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THE EXPERIMENTAL TRUTH IN RELATION TO DISINFECTANTS.

TRANSLATED BY DR. J. WORKMAN, TORONTO.

The following article (translated from the Spanish) is presented in the September number of the "*Revista Argentina de Ciencias Medicas*," of Buenos Ayres. Probably some, if not many of the statements of the author will appear rather marvellous to Canadian medical reader at the present time, considering the great practical value which has been attached to disinfectant processes during the course of the small-pox epidemic, which has proved so destructive in the City of Montreal and the adjacent villages. If, as seems to be generally believed, these processes are efficient in the prevention of infection, and the statements of the Spanish experimenter, *Dr. Jose de Letamendi*, are perfectly reliable, the conclusion seems inevitable, that microbes have no part in the causation of infectious diseases, or that if they really are the conveying agents, the accredited destroying means of disinfection must accomplish the desired purpose by virtue of some other sanitive process, distinct from that of killing the microbes, for this result would seem to be unattainable even by the most powerful chemical agents hitherto employed. *Letamendi*, as the reader will find towards the end of his article, reduces his disinfecting means to the two primitive agents, *water and fire*. In this simplification of disinfection, he has, perhaps, come as near to the truth as persistent experimentation and common sense enabled him to attain. We now submit the article as it was presented in the *Archivos de Therapeutica*, in Spain :

"The conflict with a determinate species of the microbes may be as relates to the family, individual or collective. In taking the field in single

combat we must have recourse to the therapeutic agents which kill the aggressive horde in the collective combat (epidemia from contagion); as soon as the microbes have assailed a population, recourse must be had to a prophylactic means, which, by killing the germs emanating from every diseased person, in his *excreta*, and adhering to retentive objects (*contagium vivum*), cuts short the epidemic process. By virtue of these indications, and by calling disinfectants the means which, in individuals and things, kill the infecting microbe, the following two problems are naturally presented :—

1st. Is curative disinfection, or that of individuals, possible? 2nd. Is preventive disinfection, or that of things, possible?

Let us see. At our very outset sound sense imposes on each of these problems a certain limitation. Here is the limitation of the 1st problem :— It is indispensable that the agent destroying the microbe shall not overpass, in the diseased person, the limits assigned to therapeutic disturbances. Without this limitation it would be possible, in killing the cause of the disease, to kill our patient also. The limitation of the 2nd problem is this :— It is requisite that the agent killing the microbe shall not attack retentive objects unless within certain prudential economic limits. Goods, articles of utility, capital, wealth, are products of industry which are esteemed by the people as the equivalent of their means of life.

Having now stated the theo-practical problem, let us seek its solution, not in mere arguments, but in real facts, positive and correct. In this field nothing exposes more to error—unpardonable error—than submitting our own conduct to outer-authority; be it that of a man elevated to the undisputed position of a demigod, or that of a precedent established beyond appeal by a judge. Facts have truly a decisive force; but they must be facts seen, not heard from others, and not assented to from mere laziness to test them. I proceed, therefore, to present the results of my own experiments, some of which were made in 1865, when the *religion of carbolic acid* was introduced into Spain, and others during the present year, recommending to the reader, beforehand, the utility of testing them by himself, or in association with some person expert in the matter. The microbes subjected by me to experimentation, have been the *bacterium*,

the *diplococcus cadavericus*, the *bacteridium carbunculosum* (in attenuated culture), the *diplococcus* of roseola and of hogs, the *bacillus phymatogenus* or that of *plithisis*, the *bacterium of urea*, and others of less importance.

The agents and the results of reactions were as follows :—

1st. Phenyl, or carbolic acid pure, crystallized ; watery solution of 2 per cent. Result.—All the microphytes continuously in life.

2nd. Idem, incomplete cold solutions or emulsions, from 5 to 10 per cent. Result.—Between the layers of microphytes imprisoned in the coagulum of the albuminous substances of the putrilage and the liquid of the culture, numerous free *cocci*, living, and swimming about in a sea of microscopic drops of emulsified phenyl, moving with the impulses and in the style of microbes, up to the seventh day.

3rd. Considering the trivial solubility of pure phenyl, the same solutions as the previous were aided and completed by means of some drops of alcohol. Consequent disappearance in them of free phenyl was noted. Result.—An immediate augmentation of the activity of the microbes. The alcohol, by debilitating extraordinarily the action of the phenyl or pure carbolic acid, caused practically the obtainment of a carbolised water of over 3 per cent. This fact, which I had observed in 1865, has been verified by Koch in relation to divers species of *bacilli*.

4th. Liquid carbolic acid (by natural deliquescence, with alteration of its chemical constitution). Enormous doses ; 10 grains of pure reactive to 2 grains of putrid urine or the putrilage of flesh, that is to say, 100 to 20. Result.—Large islands or clusters of bacteria imprisoned in the coagulated albuminoid substance ; intermediate lakes peopled with free bacteria in their greatest activity. Observed two days. On the 8th day the liquid appeared turbid, and when again subjected to microscopic examination, it gave a notable increase of free bacteria.

5th. Thymol, or thymic acid, pure, amorphous. Experiments and results similar to those by phenyl.

6th. Salicylic acid ; solution of 1 per 2,000 ; microphytes living *ad maximum*.—Solution of 1 per 1,000, microphytes living, but rather remiss in

their movements. Observed to the fifth day ; they continue living and agile.

8th. Lime. Action nil ; all living.

9th. Mixture of caustic soda, and barilla, without definite dosage, but not under 10 per cent., and the same as is used by me in my own laboratory for perfectly cleaning in twenty-four hours, the glasses of varnished plates. In one drop of this mixture I found a good number of *bacilli* and *cocci* of various species in full activity, which had proceeded from micrographic preparations of the same sorts, previously worn out and put into the same mixture in order to clear them of mastich.

10th. Pyrogallic acid ; solution at 10 per cent. Result.—Nil ; all the bacteria alive and in motion, free from the meshes of the coagulum. The observation was followed up to the twentieth day, when all were living *ad maximum*. This explains why hides, either whole or cut, may infect with carbuncle.

11th. Ammonia, pure. Result.—All alive continuously.

12th. Sulphohydrate of ammonia, pure. Result.—All alive in 24 hours, though torpid in movements, and the field turbid, without doubt, from the reduction of the sulphur.

13th. Sulphate of iron at 30 per cent. ; solution slightly acid. Result.—All the microbes living.

14th. Sulphate of copper ; saturated cold solution. Result after 24 hours :—All living, but with one singular circumstance ; many of the bacteria show a sharp twisting, over half their length ; but on returning to observe them on the fifteenth day, they all continued in life and in notable motion.

15th. Essence of turpentine, pure. On the fourth day all continued in life ; and on the eighth day the same.

16th. Chloride of mercury (corrosive sublimate). Result.—All living. Observation followed till the third day ; all the microbes living free from the coagulum and very active.

17th. Boracic acid. Saturated aqueous solution, cold (4 per cent). Result.—All alive. Observation continued until the fifteenth day.

18th. Picric acid. Saturated aqueous solution, cold (1 per cent.) Result.—All living, swimming about, free from the meshes of coagulum. Observed again on the fifteenth day, still living.

19th. Picric acid, obtained by transformation of

carbolic acid by a sufficient quantity of nitric acid Result, as the last.

20th. Cyanuret of potass; aqueous solution at 4 per cent. Result.—All living and more excited than ordinary. On the eighth day they continued in the same state.

21st. Potassic picro-cyanuret; aqueous solution at 4 per cent. Result, as the preceding; all the microbes swimming lively between beautiful crystallizations in the form of a double brush, characteristic of the reaction of picric acid on the cyanuret of potass.

22nd. Picrate of ammonia, pure. Result.—Large clusters or layers; but all the microbes alive and free.

23rd. Permanganate of potass; aqueous solution at 5 per cent. Result.—All alive, and in addition, the permanganate decomposed from being robbed by the microbes of one equivalent of oxygen.

24th. Arsenious acid; aqueous solution, cold, at 1 per 1000, that is to say, almost saturated. Result.—At 24 hours (when writing these lines), all alive, as if nothing had happened.

25th. Iodide of bromine. Application useless in practice, because the alkaline salts of common or natural waters form with the iodides or bromides combinations inoffensive to the microbes.

26th. Sulphuric, nitric, and hydrochloric acids; aqueous, 1 per cent. solutions. Result.—All indefinitely alive.

27th. Aqua regia, pure (nitro-muriatic acid), equal parts. Result.—All alive on the fifteenth day (!!!). Such is the effect of aqua regia, a liquid that dissolves everything, from gold and platinum down to liver and brain.

28th. Nitrate of silver; saturated solution, cold, with excess of crystals and exposure to light for a whole day. Result.—The silver, reduced by the light, has combined with the substance of the cuticle of the microphytes, but it has not penetrated them; since, though as black as charcoal, they continue alive, swimming with marvellous agility, in spite of so much metallic silver which each of them carries. Only those entangled in the meshes of the coagulum are motionless, in the state of real microderms, or bacterial pellicles, as well in layers as in islands. Though this is the most powerful reagent, that is, from rendering a greater number of the microbes motionless, besides altering their

integument, yet, in preparations of some days' standing, living *cocci* and *bacilli* were seen swimming. In a specimen of the *bacteridia carbunculosa*, treated by this process for the purpose of better photographing it, I saw, on the twentieth day after sealing the preparation, a multitude of bacteria still in motion, with remarkable activity, in spite of their coat of metallic silver (!!!).

And now I ask, in view of these facts, in face of the quality of the substances employed, and the enormity of the doses, what have the storm waters left behind them? Will any physician be so simple as to believe, that among the substances prized as disinfectants, there is one capable of killing the *contagium vivum*, either *inside* or *outside*, either in individuals, by cutting short the process of an infectious disease, or in retentive articles, by hindering the development of an epidemic? Will there be any association, council, minister or governor, who will rest tranquil after having assented to proceedings of disinfection, which experimental facts, carried to the extremes shown in those herein related, declare to be absolutely useless, besides being offensive, expensive, and injurious? If the strong doses (some horribly mortal to individuals) which I have signalized, have proved useless, in what doses shall we employ them with success? And even supposing—and it is no little to suppose—that such doses were really disinfectant, what utility could they offer in practice, either *internally* or *externally*? If, for example, we should administer carbolic acid in the impossible solution of 10 per cent., on reaching the current of the blood in the quantity of a few drops, or when scattered by an atomiser on the bottom of an ulcer, or on retentive wares, from which it rapidly evaporates, it will not represent then even $\frac{1}{2}$ per 1,000. Let it be tried, and it will be seen that this deduction is inevitable.

Finally, we have to renounce curative or individual disinfection by means of the death of the *contagium vivum*, and as respects preventive or public disinfection by the death of the *contagium vivum* in retentive objects, we have to abandon, as absolutely impotent, chemical means; the entire abortive police of an infectious epidemic is reduced to these two elements, WATER and FIRE; supreme cleanness, and intelligent and methodical cremation up to complete calcination of articles impregnated with the excreta of the sick. I say "intel-

ligent and methodical," because after a provisional drying by means of sawdust, the carbon, vegetable or mineral, in powder, and the boracic acid, as well as the hermetical enclosing of the articles ; all this, with the charge of particulars, ought to be proceeded with by the public administration—the only authority which can realize it—by the formal cremation of these articles at two distinct times ; one of drying by a slow fire, and the other of definitive calcination ; all to be so executed that the fumes peculiar to ordinary combustion may not carry off, and scatter in the atmosphere, enormous quantities of unburned or incompletely burned microbes. I have been convinced by my experiments that, as a general rule, nothing short of complete "calcination" is a sufficient guarantee for the death of the microbes.

I cannot close this article without mentioning one very important experimental fact, the omission of which might suggest doubts, or even reflections, with some foundation. A good number of the substances used by me, when they are employed in the enormous doses mentioned, although they do not kill the microphytes, yet diminish, or altogether suspend their reproductive energy. For this purpose the only substance which, among those experimented with by me, offers practical conditions, is boracic acid. Borax, which is colorless, inodorous, and slightly acid, inoffensive to persons and things, giving an aqueous saturation at 4 per cent. in ordinary temperature, may be administered internally as "boracic lemonade" without any risk ; it is inassimilable or anhistogenous, and though like the other reagents, it does not kill the microbes, on the other hand, in supersaturated solution it restrains their reproduction better than the others. In order to demonstrate this, it suffices to hold under observance two equal quantities of the same culture ; one of them immediately supersaturated with boracic acid, and the other left without it ; let each of the vessels be closed with glass stoppers which will not altogether impede evaporation. On the fifth day afterwards the difference is amazing ; in the liquid supersaturated with boracic acid and having the surface covered with crystals of the same, the *bacilli* have changed for free *cocci*, or bundles of *cocci*, very lively and agile, but in quantity equal to the primitive or a little greater, whilst in the other vessel, for every free *coccus*, or bundle of *cocci* of the former, hundreds of *bacilli*

are moving about, with 4, 8, 16, and more nuclei.

This remarkable influence, however, whilst being of inestimable value for other conceptions, has no useful application in the problem of disinfections, either curative or preventive. In the first place, boracic acid produces such effects only in practical doses and conditions* (economic, clinical and hygienic), by reason of its natural advantages above indicated. In the second place, every microphyte in passing from a favorable to an unfavorable medium, degenerates, and its fecundity is suspended or diminished, but in its turn it recovers its natural fecundity as soon as it passes from an adverse to a propitious medium.

Let us present a particular example of this sort of cycle of the *contagium vivum*. A person attends a cholera or a smallpox patient, out of his own house, etc. ; impregnates his hands with the *excreta* of the patient (the vomit, sweat, pus, crusts, etc). He afterwards washes his hands with boracic saturated water, and in so doing he inadvertently splashes the sleeve of his coat. On this sleeve there are microphytes, not only motionless from dryness, but also from the influence of the boracic acid (if any of it has reached them). This person returns to his own house ; his servant next day brushes the coat ; the microbes are mixed with the air of the house, and some of them get on the soap, or into the water which his daughter makes use of ; they are emancipated from the boracic acid, recover their forces on obtaining propitious liquids, in such favorable *climates* . . . and in a little time the daughter of this man falls sick, with cholera or smallpox.

It is a fact that things profit much by their names. Let Killing mean putting out of life ; the problem of disinfections is the problem of the death of the *contagium vivum*, and not of its mere attenuation, and for this reason the attenuating virtue of this or that substance will never solve the problem of either curative or preventive disinfection."

JOSE DE LETAMENDI.

It is stated (*Nouveaux Reivèdes*) that essence of pepperment painted on a burn will stop the pain at once.

*This translation is literally exact, but there must be defect in the text.

SUBPERIOSTEAL AMPUTATION.

BY J. FULTON, M.D., M.R.C.S., ENG.; L.R.C.P., LONDON.

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The practical utility of the so-called Subperiosteal method of amputation has not been appreciated at its proper value, nor has it received that attention from the profession that its merits deserve. It cannot be called a new operation, although the technique may be new to many surgeons. Attention was first called to this method of amputation seventy years ago, by Walther of Landshut who published a short article on the subject.

In 1859, M. Ollier first demonstrated the utility in amputating, of preserving the periosteum in order to close the medullary canal, and to favor union by primary intention, but owing to the suppuration that almost constantly attended the healing of stumps in those days, all attempts at preserving this membrane were abandoned. Since the introduction of the use of antiseptics in surgery, the operation has been revived, and the practice advocated by Esmarch, Tretat, Naas, Volkmann and others who have recommended it as a highly valuable procedure. Dr. Nicaise read an interesting and valuable paper on this subject before the International Medical Congress at Copenhagen last year, in which he stated that he always preserved a portion of periosteum to cover the end of the bone in his amputations. The operation is not described in our text books on surgery, notwithstanding the favor with which it has been received by these distinguished surgeons. So that when it was brought again to the notice of the profession, a few years ago, many regarded it as an entirely new departure in surgery. It is about six years since my attention was first directed to this method of amputation. It at once commended itself to my mind as a most natural and rational procedure in all amputations through bone tissue, and I resolved to put it in practice on the first favorable opportunity. I have since then performed the operation a number of times and always with the most satisfactory results. The operation is especially indicated in all amputations which are necessitated in consequence of disease of the bones or joints. It may be well, however

to proceed further, to explain what the operation is and how it is performed.

The operation essentially consists in detaching and raising the periosteum from the portion of bone to be removed, to a sufficient extent to cover the sawn end of the bone. The length of the raised periosteum should be equal to the diameter of the bone at the point of removal. The method which I adopt and which I have found to be very simple and easy of execution is as follows: After having made the flaps as in any ordinary operation and sawn the bone through, the periosteum is peeled upwards from the sawn end of the bone, by means of the thumb-nail or raspator, to the required extent—1 inch or one inch and a half. In doing so, care should be taken not to detach it from the muscles, on its outer side, for fear of interfering with its nutrition. Having raised the periosteum to a sufficient extent, an assistant now grasps the end of the bone with stout forceps, the saw is again applied and the portion of bone denuded of periosteum removed. The raised periosteum now falls over the sawn end of the bone like a hood, and its margins may be united with fine catgut sutures, the arteries of the stump are then secured and the flaps brought together in the usual way. The use of sutures in the periosteum is not imperatively necessary. Esmarch and Naas recommend their use, but Nicaise does not regard them as necessary. The periosteal flap hangs over the end of the bone like a hood and very soon contracts adhesions. It will be seen therefore that the end of the stump is left in the same condition physiologically as obtains in other similar parts, the structures from without inwards being, integument, muscle, periosteum and bone. Indeed this is one of the advantages claimed for the operation, "that the sawn surface of the bone is brought into contact with the tissue, which is physiologically fitted for its protection, and to which it becomes organically united most quickly and certainly." Another advantage claimed for this method of amputation, is that the stump is much preferable to any other, inasmuch as the bone has no tendency to adhere to the cicatrix. The bone is also less liable to become atrophied, the stump is firm, and the tissues covering it move freely to and fro. But the most important office subserved by the periosteal flap, is its capability of quickly forming a layer of new bone, and effectually clos-

ing in the medullary canal and guarding against the spread of inflammation or suppuration which may be present in the soft parts. It has been proved by experiments on animals, that a flap of periosteum rapidly closes the open end of the medullary cavity, and prevents the occurrence of osteo-myelitis and also that on the inner surface of this membrane a thin layer of osseous tissue is rapidly formed. M. Nicaise in the paper to which I have already alluded, mentions a case of amputation of the thigh, for chronic disease of the knee in a tuberculous patient aged 42 years. After death, which occurred 29 days after the operation, when the stump had almost entirely healed, the lower end of the divided femur was found completely closed by a septum of thickened and granular periosteum, above which was a layer of newly formed bone tissue about $\frac{1}{2}$ of an inch in thickness.

The first case in which I performed the operation was a hospital patient, H. W., who was strongly predisposed to bone disease. He was about 26 years of age, had a good family history and was very healthy up to within 6 months from the date of his admission to the Toronto General Hospital in 1879. He was admitted with caries of the bones of the foot, and it was decided to perform Syme's amputation at the ankle joint. On removing the tips of the malleoli it was noticed that the bones were very soft. The stump did badly, the bones showed no disposition to heal and it was finally decided to amputate at the junction of the middle and lower third of the leg. This seemed to me a good case in which to test the utility and value of the periosteal flap, and accordingly I determined to give the patient the benefit of the operation. When the tibia was sawn through in the operation at the point selected, the marrow was found exceedingly soft and unhealthy-looking, so much so that Dr. Aikins who was present remarked that I would have to go higher up. I did not do so however, but simply contented myself by raising the periosteum to the extent of an inch and a quarter, removing the denuded bone, and bringing the periosteal covering over the end of the divided bone. There seemed to be very little difference in the appearance of the two sections of the bone. The stump healed kindly and rapidly, and the patient left the hospital cured within four weeks from the date of

the last operation. Another case which I regarded as a test case, was that of a young man, aged 22, upon whom I performed amputation of the thigh for chronic disease of the knee joint. The family history was not very satisfactory, and the patient presented evidence of constitutional syphilis. The disease of the knee had existed for seven or eight months before his admission to the hospital. With the concurrence of the staff, amputation of the thigh was decided upon. On sawing through the femur the bone was found very soft, and the medullary canal much enlarged, soft, and unhealthy looking. In this case I made a moderately long periosteal flap, so as to cover completely the end of the bone. The case did remarkably well; the stump healed without suppuration, and the patient was going about on crutches in three weeks' time. I might mention a number of cases, somewhat similar in character to the foregoing with equally good results. There is one case, however, of simultaneous amputation of both legs which is worthy of being placed on record. The patient, H. F., aged 60 years, healthy and of good family history, had the misfortune to lose both his feet through frost-bite. A modified form of Syme's amputation was performed by the surgeon, but the stumps refused to heal. The patient had been in this condition for about a year when he came under my care. After due consideration I decided to perform double synchronous amputation of the legs below the knee. This was concurred in by the consulting surgeon. As all surgeons speak of successful operations of this nature as extremely rare, and inasmuch as the patient was advanced in years, I felt considerable anxiety as to the result. On sawing through the tibiae I found the same condition of the medullary canal mentioned in the previous cases, but more marked in the right than in the left tibia. Periosteal flaps were formed in both stumps, and the result was most satisfactory. The left stump was healed completely in three weeks' time, and the right in about four. Considering the age of the patient, and the nature of the case, the success was most gratifying. Taking this case by itself, or all three cases mentioned in this paper together, they do not prove that the success was due to the periosteal flap. But having regard to the success in these cases, and in many others, in which I have adopted this method of amputation, and compar-

ing the results with those in which no periosteal flap has been made, I am forced to the conclusion that it is a most valuable procedure, and one which ought to claim the most careful and considerate attention of all surgeons.

The objections that are urged against this method may be thus summed up. First, that when the flaps are well formed, and the wound properly treated, a good stump without adhesion of the bone to the cicatrix is obtained, and that the muscle will adhere to the end of the bone, and the medullary canal become closed in by a plate of osseous tissue. This is quite true in most cases, but these changes do not take place so rapidly, and the lamella of bone is thinner than when a periosteal flap is made. Secondly, that the formation of the periosteal flap delays the operation. This objection really has no weight, as any dexterous surgeon can make the periosteal flap in from three to five minutes. Thirdly, that the retention of the periosteal flap may lead to the formation of osseous growths around the end of the bone. This may occur, it is said, in young persons, especially when there is kept up any irritation about the end of the bone, but such a formation is exceedingly rare among adults. I have not yet met a single case in which osteophytes have formed in connection with periosteal flaps. This last is the only real objection which can be urged against the operation, and even if supported by experience, is far from outweighing the benefits to be derived from this procedure. As Nicaise has pointed out in the article referred to: "we have arrived at a period in the progress of surgery, in which it is incumbent upon us to study how by attention to small details, we may give our patients the most useful stumps, for the more important measures by which the operation of amputation has been deprived of its chief dangers, are known and practised, with more or less success, by all surgeons." After carefully weighing the arguments for and against the operation, I am fully convinced they show an overwhelming balance in its favor. So strongly convinced am I of the utility and value of the operation, that I now have recourse to it in nearly all amputations, but especially in those cases in which, on section of the bone, the medullary canal is found softened, and in an unhealthy condition. I have been induced to bring this subject before the notice of this association, in the

hope that it may receive more attention in the future than it has in the past.

Correspondence.

MORPHINE IN PUERPERAL ECLAMPSIA.

To the Editor of THE CANADA LANCET.

SIR,—As I have seen lately in our medical journals a great deal written on the treatment of this disease, I beg permission to give you my method of treatment, which I have never seen mentioned by any writer, except Dr. Clark, of Oswego, N.Y., and that six years after I had first used it. I will simply give you an outline of my first case so treated, and it will cover the whole.

In August, 1874, I was called to attend a patient seven miles from here, who was being confined with her first child. The labor was tedious and as the head was pressing on perineum she took her first convulsion. I at once applied the forceps and delivered the child. The placenta came away and everything went well for about half an hour after. I say well; I should say "apparently," for she had the peculiar headache in the top of her head, pupils dilated, and nervous twitching of the fingers and mouth. Now, I simply left her alone, for the reason that I had no chloroform, chloral or bromides with me. So I waited to see what next would turn up. I had sent the husband to borrow a horse to go to my surgery (seven miles), to get what I expected I would require, but before he succeeded in getting one his wife had another severe convulsion, and then another. I despatched one messenger to the nearest drug store (five miles), and the husband to my surgery, for chloroform, etc., and I bled the patient freely; then I was done until my messengers should return—and here I was alone with a village full of old women, who had rushed in crying and calling out for me to "*do something*," as the convulsions were coming faster and faster. I tried to explain my situation, but the murmur of discontent went through the house and out of it, up and down the street. Time went on—no messenger arrived. I thought the patient would die myself, so made up my mind to let her do so easily. I gave her a grain of morphia hypodermically, but with the happy result of stopping the convulsions at once, and long before I got my chlo-

roform, etc., she had not one more. It did not produce sleep or any bad symptoms, and after remaining four or five hours I left, first giving her another injection in the same way of a $\frac{1}{4}$ gr. The patient next day was as well as could be expected, except a swollen tongue where she had bitten it.

Since that day morphia, by hypodermic injections, has been my treatment, and I find the patient rarely has a second convulsion. I never heard of this treatment before, and therefore believed I was alone in its use till July, 1880, when I saw an article written by Dr. C. C. P. Clark, of Oswego, N.Y., in *The American Journal of Obstetrics*. In his article, after bleeding, he recommends hypodermic injections of *two grains* of morphia. He read his paper before the medical Society of Syracuse, and he says, "The magnitude of the dose of morphia that I recommended raised high a universal outcry of condemnation among the gentlemen present. Not till I heard this had it entered my thoughts that what I had proposed was so very extreme—so easy had I felt on the pedestal of my actual experience."

Now, though I never use the extreme dose of Dr. Clark (2 grs.), I can endorse his treatment of large doses of morphia, and as I have used nearly every treatment I have seen recommended, except pilocarpine, I can safely say I have seen none equal and so sure as the treatment I have mentioned.

Yours truly,

F. WARREN.

Brooklin, Ont., Jan. 13, 1886.

To the Editor of the CANADA LANCET.

SIR,—On page 111 you copy a direction for making Koumiss. While milk so treated may answer some purposes as a substitute for "Koumiss," it is in no sense of the word Koumiss as used so extensively in Russia, England or the United States.

Koumiss is not only a fermented but a digested milk, and in properly prepared Koumiss the casein is so finely subdivided that it is impossible of coagulation. Before I knew of the proper formula for making "Koumiss" as it is now made at the "Oaklands Jersey Dairy," I followed similar directions to those given on page 111 of the LANCET, but it only resulted in a partially *fermented* milk, not a *fermented* and *digested* milk. Under the

direction as copied by you it is unfit for use in a few days, the casein gathers in masses, and in a short time will become putrified; whereas in properly prepared Koumiss, if it be kept in a cool place, it is fit for use two months after making. All the sugar is converted into alcohol and lactic acid, and the casein will not become lumpy. Again, water should never be added to the milk; if it is desired to have the Koumiss thinner, part of the casein should be abstracted. No foreign substance, such as glycerine, should be used, except in special cases.

In Russia, where Koumiss originated, no yeast is ever used in its preparation. If the casein gathers in lumps and refuses to disseminate when the bottle is shaken, the Koumiss has not been properly prepared, it is merely a partially fermented milk, the casein of which has not been predigested.

The great secret of the success of properly prepared Koumiss is that the casein, the most difficult part of the milk to digest, is already digested, and is ready for absorption by the blood. As Koumiss is but little known in this country, I write this in order that if any of your readers by attempting to make Koumiss under the direction copied by you, and the results are not satisfactory, "Koumiss" be not condemned; because such directions do not as a matter of fact produce a fermented and digested milk, or true "Koumiss." I know of at least 40 different formulas for making so-called Koumiss, each one based on yeast as a ferment and not one of these 40 will produce predigested casein. Where Koumiss has been longest used all attempts to make a satisfactory Koumiss in competition with that prepared under the formula used in making Oaklands Koumiss, has long since been abandoned as unsatisfactory.

VALANCEY E. FULLER.

Hamilton, Ont.

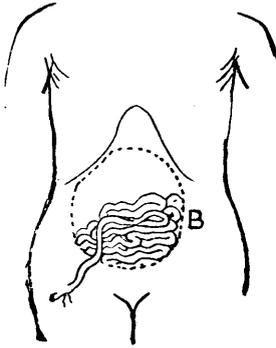
CASE OF EXOMPHALUS.

To the Editor of THE CANADA LANCET.

SIR,—I send you a sketch of child which presented at its birth the appearance described: Child was well formed in every other respect; the protusion or tumor was transparent in its lower part; the intestines could be easily seen; in size it was about equal to a child's head.

The circumference of the protusion at its junc-

ture with the skin was so great that it was useless to attempt the bringing of the parts together. The child grew nicely for first week, but dwindled gradually away during the following ten days and



Dotted lines indicate position of tumor, through which are seen the intestines B.

died. An absence of the skin to cover that portion which the protrusion occupied is the only peculiarity of the case, but as I never saw, or read, or heard of anything like it, I send you this sketch.

Yours, etc.,

J. S. SPRAGUE.

Stirling, Dec. 12th, 1885.

Reports of Societies.

MEDICO-CHIRURGICAL SOCIETY.

Montreal, 18th Dec. 1885.

Dr. Roddick in the chair.

After routine, Dr. Trenholme related two remarkable cases of ovariectomy in his practice. One case was operated upon 6 weeks ago, the tumor weighing 34 lbs. The temperature of the patient ran up to $101\frac{3}{8}$, 10 hours after the operation, but was normal the next evening, and remained so afterward, there was scarcely any subsequent suffering, hardly any tympanitis, and the patient fairly put on flesh before the end of the first week, she was convalescent on 18th day, and about the house constantly after this time. The second case 4 weeks ago, was even more remarkable, the tumor weighed 55 lbs. (parovarian), temperature 10 hours after the operation 100° , next morning it was normal, and together with the pulse remained normal afterward, there was not even the slightest tympanitis, and no subsequent suffering, save a slight back-ache, and the usual soreness

occasioned by the wound. In neither case was there the slightest sign of shock. The remarkable results obtained in these cases are due, Dr. T. believes—1st. to the smallness of the abdominal incision, in neither case was it more than 5 inches long—the intestines were not exposed to the air and in fact in the last case, not even seen. 2nd, to the mode of securing the pedicle. As in all his operations, Dr. T. employed No. 20 shoemaker's white thread and ligated the pedicle in small segments. Also, the high temperature of the room (about 95°) the atmosphere, being saturated with watery vapor, slightly impregnated with carbolic acid, was believed to have contributed to these favorable results.

Dr. A. L. Smith, then read an interesting paper on the A. C. E. mixture, which he considered the best anæsthetic for midwifery practice.

The A. C. E. mixture consists of two parts of chloroform, three parts of ether, and one part alcohol.

The greatest claim for this combination is its safety. The second is the small quantity required. The third is the ease with which the patient comes under its influence, there being no period of excitement. The fourth advantage is the pleasantness of its odor, not irritating the bronchial tubes as alcohol or ether alone does. And fifth, there is rarely if ever any vomiting after it.

He said that the reasons for the mixture of A. C. E. in the proportions of 1, 2, 3, being safer than any one of its components alone, were as follows: when inhaled in sufficient quantity, alcohol killed by the head, or by coma, chloroform killed by the heart, or by syncope, ether killed by the lungs.

8th January, 1886.

Dr. Roddick in the chair.

Dr. Trenholme shewed a composite ovarian tumor, removed from a lady (aged 21) last Tuesday, the tumor weighed 15 lbs, and was composed of numerous cells, containing a tenacious dark tarry fluid, which would not pass through the trocar. When breaking up the cells, the walls were so friable in various places that the contents of the cyst escaped into the abdominal cavity, the patient was placed on her side, and cyst with the fluid in the cavity were removed, the patient was then put on her back, pedicle ligated, in Dr. T.'s usual way, the abdominal cavity thoroughly washed out, sponged, rewashed and sponged again, and

the incision closed with 5 deep silver sutures. The usual toilet was made, avoiding the bandage (for which Dr. T. has a special aversion) and the patient placed in bed, with considerable apprehension as to the recovery of the patient. The patient made a remarkably good recovery and though the temperature ran up to 100° that night, yet at the end of 36 hours it was almost normal and pulse 80. 48 hours after the operation, I caught her reading a story, and her convalescence has gone on most satisfactorily up to the present time (5 days after operation).

In reply to Dr. Shepherd, Dr. T. stated that he never ligated the pedicle in mass, but in a number of ligatures, enclosing at the most, not more tissue than the size of a goose quill, using always No. 20 shoemaker's white thread.

Dr. R. MacDonnel than read a short paper on hemorrhage into the *pons varolii*.

In the discussion which followed, Dr. H. Howard stated that it was not yet known from what vessel the hemorrhage into the pons was derived. This point yet remains to be determined by some pathologist. Dr. MacDonnel also exhibited the bones of the thigh and leg of a microcephalic idiot. The femur was not longer than the little finger and of very light structure.

Dr. Alloway made some remarks, and shewed a sketch of a case of posterier laceration of the cervix uteri. Nothing new was elicited.

Dr. Blackadder read a paper upon the value of white lead paint in erysipelas in infants. In the discussion which followed, most speakers regarded the local treatment as secondary to constitutional treatment. Dr. A. L. Smith spoke of the value of quinine in gr. doses every three hours, as very useful.

Dr. Trenholme said that he had found elder berry (flowers) tea, thickened to the consistency of cream, the most pleasant and useful of local applications.

HURON MEDICAL ASSOCIATION.

The Huron Medical Association held its annual meeting in Seaforth on the 12th ult., and was largely attended. Dr. Taylor, of Goderich, the President, occupied the chair. Dr. Graham, of Brussels, exhibited the stomach of a man who had committed suicide by drinking carbolic acid. He

also read a paper giving an account of a child aged two years, the measurement of whose limbs were different. This did not, however, as yet interfere with the child walking. Dr. Campbell, of Seaforth, reported an instructive case of puerperal eclampsia, in which pilocarpine had been successfully used. He also presented interesting cases of compound fracture of the leg, progressive muscular atrophy, infantile paralysis, also a case of chronic pains following herpes zoster. Dr. Smith, of Seaforth, read an interesting account of three cases of naevus removed successfully with the thermo-cautery. He also presented a paper showing the excellent results which had been gained in three cases of subacute rheumatism, associated with anæmia, by the use of salicylate of iron. Dr. Young, of Londesboro', showed a case of caries of the lower portion of the femur. Dr. Mackidd, of Seaforth, presented notes of a case of tapping of the bladder above the pubes for incontinence of urine, occasioned by an enlarged prostate. He also presented a case of dissecting aneurism. Dr. Gunn, of Brucefield, presented a case of pleurisy with effusion, in which the aspirator had been used successfully three times; also a case of epulis for which an operation was recommended. Microscopic specimens, of the cholera bacillus and several varieties of abnormal urine were shown. The discussions following the different papers were most interesting, and instructive. The following officers were chosen for the ensuing year: *President*, Dr. Campbell, Seaforth; *Vice-President*, Dr. Young, Londesboro'; *Secretary*, Dr. Worthington, Clinton. It was decided to hold the meetings during the year every three months alternately, at Clinton and Seaforth.

HAMILTON MEDICAL AND SURGICAL SOCIETY.

The annual meeting of the above named society was held on the 5th ult., a large number of the members being present.

Dr. Stark was elected President; Dr. McCargow, Vice-President; and Dr. F. E. Woolverton, Sec.-Treas.

Dr. Shaw reported a case which occurred in his practice, of hæmorrhage from the bowels in an infant. The child was born on the 24th Dec. Labor was easy and natural; child cried vigorously;

visited the patient same evening. On the 26th—50 hours after birth—child passed blood from the anus in considerable quantity, and looked pale and feeble. Nursed on the 3rd and 4th day, but not since. There is a history of phthisis in the family. The child died. The writer quoted from West a number of cases which occurred in early childhood, and gave a synopsis of the cause and treatment recommended. Out of 23 cases 12 recovered. Dr. MacKelcan saw two cases. Family history good, in both; one had a number of discharges and lived only 12 hours; the second case recovered. Dr. Malloch saw a case in Jan., 1880, which terminated fatally.

F. E. WOOLVERTON, Sec.

Selected Articles.

THE PHYSICIAN'S DUTY AS TO PATENTED ARTICLES.

A recent number of the *American Druggist* contains an interesting editorial upon this ethical question. After taking the ground that all those, whether physicians or pharmacists, "whose profession has a direct bearing upon the relief of suffering humanity, should be considered as having renounced the moral right to secure or control patents, on any articles that are primarily used for remedial purposes;" and admitting that a relatively smaller number of pharmacists feel their obligations in this regard than of physicians, the article goes on to consider the important point of the proper relation of those who may use patented articles to those who own the patents. The writer remarks: It is the prerogative of the physician to employ for the cure of disease any method of treatment which he conscientiously believes to be conducive to the benefit of his patient. But it is not only his prerogative, it is even his *duty* to do so, if he knows that favorable results may be expected from the use of some remedy or appliance, even though they be claimed by a particular sect as quasi-proprietary, or else be guarded by a patent. If the physician has the choice between a non-patented and a patented article, he will quite naturally prefer the former, provided it is equally serviceable. But if the latter answers the purpose better, he is perfectly justified in recommending and employing it. The onus of immorality attaching to such a patent belongs to the patentee exclusively, but *not* to the person who uses it or is compelled to use it in want of something equally good and unpatented.

In following this argument, it should always be remembered that a patent implies not merely a

monopoly, but at the same time removes all secrecy from the invention. Every one, therefore, who uses a patented article or invention has full opportunity of examining its details and its adaptability to any special case. The reverse is the case with so-called proprietary medicines, the composition of which is kept secret, and which are copyrighted by title. It is hard to understand how any physician can persuade his conscience that he is justified in using such preparations—the composition of which is at the discretion and mercy of men seeking to make money—in the treatment of the sick.

From the above, it follows that a physician is perfectly justified in employing an article patented by others, provided he considers it of special benefit to his patient. On the other hand, he is not justified in using proprietary "medicines," of unknown composition, the ingredients of which may at any time be altered by the maker without his knowledge. Incidentally, also, it follows that the whole business of manufacturing, selling, or using proprietary "medicines" is unjustifiable, wrong in principle, and indefensible as long as there is any secrecy maintained about their composition.

It is probably known to all who read this that *no product of nature*, whether existing as such ready formed in any of the three natural kingdoms, or artificially obtainable as a definite compound of constant composition and characteristic properties (such as many artificially prepared organic chemicals), is capable of being patented. Only the special *processes* by which such products are reached can be protected by a patent. If another inventor discovers an entirely different process leading to the same result, he is as much entitled to a patent as his predecessor. There are numerous indispensable articles used in medicine which have been at times, and are even now, partly hedged around by patents, but in almost all of these cases the patent does not amount to a monopoly, inasmuch as there are channels left open by which the same article may be procured without an embargo. Take the case of salicylic acid. This may be obtained perfectly pure from oil of wintergreen, and is in fact manufactured from this source for the market. There is no patent on this. But the process discovered by Prof. Kolbe, which enabled the acid to be made at a low price on a very large scale, is protected by a patent. The patented acid is much cheaper and equally pure as the natural. Would any one plead in favor of using the more expensive natural acid, merely because the artificial is patented? Many other such cases might be cited, but the argument in favor of the patented article would remain the same. In like manner it is shown that the new antipyretic, antipyrine, is made under a process that is patented. Its chemical composition and mode of preparation have been announced to the public through the patent publications. It therefore is proper for the physician

to make use of the unequalled antipyretic powers of the drug. Meantime, should another investigator hit upon a different method of preparation, the latter could have the choice either of throwing open the right of manufacture to the world at large, or of protecting his new process, likewise, with a patent.—*Boston Medical Journal.*

THE CURABILITY OF CONSUMPTION.

In an article on pulmonary phthisis in the *Medical Record*, of the 21st ult., Dr. J. Milner Fothergill, of London, makes the somewhat startling assertion, based on an experience of ten years in a chest-hospital, that the disease is far from being necessarily fatal. Under fairly favorable circumstances, he holds, a rally may be made in the large bulk of cases, which may lead to recovery. This is glad tidings, and a detail of the means through which this consummation may be reached, will be eagerly read. It is customary in acquainting the patient of the fact that he has consumption, to do so in a tone and manner calculated to shut out from him the faintest ray of hope. Treatment, moreover, is usually undertaken with a view to euthanasia, rather than with a hope to snatch the brand from the burning. If, therefore, Dr. Fothergill has put it in our power to tell the consumptive that the odds are in favor of his outliving his disease, he will prove to have been one of the greatest of the benefactors of this and succeeding ages. He does not propose anything particularly new in the way of treatment, nor does he vaunt any specific. His common sense application of means already familiar will, however, commend themselves to the attention of the profession.

The line of attack advised in incipient cases is to improve the general condition, in which improvement the new growth has its share. To check the body expenditure and to increase the body income are our aims. All out-goings must be stopped. This is the first step. If a woman, attend to any leucorrhœa at once. Many a good line of attack has failed, many a woman sunk into her grave who might have been rescued, if only that out-going had been attended to. If the catamenial loss be heavy, put an arresting finger upon it by some ergot, sulphuric acid, and sulphate of magnesia, commencing with this two days before the appearance of the flux, and continuing it during the flow, reverting to the usual treatment on its completion. Then, is there diarrhœa? If so, attend to it. Milk and farinaceous matters are indicated (no meat-broths, no beef-tea—"giving the patient a stone when he asks for bread"—unless some farina be added). Then for medicine some astringent preparation of iron may be given in the day, and a pill of sulphate of copper (gr.

$\frac{1}{4}$ — $\frac{1}{2}$) with opium (gr. 1— $1\frac{1}{2}$) at bed-time. If there be both diarrhœa and night-sweats this pill will often "kill two birds with one stone."

If there be night-sweats, arrest them at once, or as soon as may be. Sweat is an excretion, and is highly charged with blood-salts. Consequently, profuse sweats are most exhausting. Check them, and the appetite returns, and between the two the patient does well. Prof. Sidney Ringer, F. R. S., has laid the phthisical world under a deep debt of gratitude by pointing out the potency of belladonna in the matter of hydrosis. The best preparation is atropine, not only because it is tasteless, but because we know exactly what we are doing when using it. But to secure its good effects it must be pushed. Its effect upon the pupil is nothing. Indeed, in a very extensive use of belladonna the pupil has rarely been affected. (The effect upon the pupil is a bug-bear which ought to be buried). Dry throat and dim eye-sight are discomforts, but unless severe they need not disturb the treatment. There is a wide gulf between these and any real danger. The very lowest dose is $\frac{1}{75}$ of a grain. If this does not achieve the desired end, then $\frac{1}{60}$. If that is insufficient, then $\frac{1}{45}$. If that fails—which it rarely does—one must begin to look seriously at the case. When this dose is reached, and yet the sweats continue, Dr. F. adopts the plan of an old New York quack, of which Lewis Sayre told him, viz., to sponge the body over with hot vinegar ($\frac{1}{2}$ pint) with a teaspoonful of cayenne in it. This is not at all disagreeable, and is effective. If the combined measures fail, the patient's case is hopeless, but his physician's conscience is clear.

Perhaps the patient's rest is broken by cough. Dr. F. recommends the following combination in such cases: Morphine, (gr. $\frac{1}{3}$), atropine (gr. $\frac{1}{300}$) with pil. galban. co. or pil. al. et myrrh., as the case may require. This is a pill which has done him yeoman service in his warfare with phthisis. It has found its way into the Brompton Hospital, and more recently into Squire's *Companion to the Pharmacopœia*. It will, he thinks, find its way before long into every consumption hospital in the world. This action of carbonic acid upon the sweat-glands has led Dr. Lauder Brunton to advocate strychnine (a potent stimulant to the respiratory centre) in the night-sweats of phthisis. No doubt it is useful. Dr. F.'s practice is to give it in the day-medicine. His favorite mixture at the hospital consists of liquor strychnine (4 minims), acid. phosph. dil. (15 minims), tincture capsici (4 minims), in infus. gent. (3 dr.), *ter in die*. This forms a capital tonic. Some quinine or sulphate of magnesia (or soda) may be added as required. One of the rules which have formed themselves in his mind is to give acids when the tongue is clean or coated. When the tongue is bare, raw, or irritable, then alkalines are indicated

as am. carb. (gr. 2 to 5), tinct. nuc. vom. (10 minims) inf. gent. (1 ounce), *ter in die*. On such a line of treatment the patient usually improves. The night-sweats cease, the appetite returns, the cachectic look departs, and the patient feels much better. The improvement is maintained, and soon iron and arsenic can be added to the strychnine, and cod-liver oil to the dietary (but cod-liver oil is not the best form of fat, nor yet the most palatable, though it is the most digestible. Some forms of fat in an emulsionized state are now on the market which possess many advantages over cod-liver oil). Iron is a good hæmatinic. Arsenic is an alterative and a tonic greatly believed in by many good observers in lung-consolidation. If the patient can be induced to take fat in any form the healthy tissues can be built up. Very commonly the affected area is found to shrink, and air to pass into it. In a few months, in many cases, it is scarcely possible to detect any change in the lung. The threatened danger has passed away!

All along in the treatment advocated the matter of improving the condition has never been lost sight of for a moment. If the patient can get away to a dry soil and a bracing locality, all the better for him or her. Another common patient is the person who has chronic phthisis with cavities. Such patient is always spare and badly nourished at the best; and when any intercurrent ailment still further lowers the general condition the lung trouble is aggravated. (And one matter has forced itself upon his attention, viz., that wherever there is old lung-consolidation any disturbance in the liver sets up irritation in this consolidated patch with resultant cough. And this cough, which is intractable to ordinary cough-medicines, is relieved by acting upon the liver.) The appetite has fallen off and the nutrition is impaired; and then the special danger in phthisis is set up. Very often the tongue is raw, or beefsteaky, or patchy. Here attention to the *primæ viæ* (as our grandfathers phrased it), is imperative. The patient must be sent to bed, to reduce the body expenditure to the minimum. The medicine must be bismuth, with alkalis; and the food, milk with malt extract, or a malt preparation with Mellin's food, in small quantities at a time, oft-repeated. No solid particle in the stomach to vex and irritate the sensitive (because ill-fed) mucous membrane. Even an alkali—like carbonate of magnesia—may be required to neutralize acidity and prevent too firm curdling of the milk; as much as will lie on a sixpence to the half-pint of milk is usually sufficient. Having got the assimilating processes into good working order, the tonic may be given. "The more haste the less speed" is especially true of the treatment of phthisis; and the desire to push on with tonics and good food sadly too often defeats its own end.

Sometimes a masterly inactivity is the wisest practice. A clear head and a firm will are often required to curb the desire of the patient (and still more the patient's friends) to be getting on. Back-cast after back-cast teach a painful lesson to the medical man, and involve the patient in acute danger. If the pressure put on a young medical attendant is becoming more than he can bear, let him call in an older head to help.

The chief thing to avoid is morphia tinctures for the cough. An opiate to procure sleep may be essential and unavoidable; but sedatives in the day are dangerous. They give relief from the cough but too commonly they give permanent relief by death. Opium lays its palsyng hand upon the assimilative organs, and destroys the appetite. Its evil effects seem most distinctly felt by the liver. When an opiate is indicated at night it should be combined with ipecac to antagonize its effect upon the liver, and with aloe and myrrh pill to correct its action upon the bowels. Opium strikes directly at the assimilation which is the cardinal matter in the treatment of phthisis. The patient most certain to die, the case least amenable to any treatment, is that one whose wasting progresses steadily, and where the lungs are only affected quite late on—indeed, a brief while before the final change sets in. As to other means of allaying the cough than opiates, inhalations of steam are often serviceable. Friar's balsam, iodine, carbolic acid, terepene, eucalyptus, all are good as additions to steam. Where there is a cavity with ragged walls smelling offensively, a respirator with cotton wool charged with carbolic acid is indicated.

Then, as to the other means of feeding the patient, there are inunctions of oil, often of service, especially with young subjects. Nutritious enemata have only lately suggested themselves; but in one case of a medical man steadily wasting, an enema of cod-liver oil (emulsionized by a drop of bile) and milk in equal quantities is being tried. Such enema night and morning, while in the recumbent posture, would be readily retained. When the temperature mounts up, and especially when the skin is also moist (the usual state in hectic fever connected with phthisis), Dr. F.'s plan is to give quinine (gr. 2 to 5) with tincture of digitalis (10 to 15 minims) and dilute phosphoric acid (15 minims,) thrice daily. The effect is very satisfactory usually. Where a severe raking cough is present, shaking the poor sufferer terribly, it may be necessary to give opiates; but, in the author's experience, such cough is very rarely found with pulmonary phthisis.

The treatment of hæmoptysis is quiet; no movement, no talking. When it arises from the bursting of an aneurismal sac in a cavity, or from an ulcerating process eating into a blood-vessel and opening a communication between the vessel and

an open air-tube, syncope alone is likely to arrest it. In congestion of the lung it is often an excellent form of local bleeding. Men of old bled for its relief; now free purgation with a mineral salts is in vogue. For small recurrent hæmoptysis the best treatment is to keep the bowels open. Ice, ergot, and dilute sulphuric acid may also be tried; probably they will do no harm. It is a bad plan to feed up a case of recurrent hemorrhage; it only fills the vessels rapidly, to end in more bleeding. Finally, the management of phthisis pulmonalis, whether the less grave or the more serious conditions, is a good test of the knowledge, skill and tact of the practitioner, who must, like a competent soldier, be able alike to plan a campaign or execute a sudden change of front in an emergency. That is, he must be able to lay down a persisting plan of treatment, and promptly change his plan to meet some intercurrent condition, as hæmoptysis or acute gastric disturbance.—*Med. Age.*

PLACENTA PREVIA.

Dr. E. G. Edwards, London: In conclusion, I recommended, when head presents, to separate the placenta from the os uteri all around as far as you can reach, if labor has commenced. Then, if possible, detach the placenta on one side completely, so as to allow you to reach the membranes and rupture, to give ergot by the mouth or ergotin by hypodermic injections, and use a little pressure over uterus externally. In most cases as the water discharges the head descends, thereby plugging, by pressure on the placenta, so thoroughly as to check the hemorrhage. I am in the habit of emptying the bladder by a catheter and having forceps on hand, and a roller bandage around the abdomen in order to give external support if required, and holding a plug against the os with my hand if the flooding is severe. I had no occasion to use forceps in any case of placenta previa so far.

Respecting turning, I should, in cross birth, carefully try to turn by manipulation by finger in the vagina and external assistance.

I might here state that I have thus succeeded in cross births, lowering the shoulders, raising the hips and so bringing the head, feet, or breech down. I see no reason why we should not try, especially in cross births, in cases of placenta previa.

My advice is never to introduce the hand through the placenta and thereby gain entrance into the uterus for the purpose of turning, for thereby violence is sure to follow. In fact I am not an advocate for turning by introducing the hand into the uterus under any circumstances, unless all other means fail; as I consider that procedure very injurious to the mother and very apt to be followed by shock or by inflammatory

action of some kind. Possibly in some cases, no other mode is practicable, and it must then be had recourse to. Respecting plugging, I have always succeeding in arresting hemorrhage by this means, giving thereby safety and time. It likewise stimulates the uterus, and the os is found more dilated. I would not give ergot unless I knew the bladder was empty, the parts proportionable, the os dilatable, and instruments at hand. Flooding nearly always relaxes the os. My rule in giving ergot is first to make sure of head, feet or breech presentation, with some pain, and in cases in which I have decided to deliver at once. Ergot would only increase the mischief in placenta previa, unless it was given to assist your efforts at the time of expulsion of the child.

Respecting hot drinks, I am aware that cool or cold drinks are generally recommended in cases of flooding. I do not, however, believe in giving cold drinks in shock or great depression. Opium, in small doses, as a stimulant, I hold very valuable in floodings, and large doses in the cases requiring the plug, to give rest and sleep when time for rallying is necessary.

I am of the opinion, if there has been great loss of blood, that the sooner you deliver the better, provided the hemorrhage continues, and there is pain, and the patient not too weak; but you should not introduce the hand into the uterus if you can possibly avoid doing so, always giving an anæsthetic when you do. I put emphasis on this latter— anæsthetic (ether or chloroform). My practice and advice is, in all severe midwifery operations, to give one or the other. My reasons for thus advising are:

1st. It is humane and prevents unnecessary suffering.

2d. By its use depression and shock are lessened, if not prevented altogether.

Allow me here to say that I, at any rate, have not, neither do I intend adhering to the old traditional theories and procedures respecting the use of anæsthetics in midwifery.

In conclusion, following up turning in cases of placenta previa, the only argument I can conceive justifying it when the head presents, is the speedy delivery of the child in order to save its life, but how often will we be disappointed in this, as it is well known where some floodings have taken place the child is usually born dead. To compensate for that, by plugging and waiting, the shock of introducing the hand into the uterus will be avoided and the maternal parts not injured. I believe the time is not far distant when turning, by introducing the hand into the uterus, will be the exception, not the rule, as at present.

I have adopted a procedure of my own, viz., when called to a case of placenta previa near the end of pregnancy, when flooding is in progress, with the pains continuing and the patient not too

weak or exhausted, to separate as much of the placenta as I can on one side, detaching a portion of it completely from one side, bringing it down into the vagina; and if the os is not well dilated, and the pain continuing, to squeeze the detached portion between my fingers, or to press it firmly against the opposite side until the os dilates; then I give ergot and rupture the membranes, still pressing the detached portion of the placenta until the head descends sufficiently to check the hemorrhage. —*Med. Age.*

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TREATMENT OF ANGINA PECTORIS.

It is a well known fact that all remedies which have hitherto been exhibited against the paroxysmal affections termed angina pectoris have been, generally speaking, failures, and that nearly all patients subject to these attacks have to succumb early to the progress of the disease. Even the latest approved treatment of angina with nitrite of amyl, nitrite of sodium, and nitroglycerine, as discussed some months ago in the *Gazette*, will but rarely, and under certain conditions only, cure or alleviate the affection. Huchard, the famous clinician of the Bichat Hospital of Paris, has recently published a valuable essay (*Journal de Médecine*, No. 3, 1885) which throws an entirely new light upon the pathological agents of the affection and offers important therapeutic suggestions.

A large number of autopsies (thirty five) convinced the author that the ancient pathological views held respecting angina pectoris, as taught as early as 1799 by Jemier and Parry, were fully correct, viz., that the anginal paroxysm is the result not of a neuropathic condition but of an arterial affection. In every instance where post-mortem examinations were made Huchard found ossification, and occasionally even obliteration, of the coronary arteries, conditions which naturally lead to cardiac ischæmia. Again, numerous cases were observed by Huchard and other clinicians in which a well-established cardiac neuritis was wholly disconnected from any anginal symptoms. These observations showed the uselessness of resorting in angina pectoris to remedies which simply act upon the nervous system. The bromides, Huchard says, have never cured a case of angina pectoris save the so-called false anginas, which, among other clinical characteristics, have the peculiarity of being cured by the suppression of the numerous causes productive of them and of frequently disappearing spontaneously without any medication. The cases of genuine angina pectoris belong to the most serious of pathological conditions known, and almost invariably terminate fatally. Hence in any clinical statistics concerning the curability of angina the genuine and false cases are to be strictly separated.

Huchard by his novel treatment, based upon his

undoubtedly correct pathological views, records a greater number of cures of true angina than any other clinician has ever obtained previously (twenty cures). His treatment consists principally in the exhibition of iodides, which, as is well known, are alone able to cure the affections of the arterial system, even those of a non-syphilitic nature. The iodide of potassium or, better, of sodium, given without intermission for months, and even years, in a daily dose of 1 to 2 grammes (15 to 30 grs.), will with certainty at first diminish the frequency and intensity of the anginal proxsyms, and finally bring about their definite and complete disappearance. The curative effects of the iodides of sodium and potassium in aneurism of the aorta and various other arterial affections show the powerful influence of the iodide treatment on pathological conditions of the vascular apparatus.

In aortitis, both of the acute and chronic type, we find most frequently dilation of the aorta and elevation of the subclavian artery. Under the influence of the iodide treatment both symptoms can be relieved promptly and permanently. The most refractory cases in regard to this treatment are those in which the aortitis and the arteriosclerosis approach their termination, for the iodides, however powerful they are cannot suppress an arterial atheroma. In general, it can be said with propriety that "the iodides are the digitalis of the arteries." Huchard's routine formula is,—

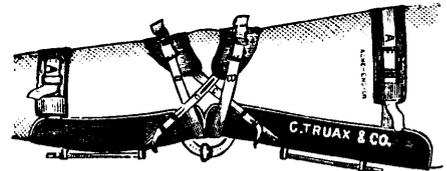
R Sodii iodidi, gr. cl ;
 Aquæ destil., f.ʒl.
 Fiat sol.

S.—Two to four teaspoonfuls daily, to be taken in a cup of tea.—*Therap. Gazette.*

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A NEW PATELLA SPLINT.

Dr. L. R. Markley of Juniata, Neb., sends us the follows description and cut of and apparatus designed by him :

"I desire to call the attention of the profession to a splint designed principally for the treatment of transverse fracture of the patella, but which I believe will also be found useful in cases of frac-



ture of the limb at or near the knee joint, and in many cases of dislocation. A few years ago, while yet a student, I conceived the idea of making a splint as here illustrated, and as I have had made for me by Messrs. Charles Truax and Co., 81 Randolph St., Chicago. This splint consists of two

well padded iron troughs shaped to fit the limb above and below the knee. These troughs are connected with an adjustable hinge having a circle stop which will permit the splint being applied and firmly held either straight or flexed at any desirable angle. It can thus be used straight in treating fractures of the patella, or bent to meet the requirements when used in other cases. The two screws shown underneath the brace can be turned by a removable thumb-key and are attached to sliding heads running in slots cut in the troughs. To these heads are attached the straps C C which places the amount of traction on the patella completely under the control of the operator. Underneath these straps are placed two well fitting pads which hold the patella in its proper position. The bands B B are made use of to prevent the pads from slipping too far over the patella. The bands A A hold the extremities of the splint firmly to the limb.

In applying the splint the bands A A and B B should be first adjusted; then after tightening the straps C C (using the buckles), traction can be made with the thumb-screws until the edges of the fractured bone are brought together. If, however, the ligamentum patellæ is too strong to be overcome by this measure and thus prevents a complete reduction of the fracture, I believe it would be safe to perform at least partial tenotomy of the ligament and thus render its reduction by this method possible. Whether or not the pressure of the pads will cause sloughing in some cases I have not been able to determine, for in a country practice cases of this kind are seldom met with.

I have had several surgeons examine the splint and they all believe the principle to be a good one.

I have not had the opportunity to make a practical test of the splint since I had it made, and in presenting it to the profession I hope that some one who may deem it worthy of a trial, and having an opportunity of trying it, if not for a fracture of the patella, some other accident at or in close proximity to the knee, will report the result."

TREATMENT OF PALMAR GANGLION.—The *Lancet* June 27, 1885, lays down the following rules for treatment of palmar ganglion, as in accord with, the best and most recent views of surgical authorities on the subject. The first point of importance is to attempt the cure of the cases as early as possible. No good can come of delay, which merely leads to greater distension of the cyst, and is especially to be deprecated as endangering the adjoining tendons, which become stretched, and even in some cases severed, by the pressure to which they are subjected. Second, the free evacuation of the cyst and the removal of all the "melon-seed bodies" it contains, whether these be free in its interior or adherent to its walls. For this purpose an incision about an inch and a half long, not a

puncture, should be made in the most prominent part of the swelling, above the annular ligament, avoiding, of course, the radial vessels and the tendons, which can be felt through the skin. Pressure should be made in the palm to force out the fluid and as many of the loose bodies as will thus escape. Then a sharp spoon should be introduced, and the whole cavity scraped, to detach any "bodies" which may be still fixed to the synovial membrane. The "spoon" is much the best means of doing this. Some have trusted to injecting a fresh stream of fluid into the cyst, but this will not remove "bodies" which are still firmly adherent to the cyst-wall.

Volkman passes a large drainage-tube through the cyst, and draws it sharply to and fro, and trusts to that to detach any adherent "bodies;" this is, however, an uncertain method, and if the cyst be old and large, with pouches extending from the main cavity, they escape the friction of the tube altogether. Having thus carefully removed all the contents of the cyst, whether solid or fluid, a solution of chloride of zinc, 40 grains to 1 ounce, should be applied to the whole interior of the sac, the purpose of this being so to modify the nutrition of its lining as to prevent any recurrence of the dropsy. A solution of iodine has been used for the same purpose, and some surgeons may be inclined to use iodoform instead. The most important steps in the treatment are those to be taken to secure healing of the wound without suppuration, at any rate without septic suppuration. As a preparatory step the parts must be thoroughly cleansed before the incision is made, and the operation should be conducted under an antiseptic spray or irrigation, and some efficient antiseptic dressing should be finally applied. A drainage-tube should be introduced into the wound and passed down beneath the anterior annular ligament, and only removed when the discharge through it is reduced to a minimum.

Dr. Weiss shows that if pressure be carefully applied over the palmar part of the cyst, all retention of fluid can be carefully obviated. The hand should be kept fixed on some kind of splint applied to the extensor aspect, until the wound inflicted is healed. As soon as that is accomplished, the fingers should be liberated and the patient be encouraged to move them. The results of this treatment are entirely different from those formerly met with. When the antiseptic precautions are carefully carried out, there is no danger whatever of blood-poisoning or of profuse local suppuration, and the final result is the restoration of a thoroughly useful hand. The tendons are not bound down by cicatricial bands, and after a time it may be impossible to find any trace of the previous mischief beyond a linear scar in the forearm. Weiss considers that the process of cure of the synovial cyst is analogous to that obtained in a

hydrocele by injection, or in dropsy of a joint treated by injection of iodine. At present no case of a recurrence of the ganglion after a septic incision and drainage has been reported.

IMPROVEMENTS IN EXCISION OF THE KNEE-JOINT, AND LIGATURE OF LARGE ARTERIES.—Mr. Edward Thompson says on this subject: There are some points in the treatment of excision of the knee-joint, both at the time of operation and subsequently, which seem to me to deserve particular attention. I have had a good many of these cases under treatment from time to time in the Tyrone Infirmary; and the suggestion I have now to make, and which I desire shortly to detail, are the outcome of my experience.

In the first place, I always make the first incision nearly straight across the limb, and as small in extent as possible; with one sweep of the knife the ligamentum patellæ is cut through, and the joint opened. The upper end of the ligament is then seized and dissected off the bone, and the patella removed. The subsequent steps of the operation require no comment. When the bleeding has ceased, the cut surfaces of bone are placed in close apposition, and the divided ends of the ligamentum patellæ are strongly stitched together with carbolic silk; the skin-flaps are brought together in the usual manner, and the wound closed, no drainage tube being inserted. The limb is at once put up in plaster-of-Paris, with a back splint of strong hoop-iron; another strong piece of iron is bent over the situation of the wound, so as to allow the application of the proper dressings; two side-splints of hoop-iron, about eighteen inches long, and slightly hollowed over the wound are placed lengthways, across the site of the joint, and over the plaster-of-Paris, the whole being firmly secured by a bandage. A completely rigid and comfortable bed is thus secured for the injured limb. The upper and lower portions of the limb are padded with French wadding, and, close to the wound, with carbolic tow. If there be any discharge from the wound it will penetrate the tow, which can be readily removed and replaced without disturbing the limb. I have heard a great many discussions, and read a great many elaborate articles, on the proper method of treating these cases; but, as yet, I have seen no apparatus which is so easy of application or so reliable as the plaster case I have attempted to describe, and which is coming into very general use.

The chief points I wish to emphasize are—1, the small extent of the primary wound really necessary; 2, the preservation of the ligamentum patellæ, not by its non-division, but by the divided ends being stitched together; 3, the enormous anterior support afforded by the preservation of the ligament, and the lessened tendency to displacement; 4, the increased power given to the limb by

preserving almost intact the insertion of the powerful crureal muscle; 5, that stitching the patellar ligament seems quite as efficacious as the recommendation by some authors of its non-division; and that, while effecting subsequently the same purpose, it in no way hinders, or renders more difficult, excision of the joint.

In all my recent cases of amputation of the thigh, I have tied the femoral artery with a strong carbolic silk ligature, and cut off both ends short. The wound has healed, and remained healed, in every case. Thus a troublesome cause of irritation—one end of the ligature being left hanging from the flap—and a very great impediment to the healing of the flap-wound by first intention, has been effectually got rid of.—*British Medical Journal*, Nov. 7, 1885.

DISEASES OF THE PLACENTA AND CORD DUE TO SYPHILIS.—The following are the conclusions of Dr. Saxinger of Tübingen, concerning this affection:

1. There exists a placental syphilis, which, in a fair proportion of cases, is recognizable on microscopic examination.

2. Placental syphilis generally accompanies foetal syphilis. It is also found in maternal syphilis with a healthy child.

3. The placenta may be diseased in an isolated lobe and throughout its density, or solely in its foetal portion, or its maternal portion.

a. If the mother has been infected by the fecundating coitus, with the foetal syphilis, the placenta is found to be more or less diseased throughout. Ordinarily, the umbilical vessels themselves are diseased.

b. If the mother is not infected, generally, besides the foetal syphilis, only the foetal placenta and the cord are diseased. Nevertheless, the morbid process may extend to the maternal placenta, and infect the mother by intra-uterine repercussion.

c. If the mother has been infected some little time before conception, if the mother has been fecundated by a healthy man before the outbreak of general symptoms, and if she has undergone treatment during pregnancy, a healthy child may be born to her. Here the maternal portion of the placenta is generally the only one diseased.

d. If the mother has been infected some considerable time before the fecundating coitus, ordinarily it is the placenta alone which is diseased. Under the influence of the progress of the morbid process, the foetal placenta and the whole of the placenta may be involved in turn, and the fetus participate in the infection, if indeed, from the disturbance of the circulation, it is not destroyed.

e. If the mother is fecundated by a healthy man, and if she is not infected until later, in spite of the immunity of the foetus, the placenta is al-

way diseased, however slightly. When the mother is syphilitic, the placenta does not escape, unless the mother be infected at a period very near to her time of delivery.

4. It is not proved positively that a woman can be infected by the passage of a syphilitic child through the genital organs, nor that a child can be infected during delivery.

5. Experience shows that children conceived during the first years of acquired syphilis, or badly treated syphilis of the parents, die during intra-uterine life, or are born non-viable. A mercurial treatment, which is well directed, may interrupt this transmission at all periods, or maintain a condition that is latent for years. If syphilis remains so latent in an organ, it is possible, after appropriate mercurial treatment, to see healthy children born, and later syphilitic children. —*Archives de Tocologie*, June, 1885.

LEAD POISONING AMONG SEWING MEN AND WOMEN. — Dr. Arthur V. Meigs, of Philadelphia, Physician to the Pennsylvania Hospital, has a note under the form of "a clinical lecture" on this subject in the *Medical News* (November 21st, 1885), with the title of "An Unusual Cause of Lead Poisoning," which should attract attention. As he entered the waiting room of the ward, he noticed a man seated upon a bench, looking very pale, and with an expression of great pain upon his face. He said he had violent pain in the abdomen. As he protruded his tongue for inspection, his breath had a heavy disagreeable odor. He had had no passage from his bowels for five days, and had been constipated for some time past. There was also upon both the upper and lower gums, the characteristic blue discoloration of lead poisoning. The man said he was a tailor, and had not done any other sort of work for a long time. Nothing could be learned tending to show that his drinking water was in any way contaminated, and he strenuously denied using any leaden implement or handling the metal in any shape. Later, the Doctor was told that Dr. H. C. Wood used to relate in his lectures at the University of Pennsylvania, that he had attended sewing women suffering with lead poisoning contracted from biting thread, which it was found was weighed with sugar of lead. Upon asking at a large tailoring establishment in Philadelphia, Dr. Meigs was told that much of the sewing silk used now-a-days is treated with sugar of lead to give it the desired weight; and then the Resident Physician, Dr. Penrose found in the *Half-Yearly Abstract* for 1866 (from July to December), an article by M. Chevalier, giving an account of how thread was treated with lead, and how women using it suffered from lead poisoning. The patient under consideration undoubtedly had the disease from the use of thread which had been treated with sugar of lead.

Dr. Meigs finished his lecture by advising the use of morphine to relieve pain; then Epsom salts to relieve constipation; and then iodide of potassium to eliminate the poison from the system.

This record has an important suggestive bearing in general practice. It is not altogether improbable that some of the cases of constipation and agonizing abdominal pains met with in sewing women and tailors are due to just such a cause. The *colica pictonum* is sufficient to awaken the suggestion of lead poisoning in such persons, although there be no blue line along the gums, wrist drop, etc. It is a very common habit for sewing persons to bite off the threads they use and keep portions of them in their mouth to chew on as a quid. Family physicians in their talks to families about household hygiene should keep their patients warned about such a possible result of improperly using threads; and in doubtful cases of persistent constipation, with abdominal pain, resembling *colica pictonum*, it would be well to resort at once to iodide of potassium, along with remedies to relieve pain and constipation. We are satisfied that in our professional rounds we have seen cases that would have been more speedily relieved by such measures than by the vacation plan of treatment which we have advised, under the impression that the trouble was due to sedentary habits, leaning forward in cramped positions, etc.—*Virginia Med. Monthly*.

FRACTURE NEAR A JOINT.—Dr. Coskeny contributes an article in which he shows that the signs of fracture ordinarily laid down in the books, namely: crepitus, deformity, and mobility are practically useless when the bone is broken near a joint. For these he proposes to substitute the signs: fixed pain, the site and quantity of hemorrhage, and perfect helplessness of the limb. He says:

"We will take up and describe each of these signs. It often happens, as for instance in fractures of the fibula alone, that we can observe no *deformity*, *crepitus*, or *mobility*, but, if we follow the line of the fibula up, at one certain point, the tip of the finger elicits pain. If this is always complained of whenever pressure is made upon this point, I think the diagnosis is plain. The pain is evidently due to the soft parts being irritated by the sharp edges of the fractured surfaces.

"The second of these signs, the *site* and *quantity* of the hemorrhage should be considered thus: my patients fell striking upon the *outer* side of the limbs, and ecchymoses slowly made their appearance on the *inner* side, and then in considerable quantity. Had the bleeding been the result of contusion alone, it not only would have appeared sooner, but at the point injured. As it was from the small and noncontractile vessels of the bone, the bleeding was longer in progress than it would

have been in the soft parts, where very probably a larger vessel would have been ruptured. Again, during this slow bleeding, the blood had time to gravitate to a dependent position, or direction of easiest escape. But in my own opinion, the absolute helplessness of that portion of the limb that contains the broken bone is probably the most important of these signs. The fact that a patient has not made a step after the accident, or raised his hand above his head, is a strong point to start from in attempting a diagnosis. (I am aware that persons are said to have taken a few steps after having met with an impacted intracapsular fracture of the femur, but this has nothing to do with the point under consideration).

"There is one mistake that I have several times seen made in diagnosing fractures of the femur. When the patient is told to raise his thigh from the bed he can do so by contracting the hamstring muscles, sliding the heel upon the bed, and thus the lower end of the femur is pushed up by the head of the tibia; but the psoas-magnus and the iliacus do not contract. For fractures in the continuity of the long bones these signs are, of course, of no use, but for those in which difficulty of diagnosis so often leads to mistakes in diagnosis, I think the presence of one or more of them should suggest to us the probabilities of a fracture, and should indicate to us the proper plan of treatment."

- *N. W. Lancet.*

HABITUAL ABORTION AND KIDNEY DISEASE.

At the recent meeting of German scientists and medical men at Strasburg, Dr. Fehling, of Stuttgart, read a memoir on habitual death of the embryo in kidney disease. In the first case under his observation, premature expulsion of a dead fœtus, occurred six times, and there was no evidence of syphilis. At every pregnancy, anasarca, albuminuria, and death of the fœtus, with severe cramp of the abdominal muscles, occurred, between the fifth and sixth month; the dead fœtus was expelled from three to ten weeks later. In the second case, similar symptoms appeared in a young unipara; the fœtus died, and thereupon the albuminuria abated. In the third case, the patient had borne two healthy children. During her third pregnancy, albuminuria and characteristic changes in the retina occurred; and, during the fourth, she was seized with hemiplegia; in both, a decomposed fœtus was expelled at the fifth month, with subsequent decrease of the albuminuria. In the fourth case, the patient in her first pregnancy aborted at the fifth month; then she gave birth at term to a recently dead child. In the third pregnancy, great œdema and albuminuria supervened, the child was stillborn, and the mother died of uræmia. Dr. Fehling believed that in all these cases, kidney disease existed before pregnancy, which aggravated the renal symptoms.

Winter had described two cases of premature detachment of the placenta, normally situated, where albuminuria existed. Dr. Fehling found atrophy of the villi of the chorion, with wedge-shaped or spherical infarcts in the placenta, in his cases, similar to renal infarcts. The infiltration of the chorionic villi and vessels of the umbilical cord with small cells, as seen in syphilis, was absent, nor did any of the embryo exhibit a trace of congenital syphilis. - *British Medical Journal*, November 21, 1885.

THE TREATMENT OF CHOREA.—In a paper on this subject, presented to the Harveian Society, of London, Dr. W. B. Cheadle, after referring to the failure of innumerable specifics, and to the skepticism too widely engendered therefrom, declared his own belief in the value of medicinal treatment. Speaking from the careful notes of one hundred and sixty cases observed during a period of eight years, he stated that the average duration of the disease under treatment had been five weeks (the extremes being ten weeks and four days); whereas cases without treatment might extend from eleven to fifty-two weeks, or indefinitely. The author had tried various methods, including rest and expectancy, with results sometimes beneficial, but never completely successful. In arsenic, he had at last found an agent which did succeed. Todd, as long as forty years ago, had recognized its power; so had Babington and Begbie; but dread of the poison had checked their use of the remedy. Dr. Cheadle proceeded to narrate some striking cases of rapid improvement under the influence of ordinary doses of liquor arsenicalis, with small doses of tincture of perchloride of iron. A comparison of long series of cases treated without arsenic and with arsenic respectively, gave for the former an average duration of forty days, for the latter, twenty-nine days; and this difference was increased when the last fifty-eight cases were compared with fifty-eight consecutive cases in the former series, the average duration under arsenic being only twenty-four days. Arsenic was in every case well borne, excepting a remarkable result repeatedly observed by the author, but not hitherto described by others, viz., a bronzing of the skin analogous to that observed in Addison's disease. The staining was most masked in the flexures, did not affect the face, and ultimately disappeared. In one case, however, it had become permanent, but would probably vanish in time. The pigment deposited was not metallic, as in discoloration by silver, but resembled the pigmentation due to chronic congestion. In conclusion, while advocating arsenic in chorea, the author did not wish to depreciate the value of other therapeutic agents, which should be employed concurrently.

STRYCHNINE IN DELIRIUM TREMENS.—That the

tremor, so characteristic of cases of chronic poisoning by alcohol, is greatly benefited by the persistent use of strychnine, which, by the way, is the most efficient remedy for this very ailment, has long since been recognized as a well-established fact. But that the same drug also is a powerful remedy for an attack of delirium tremens, has been less known, though occasional mention has been made of the fact. We learn from the *Deutsch. Amerik. Apoth. Zeit.*, vi. 9, page 277, that Dr. Journet, of Lyons, has recently treated such a case, where he employed subcutaneously over one and one-half of a grain of sulphate of strychnia within forty-eight hours, without having given rise to any symptoms of poisoning. Further, Dr Lardiére, who a short time ago demonstrated the fact that strychnine was the best and perhaps only true antidote in alcoholic poisoning, published but a few weeks ago another case, that of a man, æt. 42, who presented all symptoms of delirium tremens, as, history of debauch, tremor, redness of the face, hallucinations, sleeplessness, etc. Within four days this patient received nearly $4\frac{1}{2}$ grains of strychnine therefore, an enormous dose, with the result that a rapid improvement took place, and by the end of the fourth day a complete recovery set in. Within the first twenty-four hours the pulse fell from 124 to 90, as the effect of one grain of strychnia. The drug must be given hypodermically, and seems to be specially indicated in cases of weak heart.—*Med. and Surg. Reporter.*

DIPHTHERIA.—Dr. I. J. M. Goss writing to *Eastern Med. Jour.*, concludes as follows :

The treatment must be very rapid at the outset, which is the only hope of success. In mild cases which may get well themselves, the chlorides of iron, and potash have been used with apparent success, and so of some other remedies, but to cure a case of the more grave type, the best antiseptics must be given at the start, and constantly continued to the end of the attack. Where the disease is from a systemic poison, or inoculation, yet the local manifestation must also be met by appropriate local means, as a spray of permanganate of potash, 4 to 6 grs. to the \mathfrak{z} , used every one or two hours; or a saturated solution applied with a pencil brush as often. And between the times of using the above, the throat may be touched with a brush or swab dipped in equal parts of alcohol and spirits of turpentine.

Internally, the patient should take 1 or 2 grs. of sulphide of calcium every two hours, and alternate that with the tincture of baptisia tinctoria. If no improvement be manifested in twelve or twenty-four hours, then give 1 to $1\frac{1}{2}$ grs. of the permanganate of potash every two hours, in alternation with the sulphide of calcium, and have the tonsils and palate sprayed with a solution of the compound tincture of iodine, say 1, part to four of

water, every one or two hours, and at the same time if the lymphatic glands are affected, the ointment of iodine should be applied to them three times a day. If these remedies then fail, the child's throat should be touched with the tincture of eucalyptus globulus every two hours, and 10 to 15 drops given in *sweetened water*, every two hours. Equal parts of iodide of potash, and the chloride of potash is used by some writers, and with good results, say 1 \mathfrak{z} of each, to 6 \mathfrak{z} of water, dose 1 \mathfrak{z} every half hour, so that the throat will come in contact with the solution and the system become saturated with it as soon as possible.

QUINIA BY INUNCTION.—Dr. Wm. W. Moore, says in *Peoria Medical Monthly*: About one year ago I was called to see two children, one five and the other seven years of age, both suffering with malarial fever of a remittent type. I prescribed calomel and podophyllin in small doses every three hours until free catharsis was induced, alternating with liberal doses of quinia. The little five year old boy took his medicine without any grumbling, but the combined force of her parents, supplemented by the nurse's and my own efforts, failed to make the little seven year old girl swallow the medicine. While thinking about the advisability of a blister sprinkled with quinia, the thought obtruded itself, "Why not try inunction?"

Calling for some lard, I incorporated a large quantity of quinia with it, at least three or four times as much as I should have given her in twenty-four hours, with directions to rub one-eighth of the mass thoroughly every three hours over the abdomen and inner surface of the thighs. I should have stated that the symptoms in the little girl were of far greater severity than those of her brother. I left promising to be there at the same hour the next day.

Judge of my surprise, when upon my return, I found the patient without fever and getting along nicely. I prescribed the same treatment for the next twenty-four hours. I found her little brother with fever yet, although the remission was well marked. I went back on the third day and found the little girl convalescing rapidly, while the little boy, who continued to take his medicine *per. oram*, ran on until the fifth day before his fever "broke." I have had occasion twice since then to resort to the same method, each time with like result, although not quite so promptly.

NERVE SUTURE, WITH IMMEDIATE RESTORATION OF FUNCTION.—One of the most remarkable results of the suture of a nerve ever reported is given by Surmay, in the *Archives Gén. de Médecine*, for Oct., 1885. The case was that of a man who had received a cut above the wrist, resulting in abolition of the function of the median nerve. For some time no attempt had been made to correct

the defect. Then electricity was tried without result. Six months after the accident, Surmay resected about three-quarters of an inch of the nerve, and joined the cut ends with a fine carbonized catgut thread, which had been ingeniously inserted before the intermediate portion was cut out. The function of the nerve was re-established within twenty-four hours! The parts which had before been affected—the second phalanx of the thumb and the two terminal phalanges of the index and middle fingers—were found to have wholly recovered their general and tactile sensibility; while the sensibility to pain and temperature had returned in the thumb and in the upper half of the phalanges of the other fingers involved. Complete restoration followed after several months.

This remarkable case furnishes a strong support to operative interference in other cases than those in which loss of function results from traumatic division of a nerve; for in this one the nerve was not found divided, but the part under the wound was occupied by an enlargement which was formed by pure hypertrophy of the neurilemma. It is always surprising that the cicatricial changes which must take place in, or immediately adjacent to, a resected nerve, should have so little effect in disturbing the result of the operation. In the case mentioned, it seems to have had some disturbing influence, although this passed off with time. Further, this case is interesting as raising questions in physiology which will bear close study, namely, as to the reinstatement of one part of the function of a nerve while another remains in abeyance, as well as in regard to the relation of the different forms of sensation, which are commonly divided into: common sensation or sensation of pain, and the tactile sense, which includes appreciation of changes in temperature. As Surmay's case seems to have been studied with great care, and to present many of the conditions of scientific accuracy, it may contribute materially to our knowledge of the physiology of the nerves. *Med. News.*

FUNCTIONAL IMPOTENCE—**DR. ULTZMAN'S TREATMENT.**—The two forms of this affection which present themselves most frequently for treatment are: 1st, Psychical impotence; and, 2d, Impotence from too early ejaculation of the seminal fluid. They occur usually in strong, healthy young men, and are the forms which yield readily to proper treatment. The treatment is almost entirely local, as the difficulty consists in the incapability of having a normal erection. The capacity of exciting erections resides in the prostate: hence, this is the point to which treatment is to be directed. This is of several forms, all calculated to relieve the hyperæsthesia of the prostatic urethra, and excite the prostate to the production of powerful erections. The simplest form of treatment is by

passing a steel sound into the bladder daily, leaving it there from five to ten minutes, at the same time depressing the handle so as to make pressure upon the prostate. Usually, in a few days or weeks, powerful erections are excited. The use of astringents upon the prostatic urethra is another method. The remedies used are either tannic acid or the solution of nitrate of silver. Tannic acid is inserted in small slender suppositories by the *porte remede* and deposited in the prostatic portion. Urine should not be passed for half an hour after the insertion. This treatment may be used every day, and not less frequently than every second day, till normal erections occur. Nitrate of silver is used in a five per cent. solution, and three or four drops deposited upon the prostatic portion by a deep urethral syringe, once every three or four days. During treatment, the patient should abstain from all sexual excitement.—*Buffalo Med. & Surg. Jour.*

THE USE OF ANTIMONIALS IN PNEUMONIA AND INFLAMMATION.—D. Leith Napier, M.D. (*Practitioner* for September), states that while children do not bear the antimonials as well as adults, the following "mistura scillæsalina" has proved of great utility (sometimes combined with a suitable dose of belladonna or hyoscyamus) in the febrile catarrhal condition attending dentition:

Saline Mixture.

R Liq. antimonii tart.,
Spts. ætheris nitrosi, aa f̄ijij :
Liq. ammon. acet., f̄ijij :
Aquam ad f̄vijij. M.

Fiat mistura.

Squill Mixture.

R Vin. ipecac.,
Vin. antimonii, aa f̄ijij :
Syr. scillæ, f̄ijij :
Aquam ad f̄vijij. M.

Fiat Mistura.

These mixtures may be given alone, the first being more generally employed. In some cases the squill mixture is given alone, as in the latter stages of pneumonia; but, as a rule, equal parts of each were used.

The benefits of antimonials are more evident in pneumonia than in other inflammations; but, while Dr. Nias (*Practitioner* for August) follows Trousseau in giving comparatively large doses in the stage of engorgement (not hepatization), Dr. Napier treats the first stages with salicylic acid, antipyrine, or quinine, reserving the antimony for the stage of resolution, except in cases marked by low stamina and great debility.—*Med. Times.*

CONCENTRATED SOLUTIONS OF SALINE CATHARTICS IN DROPSY.—Dr. Matthew Hay, of Edinburgh (who has accepted a chair at Johns Hopkins

University), presented a novel method for the treatment of serious effusions in the *Lancet* (April, 1883), the good results of which have been recently reaffirmed by Dr. W. G. Eggleston (*Four. Amer. Med. Assoc.*, March, 1885). In cardiac dropsy, or pleural or abdominal effusion, abstinence from water and liquid food is enjoined for one day, and on the following morning a comparatively large dose (three ounces) of magnesium sulphate dissolved in two tablespoonfuls of hot water is to be administered. The results which have been reported have been surprising, especially where the saline is repeated on the second morning. Large watery evacuations are obtained, and the effect may be enhanced by the subsequent use of jaborandi (ext. fld. twenty drops), to act upon the skin. This method of treatment deserves further trial by the profession, not forgetting, however, that in children or persons subject to bowel-disorder a serious entero-colitis might be developed. Christison reported a case of a boy who took two ounces of Epsom salt and died with symptoms of gastro-enteritis without purgation. The hypodermic injection of solution of magnesium sulphate has been advocated in cases of dropsy.—*Med. Times*.

MERCURY AND ALBUMINURIA.—At the congress for internal medicine, held at Wiesbaden in April, 1885 (*L'Abeille Medicale*), Dr Fürbringer reported that he had found, out of a hundred chosen cases, eight syphilitics with perfectly healthy kidneys who developed albuminuria during mercurial treatment; the maximum albumen being five per cent.

The internal and external exhibition of the mercury was followed by the same results, which persisted during the whole of the treatment and disappeared some weeks after treatment was stopped.

The alterations in the kidneys were therefore not important, as was proven as well by microscopic examination.

In another series of one hundred cases of syphilis which had not been treated with mercury, or were no longer so treated, and in which the kidneys had been healthy, he was able to establish in twelve per cent. an albuminuria consecutive to the syphilis.

This in every case was discovered in the stage of the roseola eruption. Here the urine contained formed cylinders, which pointed to a light nephritis. This form of albuminuria gave way to mercurial treatment. Therefore he argues that the existence of albuminuria is not a contra-indication to mercurial treatment, which, on the contrary, should be prescribed as a necessity.—*Journal Cut. and Ven. Diseases*.

STEPHEN SMITH'S AMPUTATION AT THE KNEE-JOINT.—At a recent meeting of the Royal Medical and Chirurgical Society, London, Mr. Thomas

Bryant read a paper on amputation at the knee-joint, and reported thirty cases. The author strongly advocated disarticulation by the method of Dr. Stephen Smith. He exhibited illustrations of the operation, and endorsed completely the remarks of the American surgeon upon the value of his method of procedure, and strongly urged its application to cases of amputation in the leg also. The muscle substance was generally included in the flap in thin subjects, but not in others. The resultant stumps in the leg thereby obtained were excellent. As compared with other methods mentioned, Mr. Bryant stated that the method of Dr. Stephen Smith was to be preferred, as it gave a better covering to the condyles of the femur, and the flaps were less prone to slough; it also placed the cicatrix entirely behind the condyles, out of the way of injury, permitting no bagging of fluids, the stump being in the best position for drainage.—*Lancet*, Dec. 12, 1885. [This operation was performed recently in the Toronto General Hospital, in the case of a railway injury to leg, by Dr. Fulton, with most excellent results. Almost the whole of the resulting cicatrix occupied the intercondyloid notch, and was thus entirely out of the way of pressure in wearing an artificial limb.]—Ed.

ERUPTIONS DUE TO THE USE OF CERTAIN MEDICINES.—Quinine: Erythema scarlatina; papular erythema; hemorrhages and purpura; pemphigus, oedema, and prurigo. Cinchona, Belladonna, Stramonium, Strychnine, have the same characters as quinine. Digitalis: Erythema after long use. Aconite: Vesicular exanthemata. Santonine: Pemphigus, vesicles. Opium and Morphine: Erythema; papular eruption, with marked desquamation and itching. Pilocarpine: Increased perspiration. Atropia: Diminished perspiration. Phosphorus: Purpura. Mercury (internally): Erythema; eczema. Arsenic: Erythema and papules; vesicles and pustules. Carbolic acid: Erythema; pemphigus. Salicylic acid: Purpura; vesicular angina, pemphigus. Chloral: Erythema, slightly colored, itching, desquamation; purpura and petechia; eczema; Copaiba, Cubebs, Turpentine: Pemphigus, erythema, eczema. Cod-liver Oil: Acne. Iodide of Potassium: Papules, vesicles; pustules, ethyma, eczema; ecchymoses and purpura. Bromide of Potash: Papules and pustules, deep tubercles with ecchymoses, pemphigus, ulcers.—*Translated by Dr. C. E. Warren in College and Clinical Record*.

LEUCORRHOEAL DISCHARGES FROM ROLLER SKATING.—Dr. Von Klein writes thus to the *Boston Med. and Sur. Journal*:

"Mrs. L. consulted me about two of her little girls, Anna, aged ten, and Eva, aged twelve years. The mother called my attention to a leucorrhoeal discharge which she lately observed on their cloth-

ing. An examination of the parts verified the mother's statement. I told her I could not account for it, as I had already seen it in children younger than hers, but the lady, who is of rather extraordinary intelligence, advanced a theory that their recent excessive indulgence in roller-skating brought on their affliction. Certainly, I partly coincided with her sentiments. When she returned home and spoke to other ladies about the matter, it brought out the fact that there were many others afflicted in the same way. In fact, I examined nine children in forty-eight hours, whom I found affected with leucorrhœa. These children were all roller-skaters, from nine to sixteen years of age. Their mothers steadfastly maintained that they were not afflicted before they commenced the so-called exercise. I have reason to believe that the practice of roller-skating exercise is injurious to young females by reason of excessive movements of the lower extremities, especially of the pelvic organs, including the walls of the vagina. I trust the profession everywhere will record cases of this nature that may come under their observation, which will, I am sure, reveal many valuable pathological changes caused by the exercise of roller-skating."

MEDICAL NOTES.—Many of the patients applying for relief at the out-door department of the (Woman's Hospital, Baltimore), complain of vesical irritability, frequency of micturition, with burning pain at the meatus and much straining. In a large proportion of these cases the urine is alkaline and frequently cloudy. These symptoms are usually quickly relieved by the following combination:

R Acidi benzoici, ʒj;
Sodii biboratis, ʒjss;
Aquæ, - fʒvj. M.

S.—Tablespoonful every three or four hours.

If the trouble does not yield to this medicine, Dover's powder in three-grain doses every two to three hours is frequently found effective.

As a tonic in the anæmic condition so often attendant upon the pelvic troubles of women, the following pill is given:

R Quininae sulphat., gr. xlvij;
Ferri sulphat. exsic., gr. xxiv;
Strychninae sulphat., gr. i. M.

Ft. pil. xxiv.

S.—One after each meal.

The operations for lacerated cervix are generally done in the hospital without an anæsthetic. A catgut loop is passed around the cervix and drawn tight by means of a wire-ecraseur frame. This not only renders the operation a practically bloodless one, but the strangulation of the tissues obtunds the sensibility, and the denudation can be completed and needles passed without causing more than a slight degree of pain.—*Med. Times.*

HYPODERMIC INJECTION OF DEFIBRINATED BLOOD.—Dr. Oscar Silbermann, of Breslau, has published an account of two cases of severe anæmia which he treated successfully by the subcutaneous injection of defibrinated human blood. The first case was that of a little boy of eight, who, after measles and whooping-cough, became very anæmic, there being a systolic mitral murmur, vomiting, and fainting fits. Iron and other drugs were tried and proved useless, so forty grammes of defibrinated human blood were injected under the skin of the thigh, and a rapid improvement resulted. The injections were, therefore, repeated, and the child was completely cured. The second case was that of a girl of eleven, who had been reduced to a highly anæmic condition by profuse bleeding from a rectal polypus. There were in her case, as in that of the boy, a systolic mitral murmur, vomiting, and fainting fits. Fifty grammes of defibrinated human blood were injected subcutaneously into the thigh, and rapidly brought about a cure. The author remarks that the greatest care must be taken to disinfect the hands, the instrument, and the cutaneous surface, both of the patient and of the person who gives the blood. The blood must be completely defibrinated and kept at a temperature of 39° C.; also, during and after the injection, the surface should be rubbed or stroked in an upward direction.—*Lancet.*

THE DANGER OF VACCINATION SHIELDS.—In his capacity of medical officer to the Local Government Board, Dr. Buchanan has issued a caution against the use of vaccination shields. Cases of erysipelas have been traced to their use, and, having regard to their construction, is by no means difficult to understand why such results should have followed. That portion of the framework of the shield which rests on the arm, as also the bands for fastening the apparatus on, are covered with, or consist of, porous material, such as lint, &c.; and whenever any discharge takes place, this material runs almost certain risk of being soiled. Any subsequent use of the shield practically, amounts to the use of a dirty surgical dressing, and it is well known how serious a danger this is, even to the most trivial of surgical cases. Protection for a vaccinated arm is rarely wanted in the case of an infant, for the arm can easily be altogether taken out of the clothing, care being taken to wrap the child up warmly in some loose shawl or other similar article which is free from irritative dye. Having regard to these considerations, vaccinators are urged to discourage the use of so-called "vaccination shields," and to advise some other means of preventing irritation by means of clothing, where this may be necessary.—*Lancet.*

SHOCK AND ITS TREATMENT.—In a critical study of shock intended to elucidate its pathological relations, Groninger, of Berlin, defines shock as an

exhaustion of the medulla oblongata and the spinal cord produced by violent excitation. This definition is no doubt perfectly proper, though it strikes us as if the term "exhaustion" is not sufficiently clear for defining purposes.

He recognizes the following varieties: 1. The lowest grade of shock, which causes no appreciable effects. 2. A middle grade, which weakens sensation. 3. A high grade, which extinguishes qualitative sensation. 4. A highest grade which eradicates both passing and permanent sensations of every kind.

His views of the treatment are noteworthy: Energetic counter-irritations of the skin are to be excluded as useless and even dangerous. Abstraction of blood is contraindicated. Transfusion of blood can only be thought of in cases of great loss of blood. Opium and chloroform are of no value whatever in shock, while digitalis is worthy of further study. Alcoholic stimulants and subcutaneous excitation are useful. Horizontal posture, application of warmth, perfect rest, and subcutaneous injection of strychnine are the most recommendable factors of treatment. *Therap. Gaz.*

ARTIFICIAL MEMBRANA TYMPANI. Dr. Barth, of Berlin (*Archiv für Ohrenheilkunde*, Bd. xxii. p. 208, August 12, 1885) has suggested a very good modification of the ordinary cotton-wool membrane, as follows:

Take a piece of cotton-wool, and pull or twist out one end of it to the length of four centimetres, leaving a tuft at the other end. The handle thus made should now be dipped in collodion, and the whole, supported by means of the tuft through the mesh of a cane-seat chair, allowed to dry. In the course of five or ten minutes the handle or shaft should be again twisted, best with moist fingers, and there is then provided a strong shaft of cotton-wool one to two millimetres thick, with a brushlike tuft, which can be further trimmed by the scissors as required. This artificial membrane is so simple and so easily made that every intelligent patient can make it for himself if he is obliged to wear such an aid for any length of time. *Med. Times.*

CRAVING FOR STIMULANTS. To counteract the craving for stimulants, when they are withdrawn, and to sustain the nervous system, the following combination is effective (Bartholow):

R Tinct. capsici f. ʒ vj.
Tinct. nucis vomice f. ʒ ij. M.

Sig. — Twenty drops, in water, every four hours.

Col. and Clin Record, Oct.

ASTHMA. Dr. Q. C. Smith, of Austin, Texas, writes: To relieve those desperate paroxysms of asthma that threaten life every moment until re-

lieved, I am accustomed to administer hypodermically the following:

R Mur. pilocarpine,
Apomorphiæ each gr. ʒ.

The patient will quickly sweat profusely, breathe easier, and obtain sleep within ten minutes. *Gaillard's Med. Jour.*

CHLORAL IN ALBUMINURIA. — Dr. Barduzzi, (*Il Movimento*) has obtained excellent results with chloral in daily doses of thirty to forty-five grains, continued for some time in the treatment of nephritis. Under its use œdema is reduced and the albumen nearly or entirely disappears from the urine. The author regards it of especial value as a prophylactic of eclampsia in the albuminuria of pregnancy. It is also useful in the so-called physiological or normal albuminuria. *N. Y. Med. Record*, Sept. 19th.

CONNECTION BETWEEN AFFECTIONS OF THE EYE AND SPINAL CURVATURE. — A Polish physician, Dr. Jarsinska, has traced a connection between errors of refraction and curvatures of the spine. In thirty-seven cases of curvature, he was able to prove with certainty the previous existence of those or other abnormal conditions in the eyes, such as insufficiency of the internal rectus, astigmatism, asthenopia, etc. Myopia alone, however, does not appear to cause curvature. Unequal vision and insufficiency of the internal recti seems to be most efficient in the production of spinal curvature. Spasm of the accommodation also is capable of producing it. Removal or relief of the eye affection is followed by improvement in the spinal curvature — a troublesome and obstinate class of cases in orthopædic practice. *Lancet.*

ARSENIC WITH QUININE IN THE TREATMENT OF MALARIA. — Dr. Ernst Hensler, of West Franklin, Ind., warmly advocates combining arsenic and quinine in the treatment of malarial fevers. He says that his residence in the Ohio bottom lands has given him a wide experience in this class of diseases. Like so many other physicians, he formerly used either quinine or arsenic alone, and often without success; but latterly he has been in the habit of giving the two drugs at the same time. Since commencing this practice, he states, all his cases were rapidly cured and no relapse occurred.

BLOOD-LETTING IN ERYSIPELAS. — Dr. Daniel Lizzaralde, of Buenos Ayres, stated that he has seen most excellent results following the abstraction of blood in facial erysipelas. The procedure is indicated in the case of a strong, full-blooded adult, when the temperature is high and the cerebral symptoms are threatening.

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TREATMENT OF PNEUMONIA.

We do not wish to convey the idea that we have anything new to offer regarding this very common and fatal disease. For the very reason that it is common and fatal, it should be kept before the profession. Moreover, the treatment as outlined in our text books, is extremely vague, and for the most part unsatisfactory, especially to the young physician, who has not the experience which will enable him to follow any particular line of treatment with confidence, being perplexed by the conflicting statements of some of our most reliable authors. Discussion will tend to the discovery and fixation of the theories and practices about which there may be a general uniformity of opinion. The benefit to be derived from a free interchange of thought, was well expressed long ago by the wise man who said, "as iron sharpeneth iron so does the countenance of a man his friend."

Since the "heroic" was abandoned for a more humane and rational mode of treatment, but little progress has taken place. Additions and subtractions more or less important have been made, it is true; still we have made no very marked advance. This statement is borne out by the fact, that we have been lately drifting a little back to some at least, of the old practices, a tacit acknowledgment that the profession has been carried a little too far out on the wave of reform. At a recent society discussion, grey-headed veterans confessed with sorrow, that whereas they formerly

bled too often they now do not bled often enough, one of them confessing to not having opened a vein for twenty years. It is now almost universally conceded that venesection is a proper, lawful and beneficial remedy in selected cases. Antimony, especially in England, is generally administered in acute cases in small and repeated doses. Blistering once so fashionable finds but little favor. It is a severe and painful agent, needing careful handling. It is quite possible to kill a healthy person with a large blister. This is now so well understood that there is no danger of a re-action in favour of that adjunct in general treatment. A very small blister limited to the seat of pleuritic pain, may still be regarded as permissible. So much for the re-action in favor of old remedies.

The treatment which took the place of the heroic, some thirty years ago, may be called the expectant-supporting treatment. The better results obtained were not so much due to the practice being uniformly correct as to the fact of its being better than the one it supplanted. Results still better are now obtained from pursuing a middle course. While admitting that the tendency of disease is towards a lowered vitality, yet we now controvert the theory that disease is always best combated by a supporting and stimulating treatment. In the case of acute pneumonia, experience has clearly demonstrated the value of remedies classed as depressants. On the other hand, it is distinctly held that such remedies are inapplicable to asthenic cases. From this it would appear that the lines of treatment are pretty well agreed upon, and that the points of divergence have reference to the best means of fulfilling the accepted indications.

If we do not yet understand fully the nature and cause of the disease, we know well what its manifestations and tendencies are. The first aim of all treatment is the arrest of the morbid process, and failing that, to carry it through its course to a successful issue. We do not now often see the word "inflammation," formerly so freely interspersed in discussions on diseases. On the theory that the blood was the seat of the inflammation, the old treatment aimed at curing the disease by draining off the blood. But this had the disadvantage of frequently carrying off the patient. With a better understanding of the nature of the disease came a more rational explanation of the use

of the lancet. No one contends for indiscriminate bleeding. No one even contends for bleeding in a typical case. This potent remedy in our armamentarium is only to be used in extraordinary emergencies. That such emergencies do arise is painfully evident from the large number of sudden deaths, due to this disease. Should we be called to see a robust patient, more or less suddenly prostrated by pneumonia, temperature high, pulse full and rapid, great dyspnoea, the right side of the heart staggering under the blockade, the proper thing to do is to bleed at once and bleed freely. Of course the blood is the patient's capital, still, to save his life, he must part with some of it. That will raise the blockade, equalize the circulation, promote suspended organic function, and give a fresh starting point.

No well informed physician now denies the marked beneficial effects of venesection in suitable cases; yet how seldom is the remedy resorted to! How account for this discrepancy between theory and practice? In cases scarcely demanding venesection, antimony is probably the best agent to rely upon. Early in the case, perhaps, no harm is done should temporary nausea be produced, but care must be taken not to prolong that condition. Given in this way it reduces arterial tension, induces perspiration, and promotes the secretions generally. Care must be taken not to keep up a too free and continued action of the skin, that being both disagreeable and exhausting. While no harm can come of the use of small repeated doses of antimony, continued through the acute stage, yet, the *average* case can hardly be said to call for it. Here veratrum, with liquor ammoniæ acetatis, or some such remedy, seems to supply what is wanted, namely, as in all such cases, the relief of blood pressure by equalization of the circulation. This end is generally well and satisfactorily fulfilled by the above combination. The veratrum should be given in such doses as to produce the desired end. Let the dose, and the frequency of its administration, be deliberately decided upon in each case, and let the pulse be carefully watched. Venesection makes its results manifest at once, and herein perhaps lies one of its chief merits. In the use of substitutes we should keep this object steadily in view. The patient should be brought as rapidly as is consistent with safety, under the influence of the remedy. To do this, the

physician requires the aid of an intelligent nurse, should the patient reside at a distance. Much mischief is done by a slipshod treatment. Let medicines be administered with care and precision and better results will follow.

Opium is a most important adjunct in the treatment of acute pneumonia. We are aware that some are opposed to it on theory, but we are convinced that in this case, as in many others, experience contradicts theory. Nothing tends more to recovery than freedom from suffering and a tranquil mind. Nevertheless opium is inadmissible in a number of cases. It must be withheld when the heart is overweighted and the block in the lungs extensive. When the disease arrives at the stage of expectoration, it is well to remember that opium may do harm by restraining exudation. At a later stage, ammonia, senega, and digitalis may all be necessary and are the best of our second class of remedies.

So far our remarks refer to cases of asthenic type, occurring in persons of good constitution. No greater difficulty can be imagined than that arising from shades of difference in cases met with in practice, in all diseases. This is one reason why medicine demands the very highest order of intellectual power. Text books are poor guides in individual cases, and often almost all depends on the knowledge and good judgment of the attendant. The semi-heroic treatment, if we be allowed the expression, above outlined, is not applicable to asthenic cases occurring in the feeble and unhealthy. In such cases the second, or stimulating class of remedies, will be called for from the outset. Here too we would remark that remedies should be administered in their proper therapeutic doses—neither too small nor too large—neither too seldom nor too often. Let us decide exactly what we are to do and act promptly on this decision.

Perhaps we should not close without some matters of routine. We need say no more about extensive blistering. That is deprecated on all hands as a piece of painful barbarity, which cannot fail to counteract the tranquilizing effects anticipated from our other remedies. Since the abolishment of cantharides—hot linseed poultices have been very extensively used, and we have the highest authority as to their beneficial action. The French jacket poultice is the best, indeed by

this simple means the patient is really "bled into his own veins," the blood pressure in the heart is reduced, the heart is stimulated by the heat, and the blood which, as we before said, is a part of the patient's capital is conserved for future need, when perhaps the powers of the system are strained to the last point of endurance. No doubt when the temperature is high, the practice tends to check radiation, but this disadvantage is small when compared with the relief obtained by its use. The question of using an anodyne liniment having slight counter-irritant action has been raised, to avoid this addition to the body heat, but remembering the words of Rindfleisch, that moist heat is what is required, we do not think that the liniment would fulfil so useful a purpose as the poultice.

The question of treating pneumonia by large and repeated doses of quinine is as yet *sub judice*, though several men of experience have reported very favourably as to its action. We hope to present to our readers some of the conclusions of the profession in this matter, in the near future.

A FIELD FOR OUR ANATOMISTS.

A clever writer in one of our English magazines some months ago undertook the task of attempting to describe man as he would be some thousand years hence, after having undergone all the various changes brought about by the gradual "adaptation to environment"—to use scientific phraseology. The author came to the conclusion that man in after ages would be a hairless, toeless animal, incapable of extended locomotion, and with a head abnormally large. The data from which he argued are easily recognized: the wearing of hats and boots, and the large amount of time spent in pure brain work are the chief.

By some the article was considered to be merely a travesty on the theory of evolution. By others it was thought to be a true but over-estimated account of the practical workings of that theory. In whatever light regarded, however, the paper contains many suggestions, interesting, not only to the evolutionists and biologists, but especially to enthusiasts in the study of human anatomy.

Whatever views may be held on the doctrine of the descent of man, it is a matter of every day

experience that morphological and physiological changes are created by "adaptation to environment." Nor are these changes by any means limited to the lower animals. Perhaps, indeed, owing to his greater activity and dispersion over the whole globe, these changes are greater and more apparent in man. This it is which makes the subject interesting to the general biologist, and consequently to the medical man. Let us glance at a few of these changes; and, for sake of example, let our view be limited to the professional and upper classes.

These classes devote a large portion of the twenty-four hours to reading. In process of time this must give rise to many more or less minute anatomical peculiarities. There will be a tendency to myopia, since the lens will contract a habit of remaining fixedly abnormally convex. The external and internal recti muscles will be enormously developed. And for this reason: in perusing a page of a book or a column of a newspaper, the eye travels from left to right and back again several hundred times, while the superior and inferior recti act but once or twice.

Again, these classes lead a comparatively sedentary life. The gluteal muscles consequently being imperfectly nourished, will tend to gradual atrophy. The tuberosities of the ischium, too, may change in form.

Violent exercise being rare, the respiratory muscles will degenerate. Man will become short-winded, in fact. Already there is a vast distinction in this respect, not only between man and the lower animals, but also between different tribes of men—between the average American young lady and a North American Indian for example. The increasing use of vehicles will hasten such changes in the gluteal and respiratory muscles.

Owing to the fact that so many actions are performed by the right hand alone, not only will mankind become more generally one-handed, but, as a consequence of this, the left side of the cerebellum should preponderate in size over the right. This may in time appreciably alter the shape of the cranium. Perhaps the upper extremities and the head will cease to be bilateral.

These are but a few isolated instances of changes which must undoubtedly be gradually taking place in a single class of men. It would be interesting to extend the enquiry further: to examine, for ex-

ample, the effect of various descriptions of skilled manual labor upon the artisan class; of the mode of life in factories upon mechanics; of the outdoor life upon laborers; and so on.

That the transformations are minute and extremely gradual, is, of course, true; but it is to such small and slow-moving tendencies (added to climatic influences) that the wonderful differences between races have been brought about. The nymphæ and the nates of the South African women famed for the large size of these parts doubtless owe their existence to some such processes. It is but scientifically correct to expect anatomical abnormalities to occur. And if anatomical, then, too, physiological. Their practical import is naturally at present almost *nil*; but to the physician and the surgeon of some centuries hence they will not be so. And the physician and surgeon of some centuries hence will perhaps thank us of this generation for having noted changes which will explain to him otherwise inexplicable facts—as the astronomers of the nineteenth century owe much to Chinese annals written some thousands of years before. A thorough and exhaustive view of this subject extended to all the races of mankind, and including every phenomenon which in any way acts upon the human frame may bring to light very many various and important facts hitherto unknown. That this is partially recognized is seen by the careful, accurate and minute investigations yearly prosecuted by the Anthropological Section of the British Association. We are not aware, however, that this Section has paid any particular attention to the group of changes to which we have above adverted. Here is an excellent field for our anatomists.

CHEYNE-STOKES RESPIRATION.

In Cheyne-Stokes respiration, named after the observers, whose name it bears, and who first described it, we have a form of dyspnoea characterized by a peculiar rhythmical change in the breathing. After a period of apnoea lasting from ten to forty-five seconds or more the respirations commence, at first very shallow—so shallow as to be perceived with difficulty, but gradually they increase in depth and rapidity, till the breathing is loud and violent, the breast heaves and the nostrils are dilated. In some cases the patient now suddenly

rouses, perhaps with an exclamation, has an excited and anxious look, which soon gives place to a placid expression; the patient usually dozes off again, the respirations grow weaker and shallower, until eventually they cease altogether. After a period of apnoea, they begin as before and the cycle of phenomena is repeated. In cases where the patient does not rouse at the acme of respiration there is a gradual decrease as before, ending in the cessation of the respiratory efforts.

This symptom is regarded as a most serious one, being almost always followed by a fatal issue of the disease which occasions it. It occurs in uræmia, organic heart disease, especially in fatty degeneration; certain cerebral affections, as tubercular meningitis, lesions which involve the respiratory centre, etc., etc.

Goodhart draws attention to a modified form of Cheyne-Stokes breathing often observed in infants, which has not at all the same diagnostic import as in adults. He regards it as a paroxysmal type of respiration—at one with the paroxysmal manner in which children perform many of the ordinary acts of life. A nervous discharge occurs—then a pause, another discharge and so on. As the nerve centres reach a high state of training they work more regularly and the discharges are more or less continuous.

Various theories have been advanced to account for this form of breathing, none of which can be considered satisfactorily to make clear why it should occur in certain forms of heart disease, though it may be easily understood why irregularities of breathing should follow lesions of the medulla, affecting the respiratory centre. There seems to be a scarcity of information on the subject, but few autopsies having been made with a view to clearing up the pathological condition giving rise to this symptom. While we have no sufficient accounts of the lesions observed, one or two cases have been reported in which the nervous lesion was located. In one case where Cheyne-Stokes respiration had been observed but a few days previous to death, the pathological change was observed in the upper portion of the bulb, and both pneumogastrics were healthy. This is delightfully vague. In another, the vagi were found diseased, the left but slightly at its periphery, while in the right nerve, the lesion extended into the bulb. At the same time the medulla was the seat of con-

siderable changes, chiefly just above the longitudinal furrow of the calamus scriptorius.

Among the various theories which have been advanced to account for the symptom, the best, though at the same time the most complicated, is Bramwell's. He, following the teaching of M. Foster and others, supposes, that the inspiratory centre consists of two portions, one accelerating and one inhibitory. He further believes that these two portions are acted upon in opposite directions by the blood, whether arterial or venous. Thus while venous blood stimulates the discharging cells of the centre, and depresses the inhibitory portion, arterial blood acts in exactly the opposite direction. He also supposes the accelerating or discharging portion to be in a state of "irritable weakness." Now, at the close of a period of apnœa, the discharging portion is stimulated by the supply of venous blood and at the same time the inhibitory portion is depressed thereby. Hence though the respiratory apparatus has been on what may be called the "dead centre," respiration commences, and increases in force until the blood is fully oxygenized. Now, however, the inhibitory portion is stimulated and gradually overpowers the discharging portion, it being in a state of "irritable weakness," and soon worn out. The respirations grow weaker and weaker until at last the inhibitory portion gains complete mastery, and apnœa results.

This theory does not satisfactorily account for the weak shallow respirations at the commencement of the cycle. Would it not be more probable, that, with the blood loaded with carbonic acid, and the inhibitory portion therefore greatly depressed, the discharging portion, stimulated by the impure blood, would cause explosive breathing, lasting with decreasing strength until the blood was fully oxygenized?

Dr. Sansom believes there is a condition of partial paralysis of the respiratory centre, which thus requires a large amount of carbonic acid to stimulate it to action. This is furnished by the period of apnœa; respiration then commences and increases until the blood becomes fairly purified, when owing to the less amount of stimulation the respiratory centre gradually ceases to act and the breathing comes to a standstill. The theory advanced by Filehne, that a deficient supply of oxygenized blood produces a contraction of the arterioles

of the body—and of course of the medulla—through the action of venous blood on the vasomotor centre would account for the phenomena observed; but what is the primary condition of the centre which renders it abnormally weak? Why does it not perform its function? Why is there a period of apnœa by which the blood becomes loaded with impurities with which to stir up the sluggish centre? Here Bramwell's supposed "irritable weakness" comes in, but after all the point to be decided is, what is the pathological condition of the respiratory centre, or of the vagi which lies behind the first development of this symptom? Until that has been more clearly made out no amount of theorizing will, it seems, be able to make plain the cause of this peculiar form of respiration.

PASTEUR FORESTALLED.—"While exploring the Kalahari," said Mr. Farini (From the *Pall Mall Gazette*,) "where extremely poisonous snakes abound, several cases of the nude natives being bitten by them came under my notice, and, strange to say, the untutored savage, although not knowing anything about *similia similibus curantur*, cure themselves by inoculating with other virus. There is not a native nor a hunter that does not carry either the dried body of a deadly poisonous reptile called the N'anboo, the poison sacs of the puff adder, yellow cobra, or capella. Their *modus operandi* is this:—As soon as possible after being bitten they make slight incisions close to where the poison fangs entered, into which they sprinkle some of the dried and powdered virus. The first effect is to induce sleepiness, the swelling soon goes down, and in a day or two they are as well as ever. Three of my oxen were bitten, and cured by inoculation. One case of the bushman who had cured the oxen I must specially mention. He boasted of not being afraid of being bitten. One day while walking ahead of the waggons I discovered a full-grown capella lying under a bush. I called the bushman and asked him to catch it if he was not afraid of being bitten. He replied he would if I would give him a roll of tobacco. I refused not wishing to be accessory to his death. While I was waiting for the driver's whip to dispatch the snake, the bushman gave the reptile a kick with his bare foot, and the horrible thing bit him. But the bushman coolly took from a little skin

pouch some poison sacs, cut a piece off and reduced it to powder, pricked his foot near the puncture, which had commenced to swell, and rubbed the virus powder in. One of the other bushmen who had killed the snake and extracted the poison-cysts, handed one of them to him: he squeezed a drop of poison out of it into some water and drank it; he seemed to fall into a kind of a stupor, in which he remained for some hours. At first the swelling increased rapidly, but began to subside after some hours. Next morning he inoculated himself again; that night the swelling had completely disappeared and the fourth day he seemed as well as ever, and claimed the roll of tobacco." Mr. Farini took the precaution to bring home the poison of several snakes and a portion of a N'anboo, which he is sending to M. Pasteur to experiment with.

PERMANENT DEAFNESS CAUSED BY SALICINE AND QUININE.—The *Lancet* draws attention to the fact that permanent deafness may be caused by the continued use of large doses of quinine and salicine.

From experiments made by Kirchner on cats and rabbits, it appears that hyperæmia and exudation in the labyrinth, semicircular canals, and cochlea follows the administration of quinine.

He mentions also the case of a woman who had an exudation into the tympanic cavity after the prolonged use of salicylic acid, which he removed by performing paracentesis of the membrane tympani. It is stated by Schilling that the combination of ergot with salicylate of soda prevents tinnitus in the great majority of cases. The borate of quinine has been shown by Finkler and Prior to be less liable to produce quininism than the muriate. It would certainly appear as though the salt was to blame for these cases when permanent deafness follows hyperæmia and exudation in the labyrinth, but the disease for which the salts were used may have played a part in the production of the anatomical change on which the loss of hearing depends.

ONTARIO MEDICAL ASSOCIATION, COMMITTEES.—The President, Dr. Tye, has named the following gentlemen as members of the respective committees:

Medicine—Drs. Gillies, Caw, Hunt, Geikie. *Surgery*—Drs. Atherton, Stark, Throill, Elliott, Gilpin. *Obstetrics*—Drs. Eccles, McDonald, (Hamilton) Brouse, A. H. Wright, Roseburgh. *Ophthalmology*—Drs. Palmer, Reeve, Ryerson, Burnham,

Roseburgh. *Necrology*—Drs. Fulton, Harrison, Wishart. *Papers, &c.*—Drs. Sheard, Graham, Edwards, Hillary, Walker. *Ethics*—Drs. Holmes, McLean, Moorehouse, (London), Mullin. *Audit*.—Drs. Oldright, Teskey, Yeomans. *Arrangements*—Drs. Temple, Wright, White, W. H. B. Atkins, Pyne, Sheard, Powell, Roseburgh. The subjects chosen by the chairman in medical surgery and obstetrics, respectively are:—*Pneumonia, Fractures of the thigh, and Puerperal Albuminuria.*

PRESENTATION TO DR. MEWBURN.—The Medical profession of Winnipeg have presented Dr. Mewburn, late Hospital Surgeon, with a gold watch and chain, valued at \$150, accompanied with an address expressive of the high esteem in which he was held by them. He was also presented with a gold-headed cane by the students of the Medical School. We are glad to notice these kind courtesies from members of the profession towards each other.

WOODSTOCK MEDICAL ASSOCIATION.—The second annual meeting of the above association was held in the President's office on the 5th ult. Officers for 1886, Dr. L. H. Swan, President; Dr. J. C. Thrace, Vice-President; Dr. G. W. A. Ross, Secretary and Treasurer. The association is in a flourishing condition; many papers of interest having been read during the past season.

ABORTIVE TREATMENT OF TYPHOID FEVER BY MERCURY.—The *N. Y. Medical Journal* gives Kalb's method of treating typhoid fever by mercurial inunction. The inunctions should be undertaken before the ninth day, when he says, defervescence takes place in a few days. The inside of the thigh is chosen for the frictions, which should be continued for half an hour each time. To counteract the damage to nutrition it is advised to use large quantities of alcohol.

ELECTRO-THERAPEUTICS.—Those interested in the subject of electro-therapeutics, or the apparatus for its application, are requested to correspond with Dr. A. M. Roseburgh, Toronto.

CORRECTION.—Readers of the *Lancet* will please make the following correction in Dr. Aiton's article of last month. Page 130, 1st column, 19th line, from top—"cross lesion," should have been *gross lesions*.

REPORTING CONTAGIOUS DISEASES.—Dr. Canniff wishes to call the attention of the profession of Toronto to the requirements of the Public Health Act with respect to reporting cases of contagious diseases. This should be done promptly and every question answered. Any practitioner not supplied with blank forms can obtain them on application, stamped ready for mailing.

Dr. Lewis (*Medical World*, September) gives the following as his prescription for sexual debility.

- R. Phosphori, gr. i.
- Ext. Nucis Vom., gr. x.
- Ext. Cannabis Indicæ, gr. v.—M.
- Div. in pil. no. xx.

Sig. One night and morning.

CORONERS.—Dr. J. A. McArthur of Port Elgin, Ont., has been appointed coroner for the County of Bruce; and Dr. S. Scott of Lloydtown, coroner for the counties of York and Simcoe.

BRITISH DIPLOMAS.—Dr. J. B. Lawford (McGill) has been admitted to the Fellowship of the Royal College of Surgeons, Eng.

ROBERT DOUGLAS, A.M., M.D.

We deeply regret to announce the death of Dr. Douglas, of Port Elgin, Ont., Vice-President of the Ontario Medical Council, on the 24th ult., at the age of fifty years. He had been in failing health for several years past, but his death was in the end somewhat sudden and unexpected. Two years ago he went abroad for the benefit of his health and returned much recuperated and resumed his practice, but the improvement was not permanent. The doctor was educated in Queen's College, Kingston, and received the degree of B.A. in 1851 and M.D. in 1856. He was elected to the Ontario Medical Council for the Territorial Division of Saugeen and Brock, in 1880, and re-elected in 1885, so that his death creates a vacancy in the Territorial Division and at the Council Board. He practiced many years in Port Elgin and possessed in a high degree the confidence of the profession and the public. His loss will be greatly felt by those who knew him intimately, and his family and friends have our deepest sympathy in their great affliction.

Books and Pamphlets.

PSYCHIATRY. *A clinical treatise on diseases of the forebrain* by Theodore Meynert, M.D., Vienna, translated by B. Sachs, M.D. PART I.—The Anatomy, Physiology and Chemistry of the Brain. New York: G. P. Putnam's Sons.

As the title of this book indicates, it is intended for the specialty of alienism. The paper is very good and the type will not hurt the eyes even of aged readers. It would be a pleasing duty to award equal commendation to *all* the illustrative plates, no less than sixty-five in number. The reader whose eyes are not of microscopic power, will do well to provide himself with a suitable magnifying glass to enable him to discover the lettering on a few of the above, which though probably very accurate likenesses of the original preparations, have certainly gained nothing in the way of clearness at the hands of the American artist. If the plates 27 and 28, for example, are faithful reproductions of the Viennese artists work, the misfortune must be ascribed to the inappropriate colouring method employed by the author. As the book will be sought after chiefly by psychiatrists, a class of men whose patience is severely enough taxed by the unavoidable perplexities of their vocation, it is a pity that any impediment should be encountered by them, in their laudable efforts to acquire a better knowledge of the anatomy of the brain. It would be perilous to assert that a certain or uncertain minority of their body are already so thoroughly versed in cerebral anatomy and physiology as to stand in no need of further enlightenment. Meynert's descriptions of the constituent parts of the brain, and of their structural and functional relations, cannot fail to be studied with much profit, not only by the imperfectly informed who may muster courage to master the task, but also, and perhaps still more, by those who have made the subject a favourite and prolonged occupation. Let it not, however, be taken for granted, that the great Austrian specialist has reached the Ultima Thule of cerebral science. Readers who may have cultivated acquaintance with the productions of the experimental scientists of other countries, outside of Austria and Germany, cannot fail to see that Meynert would have benefited by a larger intimacy with outside psychological literature. Not in a single instance, in the present volume, has he

named an Italian writer, and it is beyond all question that had he given to the works of Tamburini, Golgi, Luciani, Seppilli, Bianchi and numerous others of the grand old peninsula, even a trifle of his time, he would have produced a still better treatise. Of English writers he *names* but five, and these do not come forth from his pen with much eclat. Of Ferrier, he makes short work, in the following sinistral by-slash. "In parenthesis be it said, that Ferrier's "centres" have met with opposition from *all* other quarters." The italic *all* is Meynert's. It is certainly a *multissimum in parvulo*, but it will not extinguish Ferrier. That his *centres* have been criticised and usefully qualified by several distinguished experimentalists, is well known to readers of foreign medical literature, as well as of English, but that they have met with opposition, in the sense of repudiation or negation, is very far from fact. One can understand why an Austrian Professor could not afford to know something of the doings of a people from whose confines the troops of his own country were ignominiously driven, but what have the English done to merit his scorn? If we may judge from a straggling passage in his preface, Meynert intends in his next volume to annihilate the doctrine of inherited insanity. This will do much in vindication of the mental soundness of his antecedents. Perhaps the translator may be responsible for the following curious announcement. "The brain, like a fixed star, does not radiate its own heat; it obtains the energy underlying all cerebral phenomena from the world beyond it." That Meynert is not a fixed star of this order, will not, by his readers, be questioned, unless the "world without" means only Austria and Germany. But we did not before know that the "fixed stars" do not radiate their own heat. Perhaps Dr. Sachs will not object to a little transposition in the above brilliant metaphor, and allow us to read, "the brain does not like a fixed star, radiate its own heat." If so the author and his translator may claim their proper locations either in the planetary or the cometary range.

THE PEDIGREE OF DISEASE—Six lectures by Jonathan Hutchinson, F. R. S. on Temperament, Idiosyncrasy and Diathesis. New York: Wm. Wood & Co. Toronto: Vannevar & Co.

This book has the two-fold merit of not being large and of coming from the pen of a distin-

guished teacher, whose name will no doubt serve as an adequate guarantee of its utility. Its dedication to the memory of Charles Darwin will hardly fail to commend it to the respectful attention of the general medical profession, and though the veteran practitioner of the healing art may not find in it much that will be new to him, he will be pleased to find some familiar facts presented under a clear and attractive form, and not the less interesting because of his long acquaintance with them. In his observations on *idiosyncrasy*, though the author does not lapse into that hygienic phrenzy which the inspiring subjects of eggs, tea, tobacco, stale fish and alcohol might reasonably have aroused, yet he has perhaps indulged in less twaddle than is usually inflicted on admiring audiences. It is certainly a matter of no trivial regret that so eminent and so experienced a writer has disposed of such important, and sometimes formidable, substances as chloroform, the iodides and bromides, arsenic and some others, with inexpedient brevity. As, however, he was addressing the president and members of the Royal College of Surgeons, he may have been restrained by tender considerations, from enlarging on topics involving delicate affinities. The confession of other people's sins, in mistake for our own, is the cheapest and meanest of human virtues.

J. C. Draper, M.D., LL.D., Professor of Chemistry in the Medical Department of the University of New York, died on the 20th of December in the 51st year of his age.

Births, Marriages and Deaths.

On the 20th December, James Jagu Hillary, M.D., of Jamaica, W.I., formerly of Uxbridge, Ont., aged 48 years.

On the 14th ult., R. Ramsay, M.D. of Orillia, aged 44 years.

On the 17th inst., John E. Galbraith, M.D., of Bowmanville, aged 34 years.

On the 23rd ult., J. W. Byam, M.D., of Campbellford, Ont., aged 38 years.

On the 27th ult., C. Leggo, M.D. of Ottawa, aged 69 years.