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"Je prends le bien où je le trouve."

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ORIGINAL AND ECLECTIC.

ARTICLE XIX.

LETTERS FROM SAML. D. HOLT, M. D., UPON SOME POINTS OF GENERAL PATHOLOGY.

LETTER NO. 18.

MONTGOMERY, ALA., March 18th, 1857.

Messrs. Editors,—The nature of the non-cognizable causes of disease, and their modes of operation in and upon the animal economy, are involved in so much obscurity, as to render our knowledge upon the subject little less than a system of hypothetical speculation. The discussion of these, I would willingly avoid; yet, as all diseases seem to be made up of a series, alternately of cause and effect, which are, in a great measure, inseparable, one from the other, it becomes in consequence a difficult matter to investigate their true and essential pathological character, without examining at the same time their etiology. Indeed, so closely are these links of cause and effect connected in the chain of morbid actions, which follow the operation of the first cause, that it is often difficult, and sometimes impossible to determine where one begins and the other terminates; what actions come within the range of the etiological, and what the pathological character of the disease; or rather, what actions are referable to the operation of the first cause, and what to those which may be regarded as secondary. Hence, in inquiring into the pathology of these diseases, (I mean typhus, typhoid, and other diseases of the zymotic class,)
I shall be compelled to examine at some length into the nature of their causes and the mode of their operation, however obscure and difficult of comprehension they may be. In doing so, however, I do not expect, or even hope to be able to clear up any of the difficulties, or remove the obscurity in which the subject is involved, but merely to give expression to such views as I believe to be the most reasonable, because most conformable to their nature and mode of operation, as we are best able to understand them, from observing their effects upon the animal system. By the non-cognizable causes, I mean particularly those of animal origin, whether solid, liquid, or æriform, which, when taken into the circulation in whatsoever manner, act as blood poisons, giving rise to contagious, infectious, and some forms of epidemic diseases. Now, in order to produce the diseases to which these causes respectively give rise, (for it must be received as an axiom that every disease must have its peculiar and specific cause,) it is not sufficient that the blood should serve merely as the receptacle, and act as the vehicle for conveying the poison to those parts of the system for which it may have a special elective affinity; but it is essential that the blood itself should become contaminated, undergoing changes in its vital or chemical quality or properties, and furnishing a nidus and a pabulum for the regeneration or reproduction of the poison. To express the action or process by which these changes in the condition or constitution of the blood are effected, which becomes sooner or later manifest by the signs of excitement or depression, and a corresponding increase or diminution of vascular action, giving evidence of its progress, and the actual invasion of the disease, the term "Zymosis" has been used. This term, is at least appropriate, inasmuch as the process is analogous to a "ferment," and is not the less expressive, whether the action of these poisons upon the blood be, by a chemical or a vital process. A striking analogy is found in the fact, that the process having once been completed, can not be renewed; and the blood having been once subjected to the zymotic action of any one of these poisons, has its susceptibility to their impression in a great measure destroyed, becoming, as a general rule, incapable of having it the second time excited by the same poison. This fact, and the immunity which one attack of any of the zymotic diseases secures against their recurrence, furnishes conclusive evidence to my mind of the existence of a separate and distinct cause for each disease of this class. The separate, distinct
and sui generis character of all these diseases is, at the same time, as conclusively shown in the pathognomonic signs, or diagnostic symptoms of each, whether they result from the direct operation of the first cause, or belong to the regular concatenation of morbid actions which make up the disease.

I have been led to these remarks from the fact, that the points involved remain open and unsettled questions, many contending still for the unity, or rather the identity of certain diseases and their causes, such for instance as bilious and yellow fevers, or of typhus and typhoid fevers, which they maintain are essentially the same disease, differing only in degree and the intensity of the causes which produce them. Such, I must confess, was at one time the inclination of my own opinions, but a more intimate acquaintance and careful study of their character, have satisfied me that such views were erroneous. I have even gone further and entertained for awhile, at least, the belief that some of these diseases possessed the character of a duality, that is, that they were made up of two distinct diseases blended into one, as for instance "intermittent typhoid fever" and yellow fever. Such were my views, particularly with regard to the yellow fever which appeared in Montgomery, in 1853, from which opinions I have found it somewhat a difficult matter to recede, in the face of the facts which existed at the time, (en passant, I am not the first and only one who has had to "crawfish it" in their views concerning these diseases,) which in short were these: Yellow fever had never been known or recognized previous to that time in the region of Montgomery, except such cases as were occasionally carried there from Mobile, Pensacola, or New-Orleans, notwithstanding it had been considered a hotbed for the most malignant forms of malarial fevers, and other diseases, not excepting cholera: nor were the causes of sickness apparently more rife, or even as much so as in former times, and there existed but few cases, comparatively, of malarious diseases. There were, however, prevailing, and had been for a length of time, two distinct epidemic diseases, one being jaundice, and the other typhoid fever, a coalescence of which two diseases, (and why not?) if it did not give us "typhus icterodes," it would give us at least an icterus typhoides, furnishing most of the prominent and characteristic features of yellow fever, and my belief was, that the prevailing disease was a hybrid, and not genuine "Yellow Jack," between which and yellow fever a much closer relation existed,
than between a "chestnut horse and a horse chestnut." These views received support from the fact, that the disease was characterised by an extraordinary predominance of jaundice symptoms, which were often the first, and, in many instances, the only symptoms manifested—the disease preserving the character of a pure, simple, uncomplicated case of jaundice. That such was the character of the disease as it prevailed elsewhere, I infer from some circumstances which came under my own observation, as well as from general report:

Two men from Pensacola, via Mobile, arrived in Montgomery on the 28th of August, both having been taken sick the day previous, on the boat. One of these cases presented clearly the most prominent characteristic symptoms of yellow fever, (a case which I shall notice hereafter, as it is my design to give cases illustrative of the principles and views which I advocate,) while the other was prominently marked by the characteristic symptoms of simple jaundice without a single symptom, apart from existing and surrounding circumstances, which would justify the belief that it was anything more; or, that it had any relation with yellow fever. And, if we are permitted to rely upon newspaper testimony, (?) there prevailed about that time, in Loudon, Tenn., and the surrounding neighborhood, (a place by-the-by, which has not found its way into the gazetteers, or upon the maps as I can perceive, though it is certainly of sufficient importance to have done so, if it can support a newspaper and get up an epidemic yellow fever, an honor and a distinction which formerly the large seaport cities only could aspire to,) an epidemic jaundice, as the report states, "which carried off many of the inhabitants, and which the physicians would have pronounced yellow fever, but for the absence of fever, many of the cases being attended with the characteristic black vomit."

There may be found in "Bell and Stokes," which I have not now before me, under the head of epidemic jaundice, the description of a disease which once prevailed as an epidemic in London, and described as "gastro-duodenitis," which if not yellow fever, at least bears a very striking resemblance to the disease which prevailed in Montgomery, in 1853, under that name. But further: some years ago I proposed to the Medical Society of Montgomery, as a subject of interest, an inquiry into the causes and the nature of jaundice, which I had observed, more than once, to pre-
vail in Montgomery in an epidemic form, and apparently as an idiopathic disease; but, being before yellow fever times, the subject was not deemed of sufficient importance, and some of the members doubting whether it ever so prevailed, the subject was laid aside. In 1852, however, it was so decidedly epidemic, not only in the city but in the country around, that it attracted the attention of the least observant, non-professional portions of the community, and in 1853, after yellow fever had made its appearance in Montgomery, I called the attention of some of my professional brethren to these facts, in support of the views which I then entertained, and they gave it as their opinion, that these jaundice epidemics were nothing more or less than the manifestations of a yellow fever epidemic influence. My views, with the facts, were submitted also to my brother, Dr. David Holt, of Woodville, Miss., formerly of New-Orleans, who has had an extensive experience in yellow fever, and the diseases of the South, and in whose judgment and opinions I have much confidence, and he did not hesitate in expressing the opinion, that the epidemics in Montgomery, as well as that of Loudon, were genuine and bona fide yellow fever epidemics. Well, if it be so, though I do not feel like pushing the matter too far, for fear I should be accused of entertaining heretical notions, yet I would like to propound a few questions, which are neither idle or impertinent, hoping that some one who may feel himself competent to the task will undertake to answer them, which if satisfactorily done will go a long ways towards settling many controversial points with regard both to the causes and the pathology of yellow fever. Is there then such a disease as idiopathic jaundice—jaundice "per se?" What relation exists between yellow fever and jaundice? Is the jaundice of yellow fever the result of the essential and specific cause of yellow fever, or is it the result of the operation of other and general causes? Is jaundice an essential element in yellow fever? If jaundice is, under any circumstances, idiopathic, or a disease "per se," how is the fact to be known? Now, I ask these questions in all earnestness, for I do not much like this plan of having to guess at matters, if they can be got at in a more reliable way. How was I to know that in the two Pensacola patients I had two cases of yellow fever? And how was I to know when turning off my jaundice patients, with a few rhubarb pills and a bottle of dogwood and wild cherry bark bitters, that I was turning off so many cases of yellow fever?
But I must leave this subject and these inquiries, and return to the subject which I was discussing, namely, the separate and sui-generic character of the zymotic diseases and their causes, and the nature of the zymotic process; and I desire to impress upon the mind of the reader, the necessity of separating and keeping in view the phenomena which arise from the direct operation of the first, essential and specific cause, from those which arise from the operation of general causes: for while the former determines the disease, and shapes its course and duration, and preserves its essential sui-generic character, the latter furnish the phenomena, which though non-essential, enter into and help to make up the morbid concatenation of each, and giving rise to the changes, modifications and complications to which they are all liable. While, therefore, I maintain that the prime, essential, and specific cause, whatever it may be, operates from the beginning to the end of the disease, giving rise to its true pathognomonic signs, I cannot be understood as maintaining that all the phenomena which arise in their progress, and which necessarily enter, as it were, into their composition, are to be ascribed to the direct operation of the first cause, for many of the causes of these pre-exist in the system, and only await the action of some specific cause to bring them into life, and give them activity and direction. Thus fever which is made up of an aggregation of morbid phenomena, and which may arise from almost an infinite number and variety of causes, and which forms a prominent trait in the character of a large number and variety of diseases, can be regarded only as a general pathological condition, without the operation of an essential and specific cause to give it individuality, or "a local habitation and a name." Hence, the fever of small-pox, measles and scarlatina, or of typhus, typhoid, or yellow fever, can with propriety be viewed only as a general pathological condition, which is common to them all, and which is identical in all, except so far as it is controled by the prime, essential and specific cause of each, which preserves to each throughout its course, its essential and sui-generic character, notwithstanding the changes and modifications which they are subject to from other causes.

Though there may be a triteness in these remarks, if the proper weight of importance be attached to them, they will lose that character, and this importance is manifest in the necessity for a correct diagnosis, upon which alone the successful treatment of all
diseases in a great measure depends. In the analysis, therefore, of these diseases, as well as in their treatment, too much care can not be taken to separate, and to keep separated, the causes, and the symptoms which belong to them in their individual and sui-
generic character, which constitutes their special pathology, from those, which by being common to, and entering into the composition of them all, constitutes their general pathology: for, accord-
ing to my observation and experience, it is unquestionably true, that while each of these diseases requires a course of treatment, which is best suited to them in their individual character, and found upon their special pathology; that treatment, whatever it may be, is always more or less, and often wholly amenable to treat-
ment upon general principles, founded upon the general pathological condition, which is the result of the operation of general causes, and not of the specific cause of the disease. It is unnecessary for me to cite examples, as any and all the diseases which I have named will furnish them in abundance, if viewed in the varied and modified aspects to which they are constantly liable, from the causes which I have stated, and though the principles which are involved, and which I am urging upon the attention of the pro-
fession have constituted the chief theme, and the "burthen of my song" from the beginning to the present time; and upon which my classification of fevers has been founded, I do not feel willing to let the present opportunity pass without re-expressing the opinion, that a want of proper attention to these matters, and not keeping them at all times in view, has been the principal cause of the want of success which has often attended the treatment of these diseases, and which has led to the abuse, and finally to the rejection of re-
medies which, though improper or unnecessary under one aspect or state of affairs, are under other aspects and circumstances most appropriate and beneficial. To this fate, at one time or another, have the lancet, opium, mercury, tartar emetic, and all the leading articles of the materia medica been subjected, and to this fate will they continue to be subjected as long as the treatment of these diseases in a single aspect, or in the character of their special patho-
logy, is persisted in without regard to the general pathological condi-
tion which surrounds and invests them.

Well, I will lay aside, for awhile at least, these generalities, and come to the part of the subject, with which I started out in this letter, which if not more interesting, is at least, more intricate,
namely, an inquiry into the nature and mode of operation of the causes of the zymotic diseases. And to show what my ideas are with regard to the zymotic process, as applied to the production of disease, I will select for illustration the vaccine disease, or vaccination, premising that so far as concerns the zymosis merely, it is essentially the same in the whole class of zymotic diseases, while the results which depend upon the peculiar nature of the zymotic cause, are often widely different, and belong to these diseases in their individual character. An atom of vaccine or variolous virus introduced under the cuticle by means of a prick or scratch, so slight as scarcely to create a sensation, will remain several days without producing any sensible or perceptible impression, and sometimes all traces of the prick or scratch will disappear, during which time there is no evidence of the work which is going on within, there being no manifestation either general or local, of nervous disorder or of vascular disturbance. But presently a little speck of inflammation shows itself at the point of the insertion of the virus, where a vesicle forms, which goes on to enlarge, and is surrounded with an areola of inflammation, which increases until the pustule is fully and maturely formed. And this is what I understand to be the zymotic process, which requires for its accomplishment the time from the reception of the zymotic cause, through the period necessary for the regeneration or reproduction in the system of the same zymotic cause, up to the time of its maturation, which will require a longer or shorter time according to the specific nature of the cause: the vaccine virus requires about ten days, the variolous in inoculation a little longer. But I have not stated all which occurs during the zymotic period, for about the seventh day from the insertion of the virus, a febrile movement is set up, showing that it is no longer a local affection, but that the whole system has been brought under the influence of the local affection, or is laboring under the influence of the zymotic cause, which latter is the most reasonable supposition, as when the variolous virus has been used, the febrile movement is soon followed by a crop of vesicles which appear in various and remote parts of the body, which mature about the time of the parent pustule—about which time we may suppose the zymotic process to have been completed, and about which time the febrile movement generally ceases. When the disease is taken in the natural way, the febrile movement furnishes the first evidences of the existence
of the disease, and it is generally two or three days, before the
eruption shows itself. In this instance, there is no local affection,
as in the other, to get up a febrile movement in the system, and
the only reasonable inference is, that the fever is the result of the
specific virus, undergoing the zymotic process. This question, how-
ever, belongs more properly to small-pox, in its individual char-
acter, and I wish to confine myself to zymosis merely, which is
confined to no one disease, but belongs alike to small-pox, measles,
scarlatina, typhus, typhoid, and yellow fever, and many other
diseases—some having a specific virus as their cause, and recog-
nized as contagious, while others, of an infectious character, have
their origin in a specific animal effluvium which arises from excre-
mentitious substances, and diseased bodies; and others, again,
originate from specific effluvia and aerial poisons, requiring for their
production an atmospheric contamination, as in the case of epi-
demics generally. Of the first, we have an example in small-pox,
which is both contagious and infectious—of the second, in mea-
sles, scarlatina, typhus, and probably typhoid fever; and of the
third, in yellow fever; between some of which diseases there are
many striking points of resemblance, and of some relationship—
and in one respect, they all belong to one family, that is, they are
all zymotic diseases.

Now, in examining into the manner in which these causes oper-
ate, and the relation which they bear to the diseases to which they
give rise, and to other causes which enter into their composition,
I shall have to adopt an aphoristical and catechetical style of argu-
ment, more, however, for the sake of convenience, than from an
appreciation of its elegance and beauty.

Having seen from the example or illustration given, that the
zymosis, or ferment, commences with the insertion or introduc-
tion of the virus or poison into the system, we are led to the in-
quiry as to how a disease is thus produced, when and where the
disease commences, and what part the zymosis sustains in the
disease, whether as an element in the disease, or as an active agent
merely in its production. The answering one of these questions
would perhaps suffice for them all; but I will not attempt such a
wholesale manner of disposing of them. I do not hesitate how-
ever to express the belief that it is the first link in the morbid
concatenation, and consequently is an essential as well as a prima-
ry element in all the diseases of the class, having its origin and
seat in the blood. When the poison is introduced, we may suppose the process of its absorption to commence, and its diffusion to go on, until the whole mass of the circulating fluid becomes tainted or contaminated with the poison. It is not, however, to be understood that this diffusion and contamination constitutes the zymosis, but that while this operation is progressing, the blood itself is undergoing those changes in its constitution, which constitute the zymotic process, namely in the regeneration or reproduction of the poison in the blood, from materials furnished by the blood. Some idea of the extent of this reproduction may be formed, by the supposition, which is a reasonable one, that a single atom of variolous virus having undergone zymosis in one man would probably furnish material sufficient to poison the blood, and excite zymosis in every human being on the face of the earth; such is not the case with all the zymotic diseases, some being of doubtful contagious character, some imperfectly eruptive, and few furnishing a palpable virus, which however does not alter them with regard to their zymotic character. From the fact that the zymotic action furnishes no ostensive evidence of its existence, and progress, it has been denied that it is entitled to be considered as one of the stages of disease, but the formation of the vaccine pustule shows from the beginning to the end, not only its existence, its progress and its termination, but, that it is an essential element in the disease, if not the disease itself. Vaccination is often successful without the presence of any fever, or other constitutional symptoms and shows itself to be nothing more than a local affection; yet this local affection or pustule, is not really the disease, but rather the result and consequence of the efforts of nature to relieve the system of the new products as they are generated by the zymotic process. And so it is with all the zymotic diseases; as the zymotic products accumulate, they become obnoxious and offensive to the system and the vital processes, and are thrown off by the natural emunctories, or through channels which are determined by their elective affinities, depending upon the peculiar and specific nature of each poison. Thus the zymotic products of vaccination seem to seek an exit, at the point of the insertion of the virus as shown by the formation of a pustule at that point. The products of small-pox, measles, scarlatina, &c., make their way through the skin, and some of the mucous surfaces, in the shape of eruptions, each peculiar in character to itself, and each manifesting a preference for
particular organs or parts of the system by the irritation which they kindle up in those organs or parts. While the zymotic products of typhoid fever—which, though not strictly an eruptive disease, is, as well as typhus and yellow fever, often attended with eruptions peculiar to the typhus family—find an outlet through the follicles and solitary glands of the small intestines; while the products of the zymotic process in typhus and yellow fever, seem to have no other means of escape than through the natural emunctories.

This would seem to bring us to an examination of the consequences of the elimination or non-elimination of these products; but I am not prepared for that yet, having other questions of importance yet unsettled. But finding that I shall not be able to get through with all which I have to say on these subjects, I will bring this letter to a close, by remarking that I do not wish to be understood as entertaining the opinion, that the zymotic stage of these diseases, (or the stage or period of incubation, as some writers term it,) is of chief or paramount consideration and importance, but that as a primary element in these diseases, it is important in reference to their special pathology to the manner in which the causes operate to produce them, and especially as showing the agency which the blood has in their production.

If I have not succeeded in proving that zymosis constitutes an essential part in these diseases, I have at least shown that it is entitled to more attention than is generally given to what is termed the period of incubation; a term, however, which I confess I do not exactly understand in a figurative sense, though I am somewhat practically familiar with it in a literal sense, about this time—having quit physic, and taken to the honorable calling of a farmer.

As ever, yours, &c.  
Saml. D. Holt.
Paragraph 1: Numerous experiments with the new anæsthetic Amylén (H,C,C₁₀) first introduced into the profession by Professor Snow, of the English school, and now attracting the attention of the Medical world in Paris. It does not “take,” however, with the leading surgeons, such as Velpeau, Nelaton, Malgaigné, Chassaignac, Maissoneuve, etc. Much of this apparent opposition might, I fear, be traced to an overweening jealousy for the claims of French science, and a tardiness to admit pretensions from beyond the channel. I have seen many patients under its influence, and find its action characterised by a freedom from that unpleasant sensation which always attends the administration of chloroform, i.e. nausea. Yet, the quantity, necessary to produce anæsthesia, is considerably more than that of the latter agent. What the particular results of these professional experiments may be, I cannot pretend to foretell.

M. Chassaignac has now in his hospital, some forty patients under treatment for abscess, by a new system which he terms “Drainage.” It is simple, rational, and effective. He employs a gum elastic tube about one-eighth of an inch in diameter, perforated along it sides with small holes, at intervals of two or three inches. When called to operate, he thrusts a trochar and canula entirely through the abscess at its base—withdraws the trochar, inserts the tube in the canula, passes it through, and then removes the canula itself—leaving only the flexible tube to perform its work of drainage. The gum elastic tube may be of any length required, and can be readily cut, at any point, with scissors. After it has been introduced, the opposite ends are approximated and confined together by a small cord, and the operation is complete. All can be done in ten minutes, or less time. Some two or three times per day, the tube should be moved, one or two inches, so as to allow a free exit of pus through the openings. This method is particularly applicable in diffusive abscesses, but may be used in other forms. I herewith enclose you a sketch, drawn under the eye, from a patient who entered the hospital with an extensive abscess, involving the whole upper portion of
the thigh, and extending itself to the iliac region. After this operation for drainage, two weeks only elapsed until a cure was effected. No other treatment was adopted, save regimen and diet. Indeed, it is astonishing to witness the many rapid, easy, and effectual cures which follow from the practice of this simple method of Chassaignac. It is proper to say, however, that it is not yet generally adopted by the surgeons having charge of the various hospitals; yet it will, I think, ultimately take the lead in the treatment of these affections.

ARTICLE XXI.

Extract of a Letter, under date 4th of March ult., from Dr. Thomas A. Means, now in the French Capitol.

On Monday morning last, I visited the Hôpital Lariboisière—some two and a half miles distant from my residence—to witness two operations with the Ecraseur, in the hands of Chassaignac himself. A description of this surgical instrument, now so popular with French surgeons, was furnished in a letter to my father, Dr. A. M., of Oxford, Ga., and which I find published in the February number of your excellent journal. No further particulars, therefore, as to the construction of that instrument will be necessary.

The cases which now demanded the skill and dexterity of the distinguished surgeon, were haemorrhoidal tumors, one of which was very large, but which under his admirable manipulations, required but fourteen minutes for its complete extraction, from the moment in which the chain was attached; while the other was but the work of a few seconds. Both operations were beautiful and simple, as well as efficacious.

M. Maisonneuve, perceiving some imperfections in the instrument of Chassaignac, read before the Academy of Medicine, some time last week, a paper of considerable length, in which he describes and proposes modifications and improvements, which he conceived would vastly enhance its practical value, and extend the range of its application. He suggests:

1st. The substitution of a screw and tablet, for the crank now employed by that surgeon.
2nd. A point of disarticulation, so as to allow of the application of crotchetts of various shapes and sizes, adapted to the kind of ligature used.

3rd. A curved shaft, and chain, designed expressly for the uterus.

Some of the defects in Chassaignac's instrument may be thus enumerated:

1st. Its limited lever power.
2nd. The difficulty of attaching the chain; and
3rd. Its closed cylinder.

In operating with that form of Ecraseur, upon cancerous tumors of the breast, for example, an incision must first be made through the skin, to the subcutaneous cellular tissue, before a sufficient force can be exerted to crush the dense mass below. Indeed, it becomes necessary, in all cases where the skin is involved, to incise the whole circumference, before anything can be satisfactorily accomplished.

And here, we may be permitted to say, "en passant," that in no case can the "Ecraseur Lineaire" of Chassaignac be used with decided advantage, unless in exceedingly soft tumors, such as hæmorrhoids, or bloody excrescences. And yet, even in this limited field of operation, much may be effected by it.

With Maisonneuve's modifications, however, there seems to be no limit, either to its motive power, its leverage, or its application. For this surgeon has extirpated with a simple thread of platinum, (one of any flexible metallic wire may be used,) and within the lapse of a few minutes—without hæmorrhage,—the inferior lip, diseased with a cancerous affection. He has also removed voluminous hæmorrhoidal bourrellets,—patches of detached skin,—tumors of various forms—ganglionic, carcinomatous, &c., &c., together with uterine polypi—diversified excrescences—the prepuce, &c. While upon the dead body he has satisfactorily illustrated its action upon the tongue, the round ligaments of the uterus, the integuments of the scrotum, and the various other parts, whether involving the skin, or otherwise. Both the instruments above referred to are from the celebrated establishment of Charriere & Son of this city, and are but modifications of the old Serre-Nœud of Grafe,—the latter surgeon retaining the old name with "nouveau" attached, while the former dispenses entirely with the "ancien nom," and calls it the "Ecraseur Lineaire."
**Gunshot Wound of the Hand; Amputation of a portion; preservation of the Thumb and Index Finger; Recovery. By Robert Campbell, M. D., Demonstrator of Anatomy in the Medical College of Georgia.**

Jim, a colored man, aged 30 years, the property of Mr. George Robinson, of Hamburg, S. C., was admitted into our Hospital, Dec. 24th, 1854, having, an hour previous, received the charge of a pistol through the palm of the left hand, while the palm was over the muzzle. Upon examination, I found the tissues extensively lacerated and the three inner or ulnar meta-carpal bones denuded and dislocated from the carpal row, one of them being fractured. The ulnar side of the index finger was also bare; but the flesh on the inner border of the hand, apart from having the corresponding meta-carpal bone, which supports the little finger, separated at its proximal extremity, seemed to have escaped destruction.

In consultation, an immediate operation was determined upon, to save the patient further loss of blood and suffering, which were becoming excessive, to the rapid deterioration of his strength. I accordingly removed, under chloroform, the middle, ring and little fingers, with their corresponding meta-carpal bones, entire—carrying my scalpel around the head of the meta-carpal bone, and base of the first phalanx, of the little finger, so as to prolong the extent of the flesh on the inner border of the hand, into a flap of sufficient length, to bend over and cover the front of the carpus and the whole of the denuded side of the meta-carpal bone of the index finger—thus bringing the skin of the radial and ulnar borders of the hand in apposition, having extirpated the intervening bones, except that of the index, and cut out the disorganized flesh.

After cleansing the wound as well as possible, controlling hemorrhage by ligature and adjusting one or two of the carpal bones, which were somewhat displaced, a few interrupted sutures, behind and before, served to retain the flap in position, when the stump was dressed with the cold-wet-bandage, as being the most appropriate treatment under circumstances so well calculated to induce high inflammatory action. An anodyne having been administered, the patient was put to bed.
It would be tedious and unprofitable for the reader to be obliged to wade through the monotonous annotation of the daily progress of this case, as he is too often compelled to do, in order to gather its few important features which have a practical interest. Suffice it to say, that notwithstanding the precautionary measures against inflammation, so extensive and aggravating was the injury, in this sensitive and susceptible part, that on the fourth dressing, an intense inflammation was discovered in the hand, wrist and forearm, requiring the employment of still more energetic means, both local and constitutional, for its subjugation.

The margins of the wound appeared to be sound and to have united, almost entirely, by the first intention; but the wrist was the principal seat of action, the tumefaction extending nearly to the shoulder-joint. On the 25th of January, a large quantity of pus was discharged, on lancing the dorsum of the wrist. This discharge continued to increase to such an extent, as to cause the patient, already enervated by suffering, to faint on getting up. One other lancing had to be resorted to—in the forearm.

From this time, upon the administration of the crystalized tartrate of iron and potash, 5 grs. three times a day, a generous diet, beef tea, chicken, &c., and Port wine ad libitum, the case progressed to a favorable termination—the strength of the patient improving and the suppuration diminishing until Feb. 25th, when the patient was discharged, well; but with a somewhat stiffened wrist-joint and index finger.

A year after, I saw Jim, and had the opportunity of presenting his case to the Class of that Session, at Jackson-street Hospital. He had for a long time since the operation been engaged in active service as a whitewasher, &c., earning good wages: free use having, in a great measure, overcome the stiffness of the wrist and finger—and his left hand, or its most essential elements, the thumb and index finger, remain to him, an efficient and valuable member—the satisfaction of this result fully compensating for the regret entertained at one stage of the case, that the amputation had not been performed above the wrist-joint, at the point of selection.

The similarity between the above and the following case, quoted from the London Lancet,* suggested to me the publication of the former.

"Comminuted Fracture of the Bones and extensive Laceration of the Integuments of the Hand; Amputation of a Portion; Preservation of the ring and little Fingers; Recovery. (Under the care of Mr. Weedon Cooke.)*

"D. R——, aged sixteen, was admitted Sept. 30th, 1856, in a collapsed condition, caused partly by the shock of an injury just sustained, and partly by loss of blood. He had been assisting at a factory for biscuit-baking by steam apparatus, when the right hand became entangled in the machinery, and much laceration was the result. Upon examination, it appeared that the thumb was torn from its attachments, and hung loose; that the meta-carpal bones of the index and middle fingers were much crushed, and broken up into small fragments, and the integuments both of the back and palm of the hand, including the muscles of the thumb, were most severely lacerated. When first admitted, there was free arterial haemorrhage, which was checked by pressure with dry lint and bandage. After consultation with his colleagues, Mr. Cooke decided neither to attempt to save the fingers, nor to amputate the hand, but to remove only the thumb, index and middle fingers, nipping off the corresponding fractured ends of the meta-carpal bones, and obtaining as good a flap as possible from the palm of the hand. This he did, and every thing progressed favorably. The boy was extremely weak, and required high feeding. The healing process went on partly by adhesion and partly by granulation, and was complete on the 1st of December. The two remaining fingers admit of flexion and extension, and when educated, and aided, perhaps, by an artificial thumb, will be of the greatest service to the poor youth in writing and even prehension."

The two cases above detailed, agreeing in several of their prominent features, unite their accordant testimony in favor of the rationality and justice of the general precept in Surgery, which enjoins forbearance and moderation upon the decision of its counsels, as regards the amount of permanent injury, which shall be inflicted, to remedy the misfortunes occasioned by violence or disease; when at the same time a course has to be determined upon, which shall not compromit the more immediate and vital considerations in the welfare of the sufferer. Yet it is too often the fact, as regards the interests involved in the contemplation of these cases, that this cunningly fashioned and most invaluable mechnico-vital instrument——*this chef-d'œuvre of mechanism, which some of the philosophers of antiquity regarded as the distinctive character of man, and even as the source of his intellectual superiori—*

*Royal Free Hospital, London.

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ty,"* is unhesitatingly devoted, by common consent, to be sacrificed, entire, to the over-wrought apprehension of that fearful malady—Tetanus, the liability to which is, to some extent, entailed upon it, by its peculiar physical endowments.


During the latter part of the summer, and throughout the autumnal months of the year, there occurs in some sections of this city, in its suburbs, and in the surrounding country, an endemic fever, identical, we believe, with the fever often prevalent at the same season in various localities in the whole of Tide-water, if not Piedmont Virginia, and which is designated, by different practitioners of medicine, as typhoid fever, slow fever, nervous fever, remittent fever, continued fever, and perhaps one or two other expletives, indicating a want of accuracy and agreement in nomenclature, that is sometimes, we fear, an exponent of uncertainty as to the true character of the disease. Following Dr. Bartlett,† we propose to call it periodic fever—a name which, while it is sufficiently comprehensive, does not suggest an erroneous pathology; a charge that might be well fastened on several of the prefixes before mentioned. We desire to draw an especial distinction between it and typhoid fever proper, confident that though typhoid fever is sometimes found in our midst, it is not the fever in question, and persuaded that any uncertainty with regard to this fact in the mind of the physician attendant may lead to results in practice not only inconvenient but fatal.

We believe this endemic fever to be undoubtedly the analogue of the old fashioned bilious remittent fever of this latitude, familiar to our fathers in medicine fifty years ago, but so changed withal, with the times, that we suspect it would not add to their posthumous fame, could they revisit these places, which once knew them so well, and attempt a diagnosis or conduct a treatment. It is indeed so unlike bilious remittent fever, even of some few years past, not only in the absence of severe constitutional symptoms attendant on its inception, but in the general absence of any special biliary disorder that unprofessional people, who have seen much of "bilious fever," in its unmistakable type, soon lose confidence in a physician who asserts that this is their old enemy. He must have some new name for them, and typhoid fever is the most fashionable and the most imposing. This title we regard particularly unfortunate, if the practitioner honestly apply it as indicative of the nature of the disease, and one that must inculcate erroneous pathology. Any fever or any disease may assume a typhoid type, etymologically speaking,

* Cruveilhier.  † Fevers of the United States.
but remittent fever cannot become in any stage of it, typhoid fever, considered as a special disease, originating in a specific poison, and according to Louis and his school, establishing its entity in a peculiar form of intestinal lesion.

The object of this paper is to endeavor to attract the attention of the profession, particularly of this portion of Virginia, to the want of technical precision which prevails as regards the use of the term typhoid fever, and to attempt to draw as marked a distinction as we may be able, between it and the autumnal endemic fever.

Autumnal endemic fever we regard as essentially a periodic fever of the remittent variety, but it has displayed some difference in its features as it occurs in the earlier or latter parts of the season. We will endeavor to detail its symptoms, not from authorities, but from our remembrance of individual instances, and from cases collated from our notebook.

The first cases of the season are usually mild, both as regards intensity and duration of abnormal action. These usually occur about the first of August. A physician will perhaps be summoned to a gentleman who will tell him that he is not sick much, but that he believes he has taken cold from sleeping under an open window. He will complain of pains and soreness in the limbs and back, of a want of appetite and spirits, and of a general feeling of malaise. He has been attending to his business, though with some discomfort for several days, and has at length been compelled to remain at home, and is probably in bed. He will remark that he is very weak—unaccountably so. His bowels are in good condition, unless he has disturbed them with cathartics. His tongue is moist and clean, except near its root, where it is slightly furred, and it is large and often indentated by the teeth. His skin is warm, not unpleasant, and dry or moist, as he is seen at the period of exacerbation or remission. His pulse is rarely 100, is not full, but quick. His countenance is natural, except on exertion, when it exhibits great languor. In the exacerbation it is perhaps a little flushed, and his eyes are little injected. He has had a slight pain in the head occasionally for a day or two, and his nose has once or twice bled a few drops or more, and there is also some cough, but unimportant.

Sometimes there will be more disturbance of the sanguiniferous system that is noted in this case, and the face will be flushed and the pulse full and bounding, and there will be marked and distressing cephalalgia, and perhaps a little incoherency or quickness of speech. But in such instances we have usually found some other source of irritation besides the original disease, as a meal of undigested food, or improper tampering with drastic medicine, or some moral cause. And these are generally the only cases occurring early in the season which are apt to be prolonged and troublesome.

Now, the existence of what pathological condition do the symptoms which we have enumerated indicate? There is no important capillary congestion in the original and uncomplicated case. There
is no anatomical lesion to attract attention. There is no digestive or hepatic or other visceral disorder. The nervous system is chiefly at fault. There is perversion of innervation. And this is confessedly the primary action of the poison of malaria. There is no necessity for secondary derangements of other functions of the body. We have an antidote for the poison—a specific for the disease at this stage—cinchona. Peruvian bark has scarcely ever disappointed us in its anticipated effects. In the language of an attractive author, quoted from memory—"Amidst the manifold uncertainties of medical science, it is gratifying to know that there is at least one important therapeutical relationship established, which defies alike the assaults of quackery and the machinations of skepticism." A full dose of the sulphate of quinine, exhibited at the first appearance of remission, will generally prevent or materially modify the succeeding exacerbation. We say, given at the remission, because we think it acts more happily when given at this period; but we are not averse to giving it at any stage, when it is necessary it should be administered. We do not believe it will act as an excitant in any dose, except in peculiar idiosyncracies—nor do we give it as a pure sedative, as we would digitalis, but we give it as an antiperiodic. In this light alone we use it in such cases. It is sedative in them in view of this property. It neutralizes that poison the irritation of which is manifested in the reaction of fever. A few doses, combined or not with a mercurial or an opiate, as special cases may indicate, usually cut short the disease. It never "runs into typhoid fever."

In cases occurring later in the season, the symptoms are apt to be graver and more serious from the beginning. The exciting cause seems to have acquired concentration and malignancy, with not so much of premonition, as exhibited in malaise, languor, debility, &c. The patient will be taken usually about noon or early in the afternoon with a marked chill, lasting some fifteen or thirty minutes, with pains in the back, head and limbs, and accompanied with a good deal of thirst. To this there will succeed a fever, lasting some five or six hours—then subsiding into a distinct remission. In which stage there is often considerable diaphoresis, and a much more comfortable condition for a few hours. After this, spontaneously, or consequent upon another period of vital depression, there will occur another rise of fever, to be followed by another period of remission, only less marked than the first; and the same phenomena will be repeated if the disease be unchecked, until in a few days it becomes difficult to perceive, without close observation, any period of remission in the twenty-four hours. It is in such cases the idea prevails that the disease is a continued or typhoid fever. In almost all of the cases occurring later in the season, there are evidences of visceral disorder—sometimes hepatic—sometimes congestion of the spleen, and of the whole portal circulation—evinced by fullness and tenderness over the bowels. The tongue is smaller and less moist—
coated more or less with fur, and disposed to be red at the point and edges. There is frequently complained of too, that almost pathognomonic symptom of bilious remittent—an annoying, tenacious mucus in the fauces. The pulse is usually more frequent—as high as 120, and fuller and harder. The face is flushed—sometimes dusky—and there are oftener symptoms of cerebral congestion, as evinced by dullness or delirium. There is the same tendency to bleeding at the nose, and oftener cephalalgia.

It is in the treatment of these cases the "triple base" of Maillot so accurately expresses the indications to be fulfilled, viz: "To combat the visceral lesions; to oppose the return of the paroxysms; to prevent the occurrence of relapses." To carry out the first, it may be only necessary, if the patient be seen in the paroxysm, to administer six or eight grains of the mild chloride with as many of Dover's powder, and one or two of ipecac, applying a dozen or two leeches to the head or stomach, according to the force of the reaction and its concentration at either point. The early occurrence of the remission will afford opportunity to exhibit the antiperiodic, which will effectually meet the two latter. Fifteen or twenty grains of sulphate of quinine given in one dose at this time, or in two doses of a few hours interval between them, will actually cut short an attack. Indeed, I have seen it succeed, in summarily effecting this end, after the disease had already continued unabated for more than a week, and when a dry tongue, nervous tremors and incoherency of language had apparently ushered in the typhoid stage. After two or three days of treatment, if the fever still continue, which is sometimes the case, we have found smaller doses of quinine, five or six grains, exhibited in the remission, to answer a very good effect—gradually neutralizing the poison of the disease, and hastening convalescence, without inducing any of the disagreeable symptoms of cinchonism. We sometimes combine the quinine with calomel, ipecac, and opium, at its first administration; and where there is much visceral engorgement, the antiperiodic is often thus more effectual.

Cases subjected to this treatment in their early stages have not generally in our experience "run into typhoid fever." Of nineteen cases, not selected, but transcribed from our note book of last September, the average duration of treatment was six days. Six more days would cover the average period of convalescence. And this large average was chiefly owing to the inclusion of two cases, which were sick four and eight weeks, and which finally assumed so much of the typhoid type as to lead us at one time seriously to doubt the accuracy of our original diagnosis. These were two young men, aged 19 and 21, respectively, occupying the same room, and who lived in a section of the city where typhoid fever, as it is called, prevails every summer. They both had been treated pretty actively with purgatives and without quinine, for several days before I saw them. During their convalescence two other young men,
living on the opposite side of the street, and who had nursed them occasionally during their sickness, were taken in precisely a similar manner as the two former, and recovered under the treatment which I have detailed—one in three days and the other in less than a week. Now, I am sure that all four of my patients had the same malady, and I am reduced to the alternative of deciding that quinia cured the typhoid fever in the two latter cases, or that the two former were sick with a different disease, viz: periodic remittent fever. This I believe to be the proper conclusion.

When the fever has persisted for one or two weeks, in spite of the treatment adopted, and the tongue begins to be dry and brown, and fissured, and the bowels are irritable, we usually recommend, about once in 24 hours, four or five grains of Dover's powder, with as much of hyd. c. creta, if there should be a necessity for the latter in the condition of the secretions, and apply at the same time a mild vesicatory over the abdomen. We continue the use of the antiperodic, however, exhibiting three grains of quinine or an ounce of the infusion of cinchona and serpentaria every six hours, alternating sometimes with fifteen or twenty drops of oil of turpentine.

With regard to the use of purgatives. We have found them generally not only unnecessary, but positively prejudicial at any stage of the disease, and evincing, even the mildest of them, aptness to induce irritation of the bowels.

If the first dose of calomel which we administer does not operate of itself in twelve hours, we then, not sooner, follow it with half ounce of cold pressed ol. ricini, or a Seidlitz powder, and relying upon the simplest laxatives or upon enemas during the remainder of the attack. Sometimes, in a case sick for a week or ten days, we have not used more than one gentle purgative. Occasionally we have regretted the use of this—never its omission. The farinaceous articles of diet, which are allowed, together with the cold acidulous drinks, so grateful to the patient, are generally sufficiently laxative; and in protracted cases, these latter have often to be forbidden, owing to the great tendency to diarrhoea.

The prognosis of this fever, as it occurs in this city and its vicinity, is favorable. Very few cases prove fatal. Perhaps not one in thirty. Its cause and its nature are shrouded in the same obscurity that masks our knowledge with regard to the essential character of all other fevers. When we shall have certainly determined and accurately analyzed the one, we may then possibly be able to elucidate the other. We are in the habit of attributing its exciting cause to the influence of malaria, whatever this subtle agent may be. We assign to the disease this origin, because it prevails exclusively in those portions of the city, and in the surrounding country, where the sole or main conditions for the generation of this poison abound, viz: * a porous, earthy surface, capable of absorbing moisture, occasionally soaked with water, and subsequently exposed to a drying

* Watson's Lectures. Martin on Climate.
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process, under a certain degree of heat. We believe this description well represents the character of the soil in the suburbs and vicinity of the city, if not in a considerable part of Eastern Virginia. The fever, when endemic within the precincts of the city, almost invariably occurs upon unpaved streets, and large and ill-drained lots. We know of certain localities that are almost always visited with cases of it some time during the autumn. Unless in the instances of persons who have been infected elsewhere, I have very rarely met with it on any paved street of the city, except one—Bolingbrook street; and this runs adjacent to and parallel with the south bank of the Appomattox river, and exposed, therefore, on its northern sides, to the malaria arising from the unpaved lots between it and the river, and on the opposite bank of the river. The healthfulness of the residences on the south side of the street, when compared with those on the north side, is a matter of common remark.

We think it sufficiently well established that the fever in question originates in malaria. Of this malaria we do not propose to give any definition. We know but little of it, except its name and abode. We suppose that it is a poison, disseminated in the atmosphere about the localities of its origin; that it is inhaled into the lungs; that it operates primarily upon the nerves, secondarily upon the capillaries, and that the fever is but a reaction of the system in its efforts to reject or eliminate the disturbing agent. And in briefly saying this, which of itself cannot be demonstrated to be more than conjecture, we say all, as far as we are apprised, that is known of the nature of periodic fever.

The diagnosis is a practical question—one involving most important issues in the treatment, and one, therefore, which cannot be too critically examined. Remittent periodic fever we regard as curable—it may be jugulated—it may be cut short. Whatever may be our uncertainty with regard to the essential nature of the malarial fever, Heaven has not left us ignorant of the antidote. We have this in its most convenient form, in the sulphate of quinia. We may be incompetent to determine the mode of action of this medicine, but its benefits are a matter of observation, and are constantly subjected to the test of the senses. They are unmistakable. Dr. Headland in his "Action of Remedies," has concocted a very pretty and a very plausible theory, showing how it cures. But this is only theory—its effects are facts. Typhoid fever, on the other hand, is incurable. A distinguished lecturer and physician,* speaking of the Irish typhus, remarks, "We cannot cure fever. No man has ever cured it." So of typhoid fever, which, if not identical in nature with typhus, has a similar origin and many things in common. The man is not born who can cure it. There is no specific which will cut it short. The antidote for its poison has not yet been discovered. An effort to jugulate it may be productive of the worst consequences. It is proper that certain symptoms, arising during

* Wm. Stokes, M. D. Clinical lectures in the Meath hospital.
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its progress, should be combated, and that obstructions in the way of recovery should be removed when it can be safely attempted; but nature must finally conduct the treatment and effect the cure, if at all effected. Hence the importance to the physician of an early and accurate diagnosis. Since the minute researches of Louis, Gerhard, Chomel, J. B. S. Jackson and others, into the pathology and symptoms of typhoid fever, it has not been generally considered a very difficult matter to diagnose this disease. But there are very many cases of the endemic fever, which we have endeavored to describe, that are not at all dissimilar in some important features; from typhoid fever and we have seen some very good observers evidently mistake the one for the other. The diseases are often alike in their mode of attack—in lurking each about a neighborhood or vicinity—in the frequent succession of cases in a family, or in going through a family as it is termed. Both, too often, attack the young; and to both new residents are most susceptible. Both are commonly attended in the early stages with buzzing in the ears and with epistaxis; and in both there is slight bronchitis. In both the bowels are very susceptible to the action of purgative physic, if not in a state of diarrhoea. And in both, if prolonged, there is remarked the same dusky hue of the countenance, and the same dullness of intellect, or delirium. They are unlike, however, in their relative gravity or mortality. I do not think that the deaths from endemic fever in this city and its vicinity would average one in forty. This is about the proportion shown from the imperfect statistical tables to which I have had access. In typhoid fever, on the contrary, wherever occurring, the average mortality is always much higher. In the Massachusetts general hospital in 1829, the average was only one in twenty-five, but in the same institution in 1830, it was one in three and a half; and the average in it for fourteen years was one in seven. Of 140 cases observed by Louis, more than one-third died. According to M. Piedagnel, the mortality is about one in seven. According to Chomel this varies very much with season, age, acclimation, &c.; but in all instances his average was much higher than in any endemic annual fever which I have known in this latitude. But again. The two diseases differ in this respect. The endemic fever of which we are treating is essentially a fever of the summer and autumn, and never prevails endemically at any other season; while typhoid fever, according to the experience of some of the best observers, is by preference a disease of winter; or at the least, according to Dr. Bartlett, does not occur in any one season more frequently than another. The diseases differ moreover in the absence, in remittent periodic fever, of the rose colored spots, one of the most remarkable phenomena of typhoid fever, occurring generally about the 14th day, on the abdomen of the patient, and according to Chomel and Genest, wanting in only 16 out of 70 cases observed by them. We regard this as a very essential difference, not only elucidating the diagnosis of remittent periodic fever, but
defining its specific nature, and establishing the fact of its malarious origin. There is no similar eruption in remittent fever, in intermittent fever, in malignant congestion, in yellow fever, or in any other fever, we believe, attributed to malarious poison. Whilst in every other form of fever having its supposed origin in the poison or infection of animal effluvia, there is either some disease of the subcutaneous glands or some eruption upon the dermoid tissue, partaking more or less of the character of the petechiae of typhoid fever. And we instance, in support of our assertion, typhus, plague, syphilis, smallpox, measles, &c., &c. We consider, therefore, the absence of any eruption in the endemic fever of this section as an important point in the differential diagnosis.

With regard to the abdominal lesions demonstrable after death, our opportunities for examination have been so limited as to render their results of but little avail. We have made a few necropsies in view of this special question, and one of them was on a patient of one of the most distinguished medical men of the state, who diagnosed the disease to be certainly typhoid fever. In it we found no ulceration, engorgement or other affection of the glands of Peyer. Dr. Bartlett, in his work, before quoted, page 152, declares that lesion of the elliptical plates "invariably occurs in fatal cases of typhoid fever." Could this fact be undoubtedly established, and would physicians use a little more diligence in their post-mortem investigations, the diagnosis of the disease after death would be definitely settled. Apart, however, from the inconvenience accruing to the patient from the doctor having to rely on information so tardily obtained, we must confess that we are not entirely converted to the doctrine of the duality of typhoid and typhus fevers, and therefore do not recognize the lesions of the aggregate glands as pathognomonic of one more than another of these diseases. But it does not form one of the purposes of this paper to open so vexed a question.

We do not wish to be understood as affirming that typhoid fever never occurs in this city or in this section of the state. On the contrary, we think we have seen undoubted cases of it. More: We have sometimes thought that there were intimations of the possibility of our malarious fevers being entirely replaced by it, in view of the fact that improvements in drainage, sewerage, &c., are gradually diminishing the causes of the former, while the increase of population, even to redundancy, in our cities, furnishes material for the enlarged development of the causes of the latter. But in none of the endemics of remittent fever, slow fever, continued fever, &c., as it is called, whether in town or country, which have come under our observation, have we been persuaded that the disease was typhoid fever proper. I have been assured by some excellent physicians of those sections of our state where the slow fever is almost yearly endemic, and occasionally makes devastation upon a plantation, and where it is regarded as contagious or infectious, that the disease was undoubtedly typhoid fever. But these same gentlemen
with practical good sense have also assured me that quinine was the treatment—that they often cut short their cases with it, and that they rarely lost a patient if called in time.

Now, while theory and experience both unite in declaring typhoid fever to be incurable even by quinine and calomel, these gentlemen must excuse us if we urge that they have applied to their disease a misnomer. And though we confess that it were scarcely wise to divert their attention by a new name, when they already combat their enemy so skillfully and so faithfully, yet as we advise no change in the armory, we hope they will allow us to insist on accuracy of nomenclature as essentially important to any intelligible record of the character and habits of disease.—Virginia Med. Jour.

On the Measle of the Pig; and on the Wholesomeness, as Food for Man, of Measly Pork. By Alexander Fleming, M. D., Professor of Materia Medica, Queen’s University, Ireland.

The following Report was furnished to the Committee of the provision merchants of Cork, who applied to me for information on the subject to which it refers, in January, 1856. Stated briefly, the questions submitted by the Committee were:—1. What is the nature and origin of measles in the pig? 2. Are all pigs measly? 3. Can pork be measly, and that condition be invisible to the naked eye? 4. Is there any analogy between measles in the pig, and the disease known by that name in man? 5. Is fresh measly pork wholesome? 6. Is cured measly pork wholesome? 7. What is the chemical composition of the measles?*

Twenty-one specimens were supplied to us, viz.:

Seven of fresh healthy pork, from different parts of different pigs; six of fresh pork, slightly measled; seven of fresh pork, badly measled; one of cured pork, badly measled.

"The measles of the pig is an animal parasite, the Cysticercus cellulose, or bladder flesh-worm. It infects the muscles of all parts of the body, but is found most frequently in those of the tongue, loin, and neck, and is often seen in the muscular substance of the heart, lying between the fibres of the muscle. It is seen as an ovoid bladder, from two to four lines in length, formed by a thin, transparent membrane, and enclosing at one extremity an opaque body, of a white color. This is the worm coiled up, but which, when unfolded, exhibits a head, neck, and pear-shaped vesicular tail. The head is armed by a crown of barbed hooklets, around which are

*I was requested to associate with me in this inquiry my colleagues in the Chairs of Natural History and of Agriculture, and the Report in the text was prepared by me to embody the joint results of our investigations. It was signed by me and Professor Smith. Mr. Murphy sent in a separate Report, but his views are substantially the same. Drawings of the Cysticercus, and of its several parts, referred to in our Report, are given by Professor Smith in the Microscopical Journal for January, 1857. See also, Huxley’s Lecture on the Taniadae, in Medical Times for August, 1856: and the Brit. and For. Med. Chir. Review for January, 1857.
placed four suckling mouths, and the neck is formed of a series of rings, which gradually lose themselves posteriorly on the dilated and bladder-like tail. In the interior of the worm are a number of microscopic corpuscles. The average diameter of these bodies is 1-1500th of an inch, and their usual form that of a flattened, circular disc; but they vary both in form and size.* During the life of the pig, the bladder enclosing the worm is fully distended with a pellucid fluid, but after the pig's death, a portion or all, of the contained fluid escapes into the surrounding tissues.

"In the specimen of cured pork sent to us, the bladders were empty of fluid, and the microscopic corpuscles in the body of the worm presented a central granular opacity, instead of being clear and transparent, as in the fresh specimens. We believe that the life of the parasite is destroyed by the process of curing.

"It is now maintained by several eminent physiologists, that this fleshworm is the scolex or imperfect condition of the tapeworm or 

_Taenia solium_, and that when passed alive into the intestinal canal of man and other mammalia, it assumes there a higher degree of development, and becomes a tapeworm—a troublesome parasite—often causing distressing symptoms, and impairing the health. The organization of the fleshworm, as now described, goes far to establish this opinion, if, indeed, it be not already placed beyond doubt by the results of experiments in which it was shown that dogs, fed on fresh measly pork became affected with tapeworm. With us the parasite is killed by cooking, but where the flesh is eaten raw, as in Abyssinia, tapeworm is very common.

"All pork is not measly.—In the specimens of healthy pork we found no trace whatever of the parasite in any stage of development.

"In the specimens of both slight and badly measles pork submitted to us, the worms were all visible to the naked eye. All appeared to have reached the same degree of organic growth, and in none of the specimens, healthy or otherwise, could we find eggs or the slightest trace of the parasite in an earlier stage of development.

"This parasite has been found in the muscle, brain and eye of man; but there is no analogy whatever between measles in the pig, and the disease known by that name in man.

"It is highly probable if not quite established, that measles originate in the eggs of the tapeworm which infests the bowels of the dog. Each mature joint of the last parasite contains many thousand eggs. These, when voided by the dog, are resolved into a fine dust, and are scattered by the wind, and thus, mixing with the food or drink of the pig, enter its body, and are there converted into the measle or fleshworm, which, as already stated, is an imperfect condition of the tapeworm. Measles may not form in every hog that has swallowed tapeworm eggs; while a feeble digestion and constitutional debility may especially favor their hatching in some pigs.

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*These cells were erroneously regarded as eggs by Klencke and Gulliver.
"If this view of the origin of measles be correct, it will be an important and rational guide to the prevention of the disease, and which will consist in providing the pig with thoroughly clean food and drink, promoting its general health, and removing it from the neighborhood of dogs affected with tapeworm.

"When only a few of the parasites are scattered in the body of the pig, the flesh does not differ from that of healthy pork in its ordinary character or minute structure, and the general health of the pig is not affected. When used as food, it must be so rare that the vitality of the worm can escape cooking, mastication and digestion, that we believe the risk of tapeworm from its employment to be very small; and on the whole, we see no valid reason for regarding slightly measled pork as unwholesome; but it must be well cooked, and never eaten raw or undone.*

"On the other hand when the parasite is thickly distributed throughout the muscle, the flesh is pale, soft and watery, and the muscular fibre near the worm loses its healthy structure, and exhibits evidence of the condition known to pathologists as fatty degeneration. The health of the pig is much impaired, and in the worse forms of the affection we may have inflammation and suppuration in one or more parts of the body, with general fever, wasting and weakness. The pig is seldom permitted to see this stage, and almost never to survive it.

"When the disease proves fatal, according to Mr. Martin, the animal loses appetite, blisters form under the swollen tongue, the skin ulcerates, and death occurs amidst extreme debility and emaciation.†

"Badly measled pork is insipid when cooked, and in boiling loses more weight than healthy pork. It is more difficult to dry, and exhibits greater proneness to putrescence;‡ while, respecting its use as food, we must not forget the possibility of its causing tapeworm, nor the risk of some portion of the animal having undergone during life changes of a truly morbid nature, as inflammation and suppuration. Taking account of all these circumstances, we cannot regard bad measly pork, fresh or cured, as wholesome food for man.

"This opinion may be assailed on the ground that bad measly pork is consumed to a large extent, and that no hurtful effects have been traced to its employment. But we cannot trust to common experience in a question of this nature. Putting aside the ordinary sources of fallacy, the poor consumer of such meat is rarely capable of tracing the relation of cause and effect between bad food and its evil consequences. He would conclude meat to be wholesome which failed to produce some striking bad symptoms soon after a meal, and would be unable to refer to its true cause the injurious

* The process of curing is fatal to the parasite, and removes all risk of tapeworm.† Farmer's Library, vol. ii. p. 491.‡ These facts were determined by repeated comparative observations with healthy pork.
influence, slowly and silently, but not less certainly, wrought upon his system by the long continued use of an unwholesome article of diet.

"Chemical analysis could not aid much in this inquiry, but were it otherwise, the time allowed us did not permit of its employment."

The measles in the hog is more observed in Cork than elsewhere in these islands. This is in part due to its being more carefully sought for; but chiefly to its greater frequency, caused, I apprehend by inattention to the cleanliness of the pig's food and drink, and by the circumstance of its being reared in the peasant's cabin, where it has very generally a dog (untaxed in Ireland) for a companion. This dog for the most part, has tapeworm. Nor must we forget the influence of our low marshy grounds and warm humid climate, in favoring the production of parasites, and especially of worms. These conditions may induce a state of constitution in the pig favorable to the reception of the parasite, and we can readily understand that a warm and moist air should favor the incubation of the tapeworm egg and development of the young taenia outside the body.

I am informed that in Cincinnati, the largest pork market in the States, the measles is unknown. If this be the fact it would be interesting to know whether the pigs brought to that city, and which are fed chiefly in the forests of Ohio, Kentucky, and West Virginia, are kept apart from dogs having tapeworm. Perhaps some of our American readers could inform us on this point. Dr. Wood, of Philadelphia, says that tapeworm is comparatively rare in the natives of the Union.

The researches of Küchenmeister, Röll, Leuckart, Von Siebold, and Van Beneden, leave no doubt of the connexion between the cystic and cestoid entozoa. Experiment shows that the mealle is generated in the muscle of the pig by feeding it with ripe joints of the dog's tapeworm (the *Tecnia serrata*, now considered to be the same as the *Tecnia solium*, or human tapeworm,) and that the same tapeworm is developed in the intestines of a dog fed with fresh measly pork. The measles is not generated in the dog by feeding it with the tapeworm eggs.

Leuckart has traced in the rabbit the passage of the embryo tapeworm into the blood vessels. The eggs are quickly hatched in the stomach, and the young taenia bore their way with their lancet-armed heads through the mucous membrane, into a blood vessel. With the blood they are carried in the rabbit to the liver, to be there arrested and developed into hydatids or Cysticerci. In the lamb, the young taenia are carried with the blood to the brain, where they fix and grow into the cystic parasite named *Cenurus cerebralis,* and within two weeks of the commencement of the experiment the lamb is affected with the "staggers."

The cystic entozoa or hydatids do not form a separate class of parasites, but are merely the cestoid entozoa or intestinal worms in an imperfect state. Each species of tapeworm has its correspond-
On the Measle of the Pig, &c. [July,

ing cystworm, but the same embryo tapeworm may produce two or three forms of hydatid, according to the species of animal and part of the body in which it may chance—or rather, I should say, mischance—to be developed, for the hydatid is essentially abnormal both in form and site, and these entozoa obtain their perfect growth only in the intestinal canal—their proper dwelling place. The young tapeworm, swimming in the blood, is fixed probably by getting into a capillary too small for its passage; and the reason of its being arrested by preference in the muscle of the pig, brain of the sheep, and the liver of the rabbit, may perhaps be found in the relatively small size of their capillaries.

As the egg of the same tapeworm develops both the measles in the pig and the staggers in the sheep, the means of prevention suggested in the Report, for the former disease, will apply equally to the latter.* In addition to the means of prevention there mentioned, it might be well to reduce the number of dogs in the country, and to diminish the frequency of tapeworm among them by not feeding the healthy with raw flesh, and by the vigorous treatment of the diseased. The excrement of dogs should not be mixed with the manure for pasture fields.

There is more hope of preventing measles than of their cure. I made many inquiries as to the treatment of the disease, but without obtaining information of much value. The farmers generally are skeptical as to cures being ever obtained, but a few have faith in treatment; and, of the several remedies employed, the internal use of sulphur is most relied on. Two or three cases were mentioned to me by trustworthy persons in which cures appeared to have been made by this drug. It is probably converted in the pig's body into sulphurous acid, and poisons the measles. This acid is a most efficient parasite-killer. Alcohol, iodine, camphor, turpentine, and nitrate of silver, are actively poisonous to the cystic parasites, and their internal use may be tried.

In Cork the pig is examined for measles by official persons, both in the living and the dead markets. The parasite shows itself at a very early stage of the disease in the tongue, and this organ is inspected in the living market. The pig is placed on its side and the mouth opened. The tongue is then drawn forward and pressed firmly between the fingers in its whole length. The measles, if present, is felt by the finger, and withdrawn through a scratch in the mucous membrane. If none are felt, the pig is passed as healthy. This test is the best known, and is very useful, but the worm may be absent from the tongue and present elsewhere in the body; and a more certain means of detecting the disease in the living animal is to be desired.

In the wholesale dead market, the inspection is made by making

* According to Küchenmeister, the hydatid of the sheep's brain, causing staggers, is produced from the embryo of a peculiar tapeworm, named Tania cenurus, also found in the bowels of the dog.
a free cut lengthways into the inner loin muscle at the side of the spine, and by cutting across the neck. And, should the purchaser desire it, cuts are made into the flesh elsewhere, as the back of the neck and shoulder. If one measles only is found, the price is lowered 5s. per cwt., and if more are seen, a larger reduction is made, varying in amount according to the number. The worse forms are not sold in this market.

The origin of tapeworm in man from the measles was rendered probable by the greater frequency of the disease among the consumers of raw flesh, and particularly of raw pork, as the Abyssinians, the natives of Nordhausen, and the operatives of Lancashire; but Kichenmeister has given a high degree of certainty to the connection by experiment. He fed a condemned person with measles, and found tapeworms in his body after execution. The parasites were given during the three days before death, in five doses of about a dozen each time, disguised in soup. Ten young tapeworms were found in the intestinal canal, attached to the mucous membrane in the usual way.

The process of curing destroys, as we have shown, the vitality of the parasite, and to this circumstance the immunity from tapeworm, enjoyed by the inhabitants of Cork, must be attributed. The poor of this city, among whom tapeworm is very rare, undoubtedly consume a large quantity of measly pork, but always salted. The freedom of seamen in the navy from tapeworm admits of the same explanation. Much of the pork formerly used in the navy was measly, but it was well cured. At the present time, the naval contracts are inspected with care, and measly pork is rejected.*

The use of raw, measly flesh, cannot, however, be the only source of tapeworm in man. This parasite occurs among the very poor who scarcely eat flesh of any kind, and it plagues the Hindoo, who lives almost exclusively on rice. It may, perhaps, originate from the direct introduction of the tapeworm eggs or young taenia with the food or drink into the stomach. Klencke, many years ago, asserted that he had found microscopic young taenia in ditch water, and the frequency of tapeworm in Vienna has been attributed to the water of that city, in which young tapeworms have been detected.

Why, when thus introduced into the stomach of man, the dog, pig and sheep, respectively, they should cause tapeworm in the first and second, and pass into the blood of the third and fourth to grow cyst-worms, may be explained by supposing that in the carnivore's stomach the mucous membrane is tougher, or that the young taenia are dissolved by the strong acid, gastric juice, except on rare occasions, when they slip alive into the intestines to grow tapeworms; while

* While engaged in this inquiry, my friend, Dr. John Burns, of H. M. S. Hastings, communicated with several of his brother medical officers to learn their experience of the use of measly pork in the navy. Tapeworm had not been traced to its employment. During the summer of 1855, Dr. Burns states that the provisions issued were uniformly of good quality.
in the herbivorous* stomach, where the food lies long, they escape digestion, the gastric fluid acting feebly on animal matter, and, piercing the softer mucus coat, make their way into the circulation.

These remarks have brought me to difficult, and as yet obscure ground, and, in truth, although great progress has been made of late years in our knowledge of intestinal worms, much remains to be done as well for their natural history as for those important questions in hygiene and pathology to which they give rise, before we can attain to clear views and definite conclusions.—[New Orleans Med. News and Gazette.

Abstracts of Reports of Hospitals, Dispensaries, &c., in Austria.

On the 30th December, 1855, Dr. A. E. Flechner gave in his report to the Medical Association of Vienna, upon the monthly and annual Sanitary Reports of the different Hospitals, Alms Houses, Dispensaries, Penal Institutions, Asylums, &c., of Austria for the past year. The number received and examined exceeded two hundred, and embrace results from September, 1855, to October, 1856.

The following facts and items, gleaned by Dr. Flechner in his examination of these Reports, and interesting in their therapeutic and pathological relations, we translate from the Österreichische Zeitschrift für Praktische Heilkunde.

It appears from the monthly reports of General Hospitals, that, in traumatic tetanus wine was administered with favorable results, accompanied at the same time by the use of carbonate of potash baths, followed by early use of opium and carbonate of potash. The autopsy, in a severe case of tetanus of ten days duration, disclosed in the body no material pathological changes. A case of chronic lead poisoning, accompanied with violent headache, and complicated with paralysis, was cured after nineteen days use of four drops daily of chlorbrom in two ounces of water. Diabetes melitus was treated successfully by strict flesh diet, iron, tannin, and carbonic acid water. Tannin was of no avail in intermittents; on the other hand, berberin was employed with advantage in non-gastric diarrhœas. Glycerine did good service in bed-sores. A caustic agent, much esteemed in France, was experimentally tried with good results, viz: one part of pure liquor ammoniæ to two parts of oil. Poured upon cotton and laid upon the skin, lentil-sized blisters were raised in five minutes, which, being pricked, were sprinkled with morphia. Iodide of potassium repeatedly proved itself useful in cases of mercurial poisoning, and croton oil in cases of lumbago and sciatica, externally applied. Upon trial of Fleming’s method for the itch, less favorable results were obtained than by that usually

* Cysticerci infest the flesh of several vegetable feeders, as the ox, deer, sheep, hare, rabbit and mouse.
employed in General Hospitals. Favorable results follow the use of strychnia in paraplegia, and cantharides in incontinence.

Among other things, typhus deposits were found wholly wanting in exanthematous typhus; while on the other hand, in an old apoplexy, with a slow pulse, in the course of which all the usual symptoms of typhus were absent, the body, upon examination, first showed the typhus process. Ulcerations of the larynx were often observed following typhus. A metastatic abscess developed itself in the upper arm of a patient convalescing from severe typhus, which being opened, showed a healthy disposition, but suddenly chills occurred, icterus, with pain in the liver, and very soon death. Upon examination of the body, the liver showed numerous abscesses of the size of a walnut. A fungus melanodes, appearing externally at first, in eighteen months extended inwardly, and invaded most of the internal organs. Melanotic formations were found in the pleura, peritoneum, and even in the muscular tissue. An apparently hysterical patient died with comatose symptoms, and the body showed, upon examination, melanotic degenerations in both hemispheres of the brain, as well as in the right lung, and several formations of the same kind in the omentum and mesentery. In an epileptic, whose paroxysms were accompanied by violent vomiting and diarrhea, sixty hydatids were found, of the size of grapes, in the cortical substance of the hemispheres of the brain, and one in the right corpus striatum. A tubercle of the size of a hazelnut was found in the right hemisphere of the cerebrum, the patient having exhibited no cephalic symptoms of disease during life. Fatal cases of puerperal fever, accompanied with icterus, left no traces of any affection of the liver. Union of the pia mater with the substance of the brain resulted in epileptic convulsions, loss of memory, and finally death; hypertrophy of the cerebrum was accompanied with loss of the sense of smell and taste, while that of sight was little disturbed. Cancer and tubercle were found together in the same individual. These two diseases are therefore considered not incompatible. Fatty liver and fatty spleen were found following secondary syphilis. An evidently increasing frequency was observed in reference to the last.

We select a few of the numerous observations made at the Wieden District Hospital, and interesting among these was a case diagnosticated as phrenic neuritis, which, with extremely violent and painful hiccough, sensitiveness of the epigastrium, and pain in the points of attachment of the diaphragm, appeared in a young man, twenty years old, of good constitution, who had twice before suffered from the same affection, but of a milder form. Sulphate of quinine, in doses of five grains, morning and night, was exhibited with the most favorable results. The attacks, which at first seldom ceased longer than a few minutes, became from day to day milder and rarer. They wholly disappeared on the sixth day of treatment. Ulcerations of the larynx sometimes followed typhus; once, also, there was observed an extensive crop in the summit and posterior
walls of the throat, and posterior nasal fossæ. During the cholera epidemic typhus cases ran their course withintermitting paroxysms. In one case, cystitis developed itself after cholera, followed by an extensive furuncular eruption, and death from exhaustion. A stubborn tertian, the paroxysms of which were accompanied by vomiting and diarrhoea, and which had been battled in vain for two two weeks, at home, was cured in the Hospital by the use of corresponding doses of quinine and opium. A case of Bright's disease terminated with symptoms of cholera. In the body were found hæmorrhagic ulcerations of the stomach, and a pleuritic exudation. A drunkard lived twelve days after an apoplectic attack, although a clot of the size of one's fist was found in his brain after death. Veratria in increasing doses was successfully employed in facial neuralgia.

The reports of the Lying-in and Foundling Hospitals, including those of institutions for vaccination, deserve every acknowledgment. We here also make but a few selections, since the most important results, aside from these, are published in the yearly report. An accurate preliminary investigation into the etiology of the puerperal processes, in the first named, would be desirable, since with some fluctuations in regard to the number of cases, they disappeared entirely at no time during the year. Not less desirable would be an accurate account of their course and treatment. The lying-in wards differed strikingly in regard to the frequency of puerperal fever. The Foundling Hospitals number always, of out door and in-door patients, about 15,000, of which from 450 to 500 die monthly. The great mortality of the in-patients arises principally from anæmia, diarrhoea and pneumonia. The frequently prevalent ophthalmia neonatorum is now successfully treated by applications of pounded ice; in its further progress by solutions of lapis divinus and sulphate of zinc; and in ulcerative conditions by solutions of corrosive sublimate and tr. opii. The not uncommon cancrum oris of children was treated by muriatic acid washes for the mouth, slices of lemon, and by touching the gangrenous spots with tr. opii.; and, indeed, with better success than by glycerine, which has been recommended and employed in Children's Hospitals, in this affection. The experiments made during the course of the year, with original vaccine lymph, were twice successful, but the development of the vaccine matter so procured is always slower.

In the report of the Royal Asylum for the Insane are given items of etiological interest, and also pathological results in a field hitherto truly barren. The prevailing type of disease is mentioned for each month, and several prominent cases of disease are accurately described. In reference to the former, the abuse of alcoholic drinks, whereby, through impregnation of the nervous centres by aldehyde, arise hallucinations of sight and hearing, furthermore, sexual excesses, and finally, in women, menstruation and lactation, as well as climacteric periods of life, all play important parts. Post-mortem
examinations frequently disclosed chronic hydrocephalus; atrophy of the brain; more or less extensive softening, especially in dementia; then hardening of the brain, and finally loss of elasticity and ossification of the arteries and malformations of the heart. It is remarkable how other diseases are sometimes obscured by insanity; for instance, in a case of cholera, where in life the usual symptoms of vomiting and diarrhoea were not developed, and yet the body plainly showed the cause of death to have been this disease. In two other cases, during the course of the cholera, there was observed a striking improvement in mental activity; and in one case of a teacher, twenty-six years old, the mental disease completely ceased upon the development of pulmonary tuberculosis. In a similar way, a previously existing epilepsy wholly ceased with development of pulmonary tuberculosis. Aside from other intermittent forms of mental disease there was observed, following a case of choleratyphus, a periodically returning mania of a monthly type; and in the case of a woman, already for the third time pregnant, melancholy and a suicidal propensity were noticed each time in the sixth month of her pregnancy. A wet nurse became insane through anaemia, from nursing three children at the same time. In the case of an insane patient refusing food, instead of using the usual feeding tube, nourishment in a liquid form was sought to be introduced through the nose by the aid of a spoon only. It did not, however, succeed.

Rich in materials, also, are the reports of the Elizabethinerinnen Infirmary, since in addition to the prevailing type of disease, its course and treatment, they contain accounts of prominent cases. General and local blood-letting was employed in this institution in the graver inflammatory diseases more frequently than in other hospitals, and indeed with very average satisfactory results. At the Wahringer-gasse House of Refuge, in Vienna, the more stimulating method in the treatment of cholera, by the use of camphor, sweet spirits of nitre, and tincture of juniper, was found far more beneficial than opium and other remedies. A periodically recurring chorera was here observed.

In the reports of three Penitentiaries which came to hand, scorbutus forms a subject worthy of especial attention. The remark of the physician of these institutions, Dr. Lunzer, appears to us deserving of much consideration. Reported observations have taught him that when scorbutus accompanies tuberculosis, pulmonary affections, and especially the symptoms of tuberculosis, recede; furthermore, that scorbutus does not appear so severely in an individual having tuberculosis, as in one previously healthy; and that not rarely after the cure of the scorbutus in such cases, the tuberculosis appears to be cured. Hence scorbutus is good as a curative measure in tuberculosis—a proposition which needs for its acceptance further unbiased observations. In connection with the Penitentiary Hospital was mentioned a case of extremely ichorous eczema, which,
having withstood for a month the use of a soap of glycerine and carbonate of potash and lunar caustic, finally yielded completely through a month's continuous use of collodion.

Only five reports were given in upon epidemics prevailing in Austria, outside Vienna, during the course of the year, of which four were upon scarlatina and one typhus.

The first of the scarlatina epidemics appeared at Himburg, in the fall of 1855. There were 32 cases and 3 deaths of girls; no boys died. Two of the fatal cases terminated in the first stage from convulsions, and the other upon supervening anasarca. The source of the disease could not be established, since no scarlatina was present in all the neighborhood.

The second occurred in the four cantons of the Hangsdorfer district in the last month of 1855, and lasted until the 20th of February, 1856. There were 277 cases and 43 deaths. Many milder cases, however, did not come under the notice of the physicians. The fatal cases were also most numerous among girls. Death was caused by inflammation of the internal organs, especially the membranes of the brain, then through inflammatory discharges from the ears, and finally through anasarca. It is worthy of mention that scarlatina patients lying in the same room with cholera patients, were never attacked by cholera. The march of the epidemic in the four cantons was plainly from East to West. Its origin was not known, and its spread was not always ascertained to have been through contagion. Belladonna was shown to be useless as a prophylactic, and the results from rubbing the body with fat bacon appeared problematical.

The third epidemic of scarlet fever appeared at Mannersdorf, in the district of Bruck, on the Leitha, and lasted from April to July, 1856. Out of 69 cases 11 died, a part through angina crouposa, and a part from pneumonia and atrophy of the brain. The sick were most numerous at the beginning and end of the epidemic. There occurred also cases without the rash, followed by desquamation of the cuticle and anasarca. Among the sequelae were observed ulcerations of the mouth, and discharges from the ears. Tepid baths were found beneficial in cases showing albuminuria.

The fourth epidemic appeared at Hainburg and Hundsheim, lasting in the first from the end of April to August, 1856, and furnishing 96 cases, of which 26 were fatal.—and in the second 24 cases, of which 5 were fatal. The mortality among girls was also in this epidemic greater than among boys. Suppurations of the glands of the neck, ulceration of the mouth and tongue, discharges from the ears, and ophthalmias accompanied and followed the disease. Belladonna was useless as a prophylactic in this epidemic.

The remaining report upon the fifth epidemic, that of typhus, at Zistersdorf, presents nothing specially worthy of mention.—[American Medical Monthly.
Lecture on Chronic Orchitis. By Professor Nelaton. Translated from the Gazette des Hopitaux, (Paris.)

The patient who occupies bed No. 27 in the male ward, is affected with a long standing and chronic disease of the testicle. On account of the obscure phenomena attending this case, it presents many points which render the diagnosis somewhat obscure.

By reviewing the symptoms which characterize the different diseases of the testis, this case will appear to be curious in itself, as illustrating one of the rarest and least known of these affections, viz: chronic engorgement of the testis.

The patient is aged twenty-six years; he appears to be powerfully made: in fact, his profession, that of a mountebank, requires considerable strength; for his principal feat consists in ascending an incline plane on a large ball weighing twenty-five or thirty pounds.

About four years ago he contracted a gonorrheal affection, and we here mention it in order that it may be taken into account with the other attending circumstances. The gonorrhea lasted about four weeks, and was followed by inflammation of the epididymis. Since this time the testicle has remained much larger than before, and the patient, though not again affected with gonorrhea has, nevertheless, constantly felt some pain in urinating: afterwards, this pain was greatly increased, and several times the act of micturation was followed by a few drops of blood. About a month ago, an external injury was superadded to the previously existing disease. It appears that in the establishment to which he belongs, some animals are also exhibited. While attending on an Ostrich, he received a severe kick from this bird in the hypogastric region. Now a kick from such an animal would certainly give rise to severe accidents, and the patient attributes to this cause an exacerbation of his disease. He adds that about a year ago, he fell and injured his scrotum. All of this must be taken into consideration when considering the nature of such an obscure organic affection; that it is obscure will appear from a description of the diseased part.

The right testis, which is the only one affected, has increased in size, but not very materially, being about the size of a hen egg. On first examination it appears smooth, but when carefully felt, it can be readily found to be somewhat irregular in shape. Nor is its consistency perfectly uniform, being hard in some points, and soft in others, but the limit between these two conditions is not distinctly marked, and the most careful investigation does not reveal any specific point of engorgement. Both in the epididymis and in the testicle itself, these indurated places can be felt. In front, the body of the organ presents a well marked fluctuating point, which appears to be owing to a fissure in the tunica vaginallis. The spermatic cord retains its natural consistency, and is not
at all infiltrated or enlarged. The sensibility of the testis is greatly increased, and the slightest compression produces great pain.

Now, what can be the nature of an engorgement which has lasted three years and a half? This is certainly not the ordinary course of gonorrhreal orchitis. There is no doubt that this species of orchitis existed at the beginning, but it cannot be maintained that it could have persisted all this time.

Perhaps this might be a case of hypertrophy of the testis: for the symptoms of the latter have some analogy to those which are presented by this case. But we must remember that hypertrophy of the testis generally affects both sides at once, and moreover, the organ is uniformly increased in size! Besides, hypertrophy of the testis is exceedingly rare in this country. By my researches on the subject, I have ascertained that this affection is seldom, if ever seen in France, whereas it is very common in the other hemisphere, and especially in South America. By looking over the published records on this subject, we find fifteen cases in that part of the world to one in Europe! Alone, this reason would not be sufficient, but combined with the physical appearances, we must unhesitatingly reject the supposition of hypertrophy of the testis. We must remember again, that the latter disease generally manifests itself in the period of growth, in the transition from youth to manhood.

Could this be a tubercular affection of the testis? Nothing in the examination of this young man, either in his general condition or in the particular diseased part would lead us to adopt this supposition; his robust frame, his herculean strength at once refute the hypothesis, his general health is excellent, he presents no symptoms whatever of the tuberculous diathesis, neither the cough nor the expectoration, no sign whatever. Look at the life which he leads, marked by excesses of every kind, yet he bears it all very well. If it were not for the pain and difficulty in urinating, his disease would not affect him in the least. The local appearance of the organ is also very different from that presented by the tuberculous testis. The latter disease affects two forms which are entirely distinct: The tuberculous deposits are either, 1st. Accumulated in isolated masses of a certain size, and situated in different parts of the organ; or, 2d. Of miliary granulations in the substance of the organ: these granulations of about the size of a pin head, accumulate in enormous quantities, and by their increase may gradually give to the organ an exaggerated volume.

Could we have here either of these varieties? We can at once reject the latter form: for this kind of tuberculous testis generally develops itself with extreme rapidity, like galloping consumption, which is also characterized by the appearance of innumerable quantities of tubercles in the miliary state.

This rapid and abundant growth of tubercles is very rare, but when it does happen, it is very apt to mislead the observer. It
Lecture on Chronic Orchitis.

will generally be taken for a case of acute orchitis, and some days may elapse before it assumes its distinguishing characteristics. But in this case the engorgement has lasted three years and a half—so that this form of tuberculous degeneration is entirely out of question. Could it be the first variety? Certainly not! For when we meet those large tuburcular masses in the testis the health of the patient is generally far from good; and it is very rare to see persons subject to this disease having such a good constitution, or retain the physical appearance of this man. Moreover, these tuburcular masses would not remain three years and a half without softening, suppuration and ulceration. For these reasons we cannot hesitate to reject the idea of a tuberculous affection, in the same way that we eliminated the blennorrhagic cause and hypertrophy of the testis.

We have still three alternatives left.

It could be either a syphilitic affection, or an encephaloid tumor or chronic orchitis. Let us now examine these different morbid species.

In the first place would it be possible for this to be a syphilitic manifestation? It does not present the symptoms of the syphilitic testis.

In those tertiary forms of venereal disease which affect the testis there is generally some effusion in the tunica vaginalis; in fact, the universality of the presence of liquor is such as to amount to a law! Moreover, when the testis is examined, either with the liquid when the effusion is not too great, or after puncturing, if the quantity of liquid require this step; then it will be ascertained that the surface of the testis is rough and uneven on account of numerous small elevations about the size of a grain of wheat, which are deposited all over the surface of the tunica albuginea. And then the testis presents that shape which is characteristic of the venereal affection; the testis being completely surrounded and overlapped by the epididymis, something like an egg-cup, or an acorn in its cupula! But in this case we have none of these symptoms, neither hydrocele, nor uneven surface, nor enlargement of the epididymis. And, moreover, it is extremely rare to see a syphilitic affection remain confined to one testis during this space of time; for generally after four, six or eight months, at the latest, the other testicle will become affected in the same way. There is another sign which is very important. You will observe that in the tertiary form of syphilitic testis, this gland loses its peculiar sensibility; and the patient can bear an amount of compression which in the healthy state would be utterly impossible. In fact, you would be astonished at the degree of compression which can be exercised on the gland without giving the patient any uneasiness. But here we have seen the sensibility of the diseased organ is greatly exaggerated. The man himself says he has never had any venereal symptoms, either primary or secondary, and this is certainly
not a tertiary manifestation. Not that we should put any great
faith in these assertions on the part of patients as a general
thing, but when they confirm the results of analytical investiga-
tion, it is well to give them some little weight in the pathological scale.
We can therefore affirm that this is not a venereal affection.

Is it a cancerous degeneration? This is certain possible at
first sight. But this disease generally progresses with exceeding
rapidity. An encephaloid tumor, will, in three or four months,
attain four times the size which this case has reached. This fact
alone, should make us reject the supposition of an encephaloid
affection! Moreover, these tumors are more uneven and nodula-
ted than the present case, and are often accompanied by thickening
of the cord with engorgement of the neighboring lymphatics.
We now come to the last supposition.

Is this a case of chronic orchitis? And first, what is chronic
orchitis? This is one of the most obscure questions in pathology,
and on which the latest writers still leave many doubts and dis-
crepancies. Look at Curling's treatise on the Testis, and you will
find that what he describes as chronic orchitis, is nothing more
than a tuberculous disease of that organ. The principal anatom-
ic character of this form of inflammation, says he, is the deposi-
tion of a peculiar yellowish product, homogeneous in appearance
and devoid of any organic element. He describes two forms which
this abnormal product affects, and these are nothing more than the
two varieties which we described above as appertaining to the
tuberculous affection. He discusses the primitive seat of this
disease, and concludes that it originates in the tubuli seminiferi.
He adds that in one case where he excised the diseased organ, the
epididymis was also considerably affected, that the globus major
was filled with a soft though concrete mass, filling an irregular
sinus into which opened a fistulous communication. The globus
minor contained a similar deposit, but without external opening.
He has, moreover, illustrated his description, by a good engraving.
The author himself, foresees the objections which might be raised,
and says that this is not tuberculous matter, but something entire-
ly different! He admits that the term of yellow tuberculous
deposite has been applied to this disease, but he condemns the
term because it is apt to mislead one as to the true nature of this
affection. But with all this, his description of the case is a faithful
picture of the tuberculous affection of the testis; for he speaks of
the diseased organ of the softening of the tuberculous matters
retaining, though he reprouces the expression; he describes the
fistulous communications which are so characteristic of this disease,
and also the adhesions which take place between the testis and the
serotum.

Unfortunately Curling has not confined his description to the
tuberculous affection of the testis; he has mixed up with it the
symptoms of the testiary venereal affection, viz: the syphilitic
testis. Thus he speaks of loss of sensibility in the organ, and effusion in the tunica vaginalis.

But this is not all—he also combines with it a description of what has generally been designated under the name of fungus of the testis, this being an affection in which the inflammatory process causes the rupture of the tunica albuginea, and consequently protrusion of the vasa seminifera; the vegetation which thus takes place externally producing the fungoid growth. So that in his description we find a little of every thing: tuberculosis, syphilitic testis and fungus of the same organ, all of which, certainly tend to obscure the question instead of elucidating the subject matter. Thus it is that in all which has been written on chronic orchitis, there is much confusion, and nothing characteristic of the disease. Nevertheless, I still believe in the existence of this disease, though, it is undoubtedly very rare. In these cases the testicle becomes inflamed, and an exudation of plastic lymph takes place, quite different from tuberculous degeneration. This infiltration deposit may be absorbed without suppuratation, but on the other hand it may continue during a considerable time, as we see in inflammation of the epididymis, and then the whole organ continues in a state of permanent engorgement.

I think that the case under consideration is an example of this kind. The inflammatory action has been kept up in the testicle by the irritation of the urethra, and this state has finally brought on the chronic engorgement of the gland which is cognizable by the touch.

In relation with this subject, a single fact has been observed among those patients who are affected with this disease. The spermatic secretion is sometimes altered in its physical properties; it assumes a reddish or roseate hue, resembling gooseberry jelly. This circumstance being somewhat curious, I have attentively observed some of these patients, in order to see the result of the disease; I have been thereby enabled to ascertain that the change of color in the spermatic secretion may continue during three or four months without preventing sexual intercourse; then it gradually disappears, and the sperm resumes its normal appearance. Nor does this change affect their virile powers, for some patients who did not renounce their marital rights, have begotten children while their seminal fluid presented this abnormal condition. It has been said that children begotten under those circumstances generally present some peculiarities, such as red marks on the skin, etc. But these are idle stories entirely devoid of foundation. I have made some investigation in order to ascertain if this circumstance has been observed by other writers, and I found that Sweidour met with some patients who presented this peculiarity, and they were much frightened by the circumstance.

What is the treatment to be followed in this case? The first indication is to remove the cause of engorgement, viz: inflamma-
Glycerine as a Topical Therapeutical Agent. [July,

tion of the urethra. There does not appear to be any stricture, only a little pain in micturition. The bladder is not much affected, the urine presents no abnormal deposits.

Leeches have been applied to the perineum in order to diminish the local engorgement; we have also given him tepid baths to be repeated daily. After that, the treatment should be continued by revulsive applications, and among these the Tartar Emetic ointment is to be preferred to Cantharides, for the latter might act on the bladder, and produce inflammation of that organ.

We can very confidently expect that this course of treatment will relieve the inflammation of the urethra, and consequently the chronic irritation of the testicle which is dependant upon it.—[New Orleans Med. News and Gaz.

Upon the Use of Glycerine as a Topical Therapeutical Agent. By M. Luron. From the Comptes Rendus de la Société de Biologie.

Glycerine is an unctuous liquid not susceptible of evaporation. Although it has the appearance of an oil, it has the physical characteristics of a syrup; it is also soluble in water. By its first two properties, it prevents, as well as cerate and other fatty substances, the dressings from adhering to wounds. By its solubility in water, an extremely important quality, it permits wounds to be kept clean without the necessity of washing them a great deal. Indeed wounds dressed with glycerine, never have those crusts of pus and cerate formed over them, which can only be raised by means of a spatula, and with pain to the patient. It is ascertained, too, by observation that it is seldom necessary to wash the wound, all that is needed is to cleanse it gently by means of a sponge.

We shall see that glycerine evidently modifies the abundance of the suppuration, and again, being a very hygometrical substance, it keeps the parts in a constant state of humidity and prevents the products of exudation from becoming dry and hard. To obtain this it is indispensable to employ the glycerine in abundance, and to saturate the charpie and the perforated linen with it, while in order to avoid the inconvenience arising from the use of the cerate, when the latter is used, the dressings are hardly covered by it.

It is asked if glycerine preserves wounds from the contact of air as well as fatty bodies. The action of fatty bodies in this relation, is very imperfect; they cannot cover a bloody surface. Glycerine, on the contrary, from the quality the reverse of this, comes more directly in contact with the denuded part. It protects it against the air as well as a wet cloth or a cataplasm. It softens the charpie more readily, and is absorbed better, and with it the exuded fluids which it dilutes, and which the cerate under the same circumstances cannot do, for it rather opposes the absorption of the watery fluids.
Fatty bodies, preventing the evaporation of the humors upon the denuded surfaces, or even upon the skin, keep up a high temperature. Glycerine, from its affinity for water, also arrests evaporation by retaining the exuded liquids, and accomplishes equally well this object. To prove this, it is only necessary to cover the lips cracked by cold, with glycerine; a decided heat is soon felt in them, even when you are in the air, and the pain is greatly relieved.

Glycerine then, from its peculiar physical properties, triumphs over fatty bodies as a dressing of wounds. But the advantages of glycerine in the dressing of wounds are not thus limited. It possesses, independently of the qualities we have just indicated, a very remarkable topical action, which should seriously interest the surgeon. To show this action, the author points out the different cases in which it has been applied, in the service of M. Demarquay at the St. Louis Hospital, limiting himself simply to announcing generally its salutary effects.

The first effect of the application of glycerine upon a denuded surface is a slight pricking, which sometimes produces an itching sensation, but which soon passes off, and is never complained of by the patient.

In simple ordinary wounds, accidental, or surgical, and exempt from complications, glycerine employed like cerate has no very manifest action. It conducts to a cure quite as rapidly as most of the neutral topical agents, and is only remarkable in its action by the slight suppuration which ensues, which, however, is one of the essential and general qualities of glycerine. Besides it has been observed that it never produces an exuberance of unhealthy granulations.

In the different degrees of burns, glycerine is of extremely easy application, and has also a very efficacious action. We have seen patients upon whom cauterization had been employed for white swelling, sciatica, &c., object to the glycerine dressing because it healed, as they said, too quick, and did not draw enough.

In the diptherite of wounds,—in that bad aspect which wounds sometimes take on in Paris Hospitals during the first few days, dressings with glycerine are of essential service. Instead of assuming and preserving a grayish diptheritic appearance, they look red, and there is no exuberance of granulations.

In Hospital gangrene it proved of most marked benefit in one case following an extensive burn, in which quinine, lemon juice, mono-hydrated nitric acid, and the cauterity had failed. It also succeeded in two other cases occurring in the hospital at the same time.

In deep wounds, in sinuous abscesses, glycerine was also used. It was introduced by means of a pledget of lint, or as an injection. The suppuration was diminished and the period of cicatrization shortened. Injections were made into cold abscesses; into abscesses by congestion, and into abscesses in contact with inflamed bones, and the happiest results attended its use.
Glycerine also succeeded admirably in the dressing of ulcers; chronic ulcers, varicose, grangrenous, &c., cleaned rapidly under its influence, the unhealthy granulated surface gradually filled up, and cicatrizied. Rest is always a powerful and necessary auxiliary.

Glycerine has no property antagonistic to the specific nature of chancres, but their surfaces rapidly become clean and take on a good aspect from its use, and although there are no positive data to be given upon the specific action in this class of ulcers, yet there is no dressing so convenient for chancres of the prepuce as lint saturated with glycerine.

This topical agent has also been employed in diseases of the neck of the womb. M.M. Trousseau and Aran have tried it, but never with very satisfactory results. M. Démarquay has reaped great advantages from its use in simple or granular ulcerations of the neck. In chronic cases, or where the neck was large and tumesced, the different caustics were used, and among others, the cautery. Then the glycerine employed as a dressing, modified essentially the quantity of the secretions, which ordinarily follow the fall of the eschars.

It has also been employed in vaginitis, but the results are so inconclusive that they are not reported.

From this review of its application, it follows that the topical application of glycerine diminishes the abundance of the suppuration. It possesses a styptic influence, difficult to determine, but which by this virtue changes an impure and complicated wound into a simple wound, and consequently hastens its cure.—[American Med. Monthly.

**Case of Late Dentition.**

Dr. Deutsch was called in consultation to a man, 34 years of age, who for some weeks past had been the prey of intense pains in the head and face, the origin of which he had at first attributed to several decayed molars, the crowns of which were destroyed. There was very great swelling of the neck and face, abundant discharge of saliva, and difficulty of deglutition. But the most remarkable thing was the appearance of several new teeth. Thus, somewhat in front of the incisors of the upper jaw, four new incisors were found irregularly disposed, two in like manner presenting themselves in front of the two middle incisions of the lower jaw. New canine teeth also appeared in the upper jaw, between the incisors and the canines. In the lower jaw the new canines sprung up from below and in front of the old ones. The two bicuspids in each jaw and on both sides were pressed backwards by new bicuspids. With respect to the second molars of the upper and under jaw of the right side, and of the upper jaw of the left side, the new teeth appeared in the midst of the decayed molars without displacing these, and in such a manner that the remains of the old toothwalls formed partial envelops.
for the new. No new teeth were found corresponding to the first molars, although the old ones were carious, or to the second molar of the lower jaw of the left side. All the third molars were broken away. All the old teeth were so firmly placed as to be removable only by force. The new teeth were very fine ones. From the time of their appearance the patient's suffering ceased, although the effects of this continued some time to be apparent. A skillful dentist gradually removed all the old teeth, and those of the new which had grown out amidst the old were removed with these latter. Some months afterwards, the new teeth had assumed a very orderly position, the separations between them being very slight. The patient does not remember losing teeth at the usual period of the second dentition. The author adds, that in his own case two molars of the lower jaw, which were extracted in his twenty-fifth year, were in the course of a year replaced by two new, good, and durable teeth.—[Med. Times and Gaz., from Berlin Med. Zeitung.]

Treatment of Cancer by Dilute Solutions of the Chloride of Zinc.

The Medical Times and Gazette (April 25, 1857) contains the particulars of some cases in which Mr. Stanley has pursued the plan of treating cancers by much diluted solutions of chloride of zinc. "Their results," says the reporter, "certainly prove that the destruction and enucleation of an ulcerated cancerous tumour may be effected by the use of solutions so weak as to be all but painless, and without necessitating the confinement of the patient to bed for a single day. Without venturing at present to assert that this plan, when persevered in, in a great number of cases in various conditions of health, will be found to be absolutely void of danger, yet most will doubtless admit that the risk attaching to it will prove to be infinitely small, far less than that of excision, and that which attended the use of arsenical pastes. As far as we know, chloride of zinc, when used in its most dilute solutions, never causes deleterious effects from its absorption into the system, nor does its application ever tend to excite erysipelatous inflammation of the part. An operation for the removal of a cancer, involving as it does the exhibition of chloroform, a considerable loss of blood, a period of a week or so in which the patient is feverish and ill, and takes little food, and subsequently a considerable suppuration, must be granted to be likely, even in those cases in which the patients recovered well, not to have exerted any beneficial influence on the subsequent health. And such indeed is but too frequently observed by those who follow up their cases after dismissal. It is not at all uncommon to find patients who have never regained such health as they had prior to the excision, although their recovery from its immediate effects may have been as satisfactory as usual. Without, therefore, saying anything whatever as to the probability of the return of
the disease being greater or less after one or the other method of removal—for as to this we have as yet no facts, and to speculate would be worse than useless—we may safely assert that the plan which Mr. Stanley is trying possesses some very important advantages. Nor is it among the least of these that it may be expected to prove useful in certain cases not well suited for the knife, as, for instance, where the cancer is deeply ulcerated and borders upon important parts. In some regions of the body it will be particularly appropriate for it. On the tongue, in the cheeks, on the lips, etc., it can manifestly be used but very imperfectly, and will probably never supersede the knife; while it may be applied with ease and efficiency to cancers of the breast, or indeed of any well-exposed surface, and particularly to those of the penis or of the extremities.

"While on this subject we may just notice as an additional fact a case in which Mr. Hutchinson has been employing a solution of the strength recommended by Mr. Stanley against a large recurrent fibroid tumour of the uterus. The woman an out-patient at the Metropolitan Free, had been twice operated upon during the past year, but after each the tumour had again appeared and increased with great rapidity. At the time the trial of the solution was made it had grown to the size of an infant's head, and filled the uterus, projecting a little at the open os. The plan adopted was to pass a small catheter into the middle of its structure, and gradually inject into different parts about two ounces of the solution (one ounce of Sir W. Burnett's fluid to eight of water.) This was repeated every third day for about three weeks, and had the effect of causing some fragments of the growth to slough and come away. They were, however, of but small size when compared with what remained; and as the tumor went on increasing it was at length desisted from. No ill symptoms had been caused, although a good deal of smarting would generally follow the injections."—[Med. News and Library.

Belladonna in Incontinence of Urine.

L. B., aged 8 years, was admitted as an out-patient at the Hospital for Sick Children, under the care of Mr. Athol Johnson, in July last, on account of incontinence of urine. This infirmity had existed since birth, and she had frequently been under treatment for it, both in private and at St. Bartholomew's Hospital, without however, deriving any material benefit. At the time of her admission, the urine was acid, and nothing particular was observed as to its composition. She used to pass it frequently in the day, and usually wetted her bed two or three times during the night. She was treated at first, up to October 29th, with purgatives, alkalies, and blisters to the sacrum, but without any improvement being thereby obtained. It may be observed that there was no worms. At the above date, she was ordered one-eighth of a grain of extract
of belladonna night and morning. On November 22d, it is noted that the child had been doing very well since the use of the belladonna, and that she only passed urine in bed about once in a week. After this, she did not attend regularly; and on February 11th, after an absence of more than a month, she again presented herself in much the same state as at first, the urine being again passed frequently. The belladonna was resumed, and the incontinence again materially checked, especially at night. On February 25th, the quantity of the drug was increased to one-sixth of a grain; and on March 18th, when last seen, she had not passed water in bed since the previous date.

Remarks. — This case, though it cannot be said to be perfect, in consequence mainly of the inattention of those who had care of the child, illustrates forcibly the good effect which the use of belladonna unquestionably has, in many cases, of irritability of the bladder. The affection appears to have been congenital; all kinds of other remedies had been adopted without effect, and the improvement following on the administration of belladonna was as marked as the relapse which ensued on the omission of the treatment. It is offered, not as an instance of perfect cure, but as a well marked example of the power of the drug over this particular symptom. No other effect was observed to follow its administration.—[British Medical Journal.

EDITORIAL AND MISCELLANEOUS.

We here present to our readers the minutes of the 10th Annual Meeting of the American Medical Association, copied from extra sheets of the Nashville Journal of Medicine and Surgery, kindly forwarded to us by the Editors. To allow space for our Original and Eclectic departments, we have been constrained to leave out the excellent address of Dr. Pitcher, the retiring President, but hope to give it in a future number.

Special Reports.—Infant Mortality. — It will be seen by reference to the proceedings, that an unusual member of special committees have written after them "No report"—"Continued." We may, therefore, expect the next volume of American Transactions to be one of small size, and we do not altogether regret it, as, from the abstracts, read in our hearing, of several of the forthcoming reports, we have every reason to expect that quality will more than compensate for any deficiency in quantity.

The report of D. Meredith Reese, M.D., LL.D., of New York, on the momentous subject of Infant Mortality, was decidedly the report of our last meeting, and will go far to vindicate the next volume of our Transactions from the charge, made by the British Reviewers, of being "a big
book with nothing in't." Dr. Reese's conclusions are based upon careful statistical observations, and the developments are truly startling. He has examined the subject in all its bearings, from the causes which are inimical embrionic as well as extra-uterine infantile existence, and his report, when published, must necessarily awaken attention in a field of observation comparatively new, and heretofore very much neglected. We hope that this report will be given to the profession in a separate form, in order that it may fall in the hands of a greater number, than the readers of the Transactions.

Dr. R. D. Arnold, presented an abstract of a highly creditable report from Dr. J. F. Posey, of Savannah, which we hope to notice more fully hereafter.

Voluntary Contributions.—The report of "A new principle of Diagnosis in dislocations of the shoulder joint," by our colleague, Professor L. A. Dugas, recommended as first among the voluntary contributions, we hope to present shortly to our readers, together with the artistic illustrations furnished in photograph by the reporter to the Association.

AMERICAN MEDICAL ASSOCIATION.
TENTH ANNUAL SESSION.

NASHVILLE, May 5, 1857.

The Association met at 11 o'clock, in the Representative Hall of the State Capitol, the President, Dr. Zina Pitcher, of Michigan, in the chair, and upon his right, Dr. W. K. Bowling, of Tennessee, one of the Vice-Presidents. Dr. Wm. Brodie, of Michigan, and Dr. R. C. Foster, of this city, Secretaries, were present.

The meeting having been duly organized, the first business in order was stated by the chair to be the reception of the report of the Committee of Arrangements.

Dr. C. K. Winston, chairman of the Committee of Arrangements, on behalf of the committee and of the medical profession of the city generally, extended a sincere and cordial welcome to the members of the Association, in a few pertinent and appropriate remarks, as follows:

Mr. President and Gentlemen of the American Medical Association:

This, I believe, is the Tenth Annual meeting of this Association. As chairman of the Committee of Arrangements and Reception, I am charged with the agreeable duty of welcoming you to the State of Tennessee and the City of Nashville. I regret that I have not language to express this sentiment with sufficient cordiality. I only add, gentlemen, in common phrase, "You are more than welcome.

You are the representatives of a profession, distinguished alike for its antiquity, its scientific attainments, and its usefulness. It constitutes the true link between science and philanthropy—science and philanthropy, moral, intellectual and physical. You come from every portion of this glorious republic—from the Kennebec to the Rio Grande—from orange groves and golden sands—from mountains clad in eternal snow, and valleys smiling in perpetual verdure. You come not for purposes of self-aggrandizement or personal ambition, nor yet to advance the schemes of parties or stir up the antipathies of sections. "You know no North, no South, no East, no West;" but you come as a company of philanthropists, a band of brethren, that you may pour the acquisitions of another year into a common treasury, kneel side by side at a common altar—and drink the living water as it gushes from a common fountain. You have come to maintain the dignity, to elevate the ensign of a pro-
fession, to which you have devoted your lives, and to which you have linked your fortunes.

You are the cultivators of a profession eminently progressive, admitting to the fullest extent the spirit and genius of enterprise. So much may not be so fully said of others. Who could expect at this or any other day, to embellish the Commentaries of Blackstone, or improve the pleadings of Chitty, or re-poise the scales of justice? Where are the men with commissions never so divine, who would attempt to re-cast the logic which made Felix tremble, or adorn the doctrines of justification by faith? Who hopes now to shed additional light on the pathway to the skies, or sing in strains more immortal than the triumphs of the cross? Not so with Medicine. Yours is a rising orb—magnificent in its proportions—while others have reached the zenith, yours has but began to mount the heavens—while others have begun to fade, yours knows no eclipse nor decline. You revere the names of Hippocrates and Sydenham, of Brown and Cullen, with a host of others; you treasure up their maxims, and admire the genius with which they struck out new truths, but you acknowledge no master, you fall down at the feet of no Gamaliel. You have come to the day of free thought, of free investigation and free speech. You call in question the most hoary, as well as the most recent fact, and you are daily revealing in floods of light, principles hid from the foundation of the world.

You are eminently the students of nature. While others may be led along dubious paths by mortal pedagogues, your teacher dwells in the realms of eternal light, and guides with hand unseen and unerring to essences and first causes. The formative chrysalis and germinal dot are alike transparent before you. You are taught the mysteries of the living principle; the scalpel and retort are your companions, while you revel in the wonders of the microscopic world. You understand, somewhat, the laws by which a mite or a mountain is formed, a monarch or a man is made. The spear of grass which lifts its head in the distant solitude, the lordly oak and imperial cedar, instruct you, while air, and earth, and sea, with the creeping multitude, yield treasures at your command.

You are the veterans of a thousand battle fields, not of mortal strife where man meets man in sanguinary conflict; but where a secret and impalpable foe—a tyrant who has reigned from Adam till now—disposes his secret forces and directs their deadly shafts. When others have turned back affrighted and aghast, you, single-handed and alone, have met "the pestilence which walketh in darkness," and the destruction "which wasteth at noonday," despoiled them of "the armor wherein they trusted," and have driven them ignominious, from the field.

Were the victories which you have won, the conquests which you have achieved known, you would be crowned with laurels more unfading than those which entwined the brows of Greek or Roman conquerors.

But more and better than all, you are the lovers of your race, the friends of humanity. Scattered about all over this happy land, you emphatically "go about doing good." Your hearts beat in unison with human woe—your ears are open to the cry of distress, whether it come from hovel or palace—you "wipe away the orphan's tear and cause the widow's heart to sing for joy,"—upon your heads daily descend "the blessings of those who were ready to perish."

To such a body of men thus actuated, thus coming, we extend a cordial welcome. We feel honored by your presence, and expect to be improved and elevated by your intercourse. We throw wide our doors and invite you to the hospitals of our homes, and to the kinder affections of our hearts.

Dr. Winston then proposed that the roll of delegates, who had registered their names, should be read. The roll having been called, it appeared that twenty States were represented.

Upon the suggestion of Dr. C. K. Winston, our venerable fellow-citizens, Drs. Felix Robertson, John Shelby, and James Overton were made permanent members of the Association.

The following list comprises the names of all delegates, permanent members, and members by invitation in attendance during the session:

Connecticut—Charles Hooper.
New Hampshire—Adoniram Smalley.

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New Jersey—Richard M. Cooper.


Louisiana—O. S. Scruggs, Robert A. New, Cornelius Beard, E. D. Fenner.


Missouri—S. Pollak, E. S. Fraser, Jno. S. Moore, C. A. Pope.


Ohio—Henry F. Kohane, J. M. Mosgrove, B. S. Brown, D. Ferris, A. W. Munson.

Wisconsin—Hayes McKinley, J. K. Bartlett.

South Carolina—E. R. Henderson, M. S. Moore, R. W. Gibbes, R. S. Bailey.

Mississippi—F. B. Shuford, J. S. Cain, J. T. Lowe.

Arkansas—F. Grundy McGavock.

After a customary recess of fifteen minutes, the Association was called to order. The State Delegations then reported their choice respectively of delegates to serve on the Nominating Committee, which was constituted as follows:

Connecticut, Chas. Hooker; New Hampshire, A. Smalley; Indiana, W. W. Hitt; Wisconsin, J. K. Bartlett; New York, Jas. R. Wood; Michigan, A. B. Palmer; Missouri, J. S. Moore; Illinois, T. K. Edmiston; Kentucky, R. J. Breckinridge; Arkansas, F. G. McGavock; Ohio, B. S. Brown; South Carolina, R. W. Gibbes; Alabama, W. P. Reese; Mississippi, F. B. Shuford; New Jersey, R. M. Cooper; Louisiana, S. O. Scruggs; Pennsylvania, P. Cassidy; Georgia, Thomas S. Powell; Tennessee, J. B. Lindsley; Iowa, Asa Hogg.

On motion of Dr. Hooker, of Connecticut, it was resolved that the President, Dr. Pitcher, be now requested to deliver his annual address.

[This excellent address we will present to our readers in a future number.]

On motion of Dr. Flint, of Ky., the thanks of the Association were tendered to the President for his very able address, and the same was referred to the Committee on Publication.

The chairman of the Committee of Arrangements announced that the sessions of the Association would be from 9 A. M. to 2 P. M.
Judge Catron, of the U. S. Supreme Court, being present, was invited to a seat on the stand.

The Nominating Committee then retired for the purpose of nominating officers for the ensuing year.

The report of the Committee on Publication being called for, it was read by Dr. Casper Wister, of Pennsylvania, and on motion, was accepted and referred to the committee on publication.

Dr. Wister also read his report as Treasurer, which was received and adopted.

On motion of Dr. Flint, of Ky., Dr. R. T. Fleming, of Ky., was admitted as a member of the Association by invitation.

The committee on Prize Essays being called upon to report, requested further time, because of the late hour at which the essays were handed in, which was granted.

The President informed the Association that Dr. F. Campbell Stewart, of New York, Dr. Alden March, of New York, Dr. Isador Gluck, of New York, and Dr. Pancoast, of Penn., had been appointed to represent this Association in foreign scientific bodies.

The committee on Medical Education was called, but made no report.*

The committee on Medical Literature was called—no report.

The committee on Medical Topography and Epidemics being called, a communication from Dr. J. C. Watson, of Maine, was read, asking for further time to make a report, which was granted.

Dr. Arnold of Georgia, offered the following resolution, which was adopted:

Resolved, That the Committee on Nominations be constituted a standing committee during the present session of the Association, to which shall be referred all business of the Association on which an immediate vote is not required.

Dr. Jas. Mauran, of the committee on Medical Topography and Epidemics for Rhode Island, being called for, the Secretary read his apology, which was accepted.

Dr. Peregrine Wroth, of same committee for Maryland, sent in his report with accompanying reports of Drs. A. M. White and Edmund E. Waters, which were received and referred to the Committee on Publications.

Dr. W. L. Sutton, of same committee for Kentucky, sent an apology and asked for further time, which was granted.

The members of the same committee for the States of New Hampshire, Vermont, Massachusetts, New York, New Jersey, Pennsylvania, Delaware, Virginia, District of Columbia, South Carolina, North Carolina, Tennessee, and Minnesota being called, no reports were made.

The delegates from Connecticut and Louisiana being absent for the time, the consideration of their reports was postponed until to-morrow.

A report from Dr. J. F. Posey, of Georgia, was presented by Dr. Arnold, and subsequently withdrawn by him for the purpose of preparing an abstract of it.

OFFICERS FOR THE ENSUING YEAR.

The committee on Nominations then appeared, and through their chairman, Dr. J. B. LinIsley, reported the following officers of the Association for the ensuing year, viz:

* Received after the adjournment.
President—Dr. Paul F. Eve, of Tennessee.
Vice-Presidents—R. J. Breckenridge, of Kentucky; D. M. Reese, of New York; W. H. Byford, of Indiana, and Henry F. Campbell, of Georgia.

On motion of Dr. Arnold, of Georgia, the report was accepted.

The chairman stated that the Secretaries will be selected when it is ascertained where the next meeting of the Association will be held.

Dr. Wister, of Pennsylvania, moved that a committee of three be appointed by the President to conduct the newly elected officers to the chair, which was carried.

The President appointed as such committee, Drs. Wister, Arnold and McGugin.

The President elect being absent, the Association adjourned to meet at 9 o'clock, A.M., to-morrow.

SECOND DAY.

Nashville, May 6th, 1857.

The Association met pursuant to adjournment. The minutes of yesterday were read and adopted.

The committee appointed on yesterday, Drs. Wister, Arnold and McGugin, were then requested to conduct the newly elected officers to their respective seats.

DR. EVE'S SALUTATORY.

Dr. Eve, of Tennessee, in taking the chair, addressed the Association in a few pertinent remarks, as follows:

Gentlemen of the American Medical Association:

It is with deep emotion that I attempt to return you my heart-felt thanks for this distinguished honor. In elevating one so unworthy of this station, so ill-prepared to preside over your deliberations, or carry out the great designs of this body, I must express the apprehension that you have done yourselves injustice, and, it may be, not advanced its best interests. But, believing that this office should neither be sought nor declined, when tendered as it has been, after my State had declined to take any part in the nomination of a presiding officer, I enter upon the discharge of its onerous duties with much diffidence, and shall have frequent occasion to throw myself upon your considerate indulgence.

We are engaged, gentlemen, in a good and noble work. Life, the greatest of human blessings, and health, the sweetest stimulus to earthly enjoyments, are our end and aim. We live to secure the one and to preserve the other. To promote these all important objects, the medical profession of our country have, during the past twelve years, annually appointed delegates to assemble and counsel how this may be effected. And we are here to-day on one of these great festive occasions, and, amidst our mutual congratulations, these glorious re-unions of good-will and fellowship among the brotherhood, must not forget that to us is committed the health and lives of others. In maintaining the honor and increasing the usefulness of medical science, we become the best contributors to the welfare and happiness of those around us. You have come up hither from the North and from the South, from the East and from the West, and have done well neither to count the cost nor calculate the sacrifice; for the cause in which you are engaged is worthy of you. You present again the sublime spectacle of brethren from sections of this widely extended Union, congregated to devise the best means to relieve suffering humanity; and may I not add, we are here with

“Our souls by love together knit,
Cemented, mixed in one;
One hope, one heart, one mind, one voice.”
Dr. Winston, of Tennessee, read the names of additional delegates to the Association.

Dr. Hooker, from the committee on Medical Topography and Epidemics for the State of Connecticut, being called on for his report, arose and explained that it was his understanding that the committee were to have three years in which to make their report, and at the end of that time he would either be prepared or ask the indulgence of the Association for further time.

The President, under a resolution passed at the last meeting, appointed Drs. Currey, Grant and Evans, a committee on Voluntary Contributions.

Reports now being in order, the report of Dr. Posey, of Georgia, was called for; Dr. Arnold, of Georgia, read an abstract of the report of Dr. Posey; all of which, on motion of Dr. Palmer, of Michigan, was referred to the committee on Publication, under a suspension of the rule.

On motion of Dr. Wood, of New York, the reports which were presented yesterday were also referred to the committee on Publication, under a suspension of the rule.

The State of Ohio being called upon for a report upon its Medical Topography and Epidemics, the Secretary read an apology from Dr. G. Mendenhall, who asked further time in which to make a report, which was granted.

The States of Mississippi, Missouri, Michigan, Illinois, Indiana, Wisconsin, Iowa, California, and the U. S. Navy, being called, no response was made.

A telegraphic dispatch from Dr. J. M. Sims, of New York, who was to report on the Treatment of the Results of Obstructed Labor, was received and referred to the appropriate committee.

A communication was received from the Southern Methodist Publishing House, inviting the members of the Association to visit that establishment, which was accepted.

A communication was read by Dr. Lindsley, of Tennessee, from the Medical Association of Washington City, inviting the National Association to hold their next annual meeting in that city. On motion, the communication was referred to the committee on Nominations.

A resolution was offered by Dr. Bartlett, of Wisconsin, tendering a vote of thanks to the late President, Zina Pitcher, for the able manner in which he has presided over the deliberations of this body, which was unanimously adopted.

The reports of Special Committees for 1856-7, being next in order, they were called in order as follows:

**Inflammation—Its Pathology, etc.—**Dr. E. R. Peaslee, Maine; asked further time. Referred.

**Anatomy and Histology of the Cervix Uteri.—**Drs. H. Hutchinson and Charles E. Isaacs, New York; no report.

**Treatment of Cholera.—**Dr. J. Taylor Bradford, Kentucky; no report.

**Treatment best adapted to each variety of Cataract, etc.—**Dr. Mark Stephenson, New York; further time asked. Referred.

**Causes of the Impulse of the Heart, etc.—**Dr. J. W. Corson, of New York; a communication was received, and on motion of Dr. Brodie, he was continued.

**Causes of Infant Mortality, etc.—**Dr. D. Meredith Reese, of New York,
read an abstract of his report, which was referred to the committee on Publication.

The venerable Dr. Shelby, of Tennessee, being present, was invited to a seat on the stand. His appearance was warmly acknowledged.

Dr. Hobbs, of Illinois, offered the following resolution:

Resolved, That a committee on Essays, (not including Prize Essays,) be appointed, to whom all essays prepared for publication by this Association shall be referred, which committee shall transfer to the committee on Publication, all Essays they judge worth publishing. That said committee on essays make a full report of their proceedings to the Association at its next annual session; provided, authors of rejected essays being informed of said rejection by said committee, shall have the privilege of withdrawing their essays from the report of the committee to the Association.

On motion of Dr. Palmer, of Michigan, the resolution was indefinitely postponed.

The Secretary read a protest signed by Drs. Arnold, J. Gordon Howard, Pike Brown, and Geo. P. Padelford, against admitting the delegates from Oglethorpe Medical College, as follows:

Nashville, May 6, 1857.

The undersigned, members of the American Medical Association, protest against the admission of delegates from the Oglethorpe Medical College of Savannah, on the ground that it is not a regularly organized college, it being a matter of public notoriety in Savannah, that during neither of the two sessions of its existence, have all the chairs been regularly filled. During its first session the chairs of Physiology and Materia Medica were not filled, except by a very few lectures, by the gentleman appointed to them, and the same thing occurred during its last session as to the chairs of Materia Medica and Chemistry. All of which is respectfully submitted.

RICHARD D. ARNOLD, M. D.
J. GORDON HOWARD, M. D.
PIKE BROWN, M. D.
GEO. P. PADELFORD, M. D.

After several resolutions were offered and some discussion, On motion of Dr. Palmer, the whole subject was referred to a committee of three to be appointed by the chair.

Dr. Brodie, of Michigan, moved as an amendment, that no Faculty Member of a Medical College be appointed upon the committee, which was accepted by the mover.

The chair appointed as such committee, Drs. Wister, of Pennsylvania, Bemiss, of Kentucky, and Gibbes, of South Carolina.

Dr. Felix Robertson, the oldest physician in Tennessee, being present, was invited to a seat on the stand. He was greeted with marked consideration by the Association.

The Committee on Nominations was convened to transact important business.

The calling of Special Committees was resumed:

Spontaneous Umbilical Hemorrhage, etc.—Dr. J. Foster Jenkins, New York. Further time asked. Referred.

Use of Instruments in Obstetrical Practice.—Dr. Henry Carpenter, of Pennsylvania. No report.

Measures to be adopted to Remedy the Evils existing in the present mode of holding Coroner's Inquests.—Dr. Alexander J. Semmes, D. C. Report presented, with the following resolution attached:
Resolved, That committees of three, in each State, Territory and the District of Columbia, be appointed, and that said committee be, and they are hereby authorized in the name of this Association, to memorialize their respective Legislatures, to pass such laws as will best carry into effect the objects of the foregoing report.

The report was referred to the Committee on Publications, and the accompanying report adopted and referred to the Committee on Nominations.

True Position and Value of Operative Surgery, etc.—Dr. J. B. Flint, of Kentucky. Further time asked; granted.

Causes and Cure of Indigestion, etc.—Dr. G. Volney Dorsey, of Ohio. No report.

Medical Jurisprudence of Insanity, etc.—Dr. C. B. Coventry, of New York. Further time granted.

Human, Animal, and Vegetable Parasites.—Dr. Joseph Leidy, of Pennsylvania. No report.

Value of strict attention to position in the Treatment of Diseases of the Abdomen.—Dr. M. D. Darnall, of Indiana. No report.

Milk Sickness.—Dr. George Sutton, of Indiana. No report.

Blending and Conversion of the Types of Fever.—Dr. Clark G. Pease, Wisconsin. Communication sent, but not received. Postponed.

Best Substitutes of Cinchona, etc.—Dr. B. S. Woodworth, Indiana. No report.

Use of Cinchona in Malarious Diseases.—Dr. Franklin Hinkle, Pennsylvania. Report furnished. Referred to Committee on Publication.

Nervous System in Febrile Disease.—Dr. Henry F. Campbell, Georgia. Verbal abstract of report given. Referred to Committee on Publication.

Laws Governing the absorption and Deposit of Bone.—Dr. Jno. Neill, Pennsylvania. No report.

Intimate Effects of Certain Toxicological Agents in the Animal Tissues and Fluids.—Dr. John W. Green, New York. No report.

Intimate Structure and Pathology of the Kidneys.—Dr. Charles E. Isaacs, New York. Further time granted.

Diseases Incidental to Emigrants, etc.—Dr. Israel Moses, New York. No report.

Etiology and Pathology of Epidemic Cholera.—Dr. T. W. Gordon, Ohio. Partial report presented and referred.

Excretions as an Index to the Changes going on in the System.—Dr. H. A. Johnson, Illinois. No report.

Remedial Effects of Chloroform.—Dr. D. D. Thompson, Kentucky. No report.

Best Method of Causing an Increase in the numbers of Essays, etc.—Committees: Drs. Leidy, Wood and Meigs, Pennsylvania. No report. Committee continued.

Changes produced in Composition and Properties of Milk, etc.—Dr. N. S. Davis, Illinois. Communication read and further time granted.

Stomatitis Materna.—Dr. McGugin, Iowa. Further time granted.

An abstract of the report of Dr. Fenner, of Louisiana, upon the Medical Topography of that State, was then read and referred.

Dr. Singleton, of Kentucky, offered the following resolution, which was unanimously adopted:

Resolved, That in the death of Dr. Grafton, of Mississippi, the American Medical Association has lost a talented and useful member, and society a benefactor.
On motion of Dr. Whitaker, of Tennessee, Dr. H. Ronalds was expelled from the Association for giving certificate contrary to the rules of the Association.

Dr. Caspar Wister, chairman of the committee upon the admission of the delegates from Oglethorpe Medical College, reported as follows:

Dr. W. Benson asserts that for the past session the Oglethorpe school has been fully organized, that six professorships have been regularly filled, and that the occupants of these chairs have been in the constant fulfilment of their duties, except in cases of illness; such instances having, however, at no time interrupted the regular course of lectures, the professor absent having had his place supplied by his colleagues. The seventh chair is admitted to have been vacant; the duties were discharged however, fully by other members of the faculty.

Dr. R. D. Arnold prefers no charges beyond those admitted above.

Therefore, your committee finding nothing that infringes upon the strict letter of the law of the American Medical Association, in reference to the admission of members, we recommend that all further action in this question be suspended.

CASPAR WISTER,
R. W. GIBBES,
A. M. BEMISS.

The Secretary read the following preamble and resolutions, which were unanimously adopted:

WHEREAS, It has pleased God to remove by death our fellow-member, Robert M. Porter, and because of his devotion to the interests of the Profession of Medicine, and his steady support of the American Medical Association,

Resolved, That this Association learned with unfeigned sorrow of his decease; and that they have lost a firm and intelligent supporter, and society a benefactor and friend.

Dr. T. Bullard, of Indiana, offered the following:

Resolved, That in the death of Dr. John L. Mothersett, this Association has lost a useful member, and society a benefactor.

The Secretary read a communication from the Connecticut Medical Society, asking that the time for holding the meetings of the Association in northern cities be changed to a later period in the year. Referred over to the next meeting by the Constitution. Adjourned to meet at 9 o'clock, A. M., to-morrow.

THIRD DAY.

NASHVILLE, MAY 7, 1857.

The Association met pursuant to adjournment. The minutes of yesterday were read and adopted.

Dr. Hoyte, from the Committee of Arrangements, read the names of additional delegates to the Association, who had arrived since the meeting of the Association yesterday.

The Secretary read a communication from Dr. Clark G. Pease, of Wisconsin, which accompanied his report on "Blendiny and Conversion of the Types of Fever."

Dr. Hooker, of Connecticut, moved that the report be referred to the Committee on Voluntary Contributions.

Dr. McKinley moved to amend by having a portion of the report read, which was lost, and the motion recurring to refer the report, it was carried.
VOLUNTARY CONTRIBUTIONS ACCEPTED.

Dr. Currey, from the Committee on Voluntary Contributions, submitted the following report, which was accepted:

The Committee on Voluntary Contributions has examined the following papers, and recommend them for publication in the Transactions of the Association:

1st. A new Principle of Diagnosis in Dislocations of the Shoulder Joint. By L. A. Dugas, M.D., Professor of Surgery in the Medical College of Georgia, Augusta; accompanied by four photographic plates illustrating the principle.

2nd. Medical Statistics of Washington Territory. By George Suckley, M.D., U. S. A., embracing, 1st, Geological Divisions of the Territory; its Geology, Meteorology, Fauna. 2nd, White population and its diseases. 3rd, Native population; Diseases; Medical Practice; causes of their rapid disappearance; concluding remarks, 3rd. Medical Flora of Washington and Oregon Territories. By J. G. Cooper, M.D.

All of which is respectfully submitted,

R. O. CURRLEY, R. T. EVANS, GEO. R. GRANT.

Dr. Yandell offered the following resolution:

Resolved, That this Association re-affirm the principles respecting the rights of constituent bodies announced in a report contained in Vol. V., of its Transactions, in the following terms:

"The Faculty of every Medical College, shall have the privilege of sending two delegates to this Association, provided, that the said Faculty contain not less than six Professors, who give one course of instruction annually, of not less than six weeks, on Anatomy, Materia Medica, Theory and Practice of Medicine and of Surgery, Midwifery, and Chemistry; and also that said Faculty requires that its candidates for graduation, among other requisites, shall have attended two full courses of lectures with an interval of not less than six months between them, one of which courses must have been in their institution."

Dr. Breckinridge in the Chair.

Dr. Buchanan proceeded to discuss the resolution, and at the close of his remarks, moved to lay it on the table, which was subsequently withdrawn.

Dr. Boring offered the following resolutions in lieu, which he proceeded to discuss:

Resolved, That this Association has not the power to control the subject of Medical Education.

Resolved, That the great objects of this Association are the advancement of Medical Science, and the promotion of harmony in the profession.

Resolved, That the attempt upon the part of this body to regulate Medical Education, having most signaliy failed in its object, and already introduced elements of discord, any further interference with this subject would not only be useless, but calculated to disturb and distract the deliberations of this Association.

Dr. Currey offered the following resolutions in lieu of the whole:

Whereas, The subject of Medical Education has been committed at each annual Session to Standing Committees, and various suggestions have been proposed, which the Association has adopted, and recommended to private instructors and to the Medical Colleges.

Resolved, That a committee of five be appointed by the Committee of Nominations, as a Special Committee, to be composed of members who are in no respect connected with any Medical School, to devise a System of Medical Instruction, to be presented for the consideration of this Association at its annual session in 1858.

Resolved, That the proposed system shall set forth a uniform basis, upon which our Medical Institutions shall be organized, as well as have reference to the best mode of securing the Preparatory Medical Instruction to the Student, and that consequently the legitimate subjects to be embraced in said system, will include Primary Medical Schools—the number of Professorships in Medical Colleges, the length and
number of terms during the year, the requisite qualifications for graduation, and
such other subjects of a general character as to give uniformity to our Medical sys-
tem, and preserve harmony and friendly intercourse in the ranks of the profession.

Resolved, That, upon the adoption of the proposed system by the Association, all
Institutions which may conform to it shall be entitled to representation at the an-
nual sessions of this Association and none others.

The subject was further discussed by several members of the Association.

Dr. Reese, after some remarks, moved the indefinite postponement of the
whole subject; which was lost.

Dr. Arnold moved the previous question, which was lost, and the discus-
sion proceeded at considerable length, when

Dr. Hooker moved the previous question on the resolutions of Dr. Currey.

The reading of the various resolutions being called for, they were read
to the Association.

The motion of Dr. Hooker being in order, the previous question was
called, and the resolutions of Dr. Currey were adopted.

D.: Lindsley, from the Nominating Committee, submitted the following report:

Secretaries.—Robert C. Foster, of Tennessee, A. J. Semmes, of Wash-
ington City.

Treasurer.—Caspar Wister, of Philadelphia.

For the next place of meeting, Washington City.

STANDING COMMITTEES.

Committee of Publication.—Francis G. Smith, of Philadelphia, chairman;
Caspar Wister, of Philadelphia; R. C. Foster, of Nashville; A. J. Semmes,
of Washington City; Samuel L. Hollingsworth, of Philadelphia; Samuel
Lewis, of Pennsylvania; H. F. Askew, of Delaware.

Committee on Prize Essays.—Grafton Tyler, of Georgetown, D.C , chair-
man; J. C. Hall, of D. C; J. F. May, of D. C; Thomas Miller, of D. C;
A. J. Semmes, of D. C.; Joshua Riley, of D.C.; W. J. C. Duhamel, of D.C.
Committee of Arrangements.—Harvey Lindsly, chairman; W. J. C.
Duhamel, Cornelius Boyle, P. H. Coolidge, G. M. Dove, A. Y. P. Garnett,
Wm. P. Johnston, of D.C.

Committee on Medical Education.—G. W. Norris, of Philadelphia, chair-
man; A. H. Luce, of Illinois; E. R. Henderson, of South Carolina; G. R.
Grant, of Tennessee; T. S. Powell, of Georgia.

Committee on Medical Literature.—A. B. Palmer, of Detroit, chairman;
A. F. Alexander, of Alabama; J. M. Mosgrove, of Ohio; P. Cassidy, of
Pennsylvania; S Pollak, of Missouri.

Vacancies in Committee on Medical Topography and Epidemics —T. B.
Shuford, to fill the vacancy caused by the death of Dr. Grafton, of Missis-
sippi. C. W. Parsons, to fill the vacancy caused by the resignation of
Joseph Mauran, of Rhode Island.

SPECIAL COMMITTEES.

Spontaneous Umbilical Hemorrhage of the newly born.—J. Foster Jen-
kins, of New York.

Influence of Marriages of Consanguinity upon Offspring.—Dr. Bemiss,
of Kentucky.

Functions of the Different Portions of the Cerebellum.—E. Andrews, of
Illinois.
Causes of the Impulse of the Heart and the Agencies which Influence it in Health and Disease.—J. W. Corson, of New York city.

Treatment of the Results of Obstructed Labor.—J. Marion Sims, of New York.

Treatment best adapted to each variety of Cataract, with the method of operation, place of election, time, age, etc.—Mark Stephenson, of New York.

Human, Animal, and Vegetable Parasites.—Jos. Leidy, of Philadelphia.

Best substitute for Cinchona and its preparations in the treatment of Intermittent Fever, etc.—B. S. Woodward, of Indiana.

Intimate structure and pathology of the Kidney.—Charles E. Isaacs, of New York.

Etiology and Pathology of Epidemic Cholera.—T. W. Gordon, of Ohio.

Inflammation of Cervix Uteri.—Henry H. Miller, of Louisville, Ky.

On Milk Sickness—W. H. Byford, of Indiana.

Best means of causing an increase of the number of Essays.—Drs. Leidy, Wood and Meigs, of Pennsylvania.

Changes produced in Composition and Properties of Milk.—N. S. Davis, of Illinois.

Stomatitis Materna.—D. C. McGugin, of Iowa.

On Criminal Abortion, with a view to its general suppression.—H. N. Storer, of Boston.

The committee recommend that the committees ordered by the adoption of the resolutions accompanying Dr. A. J. Semmes' report, be filled by the several State Societies.

On motion of Dr. Brodie, amended so as to refer the same to the officers of several State Societies. Carried.

The committee also recommend the amendment of the third article of the constitution, in relation to meetings, by inserting after the words "first Tuesday in May," the words, or the first Tuesday in June, and also by inserting after the words "shall be determined," the words, with the time of meeting.

Special Committee on the Present state of Science, as regards the Pathology and Therapeutics of the Re-productive Organs of the Female.—D. Fordyce Barker, of New York.

On Moral Insanity.—D. M. Reese, of New York.

On Calculi and the Diseases of the Urinary Organs, in Iowa, Minnesota, and Nebraska.—Dr. J. C. Hughes, of Keokuk, Iowa.

On the nature, tendency and general treatment of Syphilitic Bubo.—Moses Gunn, of Detroit, Michigan.

Organic Chemistry—its progress and relations to Physiology and Pathology.—Professor Samuel St. John, of New York.

On Medical Education.—(By Dr. Currey's resolution,) James R. Wood, of New York; Geo. R. Grant, of Memphis, Tennessee; John Watson, of New York; C. B. Nottingham, of Macon, Georgia; Rene La Roche, of Philadelphia, Pennsylvania.

To fill a vacancy in the Committee on Medical Topography and Epidemics.—Dr. J. L. Cabell, of Charlottesville, Virginia.

Dr. March moved that the Report of the Nominating Committee be taken up, and each subject to which it refers, be considered separately, which motion prevailed. That portion relating to nominations was then adopted.

The place of the next annual meeting of the Association being the next
subject in order, after some discussion, on motion of Dr. March, the report of the committee was adopted.

Dr. Lindsley moved that, as Dr. Semmes, one of the newly elected Secretaries was absent, Dr. Brodie, of Michigan, be elected Secretary pro tem, which was carried.

Dr. Pitcher offered the following resolution, which was unanimously adopted:

Resolved, That a committee of three be appointed, of which the President of the Association shall be chairman, to communicate with the Surgeon General of the Army, the chief of the Medical Bureau of the Navy, and the Secretary of the Treasury of the United States, with a view to secure the concurrence of these departments of the Federal Government, so that its contributions to the Medical Topography, the Vital Statistics, and the Sanitary Police of the nation may be made tributary to the labors of this Association.

The Chair appointed as such committee, Drs. Z. Pitcher, of Michigan, and R. H. Coolidge, of Kansas.

Dr. Boling, Chairman of the Committee on Prize Essays, submitted the report of said Committee, as follows:

PRIZE ESSAYS.

The Committee on Prize Essays report that four essays have been received, each possessing great merit.

The Committee selected the following two Essays for the two prizes, provided for at the last meeting of this Association.

1st. One entitled "The Excito-Secretory System of Nerves. Its relation to Physiology and Pathology," with the following motto:

"Observation becomes Experiment when used in severe processes of Induction," and signed Henry Fraser Campbell, Georgia.

2nd. "Experimental researches relative to the Nutrition, Value and Physiological Effects of Albumen, Starch and Gum, when singly and exclusively used as Food," with the following motto:

"Quam sequimur? quove in jubes? ubi ponere sedis?
Da pater augurium, atque animis illabere nostris!" and signed, William A. Hammond, M. D., Assistant Surgeon, U. S. Army.

The President read an invitation to the members of the Association, to visit the University of Nashville, in its Military, Literary and Medical Departments.

The Committee on Voluntary Contributions, reported in favor of the publication in the Transactions of the Association, of the following paper. "On the blending and conversion of Types in Fevers." By C. S. Pease, M. D., of Wisconsin. The report was adopted.

Dr. McMurray offered the following resolution, which was adopted:

Resolved, By this Association, that the Committee on Publications be instructed to append the Code of Ethics of the American Medical Association to each volume of its present and future Annual Transactions.

The amendments to the Constitution proposed by Dr. Stocker, of Pa., at the last Annual Session, were taken up and laid on the table.

Dr. Lindsley offered the following amendment to the Constitution, which was seconded by Dr. Gunn:

"In Art. II, omit the words 'Medical Colleges,' and also the words 'The
Faculty of every regular constituted Medical College, or chartered School of Medicine, shall have the privilege of sending two delegates.'"

The amendment lies over until the next meeting of the Association, under a rule of the organization.

On motion of Dr. Palmer, the resolutions reported at the last Annual meeting of the Association, by the Committees on Plans of Organization for State and County Medical Societies, were taken up and adopted.

The following resolutions were offered and adopted:

By Dr. Pitcher—

**Resolved,** That the members of this Association, as recipients of the cordial, generous, and elegant hospitalities extended to them by the profession and the citizens of Nashville, in placing on record an expression of thanks for the social amenities they have enjoyed during its tenth annual session, wish also to leave behind them the assurance, that the recollection of their short sojourn in Tennessee, will be cherished as dearly as the remembrance of the far off sound of water, by the exhausted and way-worn traveller.

By Dr. Means—

**Resolved,** That the earnest thanks of this body be presented to the authorities of the State and City, who have tendered this magnificent State Capitol for their sittings during the present session.

By Dr. Currey—

**Resolved,** That the thanks of this Association be tendered to the Reporters of the City Press, for the accuracy and promptness with which they have reported the proceedings of the Association, and to the Publishers, for the liberal supply of their morning papers during the Sessions of the Association.

By Dr. Wister—

**Resolved,** That the thanks of this meeting be presented to Dr. Wm. Brodie, for the efficiency with which he has discharged his duties of Secretary.

By Dr. Byford—

**Resolved,** That the State and County Societies throughout the Union be requested to recommend their members to purchase the Transactions of the American Medical Association, and that their officers act as agents for the same.

On motion of Dr. Gunn, of Michigan, the Association recognized the presentation of a pamphlet by Henry Fraser Campbell, M.D., claiming "Priority in the Discovery and Naming of the Excito-Secretory System of Nerves"

On motion of Dr. Byford, the Association then adjourned *sine die.*

**Professor Daniel F. Wright.**—We are gratified and obliged at finding in the last number (May) of the Memphis Medical Recorder a very favorable and elaborate review of our contributions to the Physiology of the Nervous System, over the initials of this distinguished gentleman. His was the first and the fullest examination which our Ganglionic Theory of Typhoidal Fevers has received. We regret that our space will not allow us to consider certain important suggestions embodied in his review of the Excito-secretory System, in the present number, nor to introduce a valuable case of *Tetanus* therein reported; but we hope, at an early date, to give our readers a full discussion of Dr. W.'s views, which we at once see will serve to illustrate an extensive body of phenomena in relation to the new func-
tion of the nervous system. Our space, at present, only allows us to state that we fully appreciate the approbation of a reviewer whose opinion we so highly value.

Dr. Marshall Hall.—Having had frequent inquiries made in relation to our communication to this gentleman, on the subject of the Excito-secretory System of Nerves, we venture to quote the following from the private letter of a distinguished Surgeon of London, knowing that it will explain to our readers, as it satisfies us, as to the probable cause of our not having received a reply to our communication to this time.


* * * * I have read your paper on the Excito-Secretory System of Nerves, which certainly fully establishes your claim to originality in this investigation. I have had no opportunity of seeing Dr. Marshall Hall since I received your communication. I believe that he is staying at the seaside, and I am sorry to add that he is laboring under very serious disease.

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To Dr. H. F. Campbell,
Augusta, Georgia, United States of America.

The above is the only intimation, we have as yet, that our communication has been received in Europe. The London Lancet "makes no sign."

Excito-Secretory System—Claim admitted in London.—Since the above was in type, we have just received the July number (in advance,) of the North American Medico-Chirurgical Review, and we are gratified to find, that notwithstanding his absence from home, and his impaired health, Dr Marshall Hall has generously acknowledged our claim, and secured the publication of all the essential parts of our Letter, in the pages of the London Lancet, even as early as May 2nd. This is certainly making the amende nobly and promptly. When we wrote, "the London Lancet has made no sign," we referred of course to the American reprint, which we suppose cannot furnish the same matter simultaneously with the original work. We have not yet seen Dr. Hall's note, but quote from the North American Review, edited by Professors Gross and Richardson:

"The recent announcement of the discovery of the Excito-Secretory sub-system of the Spinal Nerves by Dr. Marshall Hall, of London, has called forth a letter, and various accompanying documents, addressed to that gentleman, from Dr. H. F. Campbell, of Augusta, Georgia, who clearly sets forth his own claims to the discovery in question. The essential portions of Dr. Campbell's communication are copied into the London Lancet (May 2.) by the request of Dr. Marshall Hall, who gracefully yields the credit of the idea and the designation of the Excito-Secretory action to our countryman."
Resignations and New Appointments in the New Orleans School of Medicine.—Dr. A. Foster Axson has retired from the Chair of Physiology, in consequence of impaired health. Dr. Anthony Peniston, formerly Adjunct to the Chair of Anatomy, has been promoted to the Chair of Physiology; while Dr. Theodore S. Clapp becomes Adjunct to Anatomy, vice Dr. Peniston promoted.


This is a most convenient and practical little Manual on the subject of which it professes to treat, viz., various methods for the Detection of Arsenic; 2dly, Detection of Antimony, Tin, Mercury, Copper, Lead and Zinc; 3rdly, Hydrocyanic Acid; 4thly, Oxalic Acid; 5thly, Detection of Phosphorus; 6thly, To detect Alcohol and Chloroform; 7thly, On the Detection of the Poisonous Alkaloids, as Narcotine, Strychnine, Morphine, Aconitine, Veratrine, &c., &c; 8thly, On the Examination and Detection of Bloodstains, for the determination of the value of evidence in legal cases. It is evidently a valuable little work, and of such a size and fair print, as to be readable by all who may desire an acquaintance with subjects therein discussed. It was kindly sent to us by II. Bailliére, 290 Broadway, New York.

Books for Review.—We are forced to leave out several notices of valuable works sent us for review, in consequence of so much of our space having been devoted to the minutes of the Association.

On the Ligature of Arteries in Suppurating Wounds. By M. Nélaton. (Gazette des Hopitaux, 1857. No 1.)—In one of his most recent clinical lectures, M. Nélaton made the following observations, the occasion being a secondary hemorrhage in the palm of the hand. Nothing is more difficult, he observed, than to arrest a hemorrhage of the hand, especially when this is consecutive—that is, when the wound is covered by pyogent granulations. If not previously instructed as to the proper management of these secondary hemorrhages, you will be extremely embarrassed. The blood flows, you employ compression, and it ceases; but the hemorrhage will not be long before it returns, and will then be uninfluenced by compression. If compression be made above the wound, oedema takes place in all the subjacent parts, and the hemorrhage soon returns. The radial, or the ulnar, or the brachial may be tried, and yet the bleeding does not stop. Meeting such a case, M. Nélaton formerly was quite at a loss to know what to do, impressed as he was with Dupuytren’s dictum, that arteries in a suppurating wound will not bear the ligature, the premature fall of this in-
fallibility giving rise to a return of the hemorrhage. Nevertheless, he ventured to tie the two ends of the bleeding vessel of the palmer arch; and although the ligature fell sooner than usual, no hemorrhage followed. He has frequently since then tied vessels under analogous circumstances, and has never seen hemorrhage as a result of the fall of the ligature. Although, therefore, this fall takes place earlier (usually about the third or fourth day,) than is the case with a ligature applied to a healthy artery, it is not premature, for bleeding does not follow. Examining the matter experimentally, upon the dead body, M. Nélaton has found that ligatures applied to arteries in a state of suppuration (as in patients who have died after amputation) produce identically the same effects upon the coats of these vessels as upon arteries remote from the seat of inflammation; the same division of the inner coats and preservation of the outer taking place in the two cases. He feels, therefore, perfect confidence in the soundness of the practice, supported as it is by numerous cases that have occurred to him, both in private and hospital practice.—Brit. & For. Med. Chir. Review.

_Apoplectic Ophthalmia._—Under this name Dr. Quadri, of Naples, states a fact worthy of attention. It is, that persons predisposed to apoplexy, present ordinarily a species of ophthalmia, characterised by the presence of varicose vessels, muddiness of the eye, and intolerance of astringent collyria a little strong. In the second form the eye secretes a yellowish mucus, very abundant and viscid, and presents a high degree of photophobia: the cornea may then become the seat of abscess, ulcers, or more frequently of pannus. Sometimes also, iritis succeeds to keratitis. The tendency to muddiness, sensibility to astringents, etc., are found in this second form; both forms precede apoplexy one or two years. The importance of these symptoms is equal to the danger of the disease, which must be met in time to be successfully combated.—[Phil. Med. and Surg. Jour., from Revue Therapeutique.

_Facial and Dental Neuralgias._—Doctor Michel Andre recommends the following mixture for prompt relief: Extracts of opium, of Belladonna, and of stramonium, each one part; laurel water twelve parts. A few drops are placed in the meatus auditoria, and cotton is placed in the passage, taking the precaution to hold the head on the opposite side for a few moments, that the fluid may pass freely into the canal.—[Ib.

_Night Sweats._—Dr. Abbot, of Boston, publishes a series of cases of phthisis to show the decided influence of the oxide of zinc in relieving the night sweats, which are so troublesome in the latter stages of this disease. His favorite prescription is four grains of the oxide of zinc with three of extract of conium, in two pills, at bed-time. Hyoscyamus and opium are sometimes used in combination with the zinc. One of the good effects is the preservation of a soluble state of the bowels. Dr. A. prefers the oxide to the sulphate of zinc.—[Memphis Med. Recorder.

_Chloroform in Sea-Sickness._—It is said to have been discovered that chloroform in doses of ten to twelve drops, repeated as occasion requires, is a specific for sea-sickness. Out of twenty passengers, eighteen were cured by a single dose, and the two others by two doses each.—[Ib.