedy is due to public ignorance and negligence, and it is not due to lack either of professional knowledge or of persistent entreaty for its application.

The benefits bestowed on humanity by the medical profession, with its free gifts to the world of every invention and discovery, are incalculable. Among many examples it will suf-

fice to recall vaccination, and the anti-toxins and other remedies originating from it, remedies now alleviating much suffering and sickness throughout the world and destined to confer far greater relief.

Who can recall a solitary invention or discovery of the quackery, so patronized by its dupes, the people, that has ever benefited mankind? History abounds with such boastful and lucrative pretensions of quackery as the following:

In 1739 Joana Stevens gained such notoriety by her so-called miraculous cures that she secured the public support of very numerous right reverend bishops, most noble peers, high and mighty dukes and duchesses, lords and ladies; that twenty justices (without one skilled expert in medicine among them) were chosen by Parliament to make careful examination, and they attested unanimously to the "utility and efficacy" of her remedies; and that Parliament actually paid her $25,000 for secret remedies that proved to be absolutely worthless. Such facts provoke one comment and one inquiry. Oh! what fools these mortals were in 1739, and are all fools dead in 1897?

In further illustration of the abyss which separates the reputable physician from the disreputable quack, suppose, solely for argument's sake, that a physician should discover a cure for drunkenness and should, by secrecy, utilize his discovery, not for the benefit of hundreds of thousands of drunkards throughout the would, but solely for the personal profit to be made out of a few thousand of them near his home. Then, remembering that even the woes of gory Armenia are but a fraction of the woes drunkenness is causing and is yet to cause mankind, you may realize the hideous inhumanity of such a discoverer. A conceivable explanation of such a reprobate would be that he had become possessed of Mark Twain's conscience, which gradually withered into such a deformed and tiny little dwarf that Mark kicked it out of his front door as a pestiferous superfluity, and has had no conscience since.

To gain some idea of the profits of quackery, consider the fact that in one year, 1890, the manufactories of patent medicines in the United States sold their products for $32,622,123. Now, if the retailers doubled the price to consumers, as is more than probable, then the people of this country paid for their patent medicines, which very surely do much more harm than

good, money enough to have paid every one of the 104,805 "physicians and surgeons" of the United States an annual income exceeding $600. This evil has not diminished since 1890, and if the money expended on all other forms of quackery could be added to the above sum, then would be realized the enormous amount expended on quackery by the people in this, the favorite land of the quack and the home of his dupes. How long will our laws, made for the people by the people, permit patent medicine corporations to so seduce, by profitable advertisements, our public press, the greatest teacher of the people, and to seduce, by profitable discounts, our druggists, the chief distributors of medicines, that both newspapers and druggists have become paid agents for duping the people to their grave detriment?

Why is it that quackery so succeeds? All of us fear injury and this breeds suspicion, and all long for benefits and this breeds credulity. Both suspicion and credulity are greatest where ignorance is greatest. And since there is no knowledge of universal and daily application, which is so little understood by the people, as the structure and functions of the human body with its diseases and their remedies, there is no subject as to which suspicion can be so readily lulled to rest and credulity be so easily fanned into a flame. Successful quacks fully appreciate and unscrupulously play upon the human infirmities, suspicion, credulity and ignorance of medicine, and quackery will continue to succeed, as it has always done, just as long as man can be easily beguiled by pretension, deception and trickery. "Man," said Southey, "is a dupable animal. Quacks in medicine, quacks in religion, quacks in politics know this and act upon the knowledge. There is scarcely any one who may not, like a trout, be taken by tickling." Every comparison between the quackish and the reputable practice of medicine always recalls to me a literary relic from ancient Rome—"man's feet cling to the earth, but his face turns upward to heaven, in part beastly, he is in part divine."

I have dwelt on quackery because it is the greatest foe to the medical profession, but there are other serious obstacles to the financial success of the reputable medical practitioner, and four of these will be noticed. There is no country in Europe that has one physician to even as few as every 1500 population. It has been estimated that in the United States it requires a population

of 2000 to provide a moderate livelihood for one physician. And yet there was in this country in 1890 a population of only 600 to every "physician and surgeon." These facts warn you how great is the competition you will encounter, and how arduous must be the medical practitioner's struggle for existence.

Another obstacle, in every large city, is the abuse of hospitals and dispensaries, founded solely for the destitute, by patients well able to pay; an abuse which is increasing and demands correction by the medical officers in charge of all such charities.

Still another obstacle to success is "society doctoring," whereby an educated physician accepts for every professional visit the wage to be earned by a messenger boy. Every physician who accepts a society for inadequate wages is, in this, an enemy to his profession; and it is a mortifying reflection that, while many manual laborers can organize so as both to keep up their own and keep down their doctor's wages, these few educated brain-workers fail to organize so as to secure adequate fees for themselves. This failure prompts the question, whether the fees, so inadequate for good service, are not, after all, ample for such service as is rendered?

A fourth obstacle to your success is found in the fact that the death rate of physicians is higher than that of men engaged in some more wholesome occupations. This greater mortality of medical men is readily accounted for by their more arduous and especially by their more anxious lives; by their unavoidable irregularity as to meals, rest and sleep; by their greater exposure to communicable diseases and to bad weather; and by their greater temptation to seek temporary relief from frequent exhaustion, worry and sleeplessness, by indulgence in such seductive but disastrous drugs as alcoholics and opiates. Their greater opportunity to procure and their greater familiarity with such drugs unfortunately tend too often to an underestimation of the frightful risk of self-indulgence. These facts forcibly teach us that few men have greater need than medical practitioners to guard incessantly their own health; and it is manifest that no men are more disqualified by intemperance or by ill health to discharge the duties owed their clients. The statue of the "beloved physician," St. Luke, decorates our college wall, and you will observe that I have urged on you the lesson taught by him: "Physician, heal thyself."

If you have thus far been discouraged by my presentation solely of the obstacles to your success, I shall remind you that he who best knows poisons, can best apply their counter-poisons. But it is time to consider the requisites for success.

First of all need is medical knowledge, including therein skill in its application; and thereafter is needed capacity to gain patients and to keep them. The less the competition, the easier to fulfil these requirements. But most of you will have a superabundance of competitors, and what, then, will be required to gain patients?

No medical practitioner attains eminent success, however great his medical knowledge, unless he possesses high qualities that would gain success in other occupations. Further, practitioners who possess certain qualities often surpass those who are their superiors in medical knowledge. These facts conclusively prove that medical knowledge is not the sole requisite to gain patients.

The two greatest requisites for success in every occupation are enthusiastic devotion to one's calling, and untiring industry in its pursuit. Love of medical knowledge and work for the love of this knowledge, and not merely for selfish success, are two of the best promoters of success. What man has stronger inducements to love and to work than the physician? The chief incentive to his enthusiastic devotion is the incessant struggle for victory over disease and premature death, the worst foes to human happiness. He has enlisted to serve as humanity's champion in waging war against these destructive monsters; and he needs, in this contest, the persistent and courageous devotion that sustained our ancestors in ridding our land of wild beasts, of savages and of foes to liberty, and in dedicating it to freedom from all enemies to safety and happiness.

But in addition to the incentive to devotion supplied by this warfare, the study and practice of medicine provide inducements like those that tempt the Arctic or African explorer, for medical science abounds in curiosities and in anomalies; in a multitude of problems solvable, but still unsolved; in surprises of victory and of defeat; and in the enticing vista of a paradise, as yet unattained, where avoidable disease and premature death will be unknown, except as memories of a civilization which our descendants will denounce as no better than a stage of barbarism. For, is not our vanity at fault in applying a

flattering designation to our social conditions, wherein the increase of population is much exceeded by the increase of the insane, the pauper and the criminal; and wherein diseases, such as consumption, the most destructive and woeful of them all, are suffered to prevail in spite of knowledge of the means to eradicate them?

To work requires opportunity, and here the physician is again fortunate in possessing boundless opportunities for incessant work. If there be no sick to attend, the cultivation of valuable friends and acquaintances, on whom greatly depends the gaining of patients, should occupy much of the time of whoever is beginning his career; and the acquisition of additional medical knowledge provides inexhaustible opportunity for incessant work. Hence, whoever gives sufficient love to medical knowledge and would succeed as a medical practitioner, has neither inclination nor time to become a drunkard, or a gambler, or, what is about as fatal, an office-seeking politician.

There are requisites, additional to those stated, that greatly contribute to the practitioner's success. Of these, the more essential are common sense or sound judgment, power of observation and of mental concentration, courage and self-reliance, command of temper and business sagacity. But, however superior may be a practitioner's intellectual endowments, his success will be greatly increased if these mental gifts be saturated with the milk of human kindness. He needs, more than most men, the charity that practises the lesson "Gently scan your brother man, still gentler sister woman," and he also greatly needs the devotion to duty, the hopefulness and cheerfulness, the cordial courtesy and the heart-felt sympathy that are so highly prized by the sick. Few, if any, practitioners possess all desirable qualities, but he best succeeds who combines in himself the greatest number of them. In fine, every popular and worthy characteristic contributes as surely to success as every unpopular and unworthy characteristic impedes it.

It has often been said that, in medicine, "the successful man is the man who knows human nature as well as his profession." And it is manifest that in every occupation, dependent on popular favor, success must greatly depend on knowledge of human nature and tact in applying this knowledge. As is enjoined on the clergyman, so the medical practitioner must strive "to

please all men in all things," not for his own but for their profit. But the medical practitioner has a much more difficult task to please all than has the politician or any one else dependent on popular favor. For, the usual task of others is to please only the well, while the practitioner must please especially the sick, as well as their numerous healthy relatives and friends.

There are patients who, by their unselfishness, their kind-heartedness, their courage and their heroic endurance of pain, illustrate the noble possibilities of human nature and inspire an ardent and a reverent admiration. But, alas! these do not represent the great majority. Sickness and pain tend to concentrate every thought on self, to weaken will, to confuse mind and to disturb morality. No physician will question the probability that, when the great Cæsar had a fever, even this conquerer of the world did demean himself "as a sick girl," and "his coward lips did from their color fly." Ordinary patients are often selfish and timid, peevish and fault-finding, exaggerative, capricious and disobedient. To manage all such patients successfully demands almost divine patience and charity, and sympathy for suffering.

But, difficult as is the management of the natural and pitiful infirmities of the sick, the practitioner's struggle to please must also include many who entertain, when well as also when ill, absurd beliefs that often hamper proper treatment. He must strive to manage the patient who wears a liver pad, or who rejoices in an electrical equipoise; who cherishes in the pocket a buckeye, or a potato or a madstone; who tremulously dreads death because one of thirteen at table, or because a looking-glass has been broken; who rejoices in a child's plentiful crop of boils because they are so healthy; who can't drink milk because so bilious and so feverish; who knows that water and ice are very dangerous in fever and blames the doctor if any bad symptom follows wholesome indulgence; who condemns the doctor if one specific disease "turns" into another, which is no more easily done than to turn a fly into a flea or a cat into a rat. The practitioner must strive to manage the very numerous patients who firmly believe that drugs are "cure-alls," that failure to cure is merely proof of incapacity to discover the proper drug, and that a doctor, if skilful, could find a prescription that would enable them to persist in their self-indulgent

outrages against the laws of health; and the patients, also numerous, who have great faith in fortune-telling, or spirit-rapping, or clairvoyance, or "faith cures," or in other such flagrant outrages against common sense.

Finally, the medical practitioner is occasionally sought by a patient, usually very sick, who, though possessed perhaps of education and common sense in other than medical subjects, firmly believes in the incredible folly, founded on the preposterous dogmas, that like cures like, and that the greater the quantity of water used to dilute a drug and the more it is then shaken, the more potent it becomes; dogmas that are very surely false as to everything on the face of the earth, unless drugs be miraculous scorners of nature's laws.

The history of popular delusions teaches us charitably to tolerate even such absurdities as have been, in small part, indicated. The astounding vagaries the human mind, even when educated and possessed of common sense, is capable of, under the influence of imagination uncontrolled by special knowledge and of the contagion of a popular delusion, have endless illustrations, and one example of these vagaries may be instructively recalled. The very learned and the very wise jurist, Sir Willam Blackstone, deliberately maintained that: "Witchcraft is a truth to which every nation in the world has, in its turn, borne testimony," and "to deny its actual existence is flatly to contradict the revealed word of God."

In view of the deplorable ignorance commonly shown of nature's laws, and especially of the laws controlling health and disease, what wonder is it that quackery, by boastful pretensions and crafty deceptions, should thrive? The flaunted successes of quackery are chiefly due to three causes: First, to the ease with which those who lack medical knowledge can be deceived—for instance, how easy to convince an alarmed mother that an innocent sore throat is a malignant diphtheria, and that an "infallible" remedy has saved her child; second, to the ill-appreciated influence of the mind over the body; and, finally, to the generally unappreciated fact that much the greater portion of the sick would recover, if properly cared for, without any drugs. None the less, it is an exceedingly rare patient who will be content without them. Every one, when sick, seems to be convinced that, while others may do well without physic, he

needs it and that it does him good. One of the most successful practitioners New Orleans ever had testified that, once in his life, he had believed that he had found one patient so sensible that drugging him could be dispensed with when needless; but that this bank president, noted for his hard common sense, had promptly undeceived him, and would not be content until given a teaspoonful six times daily of colored and unsavory water. Every practitioner could confirm this experience by numerous examples.

The popular ignorance of the natural tendency of most diseases to recovery is more remunerative to patent medicine corporations and every other variety of quackery than would be the ownership of any gold mine that ever existed.

In spite of all the obstacles I have submitted for consideration, true medical science will ever triumph over medical quackery, because of the immortal truth to be found in the wise political axiom of the sage Abraham Lincoln: "You may fool some of the people all the time, and you may fool all of the people some of the time, but you can not fool all the people all the time."

In conclusion, I remind you that, while our cotton plant and our hogs have a bureau of the national government to investigate and to aid in preventing their diseases, the diseases of the American voter, and of his wife and children, have no such guardian; and that there is not a solitary exalted official position nor one millionaire to stimulate medical ambition. How hard otherwise is the road the medical practitioner must travel I have indicated, and I tender you my heartfelt regret if a cloud has thus been cast over a day that should be for you a day of sunshine. Your happiness must be found in the gratitude and devotion of many of your patients, in the consciousness that your labor is indispensable to humanity's welfare, and in the fascination of what seems to me to be of all studies, the most enticing, the most philanthropic and the most prolific of benefits to mankind.

Graduates, in behalf of your faculty, I bid every one of you an affectionate farewell, charging you to remember that, in spite of many human infirmities, there rest deep in humanity's heart a profound respect and love for true merit and for high principle, and that on these mankind bestows its most enviable rewards.

ELECTRIC ILLUMINATION IN DISEASES OF THE EAR, NOSE AND THROAT.

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The subject of lighting by electric incandescence has received much attention at the hands of many investigators, but it was Thomas A. Edison who first produced a commercial electric system of incandescent lighting. The success of his system depends upon two principal features—one being a lamp of high resistance, by means of which any degree or subdivision of current is rendered possible, and the other is a system of electric distribution by which the current is furnished as required to each lamp.

The Incandescent Lamp.—The incandescent lamps may be used in connection either with the alternating or direct current. When used according to the Edison system of distribution, that is, a constancy of voltage (100 to 115) on the mains and the lamps in series with these, it is devoid of the danger to life of the high potential currents which are generally used with the arc lamp.

In the incandescent lamps, light is evolved by the electric current which heats the filament to incandescence. In the original lamps Edison employed platinum which was drawn to a very fine thread. When platinum becomes incandescent, however, it is very near its fusing point, and a little addition of the current is sufficient to melt it. On this account, Edison afterward adopted a fine filament of carbonized bamboo. In order to prevent this incandescent carbon from being consumed, the air is first exhausted from the bulb as far as practicable.

The filling of these globes with nitrogen, hydrogen and other gases, to the exclusion of oxygen, would likwise prevent the combustion of the carbon,* but it has been found that when this is done, there is a loss of 50 per cent. per horse-power, which would make it commercially impracticable. The filament which yields the light is a carbonized strip of fibre of the size of a horse hair. The diameter and length of this filament varies with the candle-power required and with the strength of the voltage current used to operate the lamp.

*Personal letter of Mr. Edison to the writer.

Edison was the first to make carbon filaments of thread, then of pieces stamped out of visiting cards, and many after that were stamped from paper. Others were made from slivers of bamboo and from vegetable fibres. The method used at present is to take a mixture of vegetable matter rich in carbon, like paper, stalk, and cotton, which is digested with sulphuric or hydrochloric acid until it is a gummy mass as thick as dough. This is forced through tires just as vermicelli is made, and it comes out in endless strings. For 16 candle-power filaments, the tire has an aperture of 20-100 of an inch in diameter. These strings fall into a jar partly filled with a liquid, where they lie in coils; then they are run out, warmed and partly dried and coiled on cylinders until they become entirely dry.

They are then cut into proper lengths with allowance for shrinkage, taken in bunches and wound to give them the proper form desired, and set into form by being slightly heated. They are now ready for carbonizing. This is done by packing the bunches in crucibles with sifted charcoal or some carbonized substance, and, after sealing, by baking it in a hot fire. The threads, which are now black and shiny, are then taken separately and clamped with each end of electric conductors, and, while it is immersed in a vapor of gasoline, the current is passed through it. The effect is to deposit upon the white hot filament a coating of lamp-black. The filament is now ready to be mounted in the lamp.

This carbon filament is attached to two thin wires of platinum which are fused through the end of the glass receiver. Originally the filament was given an oval shape, but recently the spiral form has been adopted in order to obtain greater illuminating power without increasing too much the size of the bulb.

The incandescent lamp forms a convenient means of illumination for examining the ear, nose and throat. It gives a brilliant light with but comparatively small expenditure of heat; it is easily controlled and is not expensive.

For ordinary examinations a 32 candle-power lamp is sufficient, especially when the light is economized by some form of condenser or reflector. For special purposes, a 50 candle-power lamp may be required, and in some cases even a 100 candle-power lamp.

When the rays from an ordinary incandescent lamp are focused

by the head-mirror, an *inverted image* of the incandescent filament is formed which is sometimes annoying to the examiner. This has been remedied in the lamp devised by Delavan, in which an opal lens gives a concentration of light, but without the image of the incandescent filaments. The objection to this lamp is, however, that the opal lens absorbs so much light that it loses much of its efficacy; but by having this lens replaced by one of transparent glass, it may be made a very convenient source of light. One objection, however, is that the case soon becomes very much heated, and is liable to burn the operator in adjusting the lamp. This, however, could be avoided by ventilating the lamp and by placing a covering of asbestos around it.

The incandescent lamp may be, for convenience, attached to an adjustable bracket, as shown in Fig. 1. A more convenient

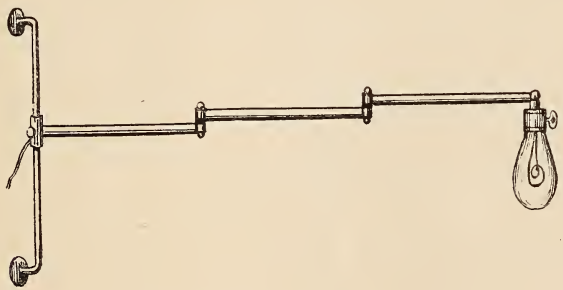

Fig. 1.—Adjustable Incandescent Lamp.

lamp, however, is the form devised by the author shown in Fig. 2. This lamp is portable so that it can be attached to any incandescent light plug, and by means of a cogged arrangement it may be adjusted so that the lamp can be used at various elevations. Behind the lamp is a convex reflector, which not only projects the light forward, but prevents the light from illuminating the wall behind the lamp, which is objectionable. In front of the lamp is a powerful condenser for converging the rays of light, and, as the parts between the lens and the reflector are open, the lamp becomes but little heated. With this apparatus it is possible to obtain from a 32 candle-power lamp more light than from an ordinary 100 candle-power lamp, and without the heat and expense of the larger lamp.

Charles E. Sajous, of Paris[1] in referring to electricity as a means of illumination in laryngology, calls attention to some of the inconveniences that are met with in using the incandescent light current due to the irregularity of the current applied.

With the improvement in the incandescent light system in

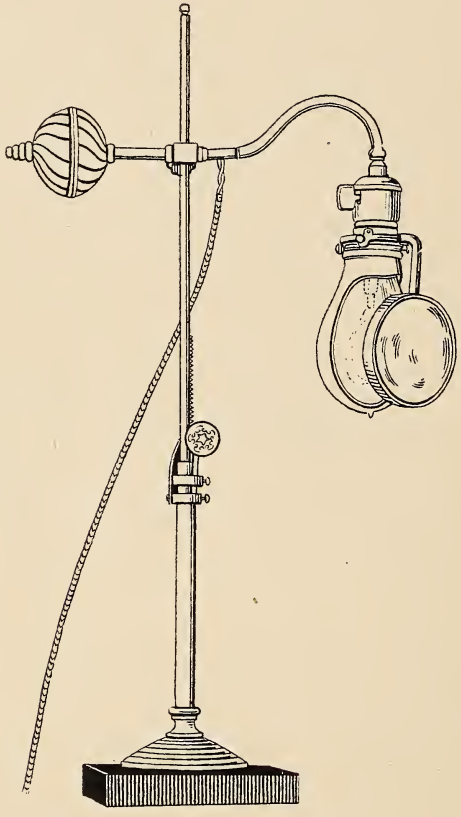

Fig. 2.—Scheppegrell Portable Laryngoscopic Lamp.

the larger cities these difficulties are now rarely met with. With a little understanding of the physics of electricity, many of the interruptions which are sometimes complained of are easily remedied. In several years' experience at the Eye, Ear, Nose and Throat Hospital there was only one day that the electric lights could not be utilized, this being due to a large fire which had delayed the repair of the mains beyond the hours of the clinic.

Occasionally an interruption of a few minutes was caused by a short circuit within the hospital, but this was soon remedied by removing the defective lamp or other source of the trouble and by replacing the blown fuse, the location of each of which was thoroughly understood. This experience shows, however, the necessity of understanding the physics of electricity, even in those cases in which it is used only for its illuminating effects.

The Electric Arc Lamp.—The arc lamp is rarely used in laryngoscopy. The light is so intense that close proximity to it for any considerable length of time would cause irritation and inflammation of the eyes. Sufficient illumination is also obtained from the safer incandescent lamps, so that the arc lamp is unnecessary in all but rare cases in which an intense degree of illumination is needed, and even in these cases the sunlight is a better substitute.

As already explained, when describing the systems used for electric lighting[2] the arc lamps are generally used in connection with the high-voltage current, which is dangerous to life. They may also, however, be used with the 115 volt direct or alternating current, either by having two lights in series or by having a proper resistance when one arc lamp is used. When required in laryngoscopy or photography of the larynx they should only be used in this manner.

E. Winckler, of Bremen[3], has applied the electric arc-light for laryngoscopic purposes. The lamp requires 60 to 80 volts and gives an illumination of 150 to 200 candle-power. As already explained, unless these lamps are supplied from an incandescent light circuit, it presents a grave element of danger. In the ordinary arc-light circuit, although the individual lamps require only 60 to 80 volts, the circuit itself may have a voltage of 2000 or more volts, the grounding of which would be dangerous to life. Even where this light is connected with the incandescent service, it gives a concentration of luminous rays from one point, which offers a very brilliant image, but is exceedingly irritating to the eyes. A number of cases have been reported in which grave inflammation of the eye of a serious nature has been set up by close proximity to these lights.

The recent introduction of the *enclosed arc lamps* has rendered them useful for many purposes for which they formerly could not be used. These lamps have also recently been made of

smaller size, so that they can be used for many purposes for which the incandescent lamps were formerly applied. A lamp of this character (Fig. 3) was recently introduced by the Standard Thermometer and Electric Company, of Peabody, Mass., which is well adapted for laryngoscopic purposes. The enclosure of the arc gives a more diffused light, and does not give rise to the irritation caused by the unprotected arc.

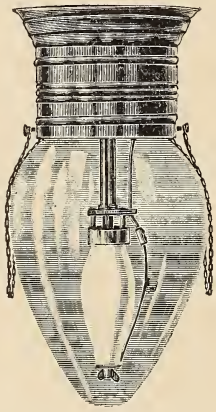

Fig. 3.—Enclosed Arc Lamp.

The Photo-Laryngoscope.—For photographic purposes, the arc-lamp has decided advantages, and is used very extensively in laryngeal photography.

Dr. T. R. French, of Brooklyn[4], having had unsatisfactory results with the sunlight as the illuminating agent, has recently called to his aid the arc-light, and with the most gratifying results, not only with the larynx, but also with the naso-pharynx and posterior nares.

The necessary outfit consists of a 2000 candle-power arc-light partly enclosed in a metal box, the anterior face of which bears a condensing lens at a distance of nine inches from the box—the lens giving a focal distance of twenty inches. The lamp and accessories are fitted to a narrow board attached to a table, with a device for raising and lowering the light. A shelf below the table carries the rheostat. The matter of technique is the same as with the sunlight condenser.

Stein, of Frankfurt, has also used the electric light for making photographs of the interior of the eye, ear and larynx. Instead of the arc-light, however, he has made use of the *incandescent*

lamp. This light, however, is much inferior to the arc-light for photographic purposes, not only on account of its lesser brilliancy, but also because it does not contain all the elementary components of light, such as are present in the arc-lamp.

Stein's photo-laryngoscope consists of a small camera which is placed on the handle of a "Nitze-Leiter" laryngoscope, which contains an incandescent lamp, as close to the mirror as possible. The lens has a very short focus, and, by a fine adjustment, the image on the laryngeal mirror is sharply focused on the ground glass. Since the incandescent light is only about six centimeters from the larynx, it is well illuminated. When the ground glass falls back a very sensitive dry plate is exposed. The exposure is made by means of a disk which rotates in front of the lens. A small bichromate immersion battery generates the current required for the lamp.

The Schutt and X-Rays Lamps.—Another form of electric light was recently described by Schutt, of Jena[5], and called by him the *Electrocapillary Light.* This is also of much scientific interest, but whether it will be of practical and commercial value will depend upon future investigations.

When the discharge of an induction coil is sent through a narrow capillary tube about 0.05 millimeters (1-1500 inch) in diameter, provided with an aluminum or copper electrode and filled with air under ordinary pressure, an intense illumination of the threads of air is obtained—a luminosity which is far superior to that of the arc-light, and one that would form an exceedingly brilliant source of light if it could be made continuous.

The narrow capillaries, however, deteriorate rapidly, are roughened inside and are blown into a series of spherical enlargements. Wider tubes give less light, but are more permanent. At the same time, the bright lines in the continuous spectrum in the original light become more permanent. At pressure of about one atmosphere the phenomena were nearly the same, but the sparks passed with greater difficulty. At low pressure the light became less intense, the continuous spectrum faded and the bright lines shone out more distinctly. The kind of glass is immaterial. It is stated that tubes may be made 20 centimeters (8 inches) long.

The application of the X-rays for illumination purposes has also been discussed, and at one time received considerable attention at the hands of our scientific and daily papers.

In this light the effect of the X-rays on fluorescent salts is utilized, and the great advantage claimed is that it would furnish a light entirely without heat effects. The ordinary incandescent light has the advantage over gas light in that it avoids filling the room with the products of combustion, but it, nevertheless, radiates considerable heat, as any one who has worked in the neighborhood of a 32 to 50 candle-power light can testify. The incandescent light is also objectionable in that the light emanates from a thin filament, which is irritating to the eye.

In the light produced by the action of the X-rays there is not only the absence of the products of combustion, but also of the heat effects, and to such a degree that it has no influence on the ordinary methods of testing. An advantage of especial importance is that the light is not given off from a small point, as in the arc lamp, or from a narrow filament, as in the incandescent lamp, but from the whole surface of the lamp, giving a soft and diffused light.

The lamp consists essentially of a Crookes' tube such as is used for generating the cathode rays, the glass condenser of which is coated with a fluorescent salt, such as tungstate of calcium or barium-platino-cyanid, which are also used as the agents for transforming the X-rays into luminous rays in the fluoroscope. The action of the X-rays on this salt has the effect of changing the character of the vibrations so that instead of being visible they become luminous and give rise to the peculiar white light that is seen in fluoroscopic examinations.

Theoretically, this is an ideal light in that all the energy is developed into luminous rays without the loss of the energy involved in the generation of the caloric effects. Practically, it presents difficulties which at present appear almost insurmountable from a commercial standpoint. In the first place, the current required is of such high voltage that the ordinary methods of insulation would be entirely insufficient. This will easily be understood, when we remember that the current used for the X-ray apparatus will spark three to ten inches or even more, according to the capacity of the coil and condenser. In the second place, the difficulty of obtaining and retaining the best

degree of rarefication in the tube, which is met with in ordinary X-ray investigations, and which it has been attempted to overcome by many contrivances more or less effective, will also be a great obstacle to making this light useful from a practical standpoint.

The Methods of Generating the Incandescent Light.—For the laryngoscopic lamps, the only effective means of generating a sufficiently strong and continued current is by means of the incandescent street service either alternating or direct. The various chemical and storage batteries which have been recommended for this purpose are so inconvenient and expensive, and require so much attention that other means of illuminating should be used where the street service is not available. For the smaller incandescent lamps, however, such as are used for the forehead illuminators, antrum lamps, etc., in which a lighter current is required, these may be illuminated by means of the Edison-Lelande or other constant chemical battery or storage cell, although, even for these lamps, these methods are much inferior to the dynamic current of the incandescent system. The incandescent light service may be used for these lamps either by some form of resistance, or by means of transformers.

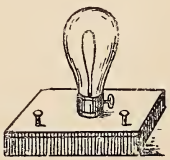

Fig. 4. Simple Lamp Resistance.

The simplest apparatus for using these lamps with a resistance is shown in Fig. 4. It consists of a stand with two binding-posts and a lamp; the binding posts are so arranged that when the small lamp is used it will be *in series* with the incandescent lamp of the apparatus. The filament of this lamp is thus the resistance which prevents the burning out of the smaller lamp. As the resistance may be either of 15, 32, 50, or other candle-power, according to the requirements of the case, we will have here a changeable resistance which, though somewhat inconvenient, is still a practical and economical method of using the smaller lamps.

In the ordinary antrum illuminator a 32 candle-power lamp gives the proper resistance. It should be remembered that the higher the candle-power of the lamp the lower the resistance; thus a 16 candle-power lamp gives a resistance of 244 ohms, while a 32 candle-power lamp gives a resistance of 122 ohms, etc.

Should the resistance be made too small the illuminator will burn out rapidly; if the resistance is made too great the lamp will not give sufficient light. The switch of the resistance lamp turns the current into both the lamp and the illuminator, and also shuts off the current from both. Where the light from the resistance lamp is an objection it may be easily covered with a box which is painted dark on the inside, or even with a dark cloth.

A more convenient arrangement for utilizing the incandescent current for these lamps is shown in Fig. 5. The lamps used are

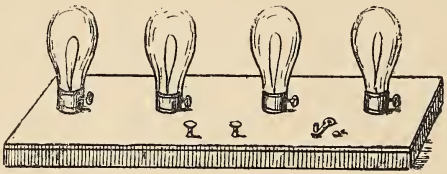

Fig. 5. Adjustable Lamp Resistance.

generally 16 candle-power, but larger or smaller lamps may be used when necessary. When the cords of the illuminator are connected with the binding-post, one, two, or all the lamps may be switched into the circuit, each additional lamp admitting an

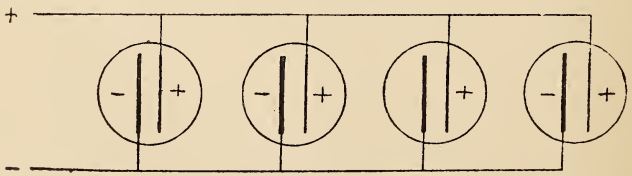

Fig. 6. Lamps Connected in Series.

increased current until the illuminator gives the proper degree of light. After the light has been adjusted the current may be turned off or on by the switch of the instrument.

The light from the resistance lamps is usually an objection, and they may, therefore, be covered with a box, as in the resistance lamp already described. When these lamps are used in a cabinet the current may be controlled by a switch on the table and the lamps placed out of sight within the cabinet.

In using the incandescent service for the antrum, forehead lamps, etc., the possibility of grounding the current should not be forgotten. Although the two sides of the circuit are insulated from one another, they may not be well insulated from contact with the body of the physician or patient, and care should be taken, while these are used, to avoid coming in contact with gas or water pipes, which may ground the current.

The terms *multiple-arc* and *series*, when used in connection with an electric circuit, refer to the method in which the instruments or lamps are connected. Lamps are said to be arranged *in series* (Fig. 6) when they are so connected that the current passes through them successively. Lamps are said to be arranged *in multiple-arcs* (Fig. 7) when two or more are so connected as to form bridges or arcs between the two sides of the circuit.

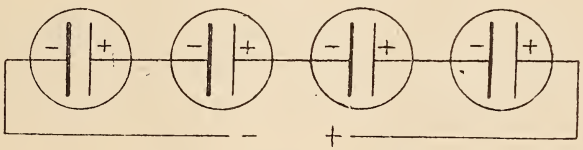

Fig. 7. Lamps Connected in Multiple-Arc.

In electric lighting the incandescent lamp system is an example of the first, and the arc lamps of the second.

The current adapted by means of a cautery rheostat, such as the McIntosh, Gish, K. A. P. Dynamic Apparatus, etc., may also be used for the small incandescent lamps, although not as economically as in the methods above described, or when the transformers are used.

In regard to the *transformers*, the energy of a current of high potential and small quantity is transformed into one of lower voltage and higher amperage, thus making it a useful and economical method of applying the incandescent current for the small illumination and the electro-cautery.

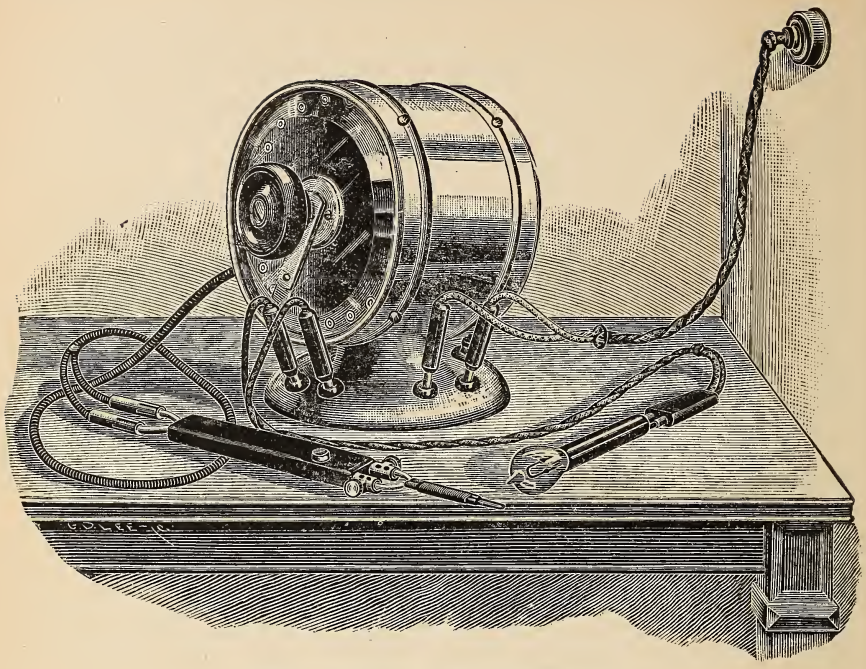

Fig. 8. Carter Duplex Transformer.

Figure 8 shows the duplex transformer of the Carter Manufacturing Company, which is used in connection with the alternating current. This transformer has separate regulators and separate

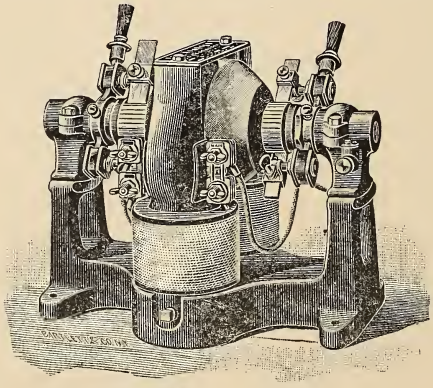

Fig. 9. Motor-Dynamo.

connections for cauteries and lamps, thus enabling the physician to use either or both at the same time. The *motor-dynamo* or rotary transformer, which may be used for this purpose, is shown in Fig. 9.

Forehead Electric Illuminators.—The electric forehead illuminators (photophores) are praised by a number of writers, and it is claimed that they offer advantages in certain operations, as upon the drum and ossicles.

For general work, and in the majority of operations, the writer prefers the ordinary lamp and head mirror, as it is more convenient in many ways. An objection to the photophore is

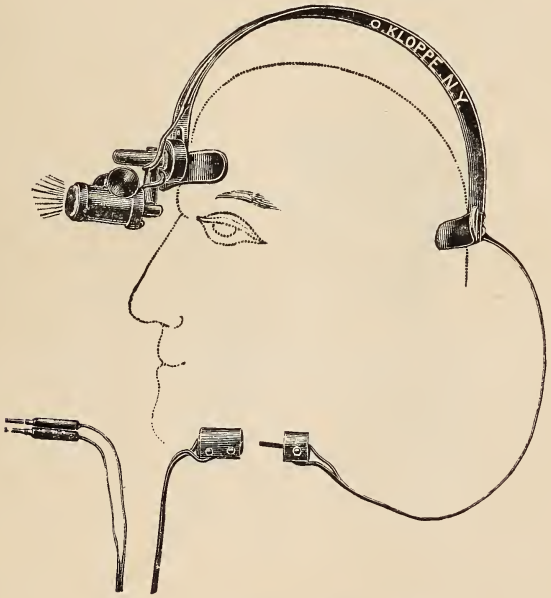

Fig. 10. Phillips' Head Lamp.

that the rays of light which are emitted from the lamp on the forehead or between the eyes are not parallel with the line of vision from either eye, so that in cases in which a mirror is used occasional parts are within reach of the eye, but are not illuminated on account of the divergence between the visual and the projected light rays.

One advantage, however, of the incandescent electric light on the forehead, is that it can be used as well when the patient is in the recumbent position as when sitting upright.

The electric head illuminator devised by Wendall C. Phillips[6] is shown in Fig. 10. The incandescent lamp is held upon the forehead by means of a strong band of steel

similar to those sometimes used with the ordinary head mirrors, and is lined throughout with fibre. By means of a thumbscrew at the side of the lamp cylinder, the focus may be regulated without removing the lamp from the head. This lamp is made incandescent by means of a storage cell or with the incandescent current and rheostat, in the same manner as the small incandescent lamps used for transillumination.

Samuel Sexton, of New York[7], prefers a lamp arranged in this manner for the radical operation of chronic catarrh of the *middle ear*, and he states that this form of illumination enables

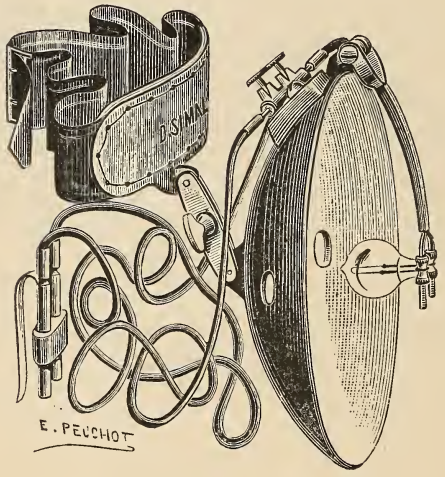

Fig. 11. Head Mirror with Attached Incandescent Lamp.

him to undertake more radical measures for aural surgery than the ordinary forehead mirror.

A new electric forehead lamp has been devised by Th. Stein[8]. It consists of two spectacle rings of vulcanite connected by an ivory insulating band which carries two small metal rods to which a light metal cylinder, containing an electric lamp, is attached. The spectacle rings can, if necessary, be fitted with lenses to correct any abnormality of vision in the observer. Each of the spectacle rings carries a black cylinder of stiff cardboard, which shades the eye of the observer from the glare of the light and from any extraneous light. It is operated by a battery and rheostat in the usual manner.

W. C. Jarvis[10] describes a new electric light, which is at-

ached within the concave head mirror, and which is used as a substitute for the laryngoscopic lamp.

The weight, heat and inconvenience of these lamps attached to the head-band, and their inferiority to the ordinary laryngoscopic lamp, will probably prevent this form of head mirror from becoming very popular. These lamps are especially objectionable when placed within the ordinary head mirror, as shown in Fig. 11, as this is not a practical method of economizing the rays of light. When the rays are emitted from a lamp at some distance and are reflected by the head mirror, they are focused and give a concentration of light, but when the lamp is within the mirror, the rays are so divergent that they can not be concentrated with the ordinary concave mirrors, and the full effect of the light is not obtained. Where a mirror is used in connection with the lamp, it should be parabolic in form, when the full effects of the light will be obtained.

Therapeutic Effects of the Electric Light.—The electric light has been used for its *thermic effects* in various ailments of the body. The experiments conducted at the Cornell University Agricultural Station, in 1889, have also demonstrated that the electric light may be used under certain conditions to make it fairly comparable to sunlight in its power to promote protoplasmic activity; that the electric light acts as a tonic to plants so that they are able to endure adverse conditions which would otherwise result in collapse, and that the electric light is a true vital stimulus, since the effect of its use at night upon plants is essentially the same as that of the longer days of the Arctics upon plants growing in that region.

P. A. Khmelevsky, of St. Petersburg[11], has shown from his experiments that both the solar and the electric light have, undoubtedly, an *inhibitory influence on the growth of microbes.* Gatchkowski, of St. Petersburg, and Stanislaus Stein[11] report a number of cases in which they have used the electric light with success in controlling the pain due to neuralgia.

The effects of this light have also been tried in the treatment of goitre by Dawson Tyner, of London. He smeared the part with red iodide of mercury ointment and then exposed the surface to direct sunlight or electric light. He suggests that the effect is due to the power of the iodide to cut off the visible rays

of the spectrum. The fact that red iodide is the most efficacious points in this direction, for it would serve to transmit the heat rays only. In this way the part is subjected to the full heat of the calorific rays without the vibration of its molecules being altered by the visible rays.

The thermic effect of the electric light has also been used by G. H. Kellogg, of Battle Creek, Mich.,[11] who has used it in the form of the electric light bath in a great variety of ailments, and found it of great utility in applying heat to the body. He states that the incandescent lamps are safer and more efficacious than the arc lamps.

In the incandescent lamp there is a uniform generation of heat, and they would, no doubt, form an excellent substitute for the various methods now practised of applying *dry heat to the ear or mastoid cells.* The extensive distribution of the electric light system has now made this available in all hospitals and in a great number of private residences, and the uniformity of generating heat in the incandescent lamp should give it special advantages in this connection.

It should not be forgotten, however, that the incandescent lamp is capable of igniting combustible substances continually in close contact with it, a number of such cases having been reported by the Underwriters' Association. Where these lamps are used, therefore, they should first be covered with some non-combustible substance, such as asbestos.

An apparatus made on the principle of the culinary vessels, in which electricity is used for heating purposes, could also be adapted for its thermic effect in therapeutics.

The employment of incandescent lamps for the footlights of the theatre should be recommended in all modern institutions of this kind, as the products of combustion of the illuminating gas are very irritating to the throat of actors, and especially of singers. Members of the theatrical profession, who have had the opportunity of acting under both conditions, speak very highly of the conservative influence on the voice of the incandescent lights. The source of danger due to the possibility of ignition of the draperies and clothing from the footlights is also avoided by the use of the incandescent lamp.

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Author's Abstract.

PARTHENIUM HYSTEROPHOROUS.

* BY H. V. ARNY, PH. D., NEW ORLEANS.

At the pharmaceutical meeting of the Philadelphia College of Pharmacy, held March 17, there was read an account of the investigation of the above mentioned indigenous plant, on which the writer has worked during the past winter. The subject is treated from a botanical as well as a chemical standpoint, and while the botanical side is strictly technical a resumé of the chemistry of the plant may not be without interest to the medical profession.

Parthenium Hysteropherous is an annual plant of the composite family, growing in Jamaica, Cuba, Florida and Louisiana, which was introduced to the medical profession by Dr. José R. Tovar, in an article in *La Cronica Medico Quirurgica*, in the year 1885, in which he extols it as a remedy in facial neuralgia, and also as an antipyretic. Subsequent notices appear in *Bulletins et Mémoires de la Societé Thérapeutique*, 1886, No. 7, and in Merck's *Bulletin*, October, 1888, in which its active principles are discussed. Considerable confusion is noticed in the statements, and in the several accounts we read of one alkaloid called Partheninine and of another named Parthenicine. The

* Published in the *American Journal of Pharmacy.*

writer began researches on the subject in 1889, when, in a graduating thesis presented to the Philadelphia College of Pharmacy, facts were presented disproving the alkaloidal character of the substance. Resuming the investigation, the following facts were shown:

The plant yielded on analysis—besides such normal plant constituents as gum, wax, starch, cellular tissue and mineral salts—a volatile oil possessing the heavy odor of the plant and from which there crystallizes out a stearopten possessing camphoraceous taste; as well as the principle to which the exceeding bitterness of the plant is due. This principle is extracted from the infusion of the plant, which has been freed from coloring matter by treatment with lead acetate, through agitation with chloroform. It is obtained in handsome crystals melting at 168 to 169 deg. C., is sparingly soluble in water, quite soluble in alcohol, solution of soda and ammonia water, less so in ether and chloroform. It fails to give a precipitate with Mayer's Reagent or other alkaloidal tests; while its glucosidal character is disproved by the fact that it is not affected by boiling with diluted acids—experiments in that direction resulting invariably in the recovery of the original substance Parthenin—as the substance can be called, since not an alkaloid appears to unite with sodium hydrate to form a sodium compound, for the production of such a reaction is an organic compound containing sodium, yielding an aqueous solution which is neutral to litmus paper and which gives a precipitate with silver nitrate—evidently a silver salt. The sodium compound has not yet been obtained in a very pure form and investigations are still in progress. These reactions all point to the likelihood of Parthenin being a proximate principle akin to Santonin. It contains no nitrogen, and while an elemental analysis has been made and an empirical formula deduced therefrom, this will not be given until confirmed by molecular weight, estimation and analysis of its derivatives. As no other principles were extracted from the plant and as the descriptions of those supposed active principles —Partheninin and Parthenicine—given, were very scant, it is presumed that both were impure forms of Parthenin.

The therapeutic properties of the plant has been the subject of some discussion. In Jamaica it is used as a remedy for ulcerated sores and certain skin diseases, especially such as are

of herpetic or pustular character. Tovar reported his parthenin as a remedy in facial neuralgia; also beneficial in a case of fever and anorexia where quinine failed to act. Guyet confirmed its efficiency in neuralgia, especially of the cranial variety, but he found it utterly without effect as an antipyretic. The dose of both partheninin and parthenicin is stated as 0.05 grammes every hour in neuralgia and 1 gramme in intermittent fever; so on such basis can parthenin be administered. The subject is worthy of further consideration on the part of therapeutists, and to this end the writer proposes preparing during the summer a considerable amount of parthenin which will be furnished in limited quantities to such physicians as will give the matter careful investigation, with a view of publication of results.

Clinical Report.

A CASE OF "RETAINED PLACENTA."

BY C. J. MILLER, M D., NEW ORLEANS.

M. P., thirty-six years of age, was admitted to the gynecological service of Charity Hospital July 27, 1896, suffering from profuse uterine hemorrhage. Questioning elicited a good history of former health; she was married and the mother of three living children. During early married life abortion had occurred twice, and she had once miscarried at the seventh month. Pregnancy, leading up to the present trouble, dated from December 10, 1895. No untoward symptoms developed until March 20, 1896, when abortion took place. Very profuse hemorrhage followed expulsion of the fetus and continued periodically for several days. The duties of housework were resumed three weeks later, and she considered herself well. The menses were re-established six weeks after the abortion; were regular, though lasted three days longer than usual, and more profuse. While at work July 24, 1896, sudden and alarming hemorrhage developed and almost exsanguinated her. Three days later she came to the hospital. Curettage was proposed and completed under anesthesia the following day by Dr. Bloch. After dilatation of

the cervix a mass was encountered which suggested uterine polypus, but further investigation developed the fact that it was placental tissue. The placenta was of about four months' growth and corresponded to the history given by the woman. The very interesting points in the case and the reason for reporting it are the length of time the placenta was retained after abortion occurred, and the fact that it gave no trouble until four days before its removal. She aborted March 20, 1896, and the placenta was removed July 27, 1896—over four months. When removed it showed no points of decomposition and presented as healthy a condition as one of recent expulsion.

Opposed to Making Specialists in College.—I always take in hand seriously the undergraduate who expresses his intention of paying particular attention to a certain branch with a view to making it a specialty when he shall have graduated. It is this kind of specialist who, as much as the advertising quack, has brought the very word into disrepute. I tell my young friend that it will be time enough when he has thoroughly grounded himself in the general principles and practice of his profession and has had ten or fifteen years of experience, to think of devoting his time in great part to some one line more than others. I would not discourage any young practitioner from endeavoring to increase his knowledge and perfect his skill in certain particular lines or line, according as he may have talent, taste or opportunity to study in that direction, for the field has become too wide for one to become expert in everything, and with quaint old Norris, "I think a little plot of ground thick sown better than a great field, which, for the most part, lies fallow." If by and by a man becomes wise or skilful beyond his fellows in a certain line of work, and they keep him so busy therein that he has no time for anything else, I can see no objection to his doing that work, whether he is called a specialist or whether he is called an expert in that line. And if all specialists were made in this way there would be no cause of complaint from anybody.—Dr. J. W. Kelly.

N. O. Medical and Surgical Journal.

Editorial Department.

Chas. Chassaignac, M. D. Isadore Dyer, M. D.

WHAT THE MEDICAL COLLEGE OWES ITS GRADUATES.

The fledgling medical graduate usually is preposterously proud with his fresh diploma, and seldom reflects that it means only the first step toward the equipment for the practice of his chosen profession. It seldom seems to him the evidence of a solemn pledge he has made in its acceptance, a contract on his part to fulfil implied obligations which the dignity of this title of Doctor of Medicine carries with it.

In the rush of study, in the interest, usually specialized curiosity, evoked in the passing through the stages of the terms and sessions requisite to the final test, these future possibilities are not considered. As a rule the formal conferring of a diploma, the stroke of a knighthood in verity, means to the graduate only the consummation of his study, the top round in the ladder, which shows him the world before him. We have made this preamble to the more emphatically direct attention to the forceful address which the Dean, Prof. Stanford E. Chaillé, of the Medical Department of Tulane, delivered this year to the graduating class for which he was responsible.

The address is published in this number of the Journal.

We have called it forceful. It is more. It is full of the pregnant questions which touch the present and the future possibilities of medical progress.

It is an appeal to a large fraction of the coming generation of medical workers to keep a sharp eye on their own conduct, lest their success be tinged with the stain of the growing dishonesty and perversion in the brotherhood of medical science.

Quackery and its congeners, illegitimate advertising for notoriety and the debasement of the physician's occupation to a competitive trade, are justly arraigned in this address, and without apology.

It is highly commendable that at such a time food for thought should be given these graduates in medicine.

Impressions are often the seeds of reflection and reflection is a good guide to conviction.

As a parent is responsible in Nature's law for the existence, well being and future conduct of her progeny, so the Alma Mater of the student graduate, as he is passed into the community with the official stamp of his college.

Certificates are not guides to conduct, nor are they more than evidence of good faith, but they beguile those who see them into the belief that they tell the truth.

The medical college owes its graduates all its diploma conveys, and if the criticisms of after experience should bring unpleasant reflection it may be attributed to the failure to create the proper impression, the right spirit at the time when the mould was ready.

All the more then do we express our gratification at the timely, direct and purposeful address we have mentioned.

QUID NUNC ?

"The License to Practice in Louisiana.—An esteemed correspondent informs us that Louisiana now has a State Board of Medical Examiners."—*New York Medical Journal*, April 3, 1897.

Are we right to exclaim!

Has our State Board lived *incognito* for the past three years, that so esteemed a contemporary in the world of medical periodic literature should at this late date have recognized its existence?

Have our struggles, lo! these many years, been profitless in the eyes of the medical world, or is our circle of usefulness so small that what we have achieved is to be limited by the boundary confines of the Pelican State?

We have a State Board, let us say, to verify the quasi-official information transmitted to the *New York Medical Journal*, and for three years it has done service in raising the standard of medical education in our midst, and in protecting us from the intentions of unqualified practitioners. Did we not immortalize ourselves in our exposition of Shrader, when we sent him to less careful communities to practice his quackery?

Have we not set the local charlatanic circle agog with our civil suits, some of them still pending?

Is not our Board promiseful for the future?

But, seriously, and among ourselves, this reflection on our State Board means more than it would seem in passing. It becomes our duty to so stimulate that board by our own desire to see it successful, that it shall so feel the responsive echo of approval and of assistance as to make other ventures toward eradicating the evils of practice amongst us. The newspapers teem with propositions for dishonest practice in the law, and we have the right to aim as high as we can and as we please.

THE FEE BILL HELPS.

While the city medical profession desultorily enters an occasional protest against the imposition of the lay public upon their skill and services, there has never resulted any systematic organization against the gross injustice done that same profession by that same public. The question of commercialism, evidenced by the tacit recognition of a constant competition, enters so into the problem that the best minded of the physicians inclined to stop evil practices in the fold have surrendered to the few who persistently hold out against reform. Meantime, our contingent from Franklin parish has formulated and has passed a set of "resolutions and a fee bill" directed at raising the price of a physician's service to a decent standard.

We are particularly struck with the third clause of the resolutions which we publish in this number of the JOURNAL.

Under no circumstances shall a member of this body enter into any yearly contract for medical services, except the parish physician.

This is the keynote of the solution. Here lies the disease and the remedy.

Perhaps, when this radical movement of the Franklin Parish Medical Association has been followed by one parish after another, we of New Orleans may see our way clear to a similar action, in justice to the high calling we are supposed to honor, while it honors us.

We congratulate Franklin parish for its energetic profession.

When the other clauses of the resolutions obtain attention, the possibility of the black list will raise the respect for that profession, and will make the returns of substantial shape much more considerable. It is only by organization, and by systematic organization, that we can hope to put the standard of medical repute, of medical skill and of the attendant emoluments where they should be.

In this same line we publish the recommendations adopted by the Medical Association of the District of Columbia, aimed at the abuse of the public hospital and dispensary services.

It is only by the energetic revolt of the profession itself that these evils will be suppressed.

ANOTHER FAKE.

A man by the name of Cyrus D. Noble seems to have victimized the profession of Texas, then that of this city, using the "Physicians' United Protective Association of Texas" for that purpose. He evidently organized this association and managed to obtain the consent of some well-known Houston physicians to act as officers. He mulcted the officers as well as unsuspecting members of $10, or more, apiece, and departed for pastures new. In this city he swindled some thirty-five physicians out of $12 each of their hard-earned money, obtained the services of a prominent young attorney under promise of a percentage of collections and departed on April fool day!

The association (apparently correctly chartered under the laws of Texas and whose charter was properly registered here) was for the purpose of furnishing information to subscribers and of collecting bad debts. A percentage on a sliding scale was to be charged for collections, and a subscription fee of $12 was demanded *in advance* for the privilege of partaking of the great benefits that were to be showered by this corporation. As many subscriptions as possible were collected by Noble and he left with them; he left only receipts behind.

The attorney of the association, who has also been victimized, was Mr. Romain, and the agent of the association, Mr. E. Vidrine. The latter accepted the agency only after being shown

what purported to be a duly signed resolution of the Texas board of directors, giving him the necessary authority. Both of the gentlemen took precautions to see that everything was done in a strictly legal manner and are very indignant at the duplicity of Noble. They are willing to contribute toward a fund to apprehend and bring back Noble, and Mr. Romain is ready to take charge individually of the prosecution.

Such bills as have been turned over to Mr. Vidrine, who was to have full charge of the collection department, are in good hands and will be duly accounted for; that gentleman intends to fulfil the contract of collection for the year and will make monthly reports of amounts collected. There is a possibility that Noble may have personally collected some bills; if so, subscribers will have additional cause for mourning.

Noble is a man in the neighborhood of thirty-five years of age; he is about five feet and a half in height; a little stout; has a fair and clear complexion; a reddish moustache; brown hair; a light and bright eye; his manners are pleasing, and—the profession should beware of him.

Medical News Items.

The Commencement Exercises of the Medical Department of Tulane University occurred on Wednesday, April 14, at the Grand Opera House in New Orleans. There were eighty-three graduates in medicine and seventeen in pharmacy.

The exercises were marked by the absence of the customary valedictory, the graduating class having declined to compete for the honor. The report of the Dean and the address by Professor Wm. B. Smith, of the University, were attentively followed by a large and appreciative audience. The diplomas were conferred, and the commendation was passed on deserving theses. A notable departure in this year's exercises was the address of the Dean. The diplomas conferred this year are, for the first time, printed in the English language.

The Board of Health of Louisiana reminds physicians practicing in New Orleans that on December 10, 1896, it adopted the following resolution:

"That hereafter, cases of membranous croup be classed as diphtheria and dealt with accordingly;" also, that according to city ordinance, "all practitioners of medicine * * * are hereby required to report, within twenty-four hours, to the office of the Board of Health, all cases within their cognizance of Asiatic cholera, leprosy, yellow fever, typhus or ship fever, diphtheria, malignant scarlet fever, small-pox, varioloid, trichiniasis, or any other case that may at any time be specified by the Board of Health."

It is the desire of the board to secure the voluntary co-operation of the medical profession in suppressing infectious disease, and it is hoped that hereafter cases of membranous croup will be promptly reported.

The Chattanooga Medical College held its commencement on March 23, 1897, in the auditorium of the U. S. Grant University. There were thirty-four graduates, the largest class save one in the history of the college, and three prizes were awarded to those showing the greatest general proficiency.

The College of Physicians and Surgeons of Chicago has recently become the Medical School of the University of Illinois.

In Reference to the Twelfth International Medical Congress, August 19 to 26, 1897, it is believed that a considerable number of American physicians will visit Moscow. As those who wish to attend the congress have a common objective point it is thought they can be associated to advantage in excursion parties. In this way the social features of the trip will be enhanced, and each individual will be surrounded by those who are personally congenial. By such association better accommodations can be secured at a reduction in price. Additional security will also be attained, as parts of the trip which include comparatively unfrequented routes will be under the charge of a traveling director conversant with languages and customs.

Final arrangements are in the hands of the well-known tourist agents, Thomas Cook & Son, who will forward on application a pamphlet containing the itineraries, terms, etc.

The Charity Hospital of Louisiana Alumni Association held its annual meeting in this city April 13 and 14, 1897. The first evening was devoted to routine business; the reading of three addresses, "The History of the Charity Hospital," by Dr. J. J. Castellanos; "Medical Progress in the Past Year," by Dr. E. H. Walet, and "Surgical Progress in the Past Year," by Dr. J. D. Bloom; and the election of officers for the ensuing year.

Dr. F. W. Parham was elected president, Dr. Lamkin, of Natchez, Miss., vice president; Dr. E. H. Walet, secretary; Dr. L. Lebeuf, treasurer; as members of the executive committee, together with the president and secretary, Drs. H. D. Bruns and J. N. Charbonnet.

The second night was devoted to listening to the annual address of the retiring president, Dr. G. A. B. Hays, and the oration of the Hon. C. P. Fenner. A banquet followed at the Cosmopolitan Hotel, which apparently was heartily enjoyed by the members and their guests.

The Fourth Annual Meeting of the American Medical Publishers' Association will be held in Philadelphia, on May 31, 1897 (the day preceding the meeting of the American Medical Association). Editors and publishers, as well as every one interested in medical journalism, are cordially invited to attend, and participate in the deliberations.

The American Medical Association will celebrate its fiftieth anniversary at the time it holds its forty-eighth annual session in Philadelphia, June 1, 2, 3 and 4, owing to the fact that there were no meetings held during the years 1861 and 1862.

The delegates receive their appointment from permanently organized State medical societies, and such county and district medical societies *as are recognized by representation in their respective State societies*, and from the medical departments of the army and navy and the Marine Hospital Service of the United States.

Each State, county and district medical society entitled to representation has the privilege of sending to the association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number.

Members by application shall consist of such members of the State, county and district medical societies entitled to representation in this association as shall make application in writing to the treasurer, and accompany said application with a certificate of good standing, signed by the president and secretary of the society of which they are members, and the amount of the annual subscription fee, $5. They shall have their names upon the roll and have all the rights and privileges accorded to *permanent members*, and shall retain their membership upon the same terms.

Secretaries of medical societies *as above designated* are requested to forward *at once* lists of their delegates.

The presidential address will be delivered by Dr. Nicholas Senn, of Chicago; the address in Surgery by Dr. William W. Keen, of Philadelphia; the address in Medicine by Dr. Austin Flint, of New York, and the address in State Medicine by Dr. John B. Hamilton, of Chicago.

Drs. Taliaferro Clark, of District of Columbia; Hill Hastings of Kentucky, and Claude H. Lavinder, of Virginia, were commissioned as assistant surgeons in the Marine Hospital Service, March 25, 1897. Dr. Hill Hastings was ordered to proceed to New Orleans to relieve Dr. H. W. Wickes, who was transferred to Boston for duty. We understand that Dr. Hastings passed an exceedingly good examination for entrance into the service, and have no doubt that he will prove quite an acquisition to the professional ranks in this city.

Dr. Gordon King, of the graduating class at Tulane and from the Charity Hospital, will sail shortly for Europe, where he will spend some time in post-graduate work, directed particularly at the ear, nose and throat.

F. W. Lea, M. D., of Lecompte, La., has been re-elected to a position on the staff of the Insane Asylum, at Jackson.

The Franklin Parish Medical Association has adopted the following resolutions:

Whereas, it has been customary with so many irresponsible and non-paying persons to call in one physician for one year, and then, without making any effort to pay for his work, trans-

fer their patronage to another for the ensuing year, with the emoluments; and

WHEREAS, many, who need a physician's services, own no property, therefore be it resolved,

First. That when one physician warns his neighboring brethren against one of those parties described in the first portion of this preamble, it shall be his duty to refuse his services, until the party makes everything satisfactory to the former medical attendant. *Second.* That a party who is not a property owner must bring a written order from his or her employer or merchant. It is understood that this does not apply to persons who are worthy objects of charity. *Third.* Under no circumstances shall a member of this body enter into a yearly contract for medical services, except the Parish Physician.

THE MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA has recently adopted the following among a number of recommendations, some of which are omitted, as they have mainly a local bearing:

I. That every institution for medical charity shall require from every applicant for relief in a hospital or dispensary, a written certificate to be obtained as hereinafter provided. Emergency cases are to be excepted from the operation of this rule.

II. That such certificate be obtained from Physicians to the Poor, the Board of Associated Charities and any registered physician.

III. That cases of sick and injured persons found upon the streets, in the stations or elsewhere, who require immediate treatment, shall be carried to the Emergency Hospital, or the nearest hospital having an emergency service, or to their homes, if so directed by the patient or his friends.

IV. That emergency patients shall not be detained longer in such institutions than the necessity of the case imperatively demands, but shall be discharged from the service and sent to their homes.

THE MISSISSIPPI STATE MEDICAL ASSOCIATION met at Jackson, Miss., April 21, 22 and 23, 1897. An interesting programme was provided. The meeting adjourned to meet in April, 1898. The following officers were elected: Dr. N. M. Paine, president; Dr. J. A. Crister, 1st vice president; Dr. R. E. Jones, 2d vice president; Dr. J. R. Tackett, secretary; Dr. C. H. Trotter, assistant secretary; Dr. J. F. Hunter, treasurer; Dr. D. L. Humphries, corresponding secretary.

The State Board of Medical Examiners met in New Orleans April 15, and was in session four days. The members of the board present were Dr. T. S. Kennedy, president; Dr. J. C. Egan, vice president; Dr. H. S. Cocram, secretary; Dr. A. F. Barrow. There were sixty-seven applicants for certificates, fifty-nine of whom passed. The standard of the papers handed in was high, and the members of the board expressed themselves as highly pleased at the thoroughness which the recently graduated physicians generally exhibited. The percentage of failures was low as compared with that of previous and less difficult examinations. The following is a list of those who received certificates from the board: White—Drs. E. L. Viers, E. A. Welsh, E. Holloway, J. Barnett, M. W. Rainold, Gordon King, O. F. Ernst, E. D. Newell, J. L. Burthe, W. D. Haralson, G. Marable, H. Dupuy, G. R. Carroll, J. C. Oden, W. E. Addison, Chas. L. Bonnemer, S. C. Levy, W. M. Perkins, S. H. Backus, E. B. Gandy, J. H. Greathouse, S. Meyers, J. E. Capdau, J. F. Dunshire, J. A. Jumel, Jr., A. S. Yenni, D. R. McDuff, P. Asher, J. S. Johnson, W. J. Durel, J. F. Richardson, L. L. Cazenavette, T. J. Walshe, W. M. Calhoun, E. N. Lowe, E. A. Landry, P. L. Bellinger, E. S. Kelly, W. H. Graham, A. R. Hagen, R. O. Marcour, E. E. Simpson, A. J. Smith, C. J. Gremillion, D. K. Texada, T. E. Dreher, E. A. Lines, V. A. Miller, E. G. Richard, C. A. M. Dorrestein, E. J. Perrault, E. L. Henry, J. P. Powell, J. Conn, W. F. Sibley, Paul Mazzuri. Colored—Drs. Emma Wakefield, J. D. McCarthy, William Murray.

A Meeting of the Officers and Chairmen of Sections and Committees of the Louisiana State Medical Society was held in this city on April 24, 1897. It had been called by the president, Dr. P. E. Archinard, to consider the suggested postponement of the meeting of 1897, owing to the threatening high water and condition of the levees. Some twenty members were in attendance and letters from a greater number were read. The consensus of opinion was that, in all probability, the attendance at the meeting on May 4 to 6 would be small and that the society would profit less by a slim meeting than by none at all. It was unanimously decided to postpone indefinitely the meeting of 1897, subject to the call of the president. A precedent for such action was created in 1890, also on account of high water. The

officers, committees, etc., will naturally hold over. It was decided to present the names of Dr. T. S. Kennedy and Isadore Dyer to the Governor for selection on his part, to appoint on the Board of Medical Examiners to fill the vacancy to be created by expiration of term of Dr. Kennedy.

An Adjunct to the State Board of Medical Examiners.—Doctors are usually slow to recognize the imposition upon their offices, and the infringement upon their prerogatives. The street medicine fakir pursues his trade for profit without disturbance so long as he pays his customary license. Not infrequently the crowd surrounding these shrewd caterers to the public's gullibility contains a stray medico interested in the particular method employed.

Recently, at Morgan City, the fakir overstepped the privilege his license bestowed and began an arraignment of the medical profession in general, striking knockout blows at the provincial profession in the immediate vicinity. The warmth of the discussion led to very broad allusions, all directed at the wastefulness of money in employing legitimate practitioners when his supreme remedial agents could be had at nominal figures.

On this occasion, attracted, no doubt, by the preceding minstrel show and other entertainment, several physicians of Morgan City were in attendance. One of them, realizing the personal offence implied and expressed, took summary proceedings and forthwith jumped on the platform and gave the fakir what he deserved, an unmerciful thrashing. The fakir left town forthwith. All of which leads us to reflect upon the improvisatory assistance such proceeding lends to our hard-worked State Board of Medical Examiners. A repetition of this treatment at successive intervals would soon rid some of our larger and smaller cities of the genus sketched above. We understand, by the by, that this same individual experienced the same treatment at Houma.

The Law of Averages.—*First Soldier* (to his company surgeon): "Doctor, I feel very badly. I have eight stools a day."

Second Soldier: "Doctor, I haven't had a stool in eight days."

Surgeon: "Well, boys, better arrange that matter between yourselves."

Abstracts, Extracts and Miscellany.

Department of Surgery.

In charge of Dr. F. W. Parham, assisted by Drs. E. D. Martin and F. Larue.

JUXTA-SYNOVIAL TUBERCULOSIS.

Mr. Gangolphe presented at the meeting, March 1, 1897, of the National Medical Society of Lyons, a patient who entered his ward, with the diagnosis of white swelling of knee-joint. A more thorough examination revealed a swelling of the subtricipital sac, the lateral ligaments being intact. Pain was, however, elicited on forcible pressure against patella. There existed a slight hydrarthrosis, and the tumor was distinctly adherent to the muscles. This patient had, besides, a digital spina ventosa. This case was similar to those studied at length, and clearly separated by Mr. Gangolphe from tubercular joint troubles. In this case, the tubercle developed in the muscle, adjoining the synovial. It is very probable that the disease would have spread, by following the neighboring prolongations of the sac, to the joint itself, and that the white swelling would have developed secondarily. Early extirpation warded off this unhappy result.

CANCER OF THE RECTUM; EXTIRPATION AFTER PRELIMINARY COLOSTOMY.

Mr. Gangolphe presented also a patient on whom he operated for rectal epithelioma, ascending posteriorly for four inches above the anus; the anterior wall seemed healthy, but the anus was completely invaded. Although corpulent, the patient's general condition was fairly good. Mr. Gangolphe, deciding to interfere, following the method of Mr. Maurice Pollosson, performed an iliac colostomy, so as to create a permanent anus and also to prepare antiseptically the rectum. The first operation

was on December 16 and resulted favorably. Daily irrigations were made for the first few days, and twenty days later he resorted to the extirpation of the tumor.

Mr. Gangolphe lays particular stress on the position in which the patient should be placed, viz., the lithotomy position, with hips so elevated as to have the anus in an almost vertical position. There was sufficient light after sectioning the coccyx, aided by the Ollier retractors.

After having ligated the middle sacral artery, and introduced a stout piece of iodoform gauze so as to cause a bulging of the rectum, the surgeon was easily able to denude the diseased organ, cutting through it with the thermo-cautery between two long forceps, at two fingers' breadth above the tumor.

The operation performed in healthy tissue was finished with a few sutures in front and the suturing of the intestinal end to the skin; but the wound was left open behind so as to allow drainage, assisted by iodoform gauze strips.

However simple, the results of the operation demonstrated the usefulness of these precautionary measures. Summing up, the essential points to be emphasized are: the preliminary iliac colostomy, the position of patient, the precautions necessary to prevent any communication between the rectal cavity and the field of operation. The patient left the ward in an excellent condition, and with a very satisfactorily acting anus.

[COMMENT.—The procedure here carried out by Gangolphe is certainly an admirable one, and is to be commended, especially in those cases where the malignant disease has produced stricture of the rectum. In such cases it is impossible to cleanse the rectum properly, a procedure so necessary in the preparation of the cases for excision of the rectum. A preliminary (complete) colostomy enables the surgeon to wash out from above and thus avoid the almost unavoidable septic contamination of the wound. Besides, in addition to the complete cutting off of the fecal current from the site of operation, this preliminary colostomy enables the surgeon to make a careful digital exploration of the pelvis, a very important examination in those cases of high-placed epithelioma, where it is doubtful from a simple rectal inspection whether the disease can be successfully extirpated. Whether this colostomy, which has some disadvantages, should be adopted as a routine practice, is certainly questionable, but

that it is an admirable procedure in most cases where the peritoneal pouch must be opened in the course of the extirpation, and especially in those cases where there is decided stricture, can not admit of serious doubt.]

SUCCESSFUL PYLOROPLASTY.

Oliver and Page report in the *British Medical Journal* an interesting case of pyloroplasty by the Mickulicz method in a much emaciated lady, whose pylorus was found to admit only a pair of scissors forceps from stomach to duodenum. Although almost *in extremis* she reacted well and gained in less than four months after the operation twenty-six pounds. Mr. Page, in commenting on this case, deplores the fact that this operation for the treatment of *non*-malignant stenosis of the pylorus "does not seem yet to occupy, in the estimation of British surgeons, the position it deserves." Gastroenterostomy still seems to be preferred "and yet few surgeons," says he, "I am sure, who in their own practice contrast the results of the two operations, will be inclined to adopt gastroenterostomy."

[COMMENT.—We believe Mr. Page is correct, for the Heinecke-Mickulicz operation can be very quickly done, and certainly is effective, providing as it does a large opening which shows little tendency to contract.]

Department of Therapeutics.

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

THE TREATMENT OF VOMITING IN TUBERCULOSIS.

In the *Revue de Thérapeutique Médico Chirurgicale* of December, 1896, Mathieu is reported to have recommended the employment of the following treatment in this troublesome condition. He first points out that the vomiting largely depends upon the fact that the stomach is reflexly irritated from the pneumogastric nerve by the diseased condition of the lung. For this reason small pieces of ice or one to two tablespoonfuls of chloroform

water may be given every ten minutes for several days, to allay gastric irritability after food is taken. After the meal the following mixture may be given:

℞—Menthol ..... 3 grains,
Syrup ..... 5 ounces.

The chloroform, however, constitutes the most efficacious form of medication.

In the discussion which followed Mathieu's paper, Ferrand stated that he had gotten the best results from diminishing the sensibility of the pharynx by the application of 10 per cent. solutions of bromide of potassium in glycerine.—*The Therapeutic Gazette.*

TREATMENT OF BRONCHITIS.

A favorite prescription for the numerous cases of acute and subacute bronchitis applying to the clinic of Dr. Eshner is constituted as follows:

Take of—

Ammonium chloride ..... 3 drachms,
Compound syrup of squill ..... 4 fl. drachms,
Syrup of senega,
Syrup of tolu, of each sufficient to make ..... 3 fl. ounces.
Mix.

Dose: A tablespoonful every three hours.

If irritative cough be present, from fifteen to thirty minims of camphorated tincture of opium may be added to each dose, or substituted for the syrup of squill. If secretion be excessive, the same quantity, or rather less, of tincture of hyoscyamus may be given.—*The American Therapist.*

TREATMENT OF SNAKE BITES.

We can say to-day, and thanks to Calmette, we are able to cope advantageously with the bites of venomous snakes, provided we are called in time.

As soon as possible after the bite we must inject from ten to twenty cubic centimeters of serum, and even more when the wound has been inflicted upon a person of large size by a dangerous reptile—as the rattlesnake. The injections must be made, with the usual antiseptic precautions, in the subcutaneous

tissue of the lateral part of the abdomen. While the injection is being prepared, and in case the bite has been inflicted on a limb, it is well to surround the latter tightly just above the bite, between the bitten part and the body, with a string, a handkerchief or any other piece of linen.

An excellent means of destroying the venom which has not been carried into the general circulation consists in injecting into the puncture of the bite and the surrounding tissues 10 *c. c.* of the $\frac{1}{60}$ per cent. solution of chloride of lime. The syringe which has been used for the injection of serum may be used for the solution of chloride. This solution possesses a destructive action on the toxic principle of the venom; its efficacy combines advantageously with that of the serum.

A few minutes after this injection the ligature may be removed from around the limb. The patient is then rubbed vigorously, and hot tea or coffee administered in order to determine an abundant perspiration. The action of fermented drinks or ammonia is dangerous. The local application of caustics is at least useless.—*Bulletin of the Pasteur Institute.*

EFFECT OF PHOSPHORUS ON GROWING BONE.

Kissel (*Virchow's Archiv, bd. cxliv, L, 1896*) records a series of experiments on dogs with phosphorus during the period of growth. The drug was given in small doses in oil, this method being selected as most near to the usual mode of administration to children. He finds that phosphorus has much stronger toxic properties than is generally supposed, and that a disturbance of digestion during the use of phosphorus, though apparently trivial, may have a fatal significance; ten centigrammes per kilogramme of body weight caused symptoms of chronic poisoning, with marked atrophic process, where bone was being deposited; six centigrammes per kilogramme hinders the normal development of bone; 3.3 centigrammes per kilogramme is the largest dose that can be given without harm. In chronic poisoning from quite small doses there was marked fibrosis, with shrinking of liver. No dose of phosphorus had any favorable influence on the growing bone. He concludes that there is no evidence in favor of the use of phosphorus in diseases of the bone.—*British Medical Journal.*

MONSONIA IN DYSENTERY.

John Maberly, writing in the *Lancet*, February 13, 1897, recommends tincture of monsonia in the treatment of dysentery. He has used the drug during six years in the Transvaal and Matabeleland and reports good results.

The Monsoniæ belong to the order Geraniaceæ, of which they form a genus. A great number of varieties are found in Southern Africa. The plants he used come under the varieties monsonia ovata and Burkei.

Several species are known to have astringent properties, due to the tannic acid which they contain, chiefly in the roots. Their action as astringent is, however, weak, and the results obtained were not due to their astringent properties. He concludes by saying that he thinks that the plant has a specific action on the poison of dysentery, aside from any mere astringent properties.

OIL OF GAULTHERIA IN THE TREATMENT OF RHEUMATIC AFFECTIONS.

Lannois and Linossier recommend the following method: The part which is affected is surrounded by lint which has been moistened by the application of one or two teaspoonfuls of the oil; this is then surrounded by a sheet of gutta-percha, and the entire limb carefully wrapped in an outside bandage, which is applied in such a way as to prevent the heat of the body from vaporizing the drug and permitting it to escape into the air; while the bandage also softens the skin and in this way aids in the absorption of the remedy.

Under these circumstances these clinicians claim that the pain is rapidly relieved, and that the swelling decreases, and further that in course of half an hour the salicyluric acid reaction may be obtained in the urine.—*The Therapeutic Gazette.*

TREATMENT OF TRAUMATIC TETANUS.

Bhiccaji (*Indian Medico-Chirurgical Review, Vol. II*, No. 5) reports the case of a female Hindoo applying for treatment for the lobule of her left ear, which was torn through. The injury

occurred on February 20. On February 24, about midnight, the reporter was called to see her at her house, where he found tetanus had appeared. The woman was removed to a hospital, and the wound of lobule of the ear antiseptically dressed. He prescribed fifteen grains of hydrate of chloral, with equal weight of bromide of potassium, every four hours. On the third day the patient was much better. Treatment was continued for eight days, and the patient discharged cured on the fifteenth day.—*The Therapeutic Gazette.*

Miscellaneous.

The Use of Antiphthisin and Tuberculocidin on 182 cases of pulmonary tuberculosis treated at his sanitarium, at Asheville, N. C., is reported upon by Karl von Ruck, B. S., M. D. The total number who apparently recovered, including all classes of cases, was 59, or over 32 per cent.; of the greatly improved there were 56, or over 30 per cent.; while of those grown worse there were only 32, or 17½ per cent. These figures are very encouraging, but we are inclined to believe that all the credit is not due to the administration of modified tuberculin. The effects of the climate, and especially of systematic and intelligent medical supervision, must have largely contributed.

The Local Treatment of Chronic Gastric Catarrh was the subject of a clinical lecture by J. M. G. Carter, M. D., Sc. D., Ph. D., reported in the *American Therapist:* It may be applied in any stage of chronic gastric catarrh, but varied in the different stages. The grade of inflammation, its character and persistence may also require some modification.

First Stage.—Local treatment is not so essential except in bacterial cases, yet it serves to modify congestion and allays dyspeptic symptoms. The use of warm water (105 deg.) with bicarbonate of sodium (three per cent.) for washing out the stomach is valuable to remove tenacious mucus. The patient may drink it or it may be introduced in the stomach through the tube. The cold douche with water at 80 deg. to 60 deg. is

sometimes more grateful and helpful than the hot douche (110 deg. to 125 deg). Weak soap-suds may be used with the tube for the same purpose. More satisfactory in many instances is the use of a solution of hydrozone, a glassful (fl ℥ viij) of a 2 or 3 per cent. solution may be given half an hour before meals. If used as a douche with the tube a 5 or 6 per cent. solution is not too strong. These douchings may be given one to six or seven times a week.

Second Stage.—The cleansing of the gastric mucous membrane must be systematic and thorough. This is best accomplished with a solution of green soap or a 5 or 8 per cent. solution of hydrozone, introduced with a double tube. After first filling the stomach, inflowing and outflowing streams ought to remain about equal or the outflow may exceed the inflow; the distention of the stomach may be maintained by retarding the reflow when necessary. For home treatment, or when the tube can not for any reason be used, a solution of 2 or 3 per cent. hydrozone is prepared. The patient may take a glassful (8 oz.) half an hour before meal time. He should lie down at once, remain five minutes on the back, then turn on the right side where he must remain during the remainder of the half hour. The hydrozone has the advantage of also checking the growth of bacteria and probably exhibits greater antiseptic properties than other agents that can be used with the same degree of safety.

After the stomach is cleansed it should be treated with soothing, stimulating and healing applications. There are many preparations which can be so used, some of the best of which are glycerole of bismuth and eucalyptol, the essential oils and glycozone. Boric acid in 2 or 3 per cent. solution as a wash with the tube is sometimes valuable. The other agents mentioned may be used with a nebulizer, by means of which a vapor impregnated with the medicines can be passed into the stomach through a tube. If it is not convenient to use a nebulizing apparatus, the glycerole mentioned, and especially glycozone, may be administered by the mouth. In many cases, the latter is more desirable. These remedies encourage healing, especially in bacterial cases. When hydrozone has been given before meals for cleansing purposes, glycozone may be administered in teaspoonful doses after meals. By this line of treatment,

often a cure is effected, particularly if the general treatment has been judiciously carried out.

If, for any reason, glycozone can not be employed, the essential oils may be used. The oils of anise, peppermint, cubebs, and tar may be combined and used with a nebulizer as previously suggested.

Third Stage.—The condition is one of atrophy. The chief difficulty is with the digestion of proteids. The first object is the removal of debris and foreign material. The second is the cleansing of the mucous membrane and the destruction of microorganisms and their removal. The third object is a degree of stimulation of the functions of motion and absorption and the tonic effect to the gastric walls which follows those washings. The first object is accomplished by the use of sterilized water or a 3 per cent. solution of sodium bicarbonate. Either tube may be used. The second object is effected by douching the walls with a green soap solution or hydrozone. The third object may be secured by using hot or cold water for the douche.

Turpentine for Facial Erysipelas.—Dr. Schwartz, in the *Indiana Medical Journal* for March, reports a case in which a single application of the common commercial turpentine was made to a facial erysipelas, with a successful result. The eruption did not spread beyond the application, and the patient was well on the seventh day. Some smarting accompanied the application and followed it.

Book Reviews and Notices.

Park's Treatise on Surgery. A Treatise on Surgery. By American authors. Edited by Roswell Park, M. D., Professor of Surgery and Clinical Surgery, Medical Department, University of Buffalo, Buffalo, N. Y. In two octavo volumes, comprising about 1600 pages, with about 800 engravings. Volume I, General Surgery and Surgical Pathology. Volume II, Special Surgery. Lea Bros. & Co., 1896.

This is a truly modern surgery, not only in the pathology which it teaches in the first, but also in the sound surgical therapeusis which is everywhere displayed in the second volume. It is written to be sold as separate volumes, a great advantage, yet so thoroughly consistent are the teachings of the two volumes and so illustrative of one another, that a surgeon or student having one must straightway find himself casting about for the other half of the work.

We should like much to have more space in which to give something of an adequate notice of this excellent work, but we must content ourselves with a brief reference to a few of its many admirable features.

The two volumes are the work of twenty-nine men, yet so thoroughly has the accomplished editor co-ordinated the efforts of all, that the work appears almost as if written by one man. Take, for instance, the chapters by Park, on Hyperemia and Inflammation, in the first part, and those by Nancrede, on Injury and Repair, in the fourth part, and we find the transition from one to the other so natural, and the teachings so uniform that we might easily suppose that Park or Nancrede had written them all.

We like the discussion of hyperemia and inflammation under separate chapters, and we believe the views of inflammation enunciated not only sound in the light of modern investigation, but practical in their bearing upon the essential measures of prophylaxis against disturbance of wound-healing. That hyperemia may occur without inflammation has long been recognized, but sufficient emphasis has not always heretofore been laid upon the fact, as so succinctly expressed in the sentence at the head of Chapter III, that "inflammation is an expression of the effort made by a given organism to rid itself of, or render inert, noxious irritants arising from within or introduced from without." This is the key to modern surgical pathology and modern technique. Both hyperemia and inflammation are due to irritants, but a hyperemia, to become inflammation, must have a new agent introduced, the specific or infective *germ*. It is obsolete, therefore, now to speak of an aseptic inflammation—all inflammation being in its essential nature septic. The outcome of such sound pathology is more scrupulous care in the prevention of the substance into wounds of these infective agents.

While in some respects the first volume might be the subject

of just criticism, surely the subject of surgical pathology has been very admirably presented in so far as the limited space permitted, and one can not study these chapters without deriving much wholesome profit. Surgical procedures are well presented, though briefly, and the volume ends by a discussion of the "Surgical Affections of the Tissues and Tissue System." In this part the chapter on "Operations on Joints" might better have been placed in the second volume, preceding or following the chapter on "Amputations," seeing that the volumes are for separate sale.

We hasten now to a brief reference to the second volume, or Regional Surgery.

The various regions and organs of the body are systematically and adequately discussed, to give a comprehensive view of special surgery. We can not take up each chapter separately, but would say that the work presents some original features, which add to the value of the work. For example, the subject of Surgical Diseases and Injuries of the Face and Neck are treated systematically in two valuable chapters by Souchon, of this city, chapters which reflect credit not only upon the author himself, but also upon the profession of New Orleans and the whole South. Our friend, Matas, also appears as one of our champions, and well has he done his part to prove that surgical progress knows no South, no North, no East, no West, on this American Continent. Surgeons in all sections are at work, and time has passed when one attaches value to a work only after knowing from what part of the Union it emanated. The estimate of such work is made now after a consideration of the weight of the work itself. We should all be proud to help bear aloft the banner of not Southern, but American progress. Let our Southern men in *National* and State, not sectional associations, and by their writings, demonstrate that the South is an essential and important factor in medical progress on this Continent. The recognition is coming slowly, but surely, of which some evidence is seen in the space accorded Southern writers in recent surgical works. Matas has presented an admirable article on Amputation, one of the best we have seen anywhere.

We are glad to see relations of the surgeon and the artificial leg man so frankly discussed, but we do not fully agree with the writer in all the views he so honestly and tersely expresses. We

do believe with him that the artificial apparatus maker should learn to do more and not expect so much of the surgeon, but in some respects his argument is not convincing.

When he says, "Granting that it is true that an artificial foot can be made to walk more elegantly and naturally than a partially amputated foot without prosthetic compensation," we believe that he strengthens the position of the apparatus legmaker, for we do not think that not being "abjectly dependent on an artificial limb, which is costly and must be renovated at intervals," would be a sufficient reason for the surgeon's saving a small part of the foot in order to give his patient what is confessedly inferior to a shorter foot with artificial addition. We make this comment in no invidious vein, but because we have felt so strongly the force of the doctor's plea for conservative surgery, and protest against the unreasonable demands of the prosthetic man. We do not feel that this matter is yet settled satisfactorily and needs much careful study. The doctor is certainly right on general principles, and a writer or teacher on surgery had best err on the side of conservatism than advise rashly the adoption of measures that time has not yet fully justified. The rule is certainly a good one in amputation, that unless something substantial is gained by cutting off an entire inch or two that inch or two should be left. Time alone will determine the best amputation in certain regions. We believe the student will have a safe guide in the article on amputation. We are proud of the work of our fellow-townsmen, Souchon and Matas, and must congratulate the distinguished author not only on his wisdom in selecting his collaborators, but also upon the general excellence of the work which his and their efforts have produced. PARHAM.

A Practical Treatise on Diseases of the Skin, for the Use of Students and Practitioners. Fourth and Revised Edition. By JAMES NEVINS HYDE, A.M., M.D., and FRANK H. MONTGOMERY, M.D. Illustrated. Lea Bros. & Co., Philadelphia and New York, 1897.

A careful comparison of the third and fourth editions of Dr. Hyde's work compels us to pass the comment that the preface to this edition is honest in its statement of the revision done. The additional information is not sufficient to increase the size of the

book, but the modernizing of many of the subjects is apparent.

We must again remark that Dr. Schmidt's (of New Orleans) plate of a section of the skin, on page 18, has not been acknowledged, as was the case in the third edition. This causes us to comment upon the absence of revision in some of the numerous plates in the book, which have been used since the first edition of Dr. Hyde's work.

The article on leprosy contains some old prints which are far from satisfactory.

Dr. Hyde is happy in his method of differential diagnosis, and his explicitness in this regard makes the work useful as a text-book.

Several colored plates are scattered through the pages of the work, but the best illustrations are those in the chapters on the anatomy and physiology of the skin.

The half tone cut on *malum perforans pedis* is particularly well done.

It is a gratifying compliment to the author that demand has come for another edition of his work, and the result is creditable.

DYER.

Reference Book of Practical Therapeutics. By Various Authors. Edited by Frank P. Foster, M. D. New York: D. Appleton & Co., 1896. In Two Volumes.

The book here reviewed is Vol. I, bearing the above title.

Among the contributors to this volume are many who rank high as pharmacologists, and as a reference book on therapeutics the work will prove valuable to the busy practitioner; and, while many of the articles are brief, they are clear and to the point.

It would require more space than is in the compass of a review to discuss even the main articles of a book containing 652 pages, therefore we note only those of special merit and interest.

The article on acetanilide by Henry A. Griffin contains much of value concerning this popular drug; Griffin also writes on the subjects of aconite and iron in a practical manner.

"Active Principles" is treated by Charles Rice in his usual lucid style. "Air, Condensed and Rarefied" is from the pen of Solomon Solis-Cohen, who shows a thorough knowledge of this

important subject so little known to the general practitioner. Arpad G. Gerster and Howard Lilienthal write on "Antiseptics in Surgery," and say much of interest. Austin O'Malley says some pertinent things about antitoxines. The subject of "Animal Extract and Juice" is treated by J. T. Eskridge.

Samuel T. Armstrong gives much information in a short space regarding baths.

"Climatic Treatment," by Charles Denison, is of much interest.

The article on coca and cocaine, by J. Leonard Corning, is one of the best articles in the book.

The article on electricity by Frederick Peterson contains many valuable points, especially regarding methods of application.

Henry Ling Taylor writes enthusiastically on the subject of exercise, and furnishes a good article on massage. The subject of mydriatics is treated intelligibly by Benjamin F. Westbrook and Samuel M. Brickner. Floyd M. Crandall gives some valuable hints concerning milk, and Russel H. Nevins writes an up-to-date article on milk adulteration.

If the second volume contains as much useful and instructive matter as the first, the work will fill a gap in medical literature.

STORCK.

The Practice of Medicine. By Horatio C. Wood, A. M., M. D., LL. D., and Reginald H. Fitz, A. M., M. D. Philadelphia: J. B. Lippincott Company, 1896.

This is the first edition of what promises to be a popular work on the practice of medicine. The profession is at all times anxious to hear from Dr. H. C. Wood, and he has this time, with the assistance of Dr. H. R. Fitz, given us a thoroughly reliable guide.

Written as it is by practical men, only that which is of real interest to the busy practical physician is given. All superfluous matter has been omitted; and it is with pleasure we notice an absence of long lists of cases so common at present in our encyclopedic works on the practice of medicine. The subject matter is well presented in six sections, containing twenty-six chapters, as follows:

Section I. General Diseases (5 chapters).

Section II. Diseases of the Nervous System (7 chapters).

Section III. Diseases of the Circulatory Apparatus (4 chapters).

Section IV. Diseases of the Respiratory Apparatus (3 chapters).

Section V. Diseases of the Digestive Apparatus and of the Peritoneum (5 chapters).

Section VI. Diseases of the Urinary Apparatus (2 chapters).

The articles on diseases of the blood contain much of interest and we are pleased to see that R. C. Cabot's name is mentioned in connection with this subject in the preface. In the concluding pages of the book is a formulary giving some formulæ as examples for medical students and young graduates. The book contains over a thousand pages, to which a good index gives ready access. The authors' work is well done and the publishers have issued a well printed and substantial book, which will be a valuable addition to the working library of every physician.

STORCK.

A Guide to the Clinical Examination of the Blood for Diagnostic Purposes. By Richard C. Cabot, M. D. With colored plates and engravings. William Wood & Co., New York.

This book is certainly the best of its kind in the English language and fills a want long felt by clinicians. The study of the blood in diseases has acquired in recent years an importance so great that no physician, be he a specialist or general practitioner, can afford to be ignorant of the discoveries in this line, and all should be able to understand and manipulate the instruments necessary to make blood examinations.

In this work of Dr. Cabot the first chapters forming Part I of Book I are devoted to a description of the apparatus used in making clinical examinations of the blood. Here we found practical suggestions of high value, which can only come from one familiar by long experience with the difficulties attending this study. Part II treats of the physiology of the blood, of the normal appearance of this fluid and its component parts both in the flesh and the dried state. Part III treats of the general pathology of the blood.

Book II, the special pathology of the blood, is divided into the following parts: Part I, diseases of the blood; Part II, acute infectious diseases; Part III, chronic infectious diseases; Part IV, diseases of special organs; Part V, diseases of the nervous

system, constitutional diseases and hemorrhagic diseases; Part VI, malignant diseases, blood parasites and intestinal parasites.

Finally, what adds still more to the value of this work is its complete bibliographical index, arranged in admirable order.

P. E. A.

PUBLICATIONS RECEIVED.

The International Medical Annual (17th), E. B. Treat, New York, publisher, 1897.

Quantitative Estimation of Urine, by J. B. Smith, L. R. C. P. Lond. Baillière, Tindall & Cox, London, publishers, 1897.

Transactions of the College of Physicians of Philadelphia, Vol. 18, 1896.

Transactions of the Eighteenth Annual Meeting of the American Laryngological Association.

Annual Report of the Supervising Surgeon General of the Marine Hospital Service of the United States, 1896.

Clinical Lessons on Nervous Diseases, by S. Weir Mitchell, M. D., LL. D. Lea Bros. & Co., Philadelphia and New York, publishers, 1897.

Treatment of Fibroid Tumors of the Uterus, by F. H. Martin, M. D. The W. T. Keener Company, Chicago, publishers, 1897.

Essentials of Gynecology, by Dr. Oscar Schaeffer. Wm. Wood & Co., New York, publishers, 1897.

The Diseases of the Stomach, by Dr. C. A. Ewald, translated and edited by Morris Manges, A. M., M. D. D. Appleton & Co., New York, 1897.

Twentieth Century Practice, edited by Thos. L. Stedman, M. D. Wm. Wood & Co., New York, publishers, 1897.

International Clinics, Vol. I, Seventh Series, 1897. J. B. Lippincott & Co., Philadelphia, publishers.

Reprints.

Therapeutic Value of Hydrobromate of Scopolamine in Plastic Iritis.—Case of Double Chorio-Retinitis in the Macular Regions, by Chas. A. Oliver, A. M., M. D.

Observations on the Treatment of Epilepsy, by A. N. Williamson, M. D.

The Professional and Technical Schools, Especially those of Medicine, by J. T. Eskridge, M. D.

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Bulletin of the Board of Health of the State of Louisiana.)

FOR MARCH, 1897.

CAUSE.	White.....	Colored...	Total .....
Fever, Malarial (unclassified)	4	1	5
" Intermittent			
" Remittent	1		1
" Congestive			
" Typho	1	1	2
" Typhoid or Enteric	2	1	3
" Puerperal			
Cancer			
Influenza	2	3	5
Measles			
Diphtheria	3		3
Whooping Cough			
Congestion of Brain	3	2	5
Meningitis	2	1	3
Pneumonia	18	22	40
Bronchitis	6	9	15
Consumption	35	41	76
Bright's Disease (Nephritis)	21	9	30
Uremia	3		3
Diarrhea (Enteritis)	2	2	4
Gastro-Enteritis	3	4	7
Dysentery	1	3	4
Peritonitis	1	1	2
Debility, General	3	1	4
" Senile	16	2	18
" Infantile	5	3	8
Heart Disease	26	15	41
Apoplexy	14	3	17
Tetanus, Idiopathic			
" Traumatic	2	1	3
Trismus Nascentium	9	5	14
Hepatitis			
Hepatic Cirrhosis	6		6
Injuries	6	2	8
Suicide	3		3
All Other Causes	90	62	152
TOTAL	288	194	482

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

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

Death Rate per 1000 per annum for month—White, 17.72; colored, 29.20; total, 21.05.

METEOROLOGICAL SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure 30.03

Mean temperature 69.00

Total precipitation ..... 4.82 inches

Prevailing direction of wind, southeast.

NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

VOL. XLIX. JUNE, 1897. No. 12.

Original Articles.

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

TREATMENT OF THE NEW-BORN CHILD.*

BY W. H. WATKINS, M. D., NEW ORLEANS, LA.

We can not hope to hold your attention to-night by anything more eloquent than the cries of the little ones as they come to us, intensified by traditions which have become so much a part and parcel of the lying-in room that all of us, as we look backward, can call to mind instances where superstition and ignorance have been important factors in their future existence.

The moment of supreme importance has arrived and the atom of humanity has been ushered into the world, commences an independent existence and takes unto itself a functional activity altogether different from the vegetable life of uterine environment. One form of nourishment has been cut off and another of complex nature is about to be substituted. Instead of simply absorbing, building up with little or no waste, an elaborate process of digestion and assimilation is called into activity. The liquid bath of a certain degree of heat is changed for one of atmospheric nature and constantly varying temperature; special senses are called into operation, and we must realize that in one moment it has been thrust into an existence which demands on our part all the skill which experience has given us to provide

*Read before the Orleans Parish Medical Society.

for its comfort—yes, even its life. And here let me say that indifference on the part of the physician and ignorance on the part of the nurse have yielded a percentage of mortality which is startling to contemplate. I have known of children which have been pronounced dead by the physician in attendance, and tossed into a covering held by the nurse, that have become resuscitated through no efforts on the part of the attendants, and other instances where nurses, ignorant of methods which would have held out hope, have allowed breathing infants to perish.

It is our purpose to assume charge of the child as soon as it has been extruded from the vulva, not to consider any of the causes which prolonged delivery, but to give it our attention as it lies attached to the mother by the still pulsating cord.

Here let me ask physicians to make war against one of the fads which constantly offend. I allude to the elaborate methods in vogue with expectant mothers, especially with the first labor, of curtaining and carpeting the room, and in piling into it all manner of ornaments and useless articles. Insist that the room shall be clean, and free from all but essentially necessary articles, and provide that the plainest linen shades shall be used for the purpose of excluding the light. I think it is a part of the right and duty of the physician to inspect the room which is soon to become the lying-in chamber.

The first indication is to place the new-born child in such position that the maternal discharges can not possibly impede respiration, and at the same time to see that the cord is not made tense by stretching, and also to remove any constriction of neck, limbs or body of the child by it; this latter manipulation being performed with tact and gentleness. After a few spasmodic efforts the child cries, and this may be facilitated greatly to its benefit by gently moving the baby, or by tapping it on that part of its anatomy which a little later becomes an object of interest to the maternal ancestor.

The child should be placed on its right side, as this position favors a prompt closure of the foramen ovale. At this time we should have on hand two articles for immediate use, a bowl of tepid water, in which have been placed two portions of absorbent cotton, and the cup which contains the ligature for the cord, in a sterilized or antiseptic solution; pouring over the ligature boiled water is amply sufficient to render it aseptic.

The first portion of absorbent cotton should be used to wash the secretions from the eyelids of the child, and the second for removing from the nose and mouth any accumulations which interfere with respiration. The Crédé method of universally using a 2 per cent. solution of nitrate of silver to the eyes, immediately after birth, is unwarranted, unless there is a suspicion of gonorrhea affecting the mother. In private practice this procedure should wisely be omitted.

Respiration having been thoroughly established, the cord should be examined and its insertion at the umbilicus noted. It has been held as orthodox to wait until pulsation has ceased before applying the ligature, but as pulsation ceases first at the maternal end of the cord, the amount of blood gained or lost to the child in the short interval from birth to stoppage of pulsation is so small as to play an unimportant part in the circulation of the child. I am rather in favor of applying the ligature as soon as respiration is thoroughly established, irrespective of the strength of the pulsation. After a long and attentive experience, I have not noticed anything regarding the immediate hours succeeding birth to warrant an opinion favorable or unfavorable to either method. The cord should be ligatured at a point sufficiently far from the navel to preclude any possibility of tying a portion of protruding intestine, though such an accident must be very remote, as I have never seen a case where such an accident was possible. At least there should be a sufficient space between the point of ligation and navel to allow the application of a second ligature, should the first not be tied securely enough to prevent hemorrhage. This occurrence, while rare, undoubtedly exists, and should always be given the attention it deserves. After years of experience I feel convinced that the material best adapted for ligaturing the cord is what is known commercially as bobbin. The elastic ligature recommended by Dr. A. C. Kellogg, of Portage, Wis., seems to possess elements which make it an improvemrnt over other methods.

Before ligating the cord, its contents should be removed by grasping it with one hand at its insertion to the umbilicus, and with the thumb and finger of the other hand gently pressing its contents to the distance of several inches, then apply the ligature tightly, and cut the cord about half an inch from the liga-

ture. The babe, separated from the mother, should then be carefully wrapped in a strictly clean flannel, and if possible placed in the lap of an attendant whose duties are not absorbed by the mother. It is better to do this than to lay it on the bed, for it has occurred to me, on one occasion, when calling for a clean cloth to be used about the mother, to have seen the babe unceremoniously thrown to the floor in an effort to procure one. Instances have been recorded where the child has been crushed to death by the knee of an attendant, or sat upon by some one present, all attention having been called to the mother by her critical condition.

We now come to the child as it is presented to the nurse for cleansing and dressing, and it is important that one should take a physiological view of the situation. First we should be careful that the change of temperature following intra-uterine life is of as little range as possible. We should recognize that the change to an atmospheric existence is stimulating enough for a normal child, and will call into play all of the necessary functions. The stimulating effects of heat and the depression of cold are unnecessary and hurtful. I do not believe, as some authorities state, that the sebaceous matter on the child's body has been eliminated as a protection against maceration during intra-uterine life, but I think is more an indication of the activity of the glands of the skin, and varies in different families and races. For its removal I can suggest nothing better than sweet, fresh hog's lard. Anointed with this substance, it can be readily removed by means of absorbent cotton, but its presence is of but little importance, and if let alone soon dries and falls off as fine scales.

The first bathing of an infant is painful, and generally should be put off for several hours—but nurses pride themselves on the expedition with which the lying-in room can be rearranged—and the washing is done frequently when the babe has been born but a few minutes. The quiet, blinking infant, wrapped up in flannel, is quite a contrast to the well-washed, restless, uneasy child. When the child is washed, care should be exercised regarding the temperature of the water employed for the purpose. It should vary little from 90 deg. F. Some one asked the great English humorist: "Mr. Smith, how do you like babies?" "Boiled, madam," he answered. The red-skinned

little creatures, after a too hot bath, have often reminded me of Sidney Smith. And the poor shivering creatures, with cold hands and feet and trembling lips, have proved that errors in the other extreme have been committed. The child should be dried quickly and without friction. See that the funis is made as dry as possible. Dust this freely with borated talcum, to which has been added 10 per cent. of aristol, and wrap it snugly in absorbent cotton. An elastic bandage should hold this in position, for of all discomforts to the helpless creatures an unyielding band is the greatest. The cord should dry off, not rot off. As soon as it has fallen the bandage should be removed, never to be applied again. Should the cotton on the cord, during the process of drying, become damp and wet, it should be removed, and fresh cotton applied. The material adopted for bandage can be kept nicely in position by safety pins to diaper and shirt, and never constricts. Those of us who have seen young puppies lap a saucer of milk have been surprised at the distention of the abdomen a small quantity of fluid produces. A tight bandage would be a great discomfort to them: Why not to young babies? The babe's toilet should be completed by dressing it warmly in light weight materials, and the clothing should be so made that it can be lifted and an inspection of the child made to its armpits. No skirt band should be allowed to constrict chest or abdomen. Soon after the child is dressed, it will go to sleep. It is well not to put it to the breast before the mother and it have rested. Any thirst on the part of the baby can be alleviated by sweetened aromatic water, and as sucking is an automatic process, I am in favor of the much abused sugar teat. It teaches the child to nurse, and it takes the mother's nipple more readily.

Gentlemen, in this résumé of what I consider the best treatment for the physiological infant, I have been trite, but I hope somebody will be benefited by my advice. The subject of pathological conditions attending the new-born child are probably of more importance, but can not be referred to here.

TREATMENT OF SMALL-POX, AND RESULTS, IN THE SHREVEPORT PEST-HOUSE FROM FEBRUARY 26 TO AUGUST 8, 1896.*

By J. F. O'LEARY, M. D., Shreveport, La.

The object of this paper is to present the treatment of small-pox, and particularly the use of cocaine, in the pest-house from February 26 to August 8, 1896, and the results. Some other points may be of interest without much elaboration.

Total number of cases treated, fifty-three; one white, and fifty-two colored. Females, twenty-five; males, twenty-eight. Ten were under ten years of age (four of these under five), and the next decade of importance, showing the greatest number of cases, twenty-one were from 20 to 30 years.

Classification.—Twenty-two, confluent; nine, semi-confluent; fifteen, discrete; seven, varioloid.

Deaths.—Total, eleven; females, five; males, six. None under 10 years. Type of disease as follows: Nine confluent; one semi-confluent, and one varioloid.

As six of the above that died were inmates of "Charity Hospital" and under treatment for other diseases when attacked with small-pox, I will read you a letter kindly furnished me by Dr. Schumpert, the House Surgeon, as I think it has special bearing on results, and is as follows:

"No. 1, G. P., male, syphilitic rheumatism, prognosis, good; No. 2, R. F., female, acute nephritis, prog., unfavorable; No. 3, M. R., female, scrofula, prog., good as far as the disease for which she was admitted in the hospital is concerned, but unfavorable, with regard to the small-pox, which was as virulent a case as I have ever seen; No. 4, B. E., male, syphilitic rheumatism, prog., unfavorable; No. 5, R. C., male, epilepsy, prog., unfavorable; No. 6, E. C., male, rheumatism, prog., good; No. 7, F. W., male, ulcer of leg, prog., good; No. 8, L. G., male, phthisis pulmonalis, prog., bad; No. 9, M. C., female, syphilis, prog., good: No. 10, C. M., male, hiccough, prog., good; No. 11, O. P., male, fracture of skull, trephined, prog., good; No. 12, W. S., male, sciatica, prog., good; No. 13, A. E., male, fracture of leg, prog., good.

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*Read before the Shreveport Medical Society, March 2, 1897.

"I mean by good or favorable prognosis, that the patient would have recovered sufficiently to have been discharged from hospital."

The eruption was developed on the above cases when admitted and the days referred to below is the number of days in pest-house:

No. 1. Confluent, recovered. Had syphilitic iritis and rheumatism in pest-house.

No. 2. Confluent, died on twenty-eighth day. This case will be referred to again.

No. 3. Confluent, died on eighth day. Glands of neck suppurated, and there was severe laryngitis.

No. 4. Confluent, died eleventh day. Very much emaciated when admitted.

No. 5. Confluent, died tenth day. Feet badly burnt, all the toes of one foot destroyed. His mental condition was so bad, it was with difficulty he could be induced to take nourishment.

No. 6. Varioloid, recovered.

No. 7. Discrete, recovered. Large ulcer on calf of leg.

No. 8. Varioloid, died twelfth day. Bedridden and emaciated from consumption.

No. 9. Confluent, recovered.

No. 10. Confluent, died sixth day. Had been treated for hiccough quite awhile in Charity Hospital, and there was no cessation of it during illness. His condition was not good at any time.

No. 11. Confluent, skull had been fractured, and was trephined about ten days before entering the pest-house. The wound had not thoroughly healed, and there was a tendency to reopen. With that exception there was no special trouble.

No. 12. Discrete, recovered.

No. 13. Confluent, recovered. Admitted with plaster dressing on for fracture of leg. The dressing had to be opened, the eruption was so bad on leg, to prevent sloughing.

I ask that you compare the letter of Dr. S. and the above comments, and notice the termination of the cases, as it has an important bearing on results.

I wish to call particular attention to the following cases. In my opinion it is the most important part of this paper:

Thirteen cases developed among suspects on pest-house

grounds. One adult and one child will not be considered, as they had varioloid and are of no importance. The balance, eleven, were not protected by vaccination. Of this number, one had semi-confluent small-pox, the balance had discrete cases and quite mild. Several did not have as much eruption as is often seen in cases of varioloid. The eruption was superficial and of short duration.

The stage of invasion was long, temperature as usual, but there was not a cessation of fever in eruptive stage which is usually expected. All of them got well.

All suspects were watched closely, and as soon as taken sick were given muriate of cocaine. Other medicines were given to meet indications.

I got the idea of using cocaine in the treatment of small-pox in an article written by Dr. Samayoa, of Guatemala. He claimed it aborted some cases, and in others limited it. My limited experience leads me to believe he is in a measure correct in his conclusions. I have never seen as many consecutive cases of unmodified small-pox so mild, and when I consider the condition of others that did not have this early treatment, I can not ascribe it to anything but the use of cocaine.

The usual adult dose was one-quarter grain, given at intervals of four hours, as a rule, night and day. In a few cases there was delirium from it, but by suspending the use of it for a few hours it would pass off, and then I would have it resumed. No other unpleasant symptom was observed.

Cocaine was given to every case when admitted; I think it was of benefit to all. To get the best results I believe it should be given during invasion (this applies to suspects) or on the first appearance of eruption. Puncture of eruption on face and hands affords comfort and possibly limits pitting.

Stearate of zinc with boric acid as a local application to exposed and ulcerated parts seemed to answer better than anything used. Solution of chlorate of potassium was kept by each bed and patient instructed to use it often to keep mouth and throat clean. In some cases where nose and throat were much involved, in addition a gargle of peroxide of hydrogen was used and nose and throat sprayed with alboline. Too much importance can not be attached to the care of the air passages.

Enemas were used to move the bowels and in case of failure

by injection salines were given cautiously. Cathartics should be given with great care. Alcoholic stimulants are harmful except in exhaustion and convalescence. No restrictions were placed on drinking cold water. Nourishment was pressed all through the disease.

Case No. 2, with nephritis, remarked several times during her illness that I was curing her kidney disease and seemed to be delighted with her improvement. All edema passed away and did not return until she had been walking around the house about a week. Cocaine had been stopped for some time. I kept her on digitalis all the time, hoping to keep her alive until she would be in condition to be discharged as cured of small-pox. At the time the edema returned a large abscess formed in the thigh, and to reduce the edema I gave her cocaine again, as I could not attribute the disappearance of swelling to any thing else I had given, and to my surprise it disappeared rapidly. But for the abscess I believe she would have lived quite awhile. I refer to this merely as an observation.

At one time I was troubled very much for proper ventilation, every available space being occupied by a bed and the doors and windows could not be used for that purpose without exposing one or more patients. Fortunately I remembered how Prof. W. A. Hammond, formerly Surgeon General, U. S. A., overcame the same difficulty and I put it in practice. I had small holes sawed in the floor alongside the walls and the condition of the room was so much improved, the nurses went beyond my instructions and I had to put a stop to further mutilation of the floor.

NOTES RELATING TO THE EFFECTS OF CANNABIS INDICA, WITH AN ILLUSTRATIVE CASE.

BY HENRY W. SAWTELLE, A. M., M. D., SURGEON U. S. MARINE HOSPITAL SERVICE, NEW ORLEANS.

The physiological effects of Cannabis Indica observed after the administration of the drug in small doses for neuralgia with the clinical history of a case in which the symptoms were similar to those produced by hashish may possibly be of interest to some as an illustration of the susceptibility of some patients to certain drugs. This peculiarity of the constitution, or idiosyn-

crasy, is observed occasionally in practice, and emphasizes the necessity for caution in the exhibition of medicines, especially new preparations or uncertain remedies. In this case the patient was under treatment for a severe occipital neuralgia, which was finally relieved by hemp after trying unsuccessfully many other remedies recommended in such cases. Probably many physicians of much experience will recall similar instances of the peculiar action of certain drugs in some cases of unique character which if recorded would be interesting additions to the literature of curative agents. Authorities on therapeutics generally agree that the preparations of hemp, especially the American variety, are very uncertain, and that the Indian hemp is generally found to be most reliable, and hence should always be administered.

The case referred to in this paper was a well developed seaman, aged 33 years, and a native of Canada. The patient stated that he had been subject to similar attacks of neuralgia before. Antipyrine, and a blister to the back of neck were ordered; arsenic, opium in the form of Dover's powder, and gelsemium were given in turn, without relief. In fact, the patient grew weaker. Iron, quinine and strychnine ordered; morphine hypodermically at intervals relieved the pain temporarily. There being no specific history, potassium iodide was not given. After the trial of various remedies for two weeks, the patient was found in a weak condition and unable to leave his bed. All treatment employed having failed to give relief, the administration of the fluid extract of Cannabis Indica was determined upon, in doses of five drops at intervals during the day. Five doses were given. Upon visiting the patient at 8 P. M., his condition was as follows: Neuralgia relieved, and the patient in a state of increased mental and motor activity, which was soon followed by partial delirium and hallucinations; pupils dilated. The hallucinations were of a jovial character, the patient being naturally of a jovial disposition. It has been observed by different authorities that the form of the hallucinations in these cases represents the mental and moral condition of the individual in his normal state. In this instance the patient talked freely and pleasantly, and when relating some incident he would burst into laughter. He first thought the ceiling was falling, and placed himself in position for protection by extend-

ing his arms and calling loudly for help. He then moved his bed to the opposite side of the ward, and imagined he saw pieces of timber floating in space about him; left his bed and went to a corner of the ward, and became intensely excited over what he took to be a fight between a large and a small dog. He watched the imaginary fight for a few moments, then returned to bed, and remarked that the large dog had torn the small one into pieces, and expressed sympathy for the small dog. At first he attempted to leave the room through a window, and it was necessary to restrain him.

The symptoms enumerated continued for three days. From the first the pulse was full and strong, respiration normal; during the night he was troubled with erections of the penis. This drug has been regarded as an aphrodisiac, but Brunton says that the trials of it made in England "seem to show that it does not itself at least have any action, but merely induces a condition of partial delirium in which Easterns may possibly have visions of a sexual nature, and, indeed, they try to give a sexual direction to the mental disturbance which the Cannabis produces, by mixing with it musk, ambergris, or cantharides." Bartholow remarks that aphrodisiac effects are said to follow the use of hashish; but impotence, which is common in hashish-eaters, doubtless results from the repeated overstimulation of the sexual organs. Professor Edes reports that he ordered it for a long-continued headache without benefit, but the patient ceased to suffer from "the bad dreams that had previously annoyed her." Acting upon this hint, he adds, it was given to several others who had made similar complaints, with similar results—that is, the character of the dreams changed and became agreeable. The effect of the drug in reference to this particular complaint I did not ascertain, as the patient referred to in this article had not suffered from such troubles.

There was slight anesthesia of the lower extremities; patient complained of weakness of legs for several days after the effects of the drug had passed off.

No bad symptoms followed the use of the drug other than those enumerated. Appetite was good from the first. During the first night he was unable to sleep at all, though chloral hydrate and potassium bromide were given at evening visits, and later morphine sulphate, ¼ grain (gm. 0.016). The second night,

chloral hydrate, 25 grains (gm. 1.62), and bromide of potassium, 40 grains (gm. 2.60), in two doses, at intervals of four hours, were ordered at the evening visit, and later $\frac{1}{100}$ grain (gm. 0.00065) hyoscine hypodermically, after which the patient slept about one hour. He slept well during the third night without hypnotics, and continued to sleep soundly until the effects of the drug had entirely disappeared.

The patient remained under observation five weeks, during which time he regained strength rapidly, and was discharged fully recovered.

A TRAUMATISM OF THE EYE GIVING RISE TO PERPLEXING SYMPTOMS.

By PAUL L. REISS, A. M., M. D. (Paris), Assistant Surgeon Eye, Ear, Nose and Throat Hospital; Visiting Oculist to Touro Infirmary; Lecturer in the New Orleans Polyclinic.

E. S., sixty years of age and a laborer by occupation. The history of the case contains some embarrassing facts which I have endeavored to elucidate and which I hope will prove of interest to the profession. The patient had always seen well; eighteen years ago was struck on the left eye with a ball; nine years after the eye became presbyopic. He could work well with that eye only with glasses, and he could see well until five years ago. The visual acuteness decreased gradually until he could only distinguish very large print. Fifteen days ago without apparent cause he lost the sight of the eye. He suffered violent pain with vomiting. The sight has not returned. Before that time, however, he saw colored rays about lights, the sight grew dim at times and there was some photophobia. At present the cornea is clear and the anterior chamber has nearly disappeared. The iris has its normal coloration and the pupil is slightly contracted. The lens is cataractous and appears soft; there is a passive congestion of the sclerotic; the tension is greatly increased, +3—. There is no doubt then that there is present an absolute glaucoma. There is no staphyloma or elevation in any part of the eye.

I made the diagnosis of absolute glaucoma with symptomatic cataract in an eye having received a blow eighteen years ago. This fact was the cause of much thought. The diagnosis was

certainly difficult. Can any objections be made to this diagnosis? Is such a history common and generally known?

The first part has certainly been often seen, *i. e.*, a blow being followed by a cataract, even after a long lapse of time. There is no constitutional affection, and nothing can be learned from the hereditary history. But what seems contrary to experience is the singular fact that, nine years after the traumatism, the eye became strongly presbyopic. We know that a cataract changes the refraction of an eye. The vision is impaired for near objects, and this is corrected by concave glasses. This acquired myopia is often seen. It rarely goes over 2 D, and is generally between 1 and 1½ D, and is explained by the change in the index of refraction of the lens. The patient then had rationally no reason to become hyperopic or presbyopic.

Can this hyperopia or presbyopia be explained from these facts? We think not. The cataract can not do so. It was only after five years that the sight diminished, which culminated in an absolute glaucoma fifteen days ago. Can we consider the glaucoma as consecutive to the traumatism occurring nineteen years ago? Secondary glaucoma, contrary to the primary, is caused by some persisting condition.

This explanation, which would make us refer the glaucoma to a secondary effect, seems, however, to bear some objections. We have a glaucoma fulminans. How then interpret this fact?

For the traumatism followed nine years later by a sudden hyperopia (shortening of the antero-posterior axis), we can suppose an advancement of the retinal surface from exudation. We could suppose, also, an existing neoplasm of the fundus, dating back ten years, which has lately caused the glaucoma with its complications. In these cases it is generally a sarcoma of the choroid. There are on record cases of sarcoma which did not manifest themselves until five, ten, fifteen, and even twenty years. All of a sudden the eye begins to react, and there is present the second stage (glaucomatous) of the sarcoma. It is only in the third stage that we have the orbit involved. This hypothesis is based upon the course of the disease, which then clears up the diagnosis. There can be but one objection put, and this is: What about the traumatism?

The statistics enlighten us. There are at present incontestible cases where a traumatism has played an important part in the

manifestation of a cancer. In an individual who has a predisposition the traumatism becomes the starting part of the affection. It develops itself in the region contused. Experimental facts have determined this. Take an animal, for instance, make it tuberculous, inflict a traumatism, say a fracture of the tibia, the rest of the lesion will become tuberculous and will not unite.

There are a number of examples of sarcoma of the choroid following a blow upon the eye. We can not then deny the influence of the traumatism. If we took two individuals, one arthritic and the other perfectly healthy, the first, after a fall upon the knee, would be prone to develop an arthritis, while the second would not.

In our treatment of the case there was to be differentiated between the use of myotics, an iridectomy or the enucleation of the eye. In spite of the probabilities that there was present a sarcoma of the choroid (the glaucoma being symptomatic), the possibility of other affections could not totally be laid aside. The other eye, being perfectly normal, led the conclusion more toward the diagnosis of a tumor. Glaucoma is generally a bilateral affection. This is not, however, a positive fact.

Having had recourse to the frequent use of eserine, with hot applications, and the use of morphine to allay pain, and no immediate result having been obtained, I advised the enucleation of the eye. An iridectomy seems out the question, as a fatal hemorrhage would most probably follow.

Author's Abstract.

OPERATIVE TREATMENT OF IRREDUCIBLE DISLOCATIONS OF THE SHOULDER, RECENT OR OLD, SIMPLE OR COMPLICATED. *

BY EDMOND SOUCHON, M. D., PROFESSOR OF ANATOMY AND CLINICAL SURGERY, TULANE UNIVERSITY, NEW ORLEANS, LA.

The writer considers all the forms and varieties of irreducible dislocations of the shoulder, and studies for each one the opera-

* Paper Read before the American Surgical Association, Washington, D. C., May, 1897.

tions performed, the difficulties and complications during the operation, the complications after the operation, the results immediate, the results remote, and formulates the conclusions as to the advantages and disadvantages of each. The study is based on 140 operated cases. The profound silence of text-books, and also of special books on dislocations, in regard to this most important subject, renders this study most imperative and timely.

All *irreducible dislocations, recent, simple, or complicated with fracture*, that were operated by reduction or resection have given good results with two exceptions, in which death does not seem to be due truly to the operation alone, but to complications of shock, unusually severe at that.

Irreducible dislocations, old, simple and forward, operated by *resection* through an *anterior incision* are the most frequent—56 cases against 33 by arthrotomy and reduction. Results remote show a great mortality in resection from injuries to the vessels mostly and from sepsis, but this is avoidable with special care. The fatalities in reductions are due to sepsis, now preventable. The disadvantages of reduction are necrosis of the cartilage and of the bone of the head, calling later for sequestrotomy and resection. This probably is due to the greater dissections and denudations of the head and surgical neck necessary to reduce than to simply resect the head. Reduction is the more desirable operation of the two because it preserves the head and all the movements depending therefrom, but the necrotic consequences are serious drawbacks, as is also anchylosis following sometimes the reduction. It should not be resorted to unless it can be done easily, without too extensive dissections, although it may be necessary to use hooks, levers and some curetting of the cup, as the cases reported show. The duration of the dislocation is immaterial; it is the condition of the parts that is all important. Some recent irreducible dislocations have given as much if not more trouble to reduce than dislocations of months' standing.

The anterior incision is the route in all forward dislocations; almost all *forward cases operated by the axillary route* and *the posterior incision* have been unfavorable.

Cases reported as *operated by subcutaneous sections of fibrous bands, of tendons, of muscles*, and by *osteotomy*, have given good

results, but they are so few. It seems extraordinary that surgeons have not employed these methods oftener; perhaps they have, but having failed, have not reported the cases. In considering the extent and the density of the tissues binding down the head and surgical neck to the surrounding parts, as reported by operators, it is a wonder that these methods should succeed except in very selected loose cases.

Irreducible dislocations, old and downward, four in number, have all been treated by the axillary incision with the resection—*i. e.*, removal of the fractured head, more or less loose in the axilla, with favorable termination. In one case, however, the head was "pegged back" and reduced with a good result. One downward dislocation (Despré's) was treated by osteoclasia, but it was a failure, no false joint forming. Yet there are cases on record of forward dislocation in which the bone was fractured near the head or through the surgical neck during efforts at reduction, and which yielded a fair enough result.

Irreducible dislocations, old and backward, in the adult, have been reported twice. They were operated by resection with a very ordinary result.

Irreducible dislocations, old, upward and operated, have not been found on record.

Irreducible dislocations, congenital, have been operated several times; they were old, backward dislocations. Two cases were operated by reduction; one case died, the other had to have sequestra removed, and then did well. Three cases were operated by resection, two with good results; the third one is not stated.

Irreducible old dislocations in young subjects and in *old subjects* are duly considered, also old *dislocations double, i. e.*, of both shoulders; also spontaneous or *pathological*, paralytic irreducible old dislocations.

The *forms and varieties* due to *complications* accompanying irreducible old dislocations are fully treated, and also the forms and varieties due to relapses or *recurrences* and to the *sequels of the operations* performed for irreducible dislocations, old, simple, or complicated.

Society Proceedings.

ORLEANS PARISH MEDICAL SOCIETY, APRIL 10, 1897.

Dr. Joachim related the history of a case of papilloma of the larynx and exhibited the patient. The little girl had been under observation since July, 1895, at which time she sought treatment for a severe hoarseness of two months' duration. At the Out Door Clinic of Charity Hospital, laryngoscopical examination revealed a papillomatous growth about the size of a pea, attached and flattened out upon the right vocal cord. After one month's treatment at the clinic she was admitted to the hospital, where frequent examinations of the larynx could be carried out and thereby establish tolerance to intra-laryngeal medication. During the interval of preparing the patient for operative measures, rapid growth of the tumor ensued and often caused paroxysms of dyspnea which at times became serious. Removal of the growth was easily accomplished under cocaine anesthesia. Frequent examinations of the larynx were continued, however, as papillomatous growths in the air passages of children are very prone to recur. Return of the growth was rapid, not only at the old site, but it showed a tendency to enter new territory. An exuberance of foreign tissue soon manifested itself in the inter-arytenoid space and along the outer commissure. Operative measures were again instituted, but with more difficulty.

The supra-glottic field was cleared easily, but the subglottic growth caused considerable annoyance. One month later the affection had repeated itself and was again removed. Several times subsequently the growth required removal.

For the purpose of a more radical procedure, laryngotomy, accompanied with scraping and cauterization of the base of the tumor, was done. It was insisted that the child should wear a tracheal canula in order to secure perfect rest of the larynx, and tracheotomy was performed. Whooping cough developed shortly after the tracheotomy and caused no little inconvenience. Acute bronchitis occurred as a sequel to the whooping cough and left the child extremely debilitated. After she improved sufficiently to allow examination of the throat, a prolific recur-

rence was found to have taken place extending to the epiglottis. All the growths were promptly removed. A recent suggestion to treat these growths with daily injections of absolute alcohol had attracted attention and it was immediately applied in this case. Improvement was marked from the beginning of the treatment and not a vestige of the growth returned. The hoarseness also was improved.

Dr. Joachim thought the improvement due to the injections of alcohol, although spontaneous subsidence of these growths sometimes occurs and must not be overlooked. Treatment of papillomatous growths of the larynx is exceedingly unsatisfactory in its final results. A mortality of 50 per cent. was often the history. Although the growth is considered benign in character, the intensity of its growth together with its situation made the prognosis one of grave nature. The result in this case was extremely gratifying, as the hoarseness was still improving, the tracheal wound was about closed and the growth showed no signs of return.

Dr. Sexton next reported a case of stone in the bladder recently operated upon at Charity Hospital. The patient was a man 35 years of age, a native of South Carolina, and residing there until 18 years old, then in New York, New Orleans and other large cities, engaged as laborer. He was of healthy parentage, and there was absence of gouty and rheumatic diathesis. When a boy he was afflicted with some kidney or bladder affection, the exact nature of which could not be recalled. Emaciation and nervous disturbances were marked. Vesical tenesmus had been constant for quite a time and disturbed his rest. The urine voided contained blood, an abundance of pus, mucous and epithelium, with a specific gravity of 1028, and of alkaline reaction. Upon examination the bladder walls were found much thickened and the bladder capacity reduced about one-half. Urethral stricture of small calibre was also present. With the aid of a Thompson's searcher the presence of calculus was easily determined.

After the usual preliminary measures, supra-pubic cystotomy was performed, and a stone weighing 1900 grains removed. The usual technique of the operation was followed. Distention of the bladder and rectum was perfected by water. Removal of the stone was accomplished with difficulty, owing to its size,

and considerable traumatism of the bladder walls resulted. Owing to the inflamed state of the bladder and the fact that many particles of the stone had not been removed, it was deemed best to only partially close the incision and allow gradual healing by granulation. Siphon drainage was not used, as it was considered impracticable in application and wrong in theory. He considered it necessary to have a bladder constantly full and air-tight in order to apply the principles of siphonage. It was impracticable in application because it would act as a foreign body to further irritate the already inflamed tissues, and required stitching in the wound to retain it in position.

Pain was also increased by the tube and was a most important objection to its use. The method of drainage adopted in this case was the application of soft towels over the abdomen, which absorbed the urine effectually and were changed hourly. Carbolized vaseline was freely applied to all surfaces coming in contact with the urine to prevent irritation. The urethral stricture was dilated until a number 14 sound could be easily introduced. Cicatrization was completed in six weeks to two months. Dr. Sexton invited discussion of siphon drainage, also why people drinking mineral or hard waters were more prone to develop stone. Attention was called to the fact that only 4 per cent. of the reported cases of vesical calculus occurred in the colored people. He suggested that their simple diet might account for the immunity.

Dr. Larue said he assisted at the operation and now recalls one point of interest connected with the anatomic structures. It was the low reflection of the peritoneum on the anterior bladder wall and the difficulty experienced in pushing it above the line of bladder incision. Considerable hemorrhage followed its removal, but was controlled by temporary gauze packing.

Dr. Lebeuf had some cases treated with and without drainage. The rapidity of recovery in those cases treated with the siphon principle was noticeable in contrast to other methods.

Dr. Parham hardly thought Dr. Sexton could claim a rapid recovery in this case. On the other hand he was induced to think reparation had been prolonged, and suggested that a more effective system of drainage would have allowed earlier healing of the wound. Drainage was the most important part in the

post-operative treatment of vesical calculus. Siphon drainage was the most effective system yet devised for keeping the vesical walls free from the contact of residual urine. There are many modifications of the siphon principle which were mentioned by Dr. Parham, particularly Dawbarn's apparatus, which combines a suction force and requires the walls of the bladder to closely approximate the tube, excluding all air. He disagreed with Dr. Sexton, who claimed that an air-tight bladder was required in order to use a siphon tube effectually. The chief reason for using the tube was to remove the urine, and the principle of siphonage was based on atmospheric pressure, which would preclude its use save where suction was combined with it. He admitted that the system was not a true siphon, but explained how contraction of the bladder walls assisted in the process and constantly removed the urine. Dr. Parham considered four weeks the average time required for recovery. European operators now close the wound, leaving only a small opening in the inferior angle of the incision which is left to heal by granulation. The time of recovery has been shortened about one-half by this method. If the wound is sutured completely the patient is often well in ten days. As these patients are usually emaciated and run down, it is a point of vantage to get them out of bed as soon as possible.

A man eighty years of age was recently relieved of a stone by Dr. Parham. The operation was borne well and the old man improved for a time, but finally succumbed to exhaustion. He thought the result might have been favorable had he closed the wound entirely and gotten him out of bed earlier. Primary closure of the incision would still further reduce the statistics in his opinion, both as to the recovery, and the time required for the wound to heal. Air has been found to answer the purpose of distending the bladder during supra-pubic cystotomy more perfectly than water. The bladder ascends higher when the bladder is distended with air than when both bladder and rectum are filled with water.

Dr Chassaignac spoke very favorably of drainage (under proper conditions) by a catheter left in the urethra. It was certainly the most convenient form and unattended by danger, if antiseptic precautions are taken. This method was indicated when the wound was completely closed after the operation. In

two cases recently under his care urethral drainage acted admirably, no leakage occurred and the wound had rapidly closed; in one case, the patient was practically well in one week, and left for his home exactly two weeks after the operation.

Of course this plan would not apply to all cases, as where cystitis was pronounced, or much manipulation of the bladder had been necessary. Another advantage of drainage by catheter was the liberty given the patient to often change his position; there is no soiling of dressings or of the bed.

Dr. Chassaignac liked the Pezzer catheter, umbrella-shaped at the bladder end, which opens up after its introduction, thereby preventing the slipping out of the catheter The catheter could be left in *situ* several days if daily flushing of the bladder and urethra with an antiseptic solution was practised. He thought Dr. Sexton's case would have improved more rapidly if siphon drainage had been used. Towels applied according to Dr. Sexton's directions allowed almost constant contact of urine with surrounding tissues, a point of prime importance to guard against.

Dr. W. H. Watkins narrated briefly the methods followed by Diettel, of Vienna. During 1889-90 he witnessed thirty operations for stone at his clinic. Lithotrity was preferred in all cases where it could be done. Siphon drainage was universally used when cystotomy was done. Dr. Watkins explained fully the principle of siphon drainage and its application in drainage of the bladder. Complete closure of the incision was permissible only where the inflammatory changes were mild and no broken segments of the calculus were left.

Dr. Woodson could not believe that the character of the drinking water exerted much influence over the formation of stone. A gouty or rheumatic diathesis was usually found as a part of the history of these cases and was responsible for a large per cent. of vesical formations.

Dr. J. M. Watkins had noted the rare occurrence of vesical calculus in natives of New Orleans. He had found only one case during his entire professional career who had lived all his life in this city.

Dr. J. A. Storck was of the opinion that the drinking water exerted a greater influence over the formation of stone than was

usually admitted. It was a fact that the ingestion of large quantities of alkaline waters produced alkalinity of the urine. This in itself might be a sufficient cause.

Dr. Sexton, in closing, said the inflamed state of the bladder in this case was sufficient cause for not closing the incision. It would have been an exceedingly bad policy. A further objection to immediate suturing was the presence of a urethral stricture, and which would also have militated against urethral drainage. A recovery within two months was gratifying in this case, considering his physical condition at the time of operation.

Dr. Parham asked to say that he did not wish to be understood as disapproving the method followed in the treatment of this particular case. Complete suturing would have been contra-indicated because of the conditions related by the operator. There could be no objection to drainage per urethram, as suggested by Dr. Chassaignac, provided the catheter was removed daily and thoroughly cleansed. Deposits upon the catheter were frequently found when left over twenty-four or thirty-six hours in the bladder, and could cause damage to the urethral structure when withdrawn.

Dr. Chassaignac irrigated the bladder daily and could not recall an instance where deposits were found on the catheter when left even so long as a week.

Dr. Martin reported three cases of long standing vesical and rectal troubles, showing the great importance of thorough examination. The first woman had been treated by a gynecologist for a uterine affection, but without relief. Six months after leaving the specialist's care a vesical calculus ulcerated through the vesico-vaginal septum. When Dr. Martin last saw her the fistula was quite small but still allowing the urine to pass.

The second and third cases proved to be large indurated rectal ulcers which had not been suspected by the specialist, but instead, the women had been subjected to prolonged uterine medication.

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C. J. Miller, M. D., *Secretary.*

Communication.

HEAR THE OTHER SIDE.

[Dr. A. C. Smith, of the United States Marine Hospital Service, has sent us a reply to the "Report of Dr. H. H. Haralson, Quarantine Inspector of Biloxi," which was reviewed recently in the JOURNAL. The communication, while interesting, is too lengthy to be published in full. We print the following as bearing most directly on the charges made against the U. S. M. H. S. Quarantine, in order to give both sides a hearing.

The Roman numerals and pages refer to Dr. Haralson's pamphlet.]

* * * * * * *

"I. Page 5. Quotation: "On June 22 a vessel from a South African port, I believe Port Elizabeth, came in the port of Biloxi. When the quarantine physician went aboard he found a sick man, with a trouble that seemed to me simulated typhus fever. The vessel was not detained."

This charge has been sufficiently answered by the supervising surgeon general, as quoted by Dr. Haralson on page 13 of the pamphlet, but there is a circumstance connected with it which ought to be known.

Dr. Haralson was my guest at the quarantine station on the occasion referred to, and when the Norwegian bark Fortuna arrived from Port Elizabeth I invited him to go aboard with me. The vessel was inspected and passed in his presence, and went immediately to the common harbor and established communication with Biloxi without objection or hindrance from him.

Without entering into a discussion of the symptoms of typhus fever, there is something extraordinary in the account given by Dr. Haralson. If the quarantine inspector for the port of Biloxi saw an apparent case of typhus fever on a vessel just about to open communication with his city, what was his duty in the matter? Certainly to protest against the vessel leaving this quarantine and entering the common harbor; or, if he did not wish to do that, then to keep the case under constant observation until he had determined definitely whether it was or was

not typhus fever. But he did neither of these, and two days later, under date of June 24, he writes his report exactly as if he had not seen the case again nor troubled his head about completing the diagnosis! It is apparent that he never considered the case typhus fever, and was merely making an unsupported effort to injure the professional reputation of a fellow-physician. * * *

XIII, pages 33 and 34. On these pages Dr. Haralson attacks the truthfulness of an official report made by me August 20, 1896, of an inspection, the previous day, of the Cat Island Quarantine Station of the Mississippi State Board of Health. He disputes only two of the statements of fact in my report—the absence of buoys and the unsuitability of the anchorage. I desire to present evidence on these two points in order to show the disingenuous character of his reply.

There were no buoys marking the anchorage August 19, and none were placed there until August 22, three days after my visit and two days after the report was written and forwarded. Upon this point I present the following letter:

OFFICE OF THE LIGHT-HOUSE INSPECTOR, EIGHTH DISTRICT,
NEW ORLEANS, La., 23d October, 1896.

P. A. Surgeon A. C. Smith, M. H. S., Gulf Quarantine, Biloxi, Miss.:

SIR—In reply to your letters of 14th instant, I have to state that on application, dated 23d July, 1896, of Dr. H. H. Haralson, member of the Mississippi State Board of Health, three buoys were placed, on August 22, 1896, to mark the Cat Island Quarantine Anchorage, Miss.

The buoys are third-class cans, painted yellow, and marked "Q."

Respectfully,

(Signed) J. B. COGHLAN,

Commodore U. S. N., Inspector Eighth Light-House District.

GEO. W. VAUGHN, *Clerk.*

Dr. Haralson must have known this, and if he had wished to make a straightforward reply to my report he would have given the date when the buoys were placed.

With reference to the depth of water in the anchorage, I refer to the official chart of the waters. The limits of the station are

taken from Dr. Haralson's latest definition of them, running two miles north of Great Sand Hill, and a mile and a half west, but the depth of water is no better still further north and west. At no point within the anchorage is seventeen feet of water shown, and only in the exposed northeast corner is there sixteen feet by the chart.

My actual experience in the matter was that I rounded North Point and entered the harbor, and tried to land at the tents. I could not approach the shore there, and had to go back around North Point and Raccoon Spit, and land near the east foot of Great Sand Hill.

The reference to the nearest deep water, in my report, was to water of three fathoms and over, which is the depth of Ship Island. Many vessels entering this harbor are of too deep draft to lie safely in sixteen feet of water, and few of importance could go well into the shelter of Cat Island. A depth of three fathoms and over is required to make a fit anchorage for all sorts of tides and weather.

Further, upon the subject of my report, another occurrence is cited. On August 6, 1896, the schooner Palos finished her period of detention at this quarantine and received *pratique* to enter at Shieldsboro, Miss. On leaving, the captain asked me if he would have to stop at Cat Island for inspection, and was advised to do so. Following is a letter from him on his experience:

NEW ORLEANS, September 14, 1896.

Dr. A. C. Smith, Gulf Quarantine:

DEAR SIR—Yours of the 9th instant duly to hand and contents noted.

The day I left your station, on the 6th or 7th of August, I proceeded toward Cat Island, and approached the shore so near as the draft of the "Palos" would allow me, and looked for the quarantine station, but I could not find or see a sign of a quarantine station of any kind whatsoever, and, as I had no direct information of said station, I kept off for Pass Christian, and came to anchor, sent my crew to New Orleans, and entered the vessel in Customhouse at Bay St. Louis (Shieldsboro) without any trouble; same time I asked the deputy collector about Cat Island quarantine, and he could not give me any information

about it. Naturally, I never troubled myself any more about it. About the 12th or 13th of August, the owners of the "Palos," Messrs. Poitevent & Favre, of Pearlington, received a letter from Dr. Haralson, of Biloxi, inspector of Cat Island quarantine, informing them that I had violated the State quarantine law by passing by Cat Island station without being inspected, and also demanded that I should return with vessel and crew to Cat Island for inspection. Messrs. Poitevent & Favre telegraphed to me at Pass Christian to come to Pearlington immediately, which I did. I explained the case to Mr. Poitevent. * * * I explained the whole case to Dr. Haralson. I told him that I had no direct information about Cat Island quarantine; all the information I had was from Dr. A. C. Smith, and Dr. Smith could give me no direct information or particulars about it. For all that, I did my best to find the station, and nobody came near me and could see no sign of a station. I also told Dr. Haralson the day and hour I passed Cat Island that there was nobody on or near the island belonging to the quarantine. What else could I do then but proceed to my destination? The consequence was that Dr. Haralson recalled his order, and said I needn't take the vessel back to Cat Island; that I could go ahead with my business.

Very truly yours,

(Signed) FRED. NEWMAN.

It is well known here that not only did Dr. Haralson live in Biloxi while acting as quarantine inspector, but his assistant, the quarantine physician of the Cat Island station, also lived in Biloxi a great part of the time, and the inspections were made most frequently from the tugboat New York, or other tugs plying in the harbor. * * *

XV., page 42. After devoting the preceding pages of his report to denouncing the United States Gulf Quarantine Station as inefficient, dangerous and badly conducted in every way, by officers who know nothing of scientific quarantine, and who have no interest in their work and no sense of truth and duty, he here demands that this institution shall continue to do for the State of Mississippi the most dangerous and critical class of work, and the class requiring the greatest skill, courage and attention, in fact the whole of the real quarantine work; and he

only specifies that it shall be done "at some isolated point on the gulf."

Truly, he has a better opinion of the station than he has before revealed, and he only wants it to get out of his way. He destroys the effect of his whole report in this last paragraph.

In conclusion I desire to say that there are but two items in the entire pamphlet which could be construed as fair criticisms of the conduct of the Gulf Quarantine Station, and there are strong reasons for asserting that these criticisms are not honestly made. They are as follows:

1. The comments upon the station's boat sometimes meeting the transfer boat at the barge. This was done under my direction, and under circumstances which were perfectly safe. It is an unimportant point. As Dr. Haralson did not hesitate to communicate directly with me and with the station several times during the season, I do not regard this criticism here as candid.

2. The comments upon my having made inspections in person of all classes of vessels, and, in particular, while I was engaged in treating the ship Tuskar at the station. The following instance bears strongly upon this point.

Drs. Kiger and Haralson called upon me at the limits of the Quarantine Station while the Tuskar was in quarantine, and after it had been reported to them that the vessel was infected and that I was daily in contact with it. I met them under exactly the same conditions as I meet a vessel for inspection, and they shook hands with me and sat close to me in my boat and talked with me. After the conference they returned immediately to Biloxi and the Mississippi coast. Neither one is immune to yellow fever, and I can not believe they thought themselves in any danger of contracting that disease and so infecting their State.

On page 30, Dr. Haralson uses the words, "the infected vessel which came to this station in April, and to which Dr. Smith so recklessly exposed healthy vessels and the people of Mississippi." What does this language mean, if for "healthy vessels" are substituted the words, "Drs. Kiger and Haralson, with their own knowledge and connivance?" It must mean that he is setting forth an opinion which he does not hold himself."

A. C. Smith, M. D.,

Passed Assistant Surgeon, M. H. S., in Command of Gulf Quarantine Station.

N. O. Medical and Surgical Journal.

Editorial Department.

CHAS. CHASSAIGNAC, M. D. ISADORE DYER, M. D.

NEWSPAPER ATTACK ON THE CODE OF ETHICS.

Barring the fact that the daily newspapers print anything that pays in the way of quack advertisements, not excluding those that are unblushingly fraudulent or immoral, physicians have no reason, as a rule, to complain of the treatment accorded them by the lay press. In fact, even the offence just mentioned is injurious a thousand-fold more to the public than to the medical profession. The New Orleans papers have been particularly just to the doctors, hence it is with regret that we feel in honor bound to protest against an unfair attack upon the code of medical ethics which appeared last month in the columns of the *Times-Democrat*, of this city. An account of a meeting of the Atlanta Society of Medicine, at which charges were preferred against some members for a supposed violation of the code, is introduced as follows:

"It is questionable whether there has ever been such a disturbance among the medical practitioners of a Southern city, as there is now and has been a week among the medical men at Atlanta, Ga. The disturbance, it would be almost unnecessary to say, is in connection with that moss-grown fossil, the Medical Code of Ethics."

After a sensational account of the meeting, taken mainly from the Atlanta *Constitution*, the editorial closes with this hit, not only at the code, but chiefly at the large majority of the regular profession:

"The supporters of that curio, the Code, are mostly physicians and surgeons who got themselves amply advertised through hospitals, colleges, etc., with which they are connected, and having these channels of advertisement themselves, they want none of their medical brethren to be otherwise advertised,

which is a paying arrangement for them, but not for the others."

We find an answer so ready to hand that we appropriate it without hesitation. It forms part of the report of the Board of Censors of the Atlanta Society of Medicine on this very incident. They first acquit the doctors of the charge against them (of having published an account of a surgical operation in a daily newspaper), as it was clearly proved by testimony under oath that the three physicians accused had nothing to do with the publication. They continue:

"In view of the fact that recent publications in the daily press of this city have given great notoriety to the proceedings of the Atlanta Society of Medicine, and further that the 'Code of Medical Ethics' which this society professed to maintain has been grossly misrepresented, and perverted by such sensational articles to the manifest impairment of the dignity and influence of our honored profession, your committee respectfully recommends that this report be published in the interests of all concerned. A wise man has well said that 'there is nothing so dangerous as ignorance,' therefore, for the enlightenment of those ignorant of the true spirit and intent of the 'Code of Medical Ethics,' we would state that only the grossest ignorance or most malicious perversion of the truth could possibly distort this wise, beneficent and moral instrument into 'an antiquated engine of torture,' 'a relic of the dark and barbarous ages,' 'dragged forth' by 'a set of jealous and rusty old fogies' for the 'inquisitorial' purpose of 'crushing out the progressive spirit, rising genius' and 'advanced views' of 'enlightened doctors in their skilful efforts to relieve suffering humanity.' The medical profession, especially as organized in its various societies, like every other organization, be it a church, a court of law, or any other civic body, has its laws, its regulations and methods of procedure. The common experience of mankind has shown the imperative necessity of such laws and regulations, and for such standards of conduct or 'ethics,' where the beneficent and far-reaching results of united and harmonious organization are sought. The medical profession is no exception to this law. It would indeed be strange if it were otherwise, for surely there is no profession or calling in which the interests of society in general are more vitally and delicately involved! Hence it is

we find that the medical profession has a 'code' of laws or 'ethics' governing its members in their varied duties and relations to the public and to themselves. This 'code,' as we now have it, is the result of the experience and practical test of many centuries. It is true that our present 'code,' which is that of the American Medical Association, is but little more than forty years of age, yet looking backward we find that its essential principles were inculcated in the famous 'oath of Hippocrates,' the so-called 'father of medicine,' and was administered to members entering our profession some 357 years before Christ. Our benevolent and noble calling in its history indeed extends so far back into the past that its history, in the proper sense of that term, is lost in traditions amidst the shadows and glooms of a remote antiquity. * * * * Emerging from darkness, it has seen the dawn of a better day, and has endeavored by its principles incorporated in its 'Code of Ethics' to illustrate the teachings of 'the Great Physician:' 'Whatsoever ye would that men should do to you, do ye even so to them.' In enforcing its mandates and demanding allegiance to its principles this 'code' does but claim 'that which is lawful and right.' Liberal and true, the 'Code of Medical Ethics' has been established by this profession, which has been compelled to recognize that as in the case of the church, yea! even of the 'twelve' who followed the Christ, there are those unworthy of their 'high calling.' From earliest times there have been those who under the name of physicians, prey upon the necessity and credulity of mankind. Our 'code,' so far from 'repressing discovery' or 'retarding' the perfecting of its art, encourages and even demands that each of its members shall contribute of his 'talents,' be it 'one' or 'five,' to the advancement of all, and that the good of mankind. Through our medical societies and medical periodicals such discoveries and improvements are made known; are tested, and accepted or rejected, and that after careful and wise investigation; they are not paraded to an uninstructed and credulous public, through the medium of paid or other advertisements in the secular press.

"'Beneficent in design, kindly in its guiding hand, true in sentiment and noble in practice!!' Such is the 'genius' of our 'code,' standing pure and uncontaminated amidst certain influ-

ences of this age, which tend to lower our standard of professional honor."

Reinforcing the above, and as a retort to slurs against the "Code," by some who probably have never read it through attentively, we can quote a paragraph from the address of Prof. S. E. Chaillé to the medical graduates of Tulane of 1897, recently published in the JOURNAL: "You will find inclosed in the diploma of every one of yon a copy of the Code of Ethics of the American Medical Association. This code commands the allegiance of the most reputable members of the medical profession; it admonishes the physician of his obligations to the public, to his patients, to his fellow-physicians and to himself, it maintains in all things the honor aud dignity of the medical profession, and it upholds a standard emblazoned with the sacred command: 'Do unto others as you would be done by.' If you are to be esteemed as worthy members of the medical profession; if you are to be cherished as beloved sons of this college, you will subscribe to this code and honor it in your careers, as the soldier honors the flag waving at the front of his command."

ADVERTISING AND DISPENSING OF NOSTRUMS.

The State Pharmaceutical Association recently met in New Orleans. Many matters were discussed bearing upon the elevation of the standard of the pharmacists in the State. The wholesale manufacturers were discussed, and their products. The meeting was adjourned, and to all appearances was considered a success.

In the several days' proceedings, however, we saw no discussion of the druggist's obligation to the medical profession, nor was there any discussion of the rapidly growing habit of nostrum and patent medicine dispensing.

We have sounded the note of warning to the druggist; we have argued the dishonesty of this and other practices common among them; we have demonstrated to them the reasons therefor.

The public is open to fair-minded attempts at making them less gullible. The public is not so unreasonable that it can not be led to appreciate that it is made the subject of constant imposition.

One by one the evils in medical practice are being arraigned and are being gradually eliminated.

The medical profession itself grows less apathetic under the whip of competition in its own ranks. The more honest the competition, the more ready is that same profession to see the necessity of destroying the parasitic infringements upon its existence.

The very public will sooner or later rebel against the impositions practised upon it. This must be an evolution from the very necessity for it.

Just now a large part of the public realizes that the fraud in quackery exists. They have indulged in speculation with it, and have lost. The quacks reap the temporary harvest, and steal away, unmolested, because the victims are ashamed to publish their own shortcoming.

Such laxity exists that to-day all sorts and kinds of nostrums are foisted upon our people without let or hindrance.

Our State law governing the practice of medicine does not alone apply to the grosser violators of it, who try to practise medicine without qualifying, but it applies as well to the dispensing and dispensers of nostrums.

Bill-boards, fences and walls along our principal thoroughfares, even the avenues, are placarded with incentives to the abuse and violation of the law. Women and children are subjected to an affront, if not pollution, to their morals by the invitation to a knowledge of remedial agents for gonorrhea, usually flagrantly and grossly announced, or to the acquaintance with means of committing abortion.

The half-educated stand, with a much needed coin in hand, reading the vaunted victory over a multitude of diseases accomplished by Smith's Sarsaparilla or Bully's Bile Busters, probably later ruminating and spending the money for an unneeded and useless mixture.

To their shame, reputable (?) druggists affix their names to these flaring announcements, and boldly propose to sell these miscellaneous cure-alls—anyone of them, grab-bag fashion—at their shops.

A vulture deserves respect in contrast.

The daily press more and more prostitutes its columns to the same kind of advertisiug. The account of an act of heroism in

a young girl was, the other day, printed on the same sheet with several proffers of medicines, and criminal measures for the relief of delayed menstruation, one of these announcing, in plain words, *regardless of the cause.*

Is the public blind, or can it not be made to see?

More than any factor in the human community, the daily press is the educator of the masses. It moulds opinions, creates sentiments, devises examples, and provokes action. In the country districts and among the lower classes, the daily paper is quoted as an authority, whether for its editorials, news items, agricultural notes, political views or religious abstracts.

It stands responsible for what its columns contain, and it is so morally, whether the management recuses itself or not.

No wonder, then, that such gross insults to the intelligent public should find place in the newspaper. With an endorsement to which the mass is accustomed, the fraud and impostor thrives steadily. It would be hard to appeal successfully to the honor and morality of the newspaper, for these, in such matters, are not open to comment along any line but that of a business proposition, and where profit would be converted into a loss, the conscience seeks the shelter of commercialism.

Why can not we make the newspaper responsible for publishing the advertisements of fraudulent remedies as aiding and abetting in the dispensing of nostrums? Let us so expand our State law that the advertisement of nostrums in the daily press, or in public places, either by circular or by placard, shall be made an offence punishable either by fine or imprisonment!

Then the difficulty of dispensing nostrums will be increased, and the task of restriction easier.

It would make self-respecting druggists think twice before handling such goods, and others would have to stand the chance of being caught and of suffering the penalty.

In Ohio, the Health Food Commission fearlessly prosecutes each and every concern advertising and distributing nostrums of any sort.

All we need is that fearlessness and the energy to find the culprit and make an example of him.

Medical News Items.

The Congress of American Physicians and Surgeons met for their Fourth Triennial Session in Washington, D. C., on May 4, 5, 6, 1897. Among the multitude of interesting papers and discussions, we note that by Dr. Edmond Souchon, of this city, on the Operative Treatment of Irreducible Dislocations of the Shoulder, an abstract of which by the author we publish in this issue. The paper attracted a good deal of attention and was discussed by Dr. J. Ewing Mears, of Philadelphia, and Dr. Joseph Ransohoff, of Cincinnati.

The Medical Profession of Denver and of the State of Colorado are endeavoring to have the 1898 meeting of the American Medical Association held in Denver. A fund has already been subscribed and plans have been devised for the entertainment of the association. We see no reason why the association should not meet in Denver and many reasons are suggested why it should. We trust the profession interested in the invitation will be successful.

The Civil Service Commission, appointed by the Mayor of New Orleans, has selected the medical officers for the medical service in this connection. The physicians chosen are all well and favorably known in the community. It is their office to examine physically and medically all applicants for any position in the departments of the city. The following is the list of the medical commission: Drs. L. J. Lebeuf, chairman; H. B. Gessner, secretary; P. A. Moore, S. M. Fortier, J. J. Archinard, J. N. Roussel and E. H. Walet.

A recent number of the *American Medical Journalist* contains a new feature, an Index Editorialis. It consists of an index of the editorials contained in some of the most prominent medical journals of this country and forms a convenient reference for the busy reader.

The Imperial Granum Company have announced that they have ceased advertising in the lay press, and hereafter intend

confining their advertising to medical journals. We are pleased to notice this departure, and congratulate the above company upon the discretion which they show in appreciating the tenor of medical opinion to-day.

E. B. Treat, of New York, the well-known publisher, announces that he has removed from down town, on Broadway, to Nos. 241 and 243 West Twenty-third street. Also that he has admitted to partnership his two sons, under the firm name of E. B. Treat & Co.

The American Surgical Association at their recent meeting in Washington voted New Orleans the next meeting place. Every effort will be made by the local profession to honor the guests who honor our city by their selection.

Bellevue Hospital Medical College and the Medical Department of the University of New York have been consolidated as the New York University Bellevue Hospital Medical College. The new faculty is composed of some of the former members of both schools, and plans are already made for the enlargement of the school.

Recently the daily morning papers have carried an extensive advertisement of one Dr. Ballantine, who proposes to treat the public free of charge, flagrantly flaunting his announcement in the face of both of the State boards. We understand that both the Homeopathic and the Regular Boards are at work on the case. Ballantine is not in New Orleans, nor has he been here. His business is in the hands of one Dr. Welsh, who recently passed the regular board. The chance afforded for an example is splendid and we sincerely hope that no pains will be spared to prosecute the offenders.

Notice.—With a desire to collect data regarding the prevalence of leprosy in Louisiana and neighboring States, the undersigned begs subscribers of the Journal to forward a list of any cases in their sections, giving such memoranda in connection as will serve his purpose. The information is wanted for the International Leprosy Congress, to be held in Berlin in October of this year.

Isadore Dyer, M. D.
P. O. Box 778, New Orleans, La.

Abstracts, Extracts and Miscellany.

Department of Surgery.

In charge of Dr. F. W. Parham, assisted by Drs. E. D. Martin and F. Larue.

A NEW METHOD FOR LOCALIZING BRAIN LESIONS.

Mr. Robert Cox, of Shanghai, China, describes in the *British Medical Journal* for April 3, 1897, what he calls "a simple and infallible means of mapping out on the scalp the positions of any (or all) of the underlying convolutions of the cerebral cortex."

The apparatus consists of two parts:

1. A cerebro-graphometer, and

2. A diagrammatic map (on a gnomonic projection) of the external surface of the brain.

The cerebro-graphometer consists of the mechanical device known technically as "lazytongs," formed into a circle with two loops—one bearing numerals and the other letters from A to V.

"Localizing is performed as follows: Extend the instrument and apply the end of the lettered loop marked V to the occipital protuberance and the other end to the globella, then press down the loop to the scalp in the middle line and close the circle round the head so that the 10 on the numbered loop will lie on the lettered loop. Consult the chart for the bearings and place the letter 10 on the letter of longitude, when the number of latitude will rest over the part sought for. This instrument is equally applicable to all sized heads, and forms its own unit of measurment for each."

THE DRAINAGE TUBE AS A TRACHEAL CANULA.

Kofman, of Odessa, writes in *Centralbl. für Chirurgie*, April 10, 1897, of the rubber tube as a substitute in certain cases for the ordinary metal and hard rubber tracheal tubes. They are especially indicated in cases where the canula must be worn for a

long time. In such cases the weight of the metal and of the hard rubber canulas, and their rigidity, make them objectionable. Rubber tubes, on the contrary, being soft and pliable, answer the purpose admirably, and can be highly commended. In young children they will be found especially desirable and well tolerated, as compared with the heavy and rigid tubes ordinarily employed. Kofman inserted one for Dr. Meschelin, of Odessa, in a child aged nine months, requiring tracheotomy for tracheal stenosis, due to infiltration extending from an indurated ulcer on the side of the neck. The tube is prepared by splitting it into two longitudinal halves for an inch and a half, or two inches, threads being run through the free extremity of each half.

The tube is introduced into the trachea, and the two split ends are turned down flat on to the neck and kept in place by tying the attached threads behind, as is done with the tapes on the usual tracheal tube.

[Comment.—This expedient is well worth bearing in mind, not only for the reasons mentioned by Kofman, but also because in emergencies a very efficient tube of the proper size can thus be quickly constructed from the several drainage tubes usually at hand in ordinary operations.

We have prepared tubes after this fashion for empyema drainage, and find the method admirable to prevent slipping of the tube into the pleural sac, especially if the two halves made by splitting the tube are passed through a hole in a half dozen superimposed layers of gauze and stitched down so as to flare the tube well open. This makes, too, a very neat and efficient shield, and is so simple that any woman in a house may easily prepare a new one for each visit of the doctor We have tried this plan on the cadaver, and find it admirable.]

TWO CASES OF OPERATION FOR PERFORATION OF GASTRIC ULCER, FOLLOWED BY RECOVERY.

In the *British Medical Journal* for April 10, 1897, are reported two interesting cases successfully operated on some hours after perforation of gastric ulcers had occurred.

Case I.—Operated on by Mr. Wallace, in St. Thomas's Hospital.

In this case it was evident from the history and from the physical examination that perforation had taken place during the two days prior to admission, setting up a general peritonitis, but it was likely that the leakage was general. The operation was by a 4-inch incision, median, beginning 1½ inch below ensiform cartilage. The perforation was a clean-cut hole, two-fifths of an inch in diameter, in the anterior wall of the stomach, near the entrance of the esophagus. The ulcer could not be excised, owing to its situation behind the costal margin, but was simply closed, though with the greatest difficulty, with Lembert stitches. A rubber tube was introduced and the wound sutured. Another incision was then made below the umbilicus and the cavity washed, and closed around a glass tube. The patient recovered, but ran the gamut of a number of septic troubles. The temperature rose to 105 deg. after the operation but gradually fell. On the third day a double parotid bubo appeared, which gradually resolved in seven days without suppuration. The upper abdominal wound broke down on the fourth day and discharged sour-smelling pus. On the twelfth day all seemed to be going well, but on the sixteenth the temperature and pulse rose and she passed 2 ounces of pus by the rectum. On the twentieth day the temperature again rose to 104.4 deg. and thrombosis of the deep veins of the leg set in. In about a fortnight this subsided and a normal temperature was reached for the first time on the thirty-sixth day after operation. She finally recovered and has remained quite well.

Case II.—Operated on by Mr. Makins in St. Thomas's Hospital. Girl aged 17 years. Operation done twenty-four hours after the onset of the symptoms of perforation. Incision similar to that in last case. The opening was found one and one-half inch from the esophageal opening below the lesser curvature. The edges were freshened with a Volkman spoon and sutured by Lembert method without excision. The abdominal wound was closed after thorough flushing out of the cavity of abdomen. The case did well, though somewhat delayed in healing by the occurrence of stitch abscess in the adominal wall. Several points are worthy of remark in this case:

1. The operation was done as late as twenty-six hours after perforation, though empty state of the stomach was certainly favorable.

2. The value of palpation in discovering the perforation.

3. The use of the Volkman spoon for paring the edges of the ulcer.

4. The early administration of food, on the third day, Valentine's meat juice being given in small quantity, owing to the girl's enormous hunger and thirst.

[COMMENT.—These cases demonstrate, what other recently reported cases have shown, that even after the stomach contents have been for hours in the peritoneal cavity recovery may still be expected after closure of the perforation and thorough toilet of the peritoneum. The cases would also seem to justify abandonment of excision of the perforated ulcer, the simple closure by Lembert suture being quite sufficient.]

CATHARSIS VERSUS OPIUM IN THE TREATMENT OF PERITONITIS—McCOSH'S INTRA-INTESTINAL METHOD.

Dr. McCosh, in the discussion on peritonitis in the recent session of the American Surgical Association (*Medical News*, May 15), opposed the tendency of the present day to return to opium, and entered a strong plea for catharsis in the treatment of general septic peritonitis. Opiates were, of course, indicated in local peritonitis, where we wished to limit the inflammation, but in the general septic peritonitis nothing could be worse.

Peristaltic action must be restored and everything possible done to favor intestinal drainage and to prevent distention and thinning of the bowel wall and the escape through it of the colon bacillus. Cathartics were absolutely necessary, but were difficult to administer on account of inability of patients to retain them. He had adopted in 1896 a method which he had carried out in nine cases operated on, with six recoveries, his previous mortality from 1887 to 1895 having been 86 per cent. He thought the early movement of the bowels in these nine cases had been an important factor in the reduced mortality.

The method consists in introducing, by means of an antitoxine syringe, into the small intestine one or two ounces of saturated solution of magnesium sulphate while the abdomen

was still open. The puncture is then closed by Lembert suture. He had become so convinced of the great value of this method that he now employed it in all cases. We believe the method a valuable addition to our resources in the treatment of these almost hopeless cases.

Eucaine Hydrochlorate—M. Felix Legue says that for several months past he has been using the hydrochlorate of eucaine instead of cocaine. It is preferable to the latter, being proven less toxic and more easily sterilized. In solution it can be boiled.

Its anesthetic power equals that of cocaine; Legue uses the 1 per cent. solution according to Reclus' method; he has never administered more than 8 centigrammes (1.5 grains).

To anesthetize the urethra 1 to 1½ grains suffices; for the bladder he injects about 3 ounces of 1 per cent. solution of eucaine. It is contraindicated in bloody operations, as it causes local congestions.—*Revue de Chirurgie*, February, 1897.

A Case of Castration for Hypertrophied Prostate is related, by Chevalier, of Paris, where supra-pubic punctures, cystotomy and resection of both vasa had been previously performed.

Patient, 59 years old, had several acute attacks of retention of urine. During October, 1895, bladder was tapped repeatedly, catheterization being impossible, with negative results.

Cystotomy was then performed November 1, 1895, and five weeks later the urethra was still impervious; both vasa were resected (December 6, 1895).

March 12, 1896—Prostate very large, the urethra barely permeable and a vesical fistula was noted. Patient desired to be relieved of his hypogastric meatus.

April 29, 1896—Castration with simultaneous closure of supra-pubic fistula; catheter left in bladder until fistula was closed.

June 3, 1896—The patient left the hospital, emptying his bladder naturally, but every half hour. The prostate had, however, decreased one-third.

September 3, 1896—Patient voids a clear and odorless urine about every three hours.—*Ibid.*

Department of Therapeutics.

In charge of Dr. J. A. Storck, New Orleans, La.

GUAIACOL IN PYREXIA.

Dr. Drury read a paper before the section on medicine of the Royal Academy of Medicine in Ireland, with the above title. He drew attention to the uses and modes of use of guaiacol. He selected the method of epidermic application recommended by Rondet in 1895, as a means of reducing temperature, as superior to either internal administration or hypodermic injection. By this method one to ten minims were rubbed into the skin, previously washed, and the part covered with oiled skin. About fifty cases had been so treated. The conclusions arrived at were: (1) As a rule no ill effects followed its use. In one case of enteric fever in a female, after the use of ten minims on five successive evenings, collapses occurred several hours after application; the collapse was recovered from. (2) It very rarely fails to cause a fall of temperature, the fall being greater when the temperature is high than when it is only moderate in degree. (3) The fall reaches its maximum generally about one hour after administration, and is maintained for several hours. (4) After its use the skin becomes moist, and the patient generally sleeps. (5) It does not seem to have any effect on the course of the disease which is the cause of the fever. (6) It seems to act on pyrexia, no matter what the disease may be which causes it. (7) It usually increases secretion of urine, diminishes the night sweats in phthisis, and often relieves the cough. (8) Cardiac failure appears to be the only contraindication to its use.

Saccharin produces acute neuralgic pain in the solar plexus and its branches if given in large doses for a considerable length of time.

Chelidonium Majus is recommended very highly by Dr. Demisenko, of Bejansk, in Russia, for the treatment of cancer. The preparation used by him is the expressed juice preserved

with a trace of chloroform and is known as Chelidonii. It is a turbid, greenish fluid, miscible in water, having a faint aromatic odor and a bitter flavor. The dose is 10 minims increased to 30 or 40. He also uses a preparation hypodermically. It is prepared by inspissating the juice to an extractive condition, redissolving in water and sterilizing. One part solid is contained in two parts fluid, and the dose is stated to be about 15 minims. It is intended for injection into the vicinity of the growth.

It is said that in three cases in which the succus chelidonii has been used the effect has been more than palliative.

Chelidonium Majus, or swallow wort, belongs to the order of Papaveraceæ, and is found wild in Great Britain and the North of Europe, in Siberia and in Western Asia. It has long been a popular remedy in England and other countries for warts, and hence in some places it goes by the name of "wart wort." It was used in the middle ages as an internal remedy for cancrum oris and as a corrective of "corrupt and pernicious humors," and Linnæus and other botanical writers have expressed astonishment at the oblivion into which a plant with such energetic properties has fallen.—*The British Medical Journal.*

[NOTE.—The fluid extract of the above preparation is manufactured by two or more firms in the United States, and the dose is the same as the succus chelidonii.]

DR. JOSEPH S. GIBB, writing in the *Therapist*, on the use of eucain in laryngology and rhinology, sums up the result of his experience with eucain as follows:

(1) EUCAIN is equally efficient with cocaine as an anesthetic in ordinary examinations.

(2) It possesses equal anesthetic power with cocaine, and hence is as useful in operations in the nose, pharynx and larynx.

(3) It is nearly, if not quite, as effective as cocaine in reducing engorged turbinates.

(4) It is superior to cocaine in that it is much less likely to produce toxic symptoms.

(5) It is superior to cocaine in that it produces far less unpleasant subjective symptoms, and especially is this true in the pharynx.

Ergotin and Gallic Acid in Nephritis.—Pulvirenta gives the following prescriptions:

℞—Ergotin ..... 5.
Acidi Gallici ..... 8.
Ext. et. Pulv. Rad. Ratanhiæ ..... 3.
Fiat. pil. No. xxiii.
One pill to be taken four times a day.

℞—Ergotin ..... 2.
Acidi Gallici ..... 4.
Saccharin 5
Muc. Gum. Arab ..... 200.
Sig.: Teaspoonful to be taken twice daily.

These drugs are vascular astringents, and therefore diuretics. Like cantharides, they are contraindicated when cardio-vascular compensation is efficient and diuresis copious.

They can only be of use when arterial tension is low, dropsy urgent and urine scanty. Even here they should be combined with cardio-vascular stimulants, such as digitalis, squill, strophanthus and strychnia, otherwise there is danger of overtaxing the heart by increasing its labor.—*Treatment.*

In Fatty Dilatation of the Heart Cavities and mitral regurgitation, with anemia:

℞—Ferri Reducti.
Pulv. Digitalis fol. (English.)
Quiniæ Sulphatis ..... aa 1 scruple.
Pulv. Scillæ ..... 10 grains.
M.—Ft. massa et in pil. No. xx.
Sig.: A pill three or four times daily.

—*Bartholow.*

Miscellaneous.

Ergotole does not produce or dispose to any symptoms referable to the gastro-intestinal or the cerebro-spinal axis, such as gastric pain, vomiting and purging. A puppy, treated for four days with hypodermics of ergotole, showed no evidence of inflammation of stomach or intestines, while another puppy, similarly treated with fluid extract of ergot, showed both. Its action on the vaso-motor nervous system is intense. It diminishes

blood supply more readily than any other excito-motor. Its action on the unstriped muscular fibre is without fault. Employed hypodermically it does not cause structural alterations of the tissues. For these reasons it is welcomed as an important addition to the new materia medica—a pure ergot.—W. H. Morse, M. D., F. B. S. Sc.

Europhen is suggested as a successful agent in chancroids and suppurating buboes. It is combined with boric acid in proportions of one to three of boric acid. It is stimulant and antiseptic, thus being an excellent substitute for iodoform.—*Jour. Mal. Cut. et Syph.*

Itching in Urticaria may be relieved with the following:

Chloral	℥i.
Cocaine hydrochlorate	℥iss.
Cherry laurel water	℥ii.
Distilled water	q. s. ad. 0j.

M. et ft. lotion. Apply with slight friction.

—*Exchange.*

Chlorate of Potash in 20 to 40 per cent. ointment has been found efficacious for the removal of superficial epitheliomas, where there is scaling and not much granulation tissue. The ointment is rubbed into the spot affected and kept applied.—Gaucher—*Jour. Mal. Cut. et Syph.*

UNCOMMON CASES OF APHASIA.

The report of three exceptional cases of aphasia was published in the *Journal de Médecine et de Chirurgie Pratique* January 25, 1897.

Case I.—It is relative to aphasia in persons acquainted with several languages (polyglots), and was presented by Professor Pitres, who wrote on this singular condition of aphasia in *la Revue de Médecine*.

When persons knowing several languages happen to suffer from aphasia, it would seem they must lose, in an equal degree, the use of all the languages that were familiar to them, and recover simultaneously the faculty of using all of them in proportion as recovery comes on. Such is the case in many, but not in all. Sometimes polyglots become aphasic only as to a

number of the languages they made use of before their attack; or, after having forgotten all of them in the beginning, they again become, by degrees, capable of speaking first one of them to the exclusion of the others, which at a later period they re-acquire entirely, or only in part.

The order in which this restitution takes place is pretty regular and affords a good deal of interest. Indeed, facts go to show that recovery when it occurs, is mostly progressive and systematic; that is, one of the languages is restored before the patient can use the others. The language which returns first is commonly the mother tongue, though not always. Moreover, it is obvious from the analysis of the observations gathered by Professor Pitres that the restoration of each of the languages takes place after two stages. In the first the patient understands the languages by hearing, but is unable to speak it; in the second the patient succeeds in speaking the language spontaneously. Thus, the evolution of aphasia in polyglots comprises almost invariably, when improvement arises, the following degrees:

1. Total loss of the power to understand and speak all the languages.
2. Gradual recovery of the power to understand the most familiar language.
3. Power to speak that language recovered.
4. Power to understand the other language or languages which had been lost recovered.
5. Power to speak that or those languages recovered.

Of course, this evolution may not always be complete. Some stop occasionally presents itself in the progress toward recovery, and then the patient can only understand the language most familiar to him; or, after becoming able again to understand and speak that language, he never succeeds in both understanding and speaking the other languages, though he may yet understand if not speak them. At the conclusion of his article, Professor Pitres illustrates these remarks by presenting an original case, the history of which is briefly given here.

A man, 35 years old, knowing French, Gascon (a French dialect), Spanish, Italian, English and Arabic, was stricken with apoplexy and suffered subsequently from right hemiplegia and aphasia.

His hemiplegia disappeared rapidly enough, so much so that after a few months hardly any trace of it was left. His aphasia improved, also going through the following phases:

(*a*) For seventeen days the patient lay in a comatose or semi-comatose condition, being incapable of realizing what was going on about him, of understanding any word spoken to him, and of uttering even one syllable.

(*b*) After these seventeen days he began understanding words spoken to him in French, though powerless to answer.

(*c*) Three months from the day of his attack he caught the meaning of all that was said in French; he could also pronounce a few French words, but he neither understood nor spoke a single word of the other languages.

(*d*) Three months later he happened to be in communication with some members of his family using the Gascon dialect. In three days he recovered the faculty of understanding and speaking the latter.

Just then, though he understood and could speak easily enough French and Gascon, he remained incapable of understanding and speaking Spanish, Italian, English and Arabic, all of which were very familiar to him formerly. In the course of the three months which followed he began understanding a few separate words at first, then a few common sentences; finally most of the forms used in every day conversation in Italian and Spanish. He even succeeded in speaking a little those two languages. His improvement in English was more slow and tardy. The Arabic is not yet understood by him any more than if he had never heard it.

Case II.—Published in the *Progrés Medical*, by Professor Grasset (of Montpelier), under the following heading: Aphasia of the Right Hand in a deaf and Dumb Man.

Says Professor Grasset: "Charcot has called agraphia aphasia of the hand." This expression is suitable in that it sets the thing before your eye, imparting briefly the idea that writing is speaking with your hand. You must understand, however, that this figurative expression, aphasia of the hand (meaning agraphia), is appropriate only as a comparison, showing a resemblance between the language of articulate sounds or speech, and the language of letters, their representatives, or writing. Yet, if you go to the bottom of facts, the expression

is incorrect and inexact. The true and only true aphasia of the hand is that of a deaf and dumb individual who, having never been taught the articulation of sounds, loses the faculty of conveying his ideas with his right hand.

Cases of aphasia of the hand, properly understood, are rare, I believe, and they will be more infrequent still—we may say, exceptional, in the future, because the number of intelligent deaf and dumb who do not learn articulate language is decreasing every day. Now, to clearly observe a case of that kind it is necessary that the following three circumstances should be present.

1. An intelligent deaf and dumb person who never learned how to utter articulate sounds.

2. That this person should become aphasic.

3. The paralysis of the right arm should be so little marked as not to account for an inability TO SPEAK WITH HIS RIGHT HAND, the usual language of the deaf and dumb. These conditions, of course, are seldom met with, and on this account the description of a case is given here, in which by chance there were present all three.

Recently a man fifty years old came under my observation with all the symptoms of generalized arteriosclerosis attributed to arthritism. Two years ago, without having had any apoplectic fit, he began showing signs of softening of the brain from thrombosis of certain branches of the left middle cerebral or Sylvian artery, progressing by degrees.

The man being deaf from his birth and deaf as a post, his sense of hearing is quite out of the question. Impressions of sound are not received by his auditory nerves, therefore spoken words are neither heard nor understood. In short, he is affected with congenital word-deafness. Yet he does not suffer from sensory aphasia, for, if his acoustic nerves are null his optic nerves are normal, leading from the periphery to the centres for conception of writing. Indeed, he not only sees the words from a page set before him, but the words convey correct ideas to his mind; in short, he is not affected with word-blindness. He reads the papers; he understands anything that is written and all the signs with the fingers (deaf and dumb language). When asked in this manner to point out any written word or letter, he readily and infallibly does so.

Thus one can judge of his intelligence, although I am told by those about him that it is impaired. He could no more manage his business as clearly as he was once wont to. His memory particularly, and his former quick comprehension, have obviously diminished. He has yet enough power of grasping with his intellect to understand what he reads and what is communicated to him in the language of the deaf and dumb; only, when he seeks to answer in this language he, in vain, tries to do so with his right hand, while he readily answers if he uses his left hand.

Though very clever and well informed formerly, he would never learn how to speak by words, because at the time it was suggested to him he was no longer of an age to be educated successfully in this modern method of teaching the deaf and dumb the language of articulate sounds. I am told he then used his right hand to convey his ideas with wonderful ease, calling into use his other hand, only to finish the quick work of his right hand. But what a change since! At present, if he is asked to perform the deaf and dumb alphabet with his right hand, he painfully succeeds in representing the letter A and with still more difficulty the letter B, and he is unable to go any further. He tries, and tries again to figure C, all in vain, he grows impatient and finally gives it up. With his left hand on the contrary, he figures the whole alphabet, quickly and accurately. Again, when letters are set before him and pointed out for him to figure, he fails to do so with his right hand, while with his left he does it most correctly. It is evident that he suffers from aphasia of the right hand, in every acceptation of the word. At the same time, he suffers from agraphia. Formerly, I am told, he had in writing a very good hand. At present he can not write. He even does not care to try it any more, satisfied of his inability, which mortifies him. Now then, this inability to use his right hand for figuring his language and for writing is not due to paralysis of his right arm. The letter is somewhat impaired, but not to such a degree that he is prevented from moving it to figure the letters or to write them.

The conclusion is that the deaf and dumb have in the cells of their brain-cortex a *centre for hand language*, and it is obviously separate from the centre for movements of the upper limb, since the function of each of those two centres appears to be independent from one another; their dissociation being shown in dis-

ease when one centre is seen to operate, while the other is abolished.

Now, that centre for hand language is, from the point of view of functions, closely associated with the centre for writing. But, from an anatomical standpoint, is the centre for hand language the same as that for writing? Again, is it permissible to locate it at the foot of the second frontal convolution, instead of placing it at the foot of the third frontal. The case reported here would make you think so, yet it affords no positive proof.

Case III.—Refers to "Mirror Speech," *parole en miroir*, and Dr. Baudouin on the subject writes the following: "Everybody knows what is meant, in nervous pathology, by 'mirror writing,' a writing which left-handed people perform very easily, when they have had for a while the habit of writing with their left hand, and this I can prove myself, being left-handed from birth and having learned writing with my left hand in my earliest school days." * * * [Before proceeding any further in this article some explanation is required to thoroughly understand it. "Mirror writing" means this: Set a page before you, large print is more convenient, take a small looking-glass, for instance, and hold it with your right hand on the right edge of the page, in such a position that the image of the latter is given back from the reflecting surface. Now, for instance, take the cover of this "New Orleans Medical and Surgical Journal." Reflection from the mirror gives back "SNAELRO WEN, etc.," in the style an innocent left-handed schoolboy would write it from *right to left*, which read in our occidental style from left to right is worse than Hebrew to the average man.] * * * "But nobody," continues Dr. Baudouin, "has ever described so far a disturbance identical to this in speech, a disturbance which by analogy I may be allowed to call 'mirror speech,' though the association of those two words is jarring and incongruous.

"To my friend Dr. Doyen is credited the merit of calling attention for the first time to this strange and singular symptom. He told me about it a few months ago, but his whole report appeared in the thesis of one of his pupils, Dr. Marcotte (*De l'hémi-craniéotomie temporaire*). It is indeed a remarkable case. A young girl, 12 years old, seemed to be suffering from abscess in the brain, caused by otitis, and she was trepanned when at the point of death. After the operation it was thought syphilis was

the cause of her trouble. At any rate, a marked improvement followed, yet aphasia persisted, and the child then began to pronounce incomprehensible sentences, as, for instance, the following: "*Te-tanma; Yen-do sieur-mon, chant-mé; Le-quil-tran-ser-lais-me-vous-lez-vou.*"

Seeing she was not understood, she would put herself in a passion and angrily repeat and spout with increasing volubility sentences similar to the one cited above.

Dr. Doyen, one day, thought of writing down what the child said, and he discovered that her words had a meaning. The child simply delivered her words *in the contrary direction, inverting the syllables, beginning from the last toward the first one* and this she would do without blunder in sentences of as many as eight, ten and even more words. Thus, the incomprehensible sentences cited above meant: "*Ma tan-te, Monsieur Doyen, méchant, voulez-vous me laisser tranquille.*"

This disturbance lasted five weeks. But, since, the little girl has completely recovered, and she is now a well-grown blooming girl.

Translator's Notes.—This case is not only remarkable, indeed, for its exceptional features, but the recovery *in toto* is striking. Except cases of temporary aphasia due to trifling causes, as Henoch's aphasia, it is seldom that an aphasic recovers so perfectly. Most of the time there remains some defect, and not infrequently what is called paraphasia, "a condition in which the patient can speak quite freely, but transposes words and interpolates useless words to such an extent that what he says is, at times, unintelligible." The degree of paraphasia is, in after life, more or less marked, but it persists.

Now, the writer has known a gentleman who had suffered from serious aphasia several years back, and he spoke freely and indulged freely in speaking, too, on all topics. His intelligence was perfect, he being the manager of a large gold refining concern in Paris. His memory was surprising, and a great many times he told us about his adventures as an army officer in Mexico during that silly campaign of Napoleon the Small, as Victor Hugo called Napoleon III, in 1861-67, the forerunner of the crash in 1870, by the way. This accomplished gentleman could never speak on this subject unless he inserted in his fluent narration or conversation the words "*Voyez vous il y avait*

la dedans." At first his listeners would look amazed, but they soon caught on to the slight defect, and the monotonous interpolation would, in the end, never spoil the pleasure of hearing him.

Book Reviews and Notices.

A Practical Treatise on Medical Diagnosis—For the use of students and practitioners. By JOHN H. MUSSER, M. D., Assistant Professor of Clinical Medicine, University of Pennsylvania, Philadelphia. New (2d) edition, thoroughly revised. In one octavo volume of 925 pages, with 177 engravings and eleven full-page colored plates. Cloth, $5; leather, $6. Lea Brothers & Co., publishers, Philadelphia and New York, 1896.

A careful examination of this work can not fail to impress the critical reader with its conspicuous merit, both as a text-book for students, and as a comprehensive treatise on a subject of universal interest to medical men.

Its style is lucid and attractive, with a logical arrangement and subdivision of topics which makes the book very easy reading. Its most remarkable feature, however, is the minute, painstaking attention which the author devotes to details.

Professor Musser, fully realizing that medical diagnosis, as a practical science, must necessarily depend upon the accurate study and rational interpretation of numerous and varied details, many of which are in themselves apparently trivial, proceeds to enumerate and critically analyze every phenomenon, symptom and indication which, directly or remotely, concerns the physician in arriving at a diagnosis. He takes the safe ground of supposing that the reader of a text-book desires to know, and is entitled to be told, everything which the author of that book can possibly teach, and he seems to have omitted nothing which the most exacting reader could expect to be taught. For this reason the book is surprisingly self-contained. The busy practitioner who may read it in the intervals of routine work will not need to have text-books on physiological chemistry, bacteriology and microscopy at his elbow.

Such a book needs only to be seen to be appreciated. Its essentially practical character and completeness, and the precision with which its author singles out and elucidates every salient point of the subject, recommend it strongly to all classes of medical readers. PATTON.

A Manual of Clinical Diagnosis by Microscopical and Chemical Methods—For students, hospital physicians and practitioners. By CHARLES E. SIMON, M. D., late assistant resident physician Johns Hopkins Hospital, Baltimore. In one octavo volume of 504 pages, with 132 engravings and 10 full-page colored plates. Cloth, $3.50. Lea Brothers & Co., Philadelphia and New York, 1896.

The perusal of this admirable work furnishes food for certain serious reflections. There was a time, not many years ago, when the physician had to base his diagnosis largely upon the observation of gross physical symptoms. That day is now past. Modern science has placed at our command methods of such precision that those who still practise the old system of guesswork, neglecting the aid afforded by chemistry and microscopy, are deliberately sinning against the light. A man of limited means, or mature years, may find it inconvenient to leave his practice in order to study modern methods of diagnosis at a post-graduate school, but such a man can not excuse himself for remaining totally ignorant of these methods, despite the fact that such a complete and practical manual as this of Dr. Simon's can be had at a trifling cost. As a guide to both clinical and laboratory work, the book will be found invaluable. The indolent man, and the man who "has no time" will soon realize the thoroughness with which the author has done his work, thereby putting the reader to the least possible trouble in applying to practice the technical teaching so exhaustively set forth. The author has conscientiously thought out all the problems, and supplies all the necessary information, leaving the reader to provide only materials, instruments and accessories.

As regards the appearance of the volume, it is enough to say that it is fully up to the high standard of excellence which its publishers have established for themselves and have consistently maintained. PATTON.

A Text-Book of Diseases of the Nose and Throat. By FRANCKE HUNTINGTON BOSWORTH, A. M., M. D. Profusely illustrated with nearly two hundred engravings and seven full-page chromo-lithographic plates. New York: William Wood & Co. 1896.

Dr. Bosworth needs no introduction to the profession. His contributions to the literature of the specialty in which he has labored so diligently are all standard works. The present text-book is a condensation of his previous exhaustive work, in two volumes, which renders it somewhat more assimilable to the general practitioner, though it need not be inferred that specialists may not find abundant material for study.

The vast experience of the author gives great weight to his opinions on the practical operation of the various methods of treatment; still, we venture to place a higher value on galvano-cauterization in hypertrophic rhinitis than he seems to accord, and the use of the modified Gottstein's curette in the treatment of adenoids has, in our hands, given very satisfactory results. Again, Wright's snare is the handiest instrument of the sort in the removal of most nasal polypi. But every operator has his preferences in most things. Bosworth gives the gist of a wide experience in a volume of moderate size, which can be recommended as a good guide on the subjects discussed.

A. McS.

The Diseases of the Stomach, by DR. C. A. EWALD. Translated and edited with numerous editions from the Third German Edition by Morris Manges, A. M., M. D. Atlanta, Ga., and New York: D. Appleton & Co.

This is the second revised from the Third German Edition of Dr. Ewald on Diseases of the Stomach.

Peradventure, the best work of its kind in the English language. The author, a most excellent clinician, is ably seconded by the translator who assisted to make the work available to English readers. The book contains all the worthy knowledge from a clinical standpoint that is at present available on the subject of which it treats. The chapters on method of examination are abreast of the times and we are pleased to see mentioned the value of Töpfer's method for the quantitative and qualitative

analysis of hydrochloric acid; especially where the saving of time is important It is exceedingly gratifying to see how liberal the author is in giving credit to whom it is due. It is stated that Boas' test for lactic acid for clinical purposes is too delicate, as the reagents employed may simulate the reaction given by decomposition products of lactic acid. We arrived at the same conclusion long since. We can not agree with the translator in reference to the trouble of introducing the deglutable electrode devised by Einhorn. We have never experienced the slightest difficulty when the patient has been properly instructed regarding the swallowing of the electrode. So far as gastric surgery is concerned, no attempt is made to present details or to give technique, and so it should be in a work on clinical medicine. The work reflects credit on its distinguished author and the translator has done his whole duty. STORCK.

PUBLICATIONS RECEIVED.

A Study of Fracture of the Lower End of the Radius, by Jno. B. Roberts, A. M., M. D. P. Blakiston, Son & Co., Philadelphia, 1897.

Lectures on Appendicitis, by Robt. T. Morris, A. M., M. D. G. P. Putnam's Sons, New York and London; F. F. Hansell & Bro., New Orleans, 1897.

Diseases of the Ear, Nose and Throat, by Seth Scott Bishop, M. D., LL. D. The F. A. Davis Company, Philadelphia, New York, Chicago, 1897.

Twenty-third Annual Report of the Touro Infirmary.

Renal and Urinary Diseases, by Robt. Saundby, M. D., Edinburgh. W. B. Saunders, Philadelphia, 1897.

Practice of Medicine, by A. A. Stevens, A. M., M. D. W. B. Saunders, Philadelphia, 1897.

Braithwaite's Retrospect of Medicine, by Jas. Braithwaite, M. D., London. American edition, G. P. Putnam's Sons, New York, 1897.

Elementary Bandaging, by Walter Pye, F. R. C. S. W. B. Saunders, Philadelphia, 1897.

Hypnotism and its Application to Practical Medicine, by Otto G. Wetterstrand, M. D. G. P. Putnam's Sons, New York, 1897.

Warner's Pocket Medical Dictionary of To-Day. Wm. R. Warner & Co., Philadelphia, 1897.

Retinoscopy, by Jas. Thornington, M. D. P. Blakiston, Son & Co., Philadelphia, 1897.

Syringomyelia, by Guy Hinsdale, A. M., M. D. P. Blakiston, Son & Co., Philadelphia, 1897.

Hysteria and Allied Conditions, by Geo. J. Preston, M. D. P. Blakiston, Son & Co., Philadelphia, 1897.

Reprints.

The Relation of the Medical Profession to School Education.—The Significance of Palatal Deformities in Idiots, by Walter Channing, M. D.

The Technique of Blood Study and Experiments in the Chemistry of Leucocytes, by A. Mansfield Holmes, A. M., M. D.

The Relation of the Pregnant Uterus to the Reflex Nausea and Vomiting.—Excision of the Coccyx for Fracture and Necrosis.—Pericranial Cellulitis and Cephalhematoma, by Edward N. Liell, M. D.

Results of Electrolysis versus Divulsion or Cutting in Urethral Strictures, by Robert Newman, M. D.

Some Amusing Instances of Nasal Reflex, by Arthur G. Hobbs, M. D.

Parthenium Hysterophorous, by H. V. Arny, Ph. G., Ph. D.

Contribution to Traumatic Abdominal Surgery.—On the Treatment of Fractured Shafts of Bone in Children, by Thomas H. Manley, M. D.

Vaginal Extirpation of the Uterus and Adnexa.—Should the State Take Action to Regulate the Administration of Anesthetics?—Ectopic Gestation.—The Causes of Death After Abdominal Section, by H. J. Bolat, M. D.

MORTUARY REPORT OF NEW ORLEANS.

(Computed from the Monthly Bulletin of the Board of Health of the State of Louisiana.)

FOR APRIL, 1897.

CAUSE.	*White.....*	*Colored...*	*Total .....*
Fever, Malarial (unclassified)	5	4	9
" Intermittent	1	....	1
" Remittent	.....	.....	.....
" Congestive	2	.....	2
" Typho	.....	1	1
" Typhoid or Enteric	5	1	6
" Puerperal	.....	.....	.....
Cancer	.....	.....	.....
Influenza	1	3	4
Measles	.....	.....	.....
Diphtheria	5	.....	5
Whooping Cough	.....	.....	.....
Apoplexy	7	5	12
Congestion of Brain	5	1	6
Meningitis	5	2	7
Pneumonia	16	15	31
Bronchitis	12	9	21
Consumption	33	46	79
Bright's Disease (Nephritis)	15	24	39
Uremia	3	1	4
Diarrhea (Enteritis)	8	10	18
Gastro-Enteritis	5	.....	5
Dysentery	.....	4	4
Peritonitis	2	.....	2
Debility, General	.....	1	1
" Senile	9	6	15
" Infantile	2	1	3
Heart, Diseases of	21	14	35
Tetanus, Idiopathic	.....	.....	.....
" Traumatic	2	1	3
Trismus Nascentium	3	6	9
Hepatitis	2	1	3
Hepatic Cirrhosis	3	1	4
Injuries	7	3	10
Suicide	3	.....	3
All Other Causes	105	51	156
TOTAL	287	211	498

Still-born Children—White, 27; colored, 18; total, 45.

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

Death Rate per 1000 per annum for month—White, 17.66; colored, 31.65; total, 21.73.

METEOROLOGICAL SUMMARY.

(U. S. Weather Bureau.)

Mean atmospheric pressure	30.08
Mean temperature	71.00
Total precipitation	5.75 inches

Prevailing direction of wind, southeast.