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### Canada LANCET.

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE, CRITICISM AND NEWS.

### Original Communications.

THE DIAGNOSIS OF LOBULAR PNEU-MONIA (ACUTE AND CHRONIC) FROM TUBERCULOSIS.

BY- SHAW, M.D., HAMILTON, ONT.

Broncho-pneumonia, the name now generally used by recent writers, is an inflammation of the bronchi and adjacent parenchymatons tissue of the lung.

It is common under five years of age. During the period of dentition it occurs with greatest frequency and is attended with the greatest fatality. After this age the lungs in children develop and begin to assume the adult type, and are then less subject to this form of pneumonia. It frequently follows bronchitis and the infectious diseases of childhood, particularly measles and whooping-cough. Other favoring causes are sudden changes of temperature and ill-nourished and poorly clad children living in badly ventilated houses. It often occurs, however, in healthy children. Briefly, it may be said if following a bronchitis, measles or whooping-cough, a child has an accession of high fever, with cough, rapid pulse and rapid breathing, with râles and blowing, breathing heard at the bases, and with or without limited areas of dulness, the diagnosis may safely indicate acute broncho-pneumonia.

If instead of resolution and a return to health the symptoms and physical signs continue for a few weeks the disease merges into a chronic condition and the diagnosis as to whether the pneumonia is tuberculous or non-tuberculous in character is beset with many difficulties. I am not aware that the differential diagnosis has received much attention from the profession until recently, perhaps because tuberculosis in children beginning as an inflammation, was thought to be comparatively infrequent.

Of 500 autopsies in children reported last year from Munich Pathological Institute, in 150 tuberculosis was present, and in 92 per cent. of these cases the lungs were involved.

In an analysis of 247 cases of pulmonary tuberculosis in children, one was two weeks old, one six, one seven, fifteen from two to three months, seventeen from three to six months, forty from six to twelve months, sixty-six from one to two years, eighty-two from two to four years, thirtynine from four to six years, forty-six from six to ten years, and twenty-two from ten to fourteen years.

Tuberculosis in children is more frequent than is generally supposed. A couple of years ago, I attended an infant aged two months in which I made a diagnosis of acute broncho pneumonia. Later, the extreme emaciation, the persistency of the disease and the general appearance of the child, in connection with the family history, led me to regard the case as tuberculous. Death took place at the age of three months and four days. that time one uncle and aunt were dead from The child's grandmother died (from same cause) one month after its birth and the child's own mother and another uncle and aunt have since died from the same cause.

It seems highly probable that many such cases often diagnosed capillary bronchitis, or catarrhal pneumonia, would, with a careful enquiry into the antecedents and environments, be regarded as tuberculous. The source of infection is full of In the Johns Hopkins Hospital Bulletin for last year a case is reported of a healthy infant nine weeks old with excellent family history, having been moved into a house where a phthisical patient, whose sputum was known to contain bacilli, had been living. The infant died, aged four months, and the post-mortem showed extensive tuberculous broncho-pneumonia with suppurative and caseous focci in the bronchial In this instance it was thought highly probable that the child became infected in the house, where the phthisical patient had been living.

A study of the clinical type of the disease will be necessary in order that a correct diagnosis may be reached.

Jacobi in the Encyclopædia of Diseases for Children gives three varieties:

I. Acute miliary tuberculosis of the lung.

II. Acute or subacute caseous pneumonia.

III. Chronic phthisis.

The first form is rare in children. Formerly it was thought that one of the most common changes in broncho-pneumonia, particularly in children, was caseation, but it is now considered a tuberculous process, and when it does happen it means either a preparation of the soil by a catarrhal process or a lowering of the tissue resistance so that the bacilli already existing in the bronchial nodes are enabled to develop.

Osler says tuberculous broncho-pneumonia most commonly follows the infectious diseases, particularly measles and whooping cough. He recognizes three groups: "In the first the child is taken ill suddenly while teething or during convalescence from fever, the temperature rises rapidly, the cough is severe, and there may be signs of consolidation at one or both apices with rales. Death may occur within a few days, and the lung shows areas of broncho-pneumonia, with perhaps here and there scattered, opaque, greyish nodules."

The second type is frequently met with, beginning as a broncho-pneumonia, following an attack of bronchitis or one of the infectious diseases already mentioned, and is attended with the well-recognized symptoms and signs of a severe inflammation of the lungs. Cough at first slight, becomes severe. There is increased temperature, rising to 103° and 104° or more, sometimes remitting in the morning. The respirations are frequent and superficial.

Auscultation gives moist, dry, crepitant and subcrepitant râles—tubular breathing is frequently heard and there may be limited areas of defective resonance on percussion.

I recall a case of this type of tuberculous broncho-pneumonia occurring in my practice in a girl three years old, who had had measles a few months before, and from which she had apparently made a satisfactory recovery. The sickness began with chills for a few days, with gradual rise in temperature. My attention at first was more directed to the fever, and not to the lungs until, after a few days' illness, when I diagnosed what seemed to be a simple broncho-pneumonia. The symptoms and signs were such as are usually found in these cases. Resolution did not take place. Perspirations became troublesome, the fever hectic, there

were frequent attacks of dyspnæ, and the cough was severe. The persistency of the symptoms, the great loss of flesh following close upon an attack of measles, and having a bad family history, I, later, regarded the disease as tuberculous in character. Death took place at the end of six weeks.

Chronic phthisis is often preceded by impaired health, perhaps with often-repeated chills, or it may come on insidiously during convalescence from an infectious disease. There is moderate fever and loss of flesh. The cough is often overlooked. The symptoms may mitigate for a time, but physicalexamination shows the presence of râles and areasof defective resonance, and the case rapidly develops into that condition familiar to the profession as chronic phthisis. In acute cases it seems difficult from the symptoms and signs to make a positive diagnosis as few, if any, differential indications exist. Osler says: "The profession is gradually recognizing the fact that the majority of cases of broncho-pneumonia are tuberculous." The simple and tuberculous pneumonia, according to the same authority, perhaps, occur with equal frequency in the upper lobes, but the tuberculous form is more apt to invade the central portion, and the most marked dulness and signs may be areascorresponding to the roots of the lung.

Jacobi says: "Contrary to what we see in adults, in whom the tubucular deposits take place in the apices, the principal changes in the tuberculosis of children are often seen in the lower lobes because the frequent attacks of broncho-pneumonia which are apt to be starting-points of tuberculosis are more frequently observed in these lobes. If, as some suppose, infection is principally through the bronchial glands, one would naturally expect the existence of tuberculosis in children to occur frequently in the central portions corresponding to the root of the lung.

The physical signs are of little value in assisting with the diagnosis. The fever is of little value. The pneumonias following measles and whooping cough are more frequently tuberculous than those after scarlatina and diphtheria. The existence of disease in the apices or central portion is suggestive, and softening may early be detected.

Careful enquiry should be made into the personal and family history of the child, at the same time it must not be forgotten that infection may occur in a perfectly healthy child.

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In chronic phthisis there will usually not be much difficulty This case in time presents a clinical picture of ulcerative phthisis. The sputum should always be examined. It can often be found in the vomited portions of expectoration and the tubercle bacilli discovered. (The presence of these bacilli in the sputum is an infallible indication of tuberculosis.) In the acute forms it appears to be impossible to say whether the process is tuberculosus or not; we may surmise, but there is no certainty early in the disease.

Osler's Practice of Medicine says: "In many instances the decision whether an existing bronchopneumonia is simple or tuberculous cannot be made as the circumstances under which the disease occurs, the mode of onset and the physical signs may be identical, and it is well to emphasize the fact that there are many cases of bronchopneumonia in children which time alone enables us to distinguish from tuberculosis."

#### BACTERIOLOGICAL NOTES.

MICROSCOPICAL DIAGNOSIS OF TUBERCULOSIS.

#### BY E. B. SHUTTLEWORTH.

The examination of tuberculous sputum is an operation which every physician has now to frequently perform. It is not always, however, that the necessary details have been practically acquired, and, from the enquiries made of the writer, he is led to believe that a few remarks on the subject may not be unacceptable to young or inexperienced practitioners.

The demonstration of tubercle bacilli in sputum, without having recourse to staining, is a matter of some difficulty, and, for diagnostic purposes, may be at once dismissed. Of the twenty or more methods which have been recommended for staining, it may be said that, in experienced hands, and with proper attention to all the prescribed conditions, they afford fairly good results, but as a matter of fact, being based on the same principle, they may be regarded as modificatious of one general method.

It may be necessary to explain this. The bacilli of tuberculosis and leprosy, and the spores of micro-organisms generally, seem to have a thicker and more resistant cell-wall than other forms, or are in some way differently constituted

and are not readily penetrated by ordinary stains. If by heat, or some other agent, a stain can be made to enter, it is firmly held, and will withstand attempts at withdrawal, or bleaching, which are quite effective when applied to other organisms. In other words the tubercle bacillus is difficult to stain, and, when stained, is difficult to decolorize. This affords a means of differentiation which has proved exceedingly valuable. The requirements are: a stain sufficiently powerful to penetrate the bacilli; a bleacher by which the surrounding tissue, mucus, or accompanying organisms may be deprived of color; and, to make a handsome specimen, and perhaps assist in the differentiation, a second stain, to tincture the decolorized part, so that the bacilli may appear more distinctly by contrast with the back-ground. This test, is not, of course, absolutely necessary, though it is probably easier to distinguish colored objects, say red, on a blue background, than when the latter is quite colorless.

Among the best primary stains are fuchsin and methyl violet; the penetrating power is imparted by the addition of alkali, aniline oil, or carbolic acid; and, among the decolorizers may be ranked the mineral acids. Of the so called contrast stains one may choose blue or green for red, and brown or green for violet. Of these materials the preference is with fuchsin and carbolic acid = Ziehl's carbol-fuchsin; hydrochloric acid and alcohol for a bleacher; and methylene blue for contrast.

Carbol-fuchsin solution can be easily made by dissolving ten grains of fuchsin in two fl. drachms of alcohol, and adding to this two fl. ounces of a saturated aqueous solution of carbolic acid. If this is not clear, a few drops more alcohol may be used. Another ready way to make the stain is to add to the aqueous carbolic acid solution as much of a saturated alcoholic solution of fuchsin as may be necessary to give a bronzed appearance to a drop of the mixture which has been allowed to remain for a few moments on a piece of glass. The decolorizer consists of a three per cent, alcoholic solution of hydrochloric acid. The contrast stain is a saturated aqueous solution of methylene blue.

Care should be exercised in the selection of sputum for examination. That expectorated early in the morning is best. A little may be poured on a piece of black glass (or clearglass on a black surface)

and carefully searched with a needle or platinum wire loop for caseous or solid looking particles. These are to be picked out, as free from mucus as possible, and put on a cover glass. Another cover is put over this and the two worked gently together, between the finger and thumb, so that the material may be crushed and evenly distributed. The covers are now slid apart, and allowed to dry, at the air temperature. The coating is then to be fixed, so that it may not be removed by the subsequent operations of staining and washing. may be done by taking one of the covers between the finger and thumb, and holding it horizontally, coated side up, over a flame, testing it from time to time by putting it in contact with the back of the left hand. It should not be so hot as to occasion pain. The usual plan is, however, to take up the cover with forceps, and pass it three times through the flame of an alcohol lamp, or Bunsen, counting one, two, three, rather slowlysay, taking up two seconds in all. The heat should not be such as to burn or discolor the film.

A few drops of Ziehl's solution are now to be applied; the cover being held over the lamp until steam is observed near the surface, and then withdrawn, the operation being repeated three times, with intervals of about a minute between the steams. The specimen is now ready for decolorization, which is effected by washing with a gentle stream of water, (a spritz is very handy) and then treating with a few drops of the hydrochloric acid solution, and repeating the dose until the red color has disappeared. The acid is then removed by water, and a few drops of methylene blue put on. After a minute or so this may be removed by water, and the cover dried by putting it, film side up, on a piece of blotting paper, and folding over one thickness, passing the finger lightly over the surface. If a permanent preparation is desired. the cover should be very gently warmed, or allowed a few minutes to become thoroughly dry, and then attached to a slide by a drop of balsam. If for mere examination, a drop of water will be all that is required. It is to be understood that all the operations of staining and washing are to be performed while the cover is held horizontally by the forceps. For this purpose those of the Cernet pattern will be found a comfort.

The bacilli will, of course, be red on a blue

careful and thorough and should not be hurried. It is well to examine at least three cover-glass preparations before forming conclusions. As far as power is concerned there is no doubt but a onetwelfth inch oil immersion lens will give the most satisfactory results, and is indeed indispensable for almost any kind of bacteriological work. For this purpose a one-eighth dry objective will, however, answer very nicely, and even a one-fourth inch can be used. The bacilli, if well stained, are visible with a good lens of seven-tenths, with a strong ocular, as it is a case of differentiation of color more than form. A one-fourth inch, with a medium eye-piece, is as low a power as can be safely employed, even in experienced hands.

INTRA-CRANIAL NEURECTOMY OF THE SECOND AND THIRD DIVISIONS OF THE FIFTH NERVE IMMEDIATELY IN FRONT OF THE GASSERIAN GAN-GLION.

BY JOHN B. ROBERTS, M.D.

I report this case partly on account of its novelty and partly on account of the apparent success of the operation. The patient is a man seventysix years of age, on whom I operated about two years ago for frightful neuralgia, which affected the first and second branches of the fifth cranial nerve. He had been operated on previously without success. I removed the supra-orbital and infraorbital nerves at their anterior foramina, chiselling away the lower part of the orbit in order to tear off the latter nerve as far back as possible. He had a period of comfort for perhaps a year, when the disease returned. He was then operated on, 1 think, by Dr. John B. Deaver. I do not know what Dr. Deaver did, but I believe that he cut out the cicatrix. The man came to see me again a year ago, and I decided to ligate the primitive carotid, which has been recommended in some of these cases, and which I had found satisfactory in a case operated on six months previously. I operated last November, tying the primitive carotid with catgut. He was discharged at the end of three weeks suffering no pain.

He again began to suffer and has appeared at my office two or three times in the last three of The microscopic examination must be | four months. His pain was so great that I de-

cided to attempt the removal of the Gasserian I had long made up my mind that the route advised by Rose, of England, of cutting away the coronary process of the lower jaw and the zygoma, and trephining from below, was an operation of great severity; and although he has reported several cases of cure, I had about made up my mind that I would not try it. In March of this year I saw the description of the operation proposed by Hartley, of New York, which is somewhat similar to that of Horsley. An opening is made by Horsley in the temporal region, the dura mater opened, and by getting under the temporal lobe, the fifth nerve is cut off at the pons and the ganglion also removed. The case on which this operation was done, died. When I saw Hartley's operation described, it seemed to me that it presented the better method, and I determined that I would adopt it in a case where such operation was indicated.

Four days ago I made an omega-shaped incision, beginning at the external angular process of the left side, ascending to the temporal ridge and coming down at the tragus. With a sharp chisel I cut through bone in the same line; above, going down to the dura mater, but below through to the diploë only. With a lever the bone, muscle, and integument were turned down over the zygoma as an osteo-cutaneous flap. This exposed the dura mater and the middle meningeal artery. trunk of the artery was not torn because it ran in a groove and not in a foramen at the angle of the parietal bone. A small opening in an upper branch was bleeding, and was secured by two sutures passed above and below the opening. The dura mater was separated from the base of the skull and the foramen rotundum exposed. I was surprised at the ease with which I could press the brain over to the right to make room for my manipulations. As I pressed upon the brain the man's left hand that is, on the same side as the operation—went into a state of tonic contraction or spasm, which disappeared as soon as the extreme pressure was stopped. With a tenotome I cut off the second division of the fifth nerve, which was the one that gave pain, close to the round foramen, and endeavored to follow it back to the ganglion. I was unwise in using a blunt pointed tenotome, dissecting backward along the nerve, for before I got through the dura I cut or tore the nerve off close

to its attachment to the ganglion. This made me lose my landmarks, and I could no longer trace my way back by holding on to the nerve with foreeps. I then cut off the third division at the oval foramen, and again made the attempt to dissect up to the ganglion, but practically the same thing happened. During this time there was a good deal of bleeding, probably from the petrosal sinus, but by changing the position of the patient's head the blood did not obscure the field, and with the electric light and head-mirror, I had a good view. After spending considerable time I concluded, after consultation with my colleagues, that I had probably done enough, without uncovering and removing the Gasserian ganglion. I had excised the painful nerve (the second division) from close in front of the ganglion to the round foramen, and had pushed the distal end of the nerve forward into the canal. I had also excised the third division from the Gasserian ganglion to the oval foramen and pushed the distal stump into its canal in the same manner. The flaccidity of the dura rendered it a little difficult to cut through the layer covering the ganglion with accuracy. The use of a uterine tenaculum to make the dura tense would probably have helped me.

I allowed the brain to come back into place, shut down the lid of bone, and sutured the skin, using no drainage. The eyelids of the left eye had been sewed together before the operation lest corneitis might develop after removal of the ganglion.

The patient has done so extraordinarily well that I can hardly believe it myself. He has not had a bad symptom; there has been no paralysis, no aphasia, and he has needed no anodyne. This is the fourth day. The pulse is 72, respiration 17, and temperature 98.4°. There has been no neuralgic pain. He has the same "queer" sensation in the infra-orbital region which he had after ligation of the carotid artery, and which soon disappeared. On the second day I found him slightly propped up in bed reading the paper. He catheterizes himself three or four times a day, being the subject of old bladder disease, and is doing perfectly well. The portions of the nerves removed are shown in the bottle which I have passed round.

Note—It is now eighteen days since the operation, and the wound is entirely healed by first intention. The man is well, except that he com-

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at or deplains of headache. This is probably due to the aseptic cerebral inflammation at the seat of traumatism. He is up, goes out, and has normal respiration, pulse, and temperature. He reads, talks, and seems the same as before operation, except that he is relieved of the torturing neuralgic pain, and has the dull headache. He complains of an "ugly" feeling at times in the cheek. It is not at all the pain he had previously. After this report was written it was noticed that he could not recall the names of the city streets and of the physicians. This was probably an aphasic symptom, and it is now improving, being scarcely noticeable.

## A SUCCESSFUL METHOD OF TREATING FOLLICULAR TONSILLITIS.

BY JUNIUS C. HOAG, M.D., CHICAGO.

Among the forms of disease most familiar to the physician is that of follicular or lacunar tonsillitis. The symptoms and anatomical features of tonsillitis in general are well known to all. The special chracteristics of the follicular form is the presence of cheesy masses which fill up the follicles of the tonsil and projecting upon the surface of the gland give it a punctated appearance. This feature of the disease may, indeed, be marked by the formation of a pellicle composed of the same material as that which fills the follicles and which may simulate the membrane of diphtheria; but the removal of this pellicle, which is easily accomplished, will generally enable one to make the correct diagnosis.

The differentiation of follicular tonsillitis from diphtheria may occasionally be attended with difficulties, but it is certainly not so as a rule; and yet we know that many physicians habitually inform their patients that they are suffering from diphtheria when in truth it is merely a question of tonsillitis. To this fact, doubtless, many of the marvelous cures of diphtheria may be ascribed.

To my mind the most remarkable feature of follicular tonsillitis is the disproportion generally witnessed between the comparatively innocent appearance of the tonsil and the comparative severity of the constitutional symptoms. But a few years ago I made an observation which to me seems equally remarkable and one that possesses very important bearings. This observation contains

the kernel of my present remarks, and is this:— The removal of the cheesy plugs which occlude the lacunae and follicules of the tonsils is uniformly followed by a very marked amelioration of all the symptoms of the disease.

The material which accumulates in the lucunae consists of masses of fibrinous lymph, mucus and epithelial cells swarming with micrococci, the commonest form being a streptococcus. My explanation of the severity of the symptoms of the disease is that a toxemia is produced; and conversely the removal of the source of the poisoning results in prompt relief to the patient.

My treatment is easily described. When I find a patient with the high fever and sore throat of follicular tonsillitis, I spend fifteen or twenty minutes in removing the exudate of the tonsils. I do this with the aid of three little instruments, viz: a small spoon such as is used in clearing out the meatus of the ear, an ordinary silver probe wrapped with a small piece of absorbent cotton dipped in peroxide of hydrogen, and a small forceps with which to seize sticky masses not easily removable with the other instruments. My usual directions are to make frequent applications of peroxide of hydrogen to the tonsils by means of a brush, in addition to which I direct the use of the ordinary gargles and appropriate constitutional treatment. But my main reliance is in the topical treatment as described and after a single séance with the patient I confidently expect to find a very marked improvement within a few hours and am rarely disappointed therein. This treatment is usually repeated once or twice.

I have treated many patients in this manner and have been greatly satisfied with the results obtained. Recently I have looked over as much of the literature of the subject as was conveniently accessible and failed to find any similar treatment described. By my method I am convinced that I am enabled to shorten the duration of the disease very materially; indeed my patients get well in half the time required by former treatment. I therefore recommend this procedure to you in full confidence that you will be pleased with it.

It is reported that Professor Koch's wife has obtained a divorce from her husband. The Professor is said to be *epris* of a young actress, whom he shortly intends to marry.

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### Selected Articles.

## SOME CASES OF CHRONIC TUMOR OF THE BREAST.

GENTLEMEN,—Some of you may perhaps recollect having seen me remove about a fortnight ago a small tumor from the breast of a patient in the Cholmondeley ward, who was about forty years of At first sight there appeared to be nothing very interesting about the case. The tumor was a small mass which lay in the substance of the left breast, where it had been discovered quite by accident several months before; no notice had been taken of the matter until a month before the patient's admission, when it had commenced very distinctly to increase in size. The removal of the little lump proved to be rather more difficult than it originally seemed likely to be, because it was closely connected with the breast tissue about it, although before removal it seemed to be perfectly loose, as it rolled about, apparently just beneath the In removing it, not only was it necessary to cut through a thickish layer of breast tissue, but in consequence of a hard process which passed from the tumor into the adjacent part of the breast some of the latter structure had to be taken away with The wound was sewn up with horse-hair in the ordinary way, and the patient recovered in a few days. The tumor proved upon examination to be an adeno-fibroma, that is to say, it was partly composed of gland tissue, resembling to some extent the mammary gland itself, and partly of fibrous tissue, the latter being greatly in excess. The tumor possessed, however, one peculiarity-viz, that the most recent part of it, that part, in fact, to which its increase in size had obviously been due, presented characteristics hardly distinguishable from sarcoma: a condition which, had I recognized it at the time of the operation, would certainly have led me to remove the whole breast instead of performing the partial operation.

As a contrast to the above let me mention a case upon which I have recently operated in private practice. As a rule I avoid mentioning in these lectures cases which occur in private practice because I think it is better in a general way to refer only to those occurring in the hospital wards, which some at least of you have seen; but this particular case is such a good contrast to the other that I will briefly describe it.

The patient was a lady about forty years of age. She had a tumor apparently precisely similar to the one already mentioned so far as the external aspect was concerned; the mass was hard, elastic, somewhat irregular in shape and rolled about under the skin. In the removal of this tumor no breast tissue was incised, for upon cutting through the skin nothing lay over the mass but a thin layer of

fibrous tissue, which formed, in point of fact, the capsule in which it was. Upon opening this capsule and making a little pressure the tumor slipped out, as it was not at all connected with the breast itself and indeed was perfectly free save that it was anchored to the bottom of the capsule by a single strand of fibrous tissue. This tumor proved to be an adenoma—that is to say, it was composed almost entirely of glandular tissue, closely resembling the mammary gland itself. The absence of any direct connection between this tumor and the breast and the great preponderance of gland tissue are the two points in which it contrasts so strongly with the mass in the other case. These tumors, the adenofibromata and the adenomata, are classed as innocent and harmless growths, and harmless enough they may in themselves be, provided that no evil change comes over them. As a rule they are discovered by the patient quite accidently, so that the time during which they have been in existence is generally doubtful. They may remain unchanged in size for years, causing no inconvenience, excepting, perhaps, at the menstrual epochs, when they may temporarily swell a little and become sensitive, participating, in fact, at such times in the general condition of the mamma itself. Usually if a patient consults a practitioner about a tumor of this kind she is told that so long as no increase in size or discomfort occur no anxiety need be felt, and she is advised to leave the "lump" to itself unless some change occurs in it. This advice is, I believe, the worst that the patient can be offered, for reasons which I hope I shall be able to make plain presently. It is, I suppose, hardly necessary to remind you that these growths never arrive at a perfect state of natural development. However pure the adenoma may be, you may be absolutely certain that it will never reach the perfect type of developement attained by the mammary gland. This fact applies even more forcibly in the case of the adeno-fibromata, which never arrive at anything at all approaching the perfect type. Following upon this comes another fact which is undeniable viz., that whenever a tissue found in any part of the body (especially if connected with the secreting glands) is foreign to the part in which it lies—as these tumors are, for instance, foreign to the natural breast-and does not arrive at a perfect state of development, this abnormal tissue is more liable to degenerate and tends more to erratic growth than any structure of a perfectly normal type. In other words, these tumors occurring in connection with the normal breast are more liable to degenerate and change their shape and character erratically than the breast itself, mainly because they are imperfectly developed and have an unfortunate inclination, like all products of this kind, to revert to a certain extent to the embryonic type in their growth. Granting these points, as may safely be done, we come to another stage of the

question. Malignant disease, carcinoma or sarcoma, is unhappily common in the female breast, and you are aware that its occurrence is generally supposed to be, to some extent, influenced by hereditary causes. I know that this point is, to a certain degree, disputed by some; but at least, we generally understand that, all other things being equal, a person having ancestors who have suffered from cancer is more likely to be afflicted with that disease than one whose progenitors have been perfectly free from the cancer taint. So far we may go without much fear of contradition. Now, these mammary tumors, whether they be of the nature of an adeno fibroma or pure adenoma or any other growth of an originally innocent kind, constitute really (if what I have said about their defective development is true) weak points in the mammary apparatus. Seeing how prone the mammary gland is to become the seat of malignant disease, it follows logically that a patient who has in the mammary gland a tumor of this sort would be more likely to suffer from malignant disease than one whose breast is normal, because of the existence in the mammary apparatus of a weak point, more liable to retrogress, more liable to change and erratic growth than the healthy gland itself. Again we may go still further and say, if what has been already stated is correct that a person having a chronic mammary tumor, however innocent it may in itself be, whose ancestors have exhibited the cancer taint, would be more likely to suffer from malignant disease than one who had no such tumor. Further, it ought to follow almost as a matter of course that if malignant disease should attack the breast of a patient who has one of these tumors the disease should begin in the tumor and not in the healthy breast tissue; that the tumour would, in fact, form the centre for the malignant growth. These views, although in the main, I believe, correct, are not quite in accordance with the teaching of the text-books. is another point of interest in connection with these tumours upon which the books are, I venture to think, somewhat misleading. Upon consulting some of the text-books in common use you will I think, find that the adeno-fibromata, the ardenosarcomata and the adeno cystomata are described as entirely distinct and different growths, without any reference to the possibility of the sarcomatous forms being simply produced by changes occurring in the adenomata or adeno-fibromata. That the change from the benign to the malignant form of growth is not uncommon I have, however, no doubt. Amongst the cases of tumors of the breast upon which I have operated during the past two years there were five in which the growths were small and had all the characteristics before operation of adeno-fibromata. In each of these cases there had existed without change for a long period a chronic mammary tumor, which shortly before

the operation had commenced to grow. In three of the cases the tumors proved to be sarcomatous, one was scirrhus and one was "duct" cancer, while in each there was clear evidence that the original growth had been an adeno-fibroma, which formed the soil in which the malignant disease had started.

The last of the cases occurred only a week since and is so characteristic that it is perhaps worth relating. The patient was a lady forty-three years old, who seven years ago discovered quite by accident a small "lump" in the right breast. Having thus discovered it, she, as is the custom with many patients, carefully at first concealed the fact of its existence. No increase of size or discomfort occured, but untimately she consulted a physician, who told her that the swelling was not in itself serious, but that, on the whole, it would be better at some convenient time to have it removed, and further, that if it showed the least inclination to increase removal should at once be undertaken. She did nothing more in the matter till three years later, when she was confined of a child. The swelling then became sensitive, and she consulted the accoucheur in attendance, who advised her to leave the tumour entirely alone, unless it grew This advice she readily took. Three years afterwards the increase in size commenced, and, still reluctant to have anything done, she allowed the growth to continue until a fortnight before I operated, when she consulted the physician to whom she originally went and was told to submit to operation without delay. Upon removing the tumor, which lay in a well-marked capsule and was attached to the breast at one point only, 1 found it was clearly an adeno-fibroma, but in its centre was a rounded mass of softish material, to which the increase in size had been manifestly due. This semi-gelatinous material proved to be a "spindle-celled" sarcoma and was on all sides surrounded by a layer of tissue identical in structure with that of a benign adeno-fibroma. At one point the sarcoma was creeping towards the surface, and over this part the benign structure was so thin as to be hardly perceptible. The breast around showed no actual sign of disease, but as it was somewhat hard, and as a small hard gland could be felt in the axilla, I thought it better to take away the whole mamma. In this case I think there cannot be any doubt that the tumor had only recently become sarcomatous. The chronic mammary tumor, in fact, represented a weak point in the breast, and irritation of some kind. produced probably during the time of suckling, affected the nutrition of the tumor in such a way that it began to grow erratically, a sarcomatous change in it being the result. If the patient had not been the subject of a chronic mammary tumor it is in my opinion nearly certain that she would not have developed any malignant growth, for this disease as clearly as possible originΕ,

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ated in the tumor. I also believe that had the tumor been removed when it was first discovered —that is to say, before the existence of any tendency to change in it—the patient would not have suffered from sarcoma at all. There is a tradition which is still fostered by the teaching of some of the text-books that these chronic mammary tumors (adenoma and adeno-fibroma) tend to shrink and sometimes entirely disappear during lactation. do not know upon what evidence this teaching is based; I have seen a great deal of this class of mammary tumor before, during and after lactation, and I can with all truth say that I have never seen a tumor which I had good reasons for believing to be an adenoma or adeno-fibroma show the least inclination to shrink, to say nothing of disappearing altogether. I have, however, seen such tumors increase rapidly during the suckling period, and I have seen without doubt, a simple adenomafibroma become malignant under similar circumstances. Chronic mammary indurations sometimes shrink and disappear during lactation, especially after the first parturition, but I do not believe that the true chronic mammary tumor ever disappears in this way, nor can I regard it as pathologically likely that it would do so, as the tendency after irritation would surely be towards growth rather than shrinkage.

I have mentioned in the description of one of the cases, to which I have just called your attention, that there was a hard, oval, enlarged gland in the axilla. This gland was not merely enlarged in consequence of irritation, but was affected by sarcoma of the same kind as the disease in the breast. Not long ago I saw another instance of the same Incidentally the existence of these secondary sarcomatous glands is of some interest; for it will show you that you must not rely too implicitly upon the occurrence of secondary enlargement of the glands in tumors of the breast as a symptom of carcinoma as distinguished from sarcoma, although it is, I believe, pretty generally taught that secondary disease of the glands is pathognomonic of carcinoma.

If you have followed by remarks upon the subject of these chronic mammory tumors generally, you can easily anticipate my recommendations as to their treatment. I have no doubt whatever that the proper course to follow upon the discovery of one of these tumors is to urge its immediate removal. The operation is in itself trifling, the patient need hardly be confined to bed at all, and the resulting scar is so small that it is almost imperceptible. Thus by a trifling proceeding which is entirely without risk you can rid your patient of a structure which is abnormal and which by reason of its imperfect development is prone to become the seat of a malignant disease. To advise patients, as is so commonly done, to leave these tumors alone until they show signs of growth is in

my opinion wrong from every point of view unless some special or unfavorable reason exists for such advice, for by so doing you will, I believe, condemn a certain number of women to be afflicted with malignant disease who would, if the removal of these tumors were undertaken immediately upon their discovery, escape the more serious affection altogether. Should the treatment of the tumor in any case be postponed until increase in size has commenced it is clear that an operation for its removal should be performed at once. The question then arises as to whether mere removal of the tumor only, the breast being left undisturbed, is sufficient, or whether the whole breast itself should be taken away. If there are no enlarged glands in the axilla this point can only be decided after the tumor has been laid open, when, if it appears that the increase of size has been due, as in one of the cases I have related to you, to the accession of new growth in or about the original tumor, the whole breast should undoubtedly be taken away. If, on the other hand, the increase seems to be due merely to a uniform growth of the primary tumor, the consistence and appearance of which remain the same throughout, then the operator may be content with the removal of the tumor only, at all events until the excised tissue has been submitted to microscopical examination. When enlarged glands exist in the axilla on the affected side—the opposite axilla being free—the whole breast should at once be extirpated.

In conclusion, let me warn you against the use, in these cases of chronic mammary tumors properly so called (I do not mean chronic mammary indurations), of the many liniments so much beloved by some practitioners, for I assure you they stimulate growth more than they promote absorption. for reasons which seem sufficient, it is decided in any given case to defer operation or to set it aside altogether, let me beg of you not to worry a structure, which is already inclined to grow, by irritating medicaments into unnatural activity, but to leave it entirely alone, in the true sense of the word, and -a thing which is most difficultendeavor as far as possible to make the patient do the same.—Clinical lecture by W. H. Bennet, F. R.C.S., in Lancet.

#### THE PREVENTION OF HEART-FAILURE IN ACUTE FEBRILE DISEASES.

There is a lack of good remedies to meet the indications furnished by the weak heart in pneumonia and in febrile diseases generally.

Take, for instance, the case of simple fibrinous pneumonia occurring in an elderly man of not average robustness, or in a delicate, feeble woman. No prudent physician would think of prescribing depleting medicines here; veratrum viride would

be regarded as of questionable utility, and antimony would be altogether eschewed. But what remedies should be chosen? Shall any be given? The present tendency is to be shy of large doses of powerful drugs; the practitioner feels safe in prescribing nitre and ammonia, in ordering milk and other liquid nourishment, "to support the strength." In many cases of impeded respiration oxygen is certainly of extraordinary utility, both from its relief to the pulmonary functions and from its general tonic effects. Shall one on the other hand, prescribe whiskey or brandy, or trust to "expectancy"? It cannot be said that there is perfect agreement among the best representatives of medicine to-day as to the reply which should in all circumstances be given to that question.

In the supposed case of pneumonia, one quite large class of practitioners would consider the alcoholic treatment indispensable. Granting the fact of a rather feeble pulse—a diminution in the force of the heart's systole and impulse, a considerably increased frequency of its beats—the physician of this class would early in the sickness give wine or spirits every two or three hours. Here, he would say, is a case where the danger comes from heart-failure. If we support the heart all through the sickness, will it not be more likely to stand the strain of the crisis about the end of the first week? For this reason alcohol is given, and often digitalis; the latter remedy has the disadvantage of being a vaso constrictor and of augmenting the resistance in the arterioles and capillaries. On the other hund, the opponents of the alcoholic medication point with triumph to the relatively small mortality which attends a treatment of which alcoholic stimulants constitute but a very insignificant part. They affirm that alcohol further poisons the blood, already poisoned by the toxines of the pneummococcus, and if given heroically may paralyze instead of toning and strengthening the heart. They challenge the proof that a weak heart, however well "supported" by an alcoholic regimen from the commencement of the sickness, bears up exceptionally well under the struggle. How many sink under the most heroic stimulation!

There is doubtless some truth in this presentation of the case, although it should not be forgotten that it is the worst cases which are apt to be given the most alcoholic stimulation. A feeble heart under the stimulus of blood charged with alcohol, may for several days display unusual activity. The physician may be lulled into a sense of security about his patient who, under the influence of frequent spirit-potions is supposed to be doing finely, when all at once, about the eighth day, a "rattling in the chest," coma-vigil and collapse appear! Doubtless the weak heart has sometimes been whipped into preternatural energy by alcohol, only to be exhausted just when its full functional integrity and vigor was most needed.

The opponents of the alcoholic medication à l'outrance, while affirming that such results as are above depicted are not uncommon (and here possibly the argument is based more on theoretical considerations than on any exact scientific inductions), still claim that a moderate and judicious use of wine or brandy about the epoch of crisis, to produce a temporary effect and to brace up the heart at the time when a few hours will decide the question of recovery or death, is both rational, and, in accordance with sound experience.

The same has been said pro and con in reference to the treatment of typhoid fever. Some would give alcohol rather freely from the first (not even excepting mild cases which are stimulated with the view of supporting the heart). Others are very chary in prescribing alcohol, and only order stimulants when symptoms of sinking threaten, and then for a temporary effect.

It is not yet absolutely determined that the long continuance of rather small doses of alcohol in fevers (half an ounce of whiskey every two or three hours, or an ounce of wine) to feeble, adult patients is in any sense harmful; or do we really know the amount of benefit, if any, which is derived from such doses. This is a matter which can only be determined, if ever, by large clinical experience, an experience embodying cases (occuring undersimilar conditions) that have been treated both with and without alcohol.

With regard to digitalis, we think that very many practitioners have come, with Osler, to regard the administration of this remedy to prevent falling heart in pneumonia and in fevers as of doubtful utility. The same may be said of caffeine, which when given subcutaneously with benzoate of soda, is thought by certain French authorities to be of marvellous efficacy in threatening heart-failure. It is certain that the experience of those who think that they have almost seen the dead restored to life by these injections, has not been the common experience of physicians in this country who in desperate cases of sinking and collapse have resorted to this remedy. Nor has nitro-glycerine, strophanthus, or any of the other modern heart-tonics won their way to general acceptance as trustworthy remedies against heartfailure in acute febrile diseases not primarily cardiac.

It may be contended that much can be gained by the judicious use of certain vaso dilating remedies which lighten the work of the heart by lessening peripheral resistances. In this way, writers have affirmed that veratrum has done good in pneumonia, even in the aged and feeble, that is, by relaxing the arterioles. This claim does not seem to have been positively substantiated. Similar vaso-dilator effects have been claimed for the nitrites, for belladonna, opium and gelsemium in small doses in prostrating fevers; and there is

reason to believe that alcohol (so much misunderstood and abused) when given in suitable moderation, so as not to exceed the healthy physiological mean, may be beneficial in febrile complaints, not by exciting the heart, but by calming it and diminishing its work by opening up more completely the capillary sluiceways.—Ed. in Boston Med. & Surg. Jour.

#### UTERINE HÆMORRHAGE.

Few symptoms may arise from a greater variety of causes than uterine hæmorrhage, and whilst sometimes it may be of comparatively small importance, at other times it may have the gravest It should therefore never be disresignificance. garged or treated lightly till the reason for it has been satisfactorily ascertained, or, at all events, till every effort has been made to determine its cause. It may be said that these are merely general principles such as are acted upon by every earnest practitioner in every department of medicine—that, in fact, this is merely another way of saying that diagnosis should precede treatment; and this is true up to a certain point. For instance, to take as an example a common symptom, such as diarrhea, it is obvious that all practitioners having excluded the more serious diseases likely to cause the condition, must at times be content to prescribe for it without always being able to say positively to what it may be due. We have not taken this symptom by any means at random. Indeed, within our knowledge a case occurred even in hospital practice in which a patient was treated for simple diarrhea for twelve months by various astringent mixtures without benefit. At last, when a local examination was made, a large gall-stone was found partially embeded in the recto-vaginal septum. In this instance the fact that treatment had preceded diagnosis had not done the patient any great harm; but there are special circumstances, unfortunately, in the case of metrorrhagia which not infrequently lead to the most lamentable consequences to the patient unless accurate diagnosis be made the first consideration. For instance, there is the knowledge on the part of the medical attendant that many patients are exceedingly unwilling to submit to examination, and therefore a natural disinclination on his part to urge upon them a course that would certainly be unpleasant, and might afterwards prove to have been unnecessary. Then, again, there may sometimes be a doubt in the practitioner's mind whether, after obtaining the patient's consent, the result of the examination would be as conclusive as could be wished. these reasons the practitioner may be inclined to think there can be no harm in waiting for a little time, and trying the effect of the various medicines

reputed to be useful in the treatment of metrorrhagia before determining upon a thorough investigation of the case. Yet it is scarcely possible to insist too strongly on the fact that a certain proportion of women who suffer from losses of blood. or a blood-stained discharge between the menstrual periods are suffering from cancer of the uterus, and the responsibility rests with those in attendance to make sure, as far as possible, that a case with this symptom is not a case of cancer before proceeding to treat it by simple remedies such as ergot or hamamelis. If this were borne in mind a larger proportion of cases than at present would be seen in time for operative treatment to have a fair chance of success. There are some popular fallacies, as our readers are well aware, prevailing amongst women themselves with regard to this subject. For instance, there is the notion that pain is invariably associated with cancer, and that consequently so long as there is no pain they may safely assume that their ailment, whatever it may be, is not, at all events, cancer. Similarly, even a larger class of patients erroneously fancy they must be the victims of cancer because they suffer pain. The fact of course is that, as regards cancer of the cervix, pain does not generally accur till a late period in the case, when the disease has reached an advanced stage and satisfactory treatment by operation has become impossible. It is true that in cases of primary cancer of the body of the uterus pain is often an early symptom, but, as is well known, in by far the largest number of such cases, the disease begins in the cervix, and here what has been said above applies. Another erroneous prevailing impression is, that the disease is necessarily one of advanced life. Now, whilst this is so as regards primary cancer of the body of the uterus, it is certainly not so as regards the cervix. We not rarely meet with cases of the latter class between the ages of twenty five and thirty, and after thirty they become comparatively common. Again, we must not lose sight of the fact that there is not infrequently some misapprehension as to there necessarily being an offensive discharge in cases of cancer. Such a discharge is practically always present sooner or later, but it is usually later; the point to be remembered is that in many early cases of cancer of the uterus the discharge is not at all offensive. This applies to both classes of cases. The absence of an offensive discharge must not for a moment be taken as warranting a conclusion that the patient is not suffering from cancer. On the other hand, whilst there is almost always an offensive discharge at some period or other in cases of cancer, an offensive discharge does not of course by itself warrant a diagnosis of cancer.

All whose practice deals more especially with the diseases peculiar to women have doubtless seen cases of advanced uterine cancer where valu-

able time has been lost in unavailing treatment by internal remedies and the use of some simple vaginal douche. In some of these cases perhaps no examination whatever may have been made. Great advances, however, have been made of late years in the diagnosis of cancer, and so far as the profession itself is concerned there is a more general recognition of the significance of intermenstrual hæmorrhages. Now, whilst any intermenstrual hæmorrhage should excite a suspicion that there may be something seriously amiss, and lead to a thorough investigation, it is not too much to say that hæmorrhage after the menopause is generally due to cancer. There are, of course, exceptions to this as to most other rules, but the safest plan is to regard any case of hæmorrhage after the menopause as possibly due to cancer till an examination has been made. Even if no evidence of anything abnormal is discovered by an ordinary vaginal examination, it should not be forgotten that the disease may be beginning in the supra-vaginal cervix, or even in the body of the uterus, and certainly the persistence of a sanious discharge should lead to a further investigationthat is to say, the cervix should be dilated, so that the condition of the supra-vaginal cervix, and of the interior of the body of the uterus, may be ascertained. - Ed. in Lancet.

#### PRECAUTIONS AGAINST CHOLERA.

The Therapeutische Monatshefte has published the following rules issued by the Imperial Bureau for the benefit of the German people. The advice is certainly wise and minutely given, and shows the paternal care of the government.

1. Keep your presence of mind in the danger; avoid too great anxiety, for it clouds your clear judgment. Only the man who thinks clearly can make proper use of the precautions against danger.

Maintain cleanliness in your person and surroundings. Discretion, temperance, precise cleanliness, prove the best protection against disease.

Hold firmly to your ordinary regular mode of Avoid festivities and assemblages of people.

Avoid medlcines as long as you are well. Visit the sick only when your duty calls you. Avoid intercourse and close contact with per-

sons who come from cholera regions.

Do not leave your home in order to escape the disease. Consider that you may be in greater danger in travelling, and living under altered conconditions in a strange place, than while leading a careful, regular life at home.

2. Do not put other objects besides food and drink in your mouth—e.g.—the fingers in turning through a back, pen holders, lead pencils, etc.

Drink as little water as possible, and only such as you know to be above suspicion.

Pure spring water is, as a rule, unsuspicious. Water from deep pipe wells, and from closed pipes, if taken from open waters, such as have been subjected to a genuine filtering, is safe. (Small house filters, unless frequently changed or cleaned, are rather harmful than useful.)

Water from rivers, ditches, ponds, flat, open or poorly-covered springs, also from springs which are near dirt or dung sites, is suspicious during cholera epidemics. All washing and rinsing, as well as pouring out of dirty water near springs,

may be dangerous to health.

Suspicious water during the prevalence of, or near cholera, is only safe to use for drinking, washing the face, rinsing the mouth, washing utensils used for food and drink and the like, after being boiled one minute. The germs of the disease are destroyed by cooking, but fresh germs may again occupy it if it stands long.

To make boiled water taste well, add to each glass (half a pint) as much tartaric acid as you can take on a knife-point, or two drops of hydrochloric

Keep water in clean vessels.

Tea, coffee and cocoa are permitted drinks, also good beer and pure wine.

Beware of ice and very cold drinks.

Let your beer be clear and fresh, neither sour nor insipid; have it served to you in glasses which have been washed with unsuspicious water, (when necessary, boiled).

Bitter schnapps often contains aloes, hence, act

laxatively and are questionable.

Mineral waters are unquestionable, if they come from natural springs, or are prepared with distilled

Avoid drinking uncooked milk.

The disease may adhere to butter and fresh cheese, if they were prepared or kept near persons ill with cholera.

Eat fruit and vegetables, also onions and the like, only in a cooked state.

Eat nothing uncooked or unroasted which strange hands have touched, unless you know them to be reliable.

Purchase food only from reliable, clean shops. Avoid such as are in cholera houses.

Avoid all excess in eating and drinking. especially cautious if you incline to diarrheea.

Eat and drink nothing as wholesome which is in a sick room. Consider that flies and such insects might carry the germs of disease from the patient to your food.

Even cigars may convey infection in a patient's

3. Keep your head cool, your body warm, your feet dry.

Live and sleep in pure air; fumigations do not prevent contagion.

Wash your hands frequently during the day

with water, soap and brush, especially before you touch eatables.

If you have touched any dirty or suspicious objects, first wash your hands carefully with a solution of four teaspoonfuls of clear, fluid carbolic acid in a quart of water (five per cent. carbolic acid solution); then wash this off with clean water and soap.

In cholera regions do not bathe in rivers or ponds.

Use a public privy only in case of necessity. The seats of privies which are used by strangers should be cleaned daily with soapy water. For this take one pound of soap to a pail of hot water. If your privy is used by persons suspected of disease rinse the wall of the funnel with freshly slaked lime (one part quicklime to four parts water.)

4. The infectious material of cholera is contained in the excretions of the patient. It adheres to soiled linen and clothing, and can be transmitted by anything which touches such objects or excretions, even when this occurs indirectly and not in a noticeable manner.

Excretions of persons ill with or suspected of having cholera, and floors, etc., soiled with them, disinfect by copious (at least hourly) use of slaked lime or chlorinated lime solution (five drachms chlorinated lime to one quart of cold water) or other trusted disinfectants.

Linen, clothing, bed clothing covers, and the like, also such as come to you from cholera regions, send well wrapped up and tied, to a public disinfecting institution.

If such is not in reach, soak the things twentyfour hours in soap and water (one pound washing soap to a pail of hot water) and then boil thoroughly.

Other soiled objects cleanse thoroughly with such soapy water, with quick lime or carbolic acid solution. If the nature of the objects does not admit of this, then place them for at least six days in an unused, airy, dry place.

Thorough drying is unfavorable to the development of the disease germs.

5. If your digestion is disturbed, if you have diarrhœa, especially with vomiting or great nau-

sea, consult a physician at once.

Until he comes, take a warm drink, put on a woolen bandage about your body, remain in your

room; if in great distress, go to bed.

For relief you may take a cup of tea with cognac or rum. Let your food be a mucilaginous soup, also zwieback, or stale white bread without

If you have reliable (prepared from a physician's prescription) cholera drops at hand, take from 20 to 30 drops on sugar.

Keep your presence of mind, even if you are ill. Fright and cowardice act unfavorably on body and mind.—Woman's Med. Jour.

## TREATMENT OF THE ACCIDENTS OF ANÆSTHESIA.

In the treatment of the accidents of anæsthesia there seems to be very little accord or general agreement. It is a reproach to medicine and very unfortunate that such should be the case in the treatment of any condition, much more the grave complications which we sometimes meet with here.

Is it not enough that our friend the homeopath should be satisfied with superficial and hypothetical analyses of diseased conditions, and still more superficial and absurd therapentical applications to those conditions. We ought to have a thorough and rational idea of any pathological condition that may arise and then apply remedies in an equally rational manner.

What then is the condition likely to arise which will require active treatment, and what treatment is the best and most likely to be fruitful of good results? The condition most likely to arise is overcrowding of ether which probably acts in two ways; first by its narcotic or poisonous effect on nervous matter composing the important centres of respiration and circulation; second by its mere presence mechanically preventing access of sufficient oxygen to those centres.

The treatment then, of course, will be to supply air to the blood.

Open the windows and invert the patient—generally the last things that are thought of. People cannot get it out of their heads that anæsthetics are not chemical poisons in the true sense of the word, and the most that is necessary is to supply fresh oxygen, and allow the system to eliminate the agent. Inversion and fresh air is the treatment of all cases where the patient has apparently ceased to breathe. There should be no time wasted in endeavoring to perceive whether the heart is acting or not. Prompt inversion, not allowing an instant to intervene, for in one instant who knows but that the patient may cease to live.

Throw the patient over your back, taking him or her by the heels and allowing the head to hang as low as is possible. Time, place or propriety have nothing to do with it. It is a case not of life or death, but death or life, with life in the preponderance.

The rationale of this is perfectly intelligible. It is that you shall produce by means of gravity that which you cannot by means of the vital pump. Because the vital pump is for the instant collapsed, no good, struck for higher wages. By means of gravity you bathe the paralyzed nerve centres with what amount of oxygen there is left in the vitalized blood current, and thus in many cases start up the whole apparatus of circulation and respiration.

And this brings us to the second part of our treatment and that is artificial respiration. How, let me ask, will it be possible to practice any of the various methods of artificial respiration, whether it be Marshall Hall's or the Sylvesterian or what not, in the inverted position?

You must either sacrifice the position, which I am afraid is too often done, or find some new method of introducing air into the lungs.

And a method that commends itself to me is one that I saw mentioned not long since in the Reporter, i. e., direct insufflation mouth to mouth. I have never had occasion to try this in an adult, but have used it in several cases of comatose babes, which might have been in another world if I had not hoped, believed, and been patient. Some of these babes were white and some were black, some came by the breech, and some had the cord wrapped tightly around the neck. All were blue, limp and apparently dead. I do not remember ever to have failed to resuscitate any of them, and my method has always been the same. A large bowl filled with pretty hot water, some of which is dipped out from time to time and hot water introduced in its place. The babe is suspended in your hands in the hot water from which it is raised for an instant from time to time, and the end of a towel wet in cold water dashed against its back and chest. Direct insufflation into the lungs mouth to mouth. I have kept this up for three hours, the perspiration rolling off me and my bones feeling as though they had been through a rock breaker. And finally had the satisfaction of seeing the limp and apparently lifeless, cold and blue body become warm and red. Then wrapping the babe in raw cotton I toast it before the fire, and in a few hours it is dressed. It does not need washing.

I don't mean to say that the babe is dead. Often I have fancied that I could hear a feeble heart beat though I don't spend very much time making a critical examination.

But it does not breathe, and in all probability would I think be classed as dead birth if its blue and cold body had not been warmed into life at the same time that the breath of life was blown into it to perpetuate that warmth and life. In the beginning of my career I used to use a tube, especially if it was a black babe, but very soon threw it aside. There is no time to think of nice points such as possible infection, blood poisoning, etc. A life is at stake, a human life, and if a man saves one life in his own lifetime he may have accomplished something. The theory of the hot water is this: -In the first place it makes the best medium possible for imparting an equalized and regular temperature to the child's body, and has the advantage that it can be nicely regulated by the addition of more hot water by displacement. Besides which I am of the opinion that with each | moment that the blood is allowed to remain cold at the surface of the body, is the hope lessened that it shall be made to move and circulate healthily in the vessels.—A. D. Mansfield, M.D., in Medical and Surgical Reporter.

## ON THE TREATMENT OF DIABETES MELLITUS BY FEEDING ON RAW PANCREAS.

A. H., aged 39, a policeman. There was nothing of note in his family history. He had always enjoyed excellent health, until about three years ago, when he passed a large quantity of urine and lost flesh. He continued at his post till March, 1892, when he was admitted into St. Thomas's Hospital, where, according to his statement, he was carefully dieted, etc., and was discharged at the end of six weeks, incurable, and having lost weight during this treatment. He gradually got weaker and thinner, and suffered from shortness of breath. He came to the out-patient department of the North-West London Hospital on January 10th, 1893.

He then presented an extremely emaciated condition, appeared very feeble and prostrate, and complained of pain in his chest and a troublesome cough. His tongue was thickly coated with a dirty brown fur, and dryish, and was, as he expressed it, sticking to the roof of his mouth. There were some moist rales at the right apex, the abdomen was full, the liver dulness extended to nearly 2 inches below the costal arch, and there was a marked stomach splash to be elicited. The specific gravity of the urine was 1038; it had a marked trace of albumen, and was loaded with sugar.

On January 20th I recommended him to try the pancreas treatment, and gave him the following directions: To purchase daily a fresh sweetbread, to squeeze all the juice out through a sieve, to drink all this juice raw, and to very slightly cook the sweetbread and eat it.

On February 2nd I made the following note: Feels much better, appetite improved, cough less, passes less water (does not have to get up so frequently at night), sleeps much better, physical signs over lung drier, tongue cleaner and moister. He gave the following account of his daily diet: breakfast, bacon and eggs, toast and tea; dinner at 1, sweetbread, with tea or water; at 4.30, tea, toast, and butter; supper, cold meat, or the remainder of the sweetbread and a glass of beer.

On February 24th he had still further improved; cough and expectoration were less; the tongue was dirty at the extreme base, otherwise clean and moist. On March 10th he had gained two pounds in weight (since January 20th), and continued to feel much better in himself; he quite enjoyed the

sweetbread, and now took it almost raw. He stated that the quantity of urine passed was much less, especially at night, and caused him to get up only three times, formerly it was five or six; also he only required one utensil, formerly a second one was always used. There was a slight cough at times, with very viscid expectoration, but no rales were to be heard over the lungs. The tongue was clean at the tip and edges and quite moist, but continued furred at the extreme base. While under my treatment he has taken an alkaline gentian mixture, and some acid linctus, but no other

Unfortunately the circumstances have prevented a minute study of the case, as in the two recently published by Dr. Hale White. The patient has only been seen in an overcrowded out-patient department, and but once a week. Nevertheless, the progress which has obviously taken place may be worth recording, especially as the treatment has been so simple, and has never been met with any but the most encouraging results.

From the analysis of the urine, kindly made for me by the house surgeon, Mr. Hamper, there does not appear to have been any marked change in the percentage of sugar, but the albumen has disappeared; the improvement appears to have been in the diminished quantity of urine passed. The average percentage of sugar has been just over 12 grains to the ounce.—Brit Med. Jour.

#### TREATMENT OF ACCIDENTS DURING ANÆSTHESIA.

In a very interesting address on recent advances in therapeutics, Dr. Hare calls attention to the following facts regarding emergencies under anæsthesia:

1. The worthlessness, or worse, the danger of using the faradic current as a means of resuscitation in accidents arising from anæsthesia. The action of such a current on the diaphragm, could it be obtained, would be to produce a rigid tetanic spasm, a condition fraught with the greatest It is impossible, however, to influence the phrenic nerve by any but strong currents, for the resistance offered by the cervical tissues is too great for feeble currents to penetrate them. pneumogastric is more likely to be influenced by such a procedure, as experiments conducted by Dr. Hare and Dr. Martin proved, and any inhibition of the heart's action added to the depression of the anæsthetic, or to the engorgement of the ventricles already present, might favor greatly a fatal result. Any good results which may occasionally have been obtained must be attributed to the action of the current merely as a peripheral irritant producing reflex action.

2. The danger, under certain conditions, of in-

version of the patient during anæsthetic narcosis, if threatened by respiratory or cardiac failure. This proceedure is only justifiable when heartfailure is indicated by marked facial pallor. the respiration be at fault, we should carefully avoid any inversion. The presence of still more venous blood about the already exhausted respiratory centre cannot aid it, but only injure it. Further, by inversion we may distinctly interfere with the respiratory act by compression of the diaphragm, through displacement of the abdominal viscera. This is specially liable to occur in persons with large pendulous abdomens, or in persons who have recently suffered or are suffering from tumors of the abdomen.

3. He emphasizes the importance, during the administration of anæsthetics, of watching the action of the diaphragm. He thinks it an invariable rule that the first evidence of the full effect of ether is seen in the diaphragm. He has been able to foresee danger by watching this muscle when the examination of the ordinary respiratory act, as a whole, failed to show any abnormal changes. As soon as the movements of the muscle become abortive, or irregular, it is time to stop the anæsthetic.

4. Another point of much importance in the treatment of persons suffering not only from the over effects of anæsthetics, but also from the depression caused by other accidents, in the use of He found that it was possible to lower the bodily temperature of a dog many degrees by prolonged anæsthesia, and that in man a fall amounting to four degrees might occur in comparatively brief operations and with little or no loss of blood. Hence, the application of heat about the body of a person undergoing an operation is of the greatest importance, and its use only after the operation stultifies the operator, who forgets the old adage, "An ounce of prevention is worth a pound of cure." Care at the same time should be taken that the heat is not too great, and artificial heatstroke brought about.

5. He strongly recommends the use of strychnine as a remedy for, and a preventive of, surgical shock and anæsthetic collapse. It must, however, be given in full doses. Not less than one-twentieth of a grain should be employed hypodermically every half hour in an adult, and if the condition of shock, or respiratory, or cardiac failure be marked, one dose of as much as one-fifth of a grain may be given in this way. Disagreeable effects rarely, if ever, follow, and if they do they amount to little more than muscular twitching, while in the condition spoken of the man is on the brink of death and we cannot afford to make

haste slowly.

He strongly recommends bromide of ethyl as an anæsthetic safer than chloroform, and almost, if not quite, as safe as ether. The profession, he says, is gradually coming to recognize the fact that anæsthetics are to be used like other drugs, because of distinct indications. In much the same way that the physician decides that digitalis is suited to one case and strophanthus to another, so should he recognize that one case is suitable for ether, another for chloroform, and another for bromide of ethyl.—Dr. Hare, in *Therap. Gazette*.

#### MEDICAL NOTES.

Prof. Keen says that many cases of Gleet are due to strictures of large calibre.

Prof. Hare says *Digitalis* is an invaluable remedy in the second stage of pneumonia.

Prof. Wilson says that the salicylates do not prevent *Cardiac Complications* in cases of rheumatism.

Prof. Wilson says that Salicylic Acid should never be administered in solution, but in a capsule.

Prof. Hare says that the citrate of potassium, combined with ipecac., is of the greatest value in the early stages of *Bronchitis*.

Prof. Keen states that an injection for cases of Gonorrhæa should be retained in the meatus for at least three to five minutes.

Prof. Keen thinks the sulpho-carbolate of zinc is the best preparation of zinc to be used as an injection in cases of *Gonorrhæa*.

Prof. Hare says one-half to one drop of oil of cloves, in a little water, will sometimes be found to control *Excessive Vomiting* quite speedily.

Prof. Wilson says that cases of Laryngeal Diphtheria have been known to recover spontaneously, even after mechanical obstruction has set in.

Prof. Keen does not favor the use of the nitrate of silver as a caustic in touching the proud flesh resulting in the healing of large ulcers. He rather prefers a solution in the strength of ten grains of chromic acid to the ounce.

In a typical case of Cirrhosis of the Liver, Prof. Wilson has noted good results from the following treatment: Milk diet with pepsin, hydrochloric acid, and phosphate of sodium as internal remedies.

Prof. Hare says that *Digitalis* is apt to irritate the mucous membranes in cases where they are already somewhat out of order, and, therefore, this drug should not be administered by the mouth in gastric or similar affections.

Prof. Hare gives the following prescription in cases of Pruritus Vulvæ:—

R—Hydrærg. chlorid. corrosiv., . . gr. ½
Acid. hydrocyanic dilut., . . f 3 j.
Aquæ amygdal. amaræ, . . . f 3 vj.—M.
Sig.—Apply to parts itching.
—Coll. and Clin. Rec.

THE CURETTE IN OBSTETERIC AND GYNECOLOGI-CAL PRACTICE.—John G. Cecil (Medical and Surgical Reporter, January 14, 1893), referring to the curette, remarks that the good results that may be had from its use are so manifold and great, and so far outweigh the dangers, "that to enter a pleafor a place for it in the armamentarium of the obstetrician and gynecologist would be a work of supererogation." The sharp curette is the instrument spoken of, the wire curette being almost useless. With proper antiseptic precautions and a little practice in its use, there are no dangers to be feared from the employment of a sharp curette. The author advocates the technique of curettage. which is suggested and practised by Pozzi. These measures embrace a bath for the patient some hours before the operation, and thorough cleansing of the region with soap and water, and then with bichloride of mercury solution, 1:2000. Three in. jections of sublimate solution must be given on the day of the operation—two at, intervals of an hour and one just at the moment of operating. In case there is need for disinfection of the uterine cavity as well as of the vagina, as occurs from malignant diseases of the interior of the womb, the irrigation had better be made intra-uterine, and it is to be remembered that gynecological cases will tolerate a much stronger solution of sublimate than obstetric cases will stand. the pain inflicted is not severe enough to require anesthesia, it is rather more satisfactory to use an anesthetic. It is essential that the cervical canal be dilated sufficiently to allow the easy introduction of the curette and the escape of all tissue which is scraped away. For the purpose of dilatation the graduated or steel dilators are recommended. Where constant disinfection of the field of operation seems desirable, this can be accomplished by filling the speculum with sublimate solution and elevating the patient's hips sufficiently to allow the fluid to enter the uterine canal. After systematically scraping the entire surface of the interior of the uterus, a hot antiseptic douche should be given, and all fragments washed away. An application of a mild caustic may be made or the cavity packed with iodoform gauze. Three or four days' confinement to bed is a desirable measure to insist upon even in the simplest cases, although this is not necessary, as patients are frequently curetted and allowed to walk or ride considerable distances almost immediately afterward. Speaking of the use of the curette in cases of "uterine catarrh," the author says his experience has been uniformly successful. cutting in such conditions must be deep enough to remove the diseased follicies to their entire depth. Hæmorrhage due to the presence of submucous fibroids can be promptly checked by the use of curettage. The mucosa must be removed, for it is chiefly due to engorgement and irritation of this

membrane that the hemorrhages occur. The author is not yet satisfied to disregard the teaching that acute and also chronic inflammation of the uterus and its appendages are contra-indications to the employment of curettage, for experience has demonstrated that such conditions occasionally become suddenly aggravated upon slight provocation, and cause very serious results.

On the Prognosis in Chronic Albuminuria.-Since it has become the practice to examine the urine for albumen as a matter of routine in all cases, as well as in the presumably healthy class of persons presenting themselves for life assurance and for the public services, a numerous and well defined group of cases has been recognised to exist in which the albuminuria may properly be termed "functional." They constitute from one-third to one half of all the cases of albuminuria that come under one's notice. The clinical significance of albuminuria as a symptom has consequently undergone a marked diminution during the last twenty years. Moreover, the systematic examination of the urine permits of the recognition of the mischief at an earlier period of its course, in fact before the kidney structure has been irreparably damaged. Under these circumstances it has become possible, by improved hygienic and dietetic measures, to check its advance and possibly in acute forms to prevent its recurrence. This has not only rendered the prognosis of albuminuria as a symptom more hopeful but enables life to be prolonged even in the graver cases associated with renal disease. In cases of organic renal disease, however, many other circumstances have to be taken into consideration before arriving at a prognosis, such, for example, as the constitution of the patient, heredity; specific conditions such as gout, syphilis, struma, malaria, etc., also specific poisons such as scarlet fever, diphtheria, lead poisoning and the The result is that nearly every patient presents some variation worthy of notice affecting the predisposing or exciting causes that accelerate or retard the progress of the disease.

The most familiar varieties of chronic albuminuria are those which culminate in contracted kidney with its concomitant cardio-vascular changes, or the red variety. Owing to its insidious nature the true character of the disease is often not recognised until late and is then revealed by some symptom, other then albuminuria, of grave prognostic importance, such as albuminuric retinitis, dyspnœa, hæmorrhages from mucous surfaces and paralysis. The prospect of prolonging life at this stage is, of course, small indeed. I may mention the case of a patient whose urine in 1878 was found to be normal, his pulse soft and the heart not enlarged. In 1882 he was found to have developed albuminuria, with enlargement of the left ventricle and a tense pulse. During the

subsequent eleven years his condition has not become appreciably modified for the worse owing in great measures to his care in respect of diet and general hygienic precautions. In reference to the nephritis of gouty patients, the intensity and continuance of the inflammation appear to be influenced by the severity of the gouty manifestations and where these can be controlled the renal affection may run a very chronic course. In one case, in which albuminuria with distinct nephritis has run on for nineteen years, the patient is still alive. Symptoms such as uræmia, dropsy, etc., have not the same grave import in cases of gouty nephritis as in other varieties of chronic albuminuria and are often relieved by an outbreak of acute gout. Nephritis occurring in patients who have had syphilis is not of favourable prognosis, vascular degeneration usually supervening at an early period, after which life is rarely prolonged more than eighteen months. Among other forms may be noted chronic hæmorrhagic nephritis and a paroxysmal form which may well be a true gouty inflammation of the kidney. Still another form is met with in middle aged, obese persons, probably due to venous plethora, often coexisting with a mild form of diabetes. The albuminuria met with in morphia habitues is probably due to this cause, the drug causing partial paresis of the renal veins and their branches. It is essential not to overlook the importance of intermittent albuminuria in persons past middle age, this being often the prelude to more serious manifestations. A milk diet is of value more particularly in acute or subacute nephritis and for the relief of dropsy. badly borne at an advanced period of the disease, especially if there be much arterial degeneration or uræmic symptoms. In one such case uræmic convulsions followed every attempt to enforce a rigid milk diet.—Med. Week.

THE MOTOR DISTURBANCES OF THE HEART OF NERVOUS ORIGIN.—Dr. George W. Jacoby read a paper on this subject. He stated that in a large number (probably in more than one-half) of the persons who consult us on account of some motor disorder of the heart, no anatomical lessin is clinically discoverable, and no mechanical cause can be found. In such cases it is reasonable to seek for the cause of the altered function in some disorder of the complicated nervous apparatus of the heart. The subject may be conveniently divided inco intermittent, irregular, abnormally slow (bradycardia) and abnormally frequent (tachycardia) heart's action.

Intermittency may be true or false; in the latter form the pulse fails, but the heart is regular, while in the former the heart beat is actually dropped. In irregularity of the heart's action the number of pulsations varies from minute to minute, or the pulsations vary in height and tension. These

forms of arythmia may be presistent or only temporary; when presistent, Dr. Jacoby said they are probably due to some organic disease of the heart, whether such can be detected or not; when they are temporary, they are either dependent upon defective blood mixture or are purely neurotic. Toxic influences associated with sexual excesses, and with the excessive use of tea, coffee, tobacco and alcohol he has found to be potent in the production of arythmias. Intermittency may be due to even the moderate use of alcohol.

Slow pulse, or bradycardia is a term applied in cases where the pulse falls below 60 per minute, or according to other writers, below 40. Slow pulse should be regarded as a symptom only and may be due to a variety of causes. If we make use of the term bradycardia at all, we should limit it to such cases in which the infrequency of the pulse is due to a disorder of innervation. A slight reduction in frequency of the pulse is very common in disturbances of the digestive tract.

In paroxysmal tachycardia the attack is always sudden in its onset and usually unexpected. The pulse is increased from normal to 180, 240 or even to 300 per minute, according to some observers. There is no irregularity of rhythm nor intermit-The heart beats in a strong and energetic manner, and in direct contrast to its action is the extreme diminutions of arterial tension. The cessation of the attack is as sudden as its onset. The paroxysms vary in duration from a few minutes to several hours, and occasionally last even for The intervals between the attacks are irregular. During an attack the excretion of urine is generally diminished; it may be followed by the passage of a large quantity of clear, limpid urine. The etiology of these cases is obscure. Psychic influences, fright, errors of diet, bodily exertion have all been assigned as causes. It is an affection of adult life, this we can say positively, and the best established causes are bodily and cerebral overwork.

In concluding his paper, Dr. Jacoby referred to the pathology of these cases, and gave a brief review of the various theories put forth regarding the nervous mechanism of the heart. The assumption that we are dealing with a bulbar neurosis in these cases appeared to him to be the most probable one.— Med. Week.

THE FRUITS OF VIVISECTION.—Sir Andrew Clark has given to *The Hospital* a brief list of the results of experimental research, which may be perused with profit by the anti-vivisectionists. By experimental research surgeons have been enabled to arrest or cure diseases by excising portions of the stomach, by removing one of the kidneys, by amputating the larynx, and by extirpating portions of the brain and spinal cord. By experimental research Koch discovered, in the presence

and action of the tubercular bacillus, the true cause of tuberculous disease; and this discovery has not only thrown a flood of light upon the natural history of consumption, but has enabled us to discover its presence when otherwise unsuspected, and to bring about a successful revolution in the treatment of surgical tuberculosis. Furthermore, there are just reasons for expecting that the continuance of this experimental research will lead to the discovery of means for the prevention, and perhaps even the cure, of pulmonary consumption, which destroys so many of the fairest and best of our race. By experimental research we have discovered the condition for using with efficiency and safety almost all the stronger and most useful drugs, such as digitalis, chloroform, ether, chloral, nitrite of amyl, nitro-glycerine, and many others. By experiment upon animals we have discovered the nature and relations of infectious diseases; and we have learned how, in some measure, to prevent the development and to control the spread of fevers, cholera, anthrax, and septicæmia. Through experiments on animals we have received the use of the electric telegraph, and all the various services which electricity now renders to the convenience and uses of man. And yet, with all these services before us, one cannot (in England) scratch the neck of a rabbit for the advancement of knowledge without becoming a legal criminal. But, on the other hand, for your pleasure, or for your profit, or for any other object than the promotion of knowledge, you may, without let or hindrance, beat, starve, mutilate, or destroy as many animals as you please. Knowledge can be advanced now only by experiment, and if experiment is to be suppressed, and if consistently the knowledge acquired in this manner is to be rejected, then it is certain that the art of preventing and of curing the diseases of beasts and men will decay; that physical and mental degeneration will follow, and that science in England will become the contempt and pity of the world. And if physiology, pathology, and thereapeutics were to continue their course without the help of experiments upon animals, the errors that would be committed in the exercise of our art would bring about greater suffering and greater unhappiness than all the vivisections which have ever been performed. Lastly, if experimental research hardens the hearts of experimenters, it is only too plain that an active antagonism to it begets a disregard of accuracy, a violation of charity, and a spirit of calumny which have no parallel among ordinary men.

Some Erroneous Ideas in Ptomaines.—Considerable misconception—not to say fundamental ignorance—is prevalent on the subject of ptomaines. This may clearly be seen from letters and articles which have appeared in the press since the recent sardine poisoning case, and also from

statements made by medical men under conditions calculated to lend authority to their utterances. A case recently tried in a northern town, and an inquest held only a few miles from the same town, have brought out assertions regarding ptomaines which are almost as erroneous as the announcement in a popular weekly review that "ptomaines are bacteria." As for obvious reasons, the erroneous statements made in connection with this subject are extremely dangerous, since they may lure the public into feeling of safety or comfortable reponsibility, it is desirable to point out some of the commoner and, at the same time more dangerous, misconceptions in regard to these poisons.

We hear it stated sometimes that all ptomaines are destroyed by such an amount of heat as is employed in the ordinary process of cooking. This might be so, if it were the case that ptomaines were bacteria; but if it were so, cases of food poisoning would be unheard of. Anyone acquainted with Brieger's work and the chemistery of these toxines knows how stable and resistant against heat almost all, and especially the more important, Ptomaines are; and that, therefore, there can be no safety in boiling, so far as the destruction of these bodies is concerned. Moreover, in the Separation of many of these substances heat is constantly employed without the slightest effect on their toxic properties. Analogous observations are almost daily made during the preparation of the chemical products from pure cultures of bacteria, where heat is constantly used to destroy the microorganisms. If there be death in the pot, generally speaking, no amount of boiling will prevent it. Another statement which invites unqualified dissent is that by boiling the poson will be distilled out and so much diluted by the water used as to become innocuous. Most ptomaines—there are exceptions—are very soluble in water, but it is absurd to assume that if hidden in the centre of a Piece of meat they would diffuse through the tissues and be dissolved and diluted. Lastly, the fact of several people who have partaken of a tainted article of food only one has suffered, has been used as an argument against the toxic nature of such food in any particular case. Can anything be more erroneous? The poison may be extremely localized in a particular piece of meat, the rest being free from it; and when we have to deal with a number of fish packed in the same tin, some only may be tainted, as well as shown in the case investigated by Dr. Stevenson, as here, moreover, the boiling oil in which the sardines are Placed had not destroyed the lethal substance.

The prevention of food posioning is a problem of extreme difficulty. In the meantime, however, we must remain fully alive to all the results of accurate chemical and physiological observations, and not lull ourselves into a feeling of safety while we may be face to face with death, all the more

deplorable as it is unforseen, accidental, but fortunately rare.—Br. Med. Jour

TREATMENT BY DRUGS.—It is a significant sign of the attitude of the medical profession towards the question of treatment of disease that an outspoken belief in the efficacy of drugs is not now an uncommon thing. It is not a great many years since medical science emerged from that mass of empiricism which had grown round it in the Middle Ages, and perhaps no more interesting or amusing occupation can be found than in trying to arrive at the reasons which in those old days prompted or suggested the use of certain drugs under certain conditions and to effect certain objects. With this emergence from empiricism, bringing with it as it did the foreshadowing to some extent of rational treatment, there came the natural and inevitable scepticism as to the efficacy of drugs, leading too often to a bold negation of their usefulness under any and every circumstance. But, as history is said to repeat itself without ever evoking exactly the same condition of things, so treatment by drugs at the present time bids fair to assume its ancient importance and to occupy much of the attention of everyone who has sufficient courage to confront our pathological conceptions of disease with some remedy for the use of which there is a rational foundation. No doubt the reason of this lies in the great advance that has taken place in two different directions. In the first place, many diseases are now recognised as the effect of toxic substance, using the word "toxic" in its very widest sense. Many of these toxic substances are of the nature of chemical compounds, and it is scarcely surprising, considering the enormous strides which scientific chemistry has recently made, that a hope should be born, that anitodes for some of the poisons may be discoverable, or that something may be found the application of which may render the morbid process impossible. In the same direction also is the search for some remedy for combating those probably disturbed internal conditions which underlie many of what, for want of a better name and more exact knowledge, we term "functional" diseases, and it is significant to find an authority of the high standing of the latest Fothergillian medalist declaring his growing belief in the efficacy of drugs in the treatment of disease. We cannot do better than quote some of his words: "I have been surprised," he says, "at the amount of good that has been done in affections commonly looked npon as intractable—relief, arrest and restoration. With each successful year's experience it seems to me greater and more distinct and to elicit more gratitude from the patient to whom it is applied." These words are very encouraging, and we have no doubt that during the next few years there will be discovered even more potency in the

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weapons already at our disposal, as most certainly new ones will be revealed.—Lancet.

A NEW AND RAPID METHOD OF REMOVING THE UTERUS.—At a recent meeting of the Kansas City Academy of Medicine, Dr. Emory Lanphear presented a number of fibroid tumors, sarcomata, etc., removed by a new method of abdominal hysterectomy. The abdomen and vagina having been carefully sterilized, he makes an incision in the median line terminating as close to the pubes as possible, draws the uterus with one tube and ovary to one side, and applies a clamp to the broad ligament; a strong ligature is passed a half inch away from this, including the blood-vessels, and tied; the intervening tissue is then cut with scissors. Upon the opposite side the same procedure is carried out. When done, the uterus (hitherto held down by the broad ligament) can be lifted up into the wound and separation from bladder and rectum easily accomplished; these incisions, before and behind, are carried into the vagina, when a Kelly's or Polk's clamp is introduced through the vagina as close as possible to the uterus, its points reaching the ligature already tied in the broad ligament. As soon as properly applied it is closed and its fellow clamp inserted upon the other side, when the uterus is quickly cut away with curved scissors. The pelvis is irrigated and the abdomen wound closed and drainage made through the vagina, as in cases of vaginal hysterectomy. The clamps are removed in forty eight hours. The operation can be done in twenty-five to thirty minutes, being much easier than even vaginal hysterectomy with clamps. By the rapidity allowed and by the good drainage secured, Dr. Lanphear thinks this operation can be done almost as safely as an ovariotomy-certainly as safely as a vaginal hysterectomy; and it is much preferable to any method which leaves a pedicle or stump behind. He finds it is not necessary to unite the bladder to the rectum, as union takes place just as quickly without sutures as with them. - Med. Rec.

DEATH OF A DENTIST FROM NITROUS OXIDE GAS?

—An inquest was held by Mr. C. Luxmore Drew at the Chelsea Town Hall concerning the death of Mr. Thomas Samuel Minett, aged forty years, a dentist in practice in Sloane street. It appears that the deceased was discovered by his assistant seated on a chair in a corner of his surgery, with his head and body bent forwards and his mouth covered by the mouth-piece of a nitrous oxide apparatus. When Dr. Herbert Gage-Brown, who was immediately summoned, saw Mr. Minett, the body was awarm, there was no pulse, and he tried artificial respiration without avail. The body was at that time laid upon the floor. The gas apparatus consisted of twin-bottles of 100 gallons, and

fixed vertically on a stand with a hand key, and were in communication with the face-piece by means of an india-rubber tube with a two-gallon bag intervening. One bottle, that to which the key was applied, was empty and the tap turned full on, as was also the stopcock of the face piece; the other was turned off securely. The post-mortem examination revealed only the usual symptems of asphyxia; all the organs were normal, with the exception of some slight hypertrophy of the heart; the trachea was freely opened and no foreign body was present. The question naturally arises: Was this death due to nitrous oxide acid gas inhaled for too long a time? Dr. Gage-Brown will, we believe, shortly bring before the notice of the profession a full account of this interesting case; we therefore defer any detailed comment; but it seems quite within the bounds of possibility that a man sitting in a chair and taking a whiff or two of gas, to see, for instance, whether the apparatus was all right, might fall forward with his arm supported on his knee or chair, the face piece being thus kept in position till death resulted-The jury returned a verdict of "Death by Misadventure."--Lancet

PATHOLOGY OF PARALYSIS AGITANS .-- In the Zeitschrift für Heilkunde von Ketscher has an important paper dealing with this much disputed subject. An abstract of it is given in a recent number of the Neurologisches Centralblatt. The cases of paralysis agitans, with reference to their pathological anatomy, are divisible into two classes, those in which the examination has furnished negative results, and those in which various changes have been found in the nervous system, such as hyperplasia of the connective tissue and neuroglia of the spinal cord, alterations in the nervous tissue itself and vascular changes. Similar changes have been described as occurring in the medulla and pons. Three cases of undoubted paralysis agitans have been investigated by von Ketscher. The nervous system, central and peripheral, was examined, and in all three cases changes were found in both regions. nervous structures showed atrophy, the ganglion cells of the brain were deeply pigmented and altered in form, the nerve fibres, both in the peripheral nerves and in the spinal cord, were degenerated, and had, in some instances, disappeared, whilst the muscular fibres were also atrophied or degenerated. The neuroglia was thickened, especially around the vessels and mostly in the posterior and lateral columns. The vessels also were altered, their walls thickened, and there were miliary aneurisms and small hæmorrhages present. Similar changes, but slighter in degree, were found as senile changes in patients not the subjects of paralysis agitans. Von Ketscher concludes, with Borgherini and others, that paralysis

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agitans is only the expression of an extreme and Premature senility of the nervous system, and he is of the opinion that the primary changes are in the vessels, those in the nervous structures being secondary.—Jour. Amer. Med. Assoc.

NEURITIS FROM ALCOHOL. - Dr. Drysdale, of London, in a recent discussion remarked as follows: "The statement that alcoholic neuritis is more common with women than men, is not sustained by my experience. The changes which take place in these neurites are either interstitial or parenchymatous; the latter is the more common. The spinal cord is usually unaffected, but the muscles of the limbs are atrophied. The patient first complains of tingling of the extremities, of numbness, at first in the hands and feet, then extending to the legs, which gradually lose their The patient is usually apyretic, going about his usual occupations for a time, until, at last, he takes to his bed. The extensors first show a decided weakening of both the upper and lower extremity, the patient lying in bed with the toes pointed or exhibiting foot-drop. The weakened muscles gradually atrophied, especially the anterior tibial, and interessei of the hand. muscles do not react to interrupted current, and are variously affected by the continuous current. Anæsthesia is marked in many cases, but occasionally the reverse is present. The muscles are tender to pressure for a long time, especially over The reflexes are absent, and the legs eventually become contracted and adhesions form round the joint. The patients are, as a rule, apathetic and without appreciation of their condition. Often this disease simulates locomotor ataxy when it effects the lower extremities specifically. It is distinguished from ataxy by tenderness of the muscles and dropping of the foot. In syphilis there is great tenderness of other parts of the body, especially as seen in female patients. The main point of treatment is cutting off the alcohol at once. Where rheumatism complicates the case, salicylate of sodium is of value. The continuous current is valuable in wasted muscles, and in cases much reduced a water bed is essential to prevent The treatment is essentially a tonic and a building-up one."—Jour. of Inebriety.

CREOSOTE IN TUBERCULOSIS.—Dr. Stark, *Thera- Peutic Gazette*, in concluding his paper on "The Creosote Treatment of Tuberculosis," submits the following resume:

1st. Creosote is no longer an innovation or a fad, but a drug which has come to stay as an antitubercular remedy.

<sup>2</sup>nd. Creosote is particularly valuable in the <sup>ea</sup>rlier stages of tuberculosis.

3rd. Its administration must be in moderate doses for a prolonged period.

4th. That it is a safe and reliable prophylactic in the condition that is usually described as pretubercular anæmia.

5th. It should be administered in combination

with approved adjuvant remedies.

There are several easy and palatable methods of administration. The following prescriptions are ordinarily employed by me, the daily doses being dissolved in some alcoholic or vinous mixture, as whisky or sherry:

y or shorry.			
R—Creosoti (beechwood), n xlv.			
Glycerini,			
Aquæ destil., ad 3 ij.			
Dose.—3 j. t.i.d.			
R—Creosoti (beechwood),			
Tinct. gentian comp., 3 ij.			
Dose.—m xv. t.i.d.			
R—Creosoti (beechwood), 3 ss.			
Bismuthi subnitrat., 3 j.			
M. et f. in capsul. No. xv.			
Dose.—One every four hours.			
. —Med. and Surg. Rep.			

DUBOISINE IN THE TREATMENT OF HYSTERO-EPI-LEPTIC CONVULSIONS.—Quinine and more recently antipyrine have been recommended in the treatment of the convulsions of hystero epilepsy. Dr. P. Albertoni, professor of physiology at the medical faculty of Bologna, now advocates the use of hypodermic injections of half a milligramme (grain 130) of sulphate of duboisine in the treatment of the same affection. He has employed these injections with success in three cases. In the first of these the administration of morphine and atropine had produced no effect on the convulsions, which were very violent. They, however, disappeared after two injections of duboisine, and since that time, a period of five months, the patient has only had two more attacks, which coincided with the menstrual epoch and readily subsided under the administration of a single injection of duboi-The other phenomena of hystero-epilepsy, however, remained unaffected. In the second patient the convulsions also rapidly disappeared after a few injections. The same result was obtained in the case of the third patient, but here the administration of duboisine was apparently followed by an exaggeration of the cardiac palpitations from which the patient had suffered previous to the application of the treatment.—Med.

THE VALUE OF ARISTOL IN CATARRHAL AFFECTIONS.—During the final days of winter and the early weeks of spring when catarrhal affections of the respiratory passages are an equal source of worry to physician and patient, aristol does excellent work. Dr. Porteous writes (American

Therapist):-- "Aristol in post-nasal catarrh and hay fever has acted well in my hands. After thoroughly douching the nasal and post-nasal passages, also the pharynx, with some antiseptic lotion, I apply to all available parts the powder. In no cases have I seen failure." Aristol has been equally successful in catarrhal maladies of the ear, even after the lesion has progressed into the most unsatisfactory morbid conditions. Dr. W. Byrd Scudder writes (Eclectic Medical Journal, 1893): -"In a suppurating middle ear where most of the membrana tympani has sloughed away, aristol may be blown in to perfectly coat all unhealthy tissue. I used it in a case of necrosis of the bones of the canal with excellent results." Dr. R. H. Gibbons recommends aristol (Times and Register, December 10, 1892) in a great variety of conditions calling for surgical treatment. He adds:--"I have resorted to the use of aristol in the dressing of surfaces in the cavities of the body, those of the ear, the nose, the vagina, and the rectum." His results, he writes, "have been satisfactory to an extreme degree."—Phy. and Surg.

CASE OF PUERPERAL SEPTICEMIA; RECOVERY UNDER CARBOLIC ACID TREATMENT.—I have quite recently had a case of puerperal septicæmia which, from the first, I could only regard as hopeless, but which, nevertheless, I successfully treated by the administration of carbolic acid.

On the 21st of last month I was called to a Mrs. McC-; she had been confined the Saturday previous, by a "handy woman" who, some days prior, as I happened to know, had attended a patient suffering from puerperal septicæmia. Mrs. McC., on the occasion of my first visit, presented a haggard, anxious expression. There was rigor, skin hot and dry, great thirst, tongue furred and dry, temperature 103.6. Pulse feeble, 130. Lochia fætid. I prescribed two grain doses of carbolic acid every two hours. I visited the patient night and morning, and without giving the minor details and treatment, it will suffice to say that on the fourth day I found the patient screaming and yelling, struggling violently, and throwing her arms about in delirium. The temperature was now 106 8, and the pulse imperceptible. I gave  $\frac{1}{2}$ grain of morphia subcutaneously repeated in quarter of an hour, and double this quantity in half an hour. Slowly she quieted down, and in two hours she fell asleep for one hour. She was able to recognize all around her, singing, crying, laughing and breaking into fits of violent temper, in turns. Perspiring freely, no tympanitis. Evening temperature 106; pulse imperceptible. Bowels moved twice. She lies on her back with knees drawn up; rapid breathing, slight tenderness over abdomen. Complains of headache and dryness of throat.

On 25th.—Temperature 106·1; pulse imper-

ceptible. Low muttering delirium, cold clammy perspiration, rapid breathing. Evening temperature 106.4; pulse imperceptible. Bowels moved thrice. Slept one hour.

On 26th.—Temperature 104; pulse 138. Less delirium. Breathing less rapid. Bowels moved; urine normal in color. Evening temperature 105; pulse 148. Slept one hour. Skin and tongue as before. Bowels moved.

On 27th.—105.4; pulse 150. Low muttering delirium. Evening, 105; pulse 144. Bowels moved.

On 28th.—Temperature 104 6; pulse 138. Still delirious. Evening, 105; pulse 144.

March 1st.—Morning temperature 103; pulse 120. Perspiring freely. Evening temperature 103.4; pulse 120. Less delirious.

March 2nd.—Morning temperature 100; pulse 116. Evening temperature 102; pulse 120. The next day the delirium had disappeared, but in the evening she complained of cough, dryness and pain in throat.

On the 4th the temperature became normal.

On the 21st, when I first saw the patient I prescribed two grain doses of acid carbolic every two hours, and on the 24th, when the temperature went to 106, the dose was doubled. On the 25th the double dose was repeated every hour. As I have said, I regarded the case as hopeless from the first, and did not order injections, for, with & temperature at 106°, it appeared useless; indeed, a fatal issue seemed imminent in a few days. All through the urine was normal in appearance, and the motions were not darkened in color. There was no rupture of the perineum, so that it is highly probable that infection was carried from without. I cannot see that the recovery was due to anything else than the carbolic acid, and considering that the uterus or vagina were never once washed out, I think it speaks highly for the remedy and that it is well worth a trial in similar cases. Geo. Fourquemin, M.D., in Hosp. Gaz.

OIL ENEMATA IN CHRONIC CONSTIPATION, - Dr. Fleiner distinguishes two varieties of chronic constipation, viz., the atonic and spasmodic. These two forms of chronic constipation are sometimes found combined. The lower half of the large intestine is then in a state of spasmodic contrac; tion, while the upper half is atonic and distended with gases and fæces. The distinction between atonic and spasmodic constipation is of the highest importance as regards treatment. Electricity, massage, and laxatives, which are so efficacious against the former, not only fail in the latter, but are actually harmful, for the spasm of the intestinal wallisincreased by the irritation produced. results are obtained in some cases from the administration of narcotics, particularly belladonna and hyoscyamus, and of warm injections of infusion of

chamomile, peppermint, anise, etc., but these means also very often prove inefficient. Olive oil injections, however, constitute a ready and safe way of relieving even the most obstinate cases of spasmodic constipation. The oil exerts a stimulating and soothing action on the intestine. It can also be used in cases of atonic constipation, but as this is relieved by other means of a still simpler kind, the injections are especially indicated in cases of mixed and spasmodic constipation. For purposes of administration, Professor Fleiner employs a cannula with a bulbous end, similar in appearance to an ordinary vaginal tube, and large enough to allow of the easy discharge of the oil. The cannula is connected by means of a flexible tube with a syringe containing about fifteen ounces of pure oil. The patient is made to lie on his back with the pelvis elevated, the cannula is introduced, and the oil injected slowly. The operation usually takes from fifteen to twenty minutes. The cannula need not be passed very high up the rectum, for, by placing the patient in the position above described, intestinal pressure is lowered and the oil is, as it were, aspired by the intestine. For some time after the injection the oil gives rise to no sensition whatever, but after a while the patient feels a desire to pass wind. There is no pain if pure oil is used. At the end of a few hours, in the morning if the enema was administered at night, a more or less abundant evacuation is produced which contains only half the quanity of oil injected. The remainder is retained and gradually passed in the course of ten days or a fortnight. The injection is repeated daily until the intestine is cleared of its Two or three enemas are usually sufficient for that purpose. When this has been done, the effect is kept up by means of an injection of about ten ounces of oil at intervals of a few days. When the intestine is very much distended with fæces, the first injection may not succeed in moving the bowel. In such cases an enema of water is given a few hours after the injection. Nothing but pure oil of good quality should be used, that is to say, oil free from all rancid and acid principles which are apt to give rise to colic. Needless to say that the apparatus should be kept scrupulously clean. After each operation the tube and cannula are cleaned by washing first with alcohol and then in water. Apart from chronic constipation, which is so frequently met with in neurotic subjects, in anæmia, and various gynæcological affections, oil enemata are also very useful, according to Professor Fleiner, in the treatment of membranous colitis, in typhlitis, rectal inflammation, and intestinal disturbances connected with diseases of the stomach.—Med. Week.

LOCOMOTOR ATAXIA CAUSED BY THE USE OF MORPHINE. — At the meeting of the society of German naturalists and physicians (Wein. Klin.

Wöchensch.), Althoff reported that he had observed a peculiar ataxic phenomena in dogs that had during a long period received subcutaneous injections of morphine. The reason he found to be a degeneration of the posterior columns of the cord in the dorsal region. Specimens were shown. The color of these columns is gray to the naked eye. Microscopically there was found in them complete or almost complete absence of axis-cylinders, consequently degeneration of the same. This is the first instance in which a system disease of the cord has been artificially produced in the dogs, and at the same time explains the existence of tabetic symptoms in many instances of morphine habitues.

—N. Y. Med. Times.

A NEW USE FOR THE SPLEEN.-Drs. Pizzoni and Pattani, have, through experimentation upon animals, discovered that the spleen is a necessary factor in the production of immunity from infectious diseases. Guinea-pigs, from which the spleens were removed, were found to become permanently incapable of being rendered immune to the virus of tetanus. This discovery may have a marked influence in clearing up some of the mooted questions relating to immunity. It may be possible that this organ becomes the store house of the various anti-toxines produced during the course of the infectious diseases. The fact that this organ enlarges during the course of this class of diseases might serve as a clew from which valuable facts can be obtained. Our ignorance concerning the functions of this ductless gland makes the organ a promising field for study .- Cincinnacti Lancet-Clinic.

FISTULA IN ANO.—Dr. Joseph M. Mathews, in International Journal of Surgery, says: As far as diagnosticating fistula in ano is concerned, that is quite an easy matter, but to tell exactly the character of the fistula we have had to deal with is quite another thing. An operation that will cure one fistula will not cure another. Therefore no general rule will apply to these cases. There are several things to be taken into consideration in properly diagnosticating or prognosticating a case of fistula.

- 1. Is it a simple fistula, and has it not but one channel?
- 2. Is it a progressive or non-progressive fistula?3. Is it due to any special diathesis, as tuber-
- cular, syphilitic, etc.?

  4. Does it exist as a disease per se, or is it the result (secondary) of stricture?

These are essential considerations and will decide the method of operating and after treatment and the prognosis.

To illustrate: If the case is one of simple fistula with but one channel, a division of tissue, either by knife or ligature, will effect a cure.

If it is a progressive fistula with a great discharge of pus and rapid breaking down of tissue, an operation by the knife should be advised at once. If it is non progressive, no hurry need be had and the patient can adapt himself to circumstances. If the disease is due to any special diathesis, such diathesis must be ascertained in order that the proper medical, as well as surgical, treatment can be afforded. Indeed, upon this is decided the question whether an operation is warranted at If the fistula be secondary to a stricture of the bowel, no operation is permissible until the strictural condition is righted. I consider, therefore, that these are points of much more significance than to determine whether the fistula be an external, internal or complete one. It has often occurred to me that the authorities put too great stress upon this division of fistula. It matters very little to the surgeon who is going to operate which variety he is going to deal with, for he is going to do pretty much the same operation in all. It is the complications that concern him, not this kind of division.

CALOMEL IN HYPERTROPHIC CIRRHOSIS OF THE LIVER.—Dr. Sior advocates the calomel treatment in this disease. He relates the case of a man, aged thirty, who began to suffer nine months previously from jaundice, which steadily increased and was accompanied by much loss of strength. On presentation he was deeply jaundiced. The liver was much enlarged, Its surface was regular, somewhat hard, and not tender. The spleen was also enlarged. There was no ascites or œdema. The urine was deeply bile-stained, but the stools were not completely colorless. The temperature rose slightly in the evening. There was no history of alcohol. Various forms of treatment, including potassic iodide, were tried for a month, but without the slightest benefit. The patient was then given calomel, of doses of a little less than one grain, six times a day for three days, the drug being then omitted for the three following days. From this time the patient's condition commenced to improve. The jaundice soon began to diminish and the appetite was better. Eventually even the liver became less in size, as well as the spleen. After three months of such treatment, the jaundice had disappeared, there was no bile-pigment in the urine, and the stools were pale yellow in The liver only extended one finger's color. breadth below the ribs in the nipple line, the upper limit of the dullness beginning at the sixth rib. The nutrition was excellent, and the strength good.—Berliner klinische Wochenschrift.

TREATMENT OF EMPYEMA.—The author advocates resection of a rib. The best location is the sixth and seventh rib, the same rule governing the location that pertains in the operation of

thoracentesis. A long incision is made over the rib, dividing the periosteum and separating it from the rib. After this a curved periosteotome is passed under the rib, riving off and separating the periosteum from beneath the rib to the extent desired, when the rib can be divided by a strong pair of bone forceps. Repeat the process over a second rib, the parietes of the chest still remaining intact.

Now make an opening and counter-opening at each end of the wound and insert a large drainage-tube, thoroughly evacuating the purulent contents of the sac. Follow this by a thorough irrigation with a weak antiseptic fluid. Then close the wound intervening between the opening, and fasten the ends of the tube to each other across the bridge thus formed. Encase the sides with an abundance of antiseptic gauze overlaid with cotton and other gauze and the operation is complete.

Daily dressing, including thorough irrigation and perhaps washing out the cavity with peroxide of hydrogen, replacing the tube from time to time by one of smaller calibre, with such sustaining and and antipyretic treatment as seemed necessary, has proven in my hands very satisfactory in several instances.

The object of the exsection in empyema is to allow the chest wall to collapse as do the walls of an abscess in portions of the body not encased by osseous structure. Now, if there be no disease of pulmonary tissue and it is not rendered incapable of expansion by lung pressure this result will be accomplished. If, however, the lung does not expand and perform its function, the result must be a failure.—Pacif. Med. Record.

GUAIACOL SALTS IN TUBERCULOSIS.—Of drugs advocated for the treatment of pulmonary and other forms of tuberculosis, creasote is one of the best. Its only equal, indeed, is iodoform. Some patients, however, possess or acquire an intolerance (subjective or objective) to creasote, whatever method of abministration be tried.

In such cases, guaiacol carbonate or guaiacol benzoate may be advantageously substituted. These are unirritating and almost tasteless. The dose of either salt is from 3 or 5 gruins (0.2 to 0.35 gram) up to the point of tolerance. An affective dose is 5 grains, four times a day best, given in capsule or cachet after food. As guaiacol benzoate is split up in the small intestine into benzoic acid and guaiacol, it seems to have an especial advantage in the treatment of intestinal lesions, and is certainly quite useful in the management of diarrhæa in tuberculous subjects.—Dr. Solis-Cohen, Med. News.

ing the location that pertains in the operation of Recognize no authority as absolute in the solution of the wondrous mysteries of the human body.

### THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science, Criticism and News.

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AGENTS.—Dawson Bros., Montreal; J. & A. McMillan, St. John, N.B.; Gro. Strret & Co., 30 Cornhill, London, Eng.; M. H. Mahler 23 Rue Richer, Paris.

#### TORONTO, MAY, 1893.

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#### THE TREATMENT OF ANÆMIA.

The diagnosis of anæmia as a symptom or associated condition is easy; the recognition of it in those cases when it is a disease is a difficult matter, and upon this diagnosis of the cause depends success in treatment. Hume Osler's classification of anæmias into primary and secondary, is a most helpful one. Of the primary anæmias three are not uncommon, one of them the most common of all, the chlorosis of females, the simple anæmia of bad hygiene, insufficient food and clothing, etc. (though this might in one sense be called a secondary anæmia), and pernicious anæmia. The secondary, or symptomatic, anemias are due to hæmorrhage, from traumatism or gradual, e.g., from menorrhagia, piles, etc.; to drain of albuminous fluids, e.g., in lactation, Bright's disease, chronic dysentery, or prolonged suppuration; to malignant disease; to prolonged dyspepsia. and its accompanying starvation; to acute illness, particularly of the septic type, in which by toxalbumins and defective elimination on account of fever, serious blood dyscrasia is caused, and in a similar way to metallic poisoning, and certain constitutional diseases—such as syphilis and malaria, as well as such chronic diseases as pulmonary tuberculosis.

The treatment must be: 1, Dietetic and Hygienic; and 2, Medicinal. As regards dietetic treatment, the indication lies in the fact that digestive troubles nearly always complicate the case, and if constipation does not exist the physi-

cian may consider himself fortunate. The foods given should be nutritious, plain, and moderate in quantity, but often repeated, of animal origin rather than farinaceous, fatty or sweet. Rest is important. Early retiring, late rising, with a hot cup of cocoa with plenty of milk, or beef peptonoids, beef-cacao, or some such rapidly absorbable nutritious food before leaving the bed; then a late breakfast, in which animal food of some kind is given, a soft-boiled egg, an omelet, a small, lean chop or steak not over-done; then the noon meal, luncheon or dinner, vegetables being limited somewhat and meat given again; after light open-air exercise, or sitting in the fresh air, a cupful of some nutritious fluid, e.g., an egg-nog; the evening meal, again small in quantity but nutritious, and including nitrogenous food; a quiet evening and early to bed. In the case, at any rate, of the chlorosis of school-girls, some such regimen should be strictly enforced. The capricious appetite of the patient should be specially borne in mind and guarded against, and, if the case be extreme, absolute rest in bed should be secured, if necessary, for a month.

The good effect of baths should not be forgotten. If power of reaction be very feeble, a rub with a dry towel makes a good beginning. Then use a damp and salted towel, then the warm Sitz bath with a spongeful of cool water after it, and then a rapid rubbing and drying, the patient returning to bed and taking the cupful of warm nourishment above mentioned, to secure full and prompt reaction after the bath. The skin circulation may thus be much improved, and the good effect of fresh air and sunlight upon the blood much enhanced. Of course, baths without very prompt and permanent reaction are bad. Hot baths are debilitating and undesirable.

2. Medicinal treatment.—Except in pernicious anæmia, when arsenic seems alone to have any effect, iron is par excellence the remedy. The theory is now widely taught that only the organic salts of iron ingested with the food are of any direct service to the hæmoglobin, and that the intestinal fermentation, which accompanies anæmia and constipation, and which, indeed, Sir Andrew Clark considers to be the chief cause of chlorosis (conræmia, or fæcal poisoning of the blood), causes the presence of hydrogen sulphide in such quantity that all the organic iron disappears from the

system in the form of iron sulphide in the fæces. The administration of inorganic salts of iron in excess is believed to spare the organic iron for the use of the system. The difficulty is to secure an eligible form of iron for each given case, and each practitioner is apt to fall into his own routine. The chloride, in some form, is by many considered the beat, and if given in teaspoonful doses of a 2% to 5% aqueous solution of the salt in egg-water (one part white of egg in four or five parts water) an albuminate of iron is administered which will be found acceptable to a very fastidious stomach.

Blaud's pill, especially in the modified white sugar-coated form, in which it may now be obtained, with arsenic added, is a most useful pill, especially if given after Niemeyer's fashion, one after each meal the first day or two, then increasing one pill a day till two are taken after each meal, of either the 3 gr. or 5 gr. pill as the case may seem to need. With many the scale preparations of iron are favorites, and may be given in mixtures, which many patients prefer to the pill. Constipation may be met by cascara, in liquid or pill form, or by the aloin, belladonna and strychnine pill.

Allusion should be made to the old treatment of small, repeated venesections, which some of the journals are just now mentioning again, with cases of alleged success. Its supporters claim that heightened arterial tension is a constantly associated condition, whether as cause or effect does not appear to be settled, and that venesection is therefore indicated. It may be that the hæmopoietic system, when relieved of the faulty blood, may find an opportunity to gradually replace the degraded fluid with a newer and more normal substitute, which is not at once lost in the large volume of poor blood as soon as formed, as may be the case when bleeding is not practiced.

#### ISOLATED TUBERCULOSIS.

A very peculiar case of isolated tubercular pericarditis was reported at a recent meeting of the medical society of Berlin by Professor Virchow. In his experience, according to the Medical Press and Circular for December 21st, 1892, isolated pericarditis of the tubercular variety has been a rare occurrence. He met with his first case years ago when he resided at Warsburg, and he now

remembers that it surprised him not a little that the patient, a man of eighty, manifested no other sign of tubercular degeneration. Subsequent cases of this disease have been of a like nature in this respect. Many of the cases, perhaps the majority of them, showed the remarkable complication of extensive pericardial hæmorrhages, as if a rupture of the heart had taken place.

The present case was that of a robust man from Sakwedel. He had enjoyed good health until about eight weeks prior to coming under Virchow's observation. His attack began with a severe chill. About five weeks later he was taken to the hospital, where the diagnosis of hydropericarditis was made. There was dyspnæa, but no fever, with edema of the legs, and ascites. This otherwise powerful man had given no evidences of renal disease, of cancer, or of tuberculosis. the autopsy the pericardium and pleura were found to contain fluid; that of the pericardium was hæmorrhagic. The surface of the heart which was considerably hypertrophied, had the appearance of having been the seat of a frequently recurrent pericarditis. On a more thorough examination of the cut surface of the heart an enormous eruption of tubercles was seen in the deeper tissues of the pericardium, and the heart's muscular structure itself. The tubercles were full of giant cells, unusually large, but there were comparatively few tubercle bacilli.

The origin of the disease—which was one of the first to lead Virchow to dispute the old prevalent doctrine of dyscrasia in the causation of tubercular disease—he held to be local in the pericardium; his opinion is that the disease may begin in a non-specified inflammation of the serous membrane. After a time adhesions and sclerotic conditions occur, and the marked tissues become highly vascular.

The next step is a hæmorrhage and the tubercular degeneration occurs. The affection must then be set down as a typical local, and nondyscrasic, tuberculosis. Virchow had, from his first case of the kind, formed such an opinion, but the full explanation of it did not come to him until later.

Personal.—Dr. McDonagh of Church St. will be out of town for two months from June 15th.

#### ONTARIO MEDICAL ASSOCIATION.

It is to be hoped that the members of this Association will not allow the attractions of a World's Fair in a Pan-American Congress to prevent them attending as usual the annual meeting of their own Association, which takes place in Toronto on the 21st and 22nd of June.

To allow of more time for discussion than at last year's meeting, the Committee on Papers have arranged for fewer papers this year, so that ample time may be available for discussion of the interesting papers. Another feature which the Committee hope to arrange for, is a "Hospital Visit," to take place on the afternoon of the second day, when a series of interesting cases may be brought to the attention of the members by the representatives of the staffs of the General Hospital and the Hospital for Sick Children. Full particulars of this will appear on the preliminary programme which will be issued about the 10th of June.

The list of papers, so far as is known, is as follows: "Discussion on Cholera," led by Dr. Arnot, of London; "Appendicitis," led by Dr. Howitt, of Guelph; "The Management of Abortion," led by Dr. R. W. Powell, Ottawa; "On Blood-Letting," led by Dr. Harrison, Selkirk; "Gonorrheal Ophthalmia," by Dr. Osborne, Hamilton; "Resection of Bone," by Dr. Gibson, Belleville; "A Case of Acute Simple Meningitis," by Dr. Acheson, Trenton; "The Treatment of Diphtheria," by Dr. Wilson, Richmond Hill; "Massage—Its Application in General Practice," by Dr. Holford Walker, Toronto; "Diphtheria-Cause and Treatment," by Dr. Milner, Toronto; "The Failures and Successes of Bromoform in the Treatment of Whooping Cough," by Dr. Duncan. Toronto; "The Prevention of Tuberculosis in Ontario," by Dr. E. H. Adams, Toronto; "Acute General Peritonitis, Laparotomy, Neurotomy," by Dr. A. McKinnon, Guelph; "Deflection of the Nasal Septum and its Surgical Treatment," by Dr. E. A. Spilsbury, Toronto; "Mistakes in Midwifery," by Dr. J. Noble, Toronto; "The Treatment of Hernia by the General Practitioner," by Dr. W. B. DeGarmo, New York; "The Nature of Fever, with Remarks on some of its Phenomena and its Treatment," by Dr. J. K. Holmes, Chatham.

Papers have also been promised by Drs. Hunt, of Hawkesbury, Cotton, of Lambton Mills, Primrose, McPhedran and Myers, Toronto.

The Committee appointed to confer with the Registrar General will not be called together before the meeting of the Association, as it was found to be impossible to reach the Bill at the present session of the Legislature.

#### THE ONTARIO MEDICAL COUNCIL.

The medical questio vexata which has been before the Ontario Legislature during the present session is at last settled, and white-winged peace may be expected to dwell forevermore in the halls of the college building in Temperance St.

The matter has been so thoroughly brought before the notice of the profession that we need only note the changes which have been made in the Medical Act, as the result of the efforts of the Medical Defence Association. These are in effect, (a) the election of five additional territorial representatives making the number seventeen instead of twelve as formerly, (b) the members are to hold office for four years instead of five, (c) the taxing of the profession is to be relegated entirely to the territorial representatives, (d) the next election is to take place in 1894.

AN EASY METHOD OF REDUCING DISLOCATION OF THE HIP. - Bird (Australian Med. Jour.-Therap. Gaz.) states that ordinary dislocation of the femur are not always easily reduced, even when seen soon after the accident. In difficult cases he has adopted the following procedure with success. If the left be the injured side, the patient's left lower extremity is placed over the surgeon's right shoulder, so that the under surface of the bent knee is closely applied to the shoulder, and the leg hangs down the surgeon's back. The foot is then hooked under the front of the surgeon's left elbow. Great leverage can now be exerted on the head of the bone, the patient's pelvis being steadied by an assistant. The surgeon, raising his body, lifts the patient's whole lower extremity, with, if necessary, the expenditure of considerable power, so that the head of the bone is lifted out of the nidus in which it is resting. This leaves the right hand of the operator free to help the now

easily moved head of the bone into the socket. Bird found this plan very useful in a case in which the head of the femur had slipped into the sciatic notch. In this case there was hardly any shortening, and much more than the usual amount of movement. The ordinary methods of reduction failed, probably because enough power could not be brought to bear on the head of the bone to unhook it from the sciatic notch. In cases of dislocation on the dorsum, this method is also useful, but it is desirable in such cases to place a hard pillow under the patient's buttocks, in order to make the traction in the right direction.

MENTAL DISSOLUTION.—Dr. Savage recently read a most interesting paper (Am. Pract. and News) on "The Symptoms of Mental Dissolution." He excluded all tables relating to patients over fifty years of age, as such cases only showed the way in which senile dissolution occurred. Dr. Savage said that his seventeen years' experience at Bethlehem showed that dissolution was early shown by loss of power of acquisition, then by loss of power of retention of recent impressions, next by defect of co-ordination, and last of all by loss of control and of judgment. Although, generally speaking, dissolution was the reverse of evolution, it did not follow exactly the same lines. He first treated of dissolution as seen in general paralysis of the insane, passing on to consider disorders of control of a general kind, such as hysteria, epilepsy, mania, melancholia, and dementia, taking the groups of symptoms before the individual ones, and particularly noting the danger of impulse in the maniacal, suicidal and melancholic states. the individual symptoms loss of recent memory, varying in degree and kind, was the most important. Loss of emotional control was next in frequency, and was most important as leading to sexual faults. He was unable quite to understand the disregard of cleanliness in such cases. ment often remained practically unimpaired long after the memory had visibly weakened. Referring to the recurrence of epileptic fits in elderly persons which were formerly looked upon as of grave import, they were now known to be curable by rest, quiet, and diet.

SULPHO-CARBOLATE OF ZINC IN TYPHOID FEVER.

—Dr. Ernest B. Sangnee, (*Times and Reg.*), says:
There is here a long, large, and filthy, alimentary

canal to be disinfected; consequently, whatever anti-septic is used, I think that all should be With the sulphogiven, the organism will stand. carbolate of zinc, I am in the habit of giving to an adult five grains every three or four hours, until the temperature falls. So far, I have invariably found that, in from twelve to thirty hours the temperature falls from one to two degrees. course, I do not allude to the morning subsidence, I mean a positive reduction. The sulpho-carbolate of zinc, I believe, is not claimed per se to have antipyretic qualities. If such is the case, how else can the invariable lowering of the temperature be explained than on the ground that a portion of the irritation is removed? And, as we believe microörganisms to be the source of the irritation, it must be that some of them are either killed, or that the amount of their life activity is lessened. By lessening the amount of irritation, we lessen the amount of poisonous ptomaines thrown into the system, and thus conserve a portion of the patient's vitality that would otherwise be lost-By this means we are more likely to keep him alive until the bacilli have run their course, because they have rendered their host unfit soil for further development. The likelihood of tiding our patient over the critical period is thus enhanced, and the probability of restoring him to health and strength greatly increased.

How Should a Sprained Ankle Be Treated? -Distortion of any joint must be looked upon as a serious injury (Jour. of Mat. Med.) which, if carelessly treated, frequently leads to dire result. Nor does this depend upon the existence of germs in the blood of the injured, but upon the direct effect and consequence of the injury. The immediate result of a sprain where tissue has been torn is intra articular hæmorrhage, which may be slight or of moment. Intra-articular hæmorrhage leads to intra-articular tension. The latter not only causes severe pain, but the pressure exerted upon nerves and contiguous structure endangers nutrition. to this is added unlimited motion, there is intensification of pain, inflammation and exudation, and disintegration of inflammatory products. (Mycotic invasion, if you please.) Hence, rest is the immediate indication, and cold applications (ice) to reduce inflammation and prevent hæmorrhage. Should the case be seen when intra-articular tension presages mischief, nothing is better than to trocar, aspirate, or to make subcutaneous puncture. When ice or puncture have relieved immediate symptoms, immobilization should be complete; this is to be secured by plaster of Paris bandages. It is always unwise to immobilize before the full extent of swelling has been reached, else trouble will occur and the anxieties of the patient will result in calling another physician. With swelling reduced and the joint immobilized, how long shall joint fixation last? Until every vestige of inflammation is removed. How can this be determined? By point pressure on the environs of the joint.

NARCOSIS IN OBSTETRICS.—Dührssen, (Berliner klin. Woch.), states that an anesthetic is of great value from a diagnostic as well as a therapeutic standpoint. The patient is often much excited, and can be quieted by a few drops of chloroform, while certain important factors are being ascertained, such as the frequency of the fætal heart sounds. Often in primiparæ it is only by the aid of anæsthetics that the obstetrician can assure himself whether the head has already entered the pelvic Anethesia is valuable for the prompt cavity. diagnosis of occipito-posterior and tranverse posi-In those explorations where the entire hand must be introduced into the cavity of the uterus, anæsthetics are indispensable. Therapeutically, anæsthesia is needed for turning, especially in combined and external version, for detaching adherent placenta, manual removal of ovum and membranes in abortion, reposition of impacted tumors during birth, the management of prolapsed foot in breech presentation, and turning in incomplete dilatation of the os in multiparæ. In irregu lar contraction of the uterus, chloroform often hastens labor. Dührssen considers sepsis a contraindication for anesthetics, and deep or longmaintained narcosis as dangerous in cases of eclampsia. It should only be induced in such cases to facilitate rapid delivery by operation. uterifis also a contra-indication. In acute anæmia a very little chloroform will take effect. chloroform is given Dührssen advises the obstetrician to get the patient well under, and then to leave the mask in charge of the midwife, who must, from time to time, pour a few drops into it.

THE PRESENT POSITION OF ANTISEPTIC SURGERY.

From time to time it is not only interesting,

(Ex.) but is also a necessity to take an occasional retrospective glance through the near past, and, as it were, compare notes and see where we stand. Just now, that sufficient time has elapsed. we may inquire: What is the precise, definite position of antiseptic surgery? The medical side of the question we will give our attention to later. We believe, from what can be gathered from the latest literature on the subject, that antiseptic surgery, as taught and practiced as recently as five years ago, is now something of the past. When Lister introduced the spray, and argued with great force the importance of purifying the atmosphere of the operating room, and seeking out the stray germs, lodged in sundry recesses of one's apparel or surroundings, Lawson Tait, with stinging sarcasm, recommended that the nozzle of the apparatus would do the most good when pointed out through the window. The spray went. Reports commenced to come in that antiseptics must be eschewed in the surgery of the peritoneum. It was discovered that traumatisms penetrating the skull and involving the brain, when treated antiseptically, were attended with a terrible mortality. through a consecutive, irritative meningitis. Antiseptic irrigation of the pleura, in empyema, is no longer employed by French surgeons. Bichloride solutions, when used in amputation, though they favor prompt union, are said to cause, very often painful, useless stumps, through an insidious osteo-myelitis which they excite in the cellular elements of the cancellus bone substance.

DENTITION FEVER.—Müller says that there is a great difference of opinion now existing as to whether there is really a fever depending upon the dentition or not. He believes, from observation, that certain cases of ephemeral fever occur, in which the most scientific examinations fail to show lesion, except eruptive teeth, and the tever rapidly disappears upon lancing the gums. The following is his method of gum-lancing: An assistant fixes the shoulders and legs of the child, while a second fixes the head. The index finger of the left hand is pushed between the jaws, and the tongue pushed somewhat aside. Then with a scalpel laid flat on the tooth he cuts off the little cap surmounting the point of the tooth (this can be easily discovered by the paler character of the gum in this position), or he makes parallel or cross cuts over the top of the tooth, thus excising a small portion of the gum. If the scarification is done in this manner, the point of the tooth will remain free, and a scar will not form over it. The mother is directed to wash the scarified surface several times daily with a soft cloth wet in carbolic acid solution, to prevent infection and prevent the healing of the cut. The amount of blood lost is insignificant. The little operation will always relieve the child when the diagnosis is correct. It is not to be done, however, unless the physician is certain that no other cause for the fever exists.

TREATMENT OF ULCERS BY STRAPPING.—Dr. C. E. Quimby advocates this method of treatment, which is carried out as follows:

- 1. Adhesive straps should not be over one inch in width, and usually a narrower strap is to be preferred.
- 2. Straps should be as short as is consistent with a firm hold on healthy skin, and should never fully encircle the limb.
- 3. All straps should be applied at right angles to the long axis of the ulcer, subject to slight modification by the direction of greatest cutaneous elasticity, and are to be adjusted in two sets.

First set:

- 4. These straps are applied in the usual manner by fixing one end on healthy skin and approximating the edges of the ulcer as the other end is applied and fixed.
- 5. The first strap of this set should bisect the ulcerated surface.
- 6. Each succeeding strap of this set should bisect uncovered ulcerated surfaces.
- 7. As any strap becomes loosened, one end should be freed and reapplied under appropriate tension.

DIET IN OBESITY.—Dr. Towers Smith (Med. Times) gives the following rules:

First Period, Fourteen Days.—Breakfast: Tea or coffee, with saccharin, if desired, in lieu of sugar; bread or biscuits made from soya bean, two ounces; grilled white fish or red meat, kidneys. Lunch: Cut from joint of beef or mutton, taking no fat, and one helping of green vegetables, avoiding only peas, beans, and all roots; soya bread or biscuit, one ounce. Dinner: Clear soup, white fish, red meat, green vegetables as lunch; soya bread or biscuit, one ounce.

Drink.—First thing on waking: Tumbler of hot water with slice of lemon. 11 a.m.: Cup of bovril or clear soup. Lunch: Two glasses of claret or one ounce of whisky with potash water. 5 p.m.: Cup of bovril or clear soup. Dinner: Two glasses of still hock or claret, or whisky or potash. Bedtime: Cup of bovril or clear soup. Mustard, pepper, salt, Harvey's sauce, may be taken.

Second Period, Twenty-one Days.—Addition to No. 1: Oysters, tongue, stewed fruit, with saccharin; poultry, game.

Third Period, Thirty-one Days.—Additions to No. 2: Toast instead of soya bread, for each meal, two ounces, savory jellies, aspic of prawns, plovers' eggs, jelly. Dessert: A small quantity of fruit; blue-mould Dorset cheese.

CHOLERA AND FRUIT.—We notice that the Imperial Health Office at Berlin has issued a notice to the effect that bacterological research has been made to show what dangers of cholera, if any, arise from the importation of fruits from the Mediterranean. It has been demonstrated that the cholera spirillum is destroyed in a few hours after being in contact with the cut surface of a lemon or that of an orange.

The spirilla retain their activity, for a longer time, however, on the uninjured exterior of the fruit but do not survive more than 24 hours.

This shortened vitality of the micro-organisms is believed to be due to the high acidity characteristicof these fruits. There will be no restriction placed upon the sale of the fruit, even if brought from districts where cholera has been prevalent. There is no authentic account of a single case of cholera having been conveyed by means of either oranges or lemons.

Tubercle Bacilli in Lympathic Glands.—Pizzini reports Boston Med. and Surg. Jour. a series of experiments which show that virulent tubercle bacilli may exist in lympathtic glands of persons showing no other tubercular lesions. These glands taken from persons who died from different diseases were inoculated into guinea-pigs, and it was found that in forty-two per cent. tubercle bacilli were present in the glands. The author believes that tubercle bacilli may readily pass through the epithelial lining of the air-passages, reach the lymphatic glands and there remain

quiescent, preserving, however, their virulence and in condition at any time to infect other tissues. The bronchial glands were by far the most commonly affected. In no case did he find any bacilli in the mesenteric glands.

THE RELATION OF PELVIC DISEASE TO PHYCHICAL DISTURBANCE IN WOMEN.— George H. Rohè, reported to the recent meeting of the American Association of Obstertricians and Gynecologists the results of his examination and treatment of pelvic diseases among insane women in the Maryland Hospital for the Insane. Upon the supposition that mental disorders, while not necessarily dependent upon the existence of previous pelvic disease, may be aggravated by such a condition, thirty-five woman were subjected to a vaginal examination, and of this number twenty-six were found to be suffering from some form of pelvic disease or abnormality. In some cases that were not examined nor suspected of having disease of the genitals, an autopsy revealed such lesions. Eighteen cases were selected for operation, and the majority of these had the appendages removed. Sixteen of these cases recovered from the operation, three of them have been discharged from the hospital apparently well both physically and In ten considerable improvement followed the operation in both physical and mental conditions, and in three the operation was of too recent date for the expression of any conclusions. Apropos to the above report may be mentioned the fact that similar treatment has been extended to some of the inmates of the Norristown Asylum (Med. and Sur. Rep., and among thirty patients examined by Dr. Maria B. Werner, the great majority had positive and easily recognisable disease of the pelvis, some cases requiring prompt operative measures. While the mental condition of some patients has not been at all improved by the cure of pelvic disease, on the other hand some insane women have been restored to their normal mental condition, and whatever may be said pro or con about this procedure, the result seems to show the truthfulness of Dr. Rohé's concluding remark, that we are required "in the name of science and humanity to give to an insane woman the same chance of relief from disease of the ovaries and uterus that a sane woman has.

FEEDING IN FEVERS.—Peabody, (Med. Rec.)

believes that in all kinds of illness, and especially in fevers, attention must be paid to the appetiteand desire of the patients. If a patient is really hungry, solid food of a properly-selected kind, and in judicious quantities, will rarely disagree with. him. He believes there is less danger in doing harm to an ulcerated ileum in typhoid fever by giving finely divided egg, beef or chop, than by giving milk. He habitually gives his patients. with typhoid, who are hungry, such food. He believes it is a mistake to withhold solid food merely because a patient has fever, and that it is incorrect to regard milk as a fluid food. Milk will always. remain the most serviceable general food in disease. but where it fails to nourish the patient, where it is not well borne, where it cannot be taken for any reason, it is well to remember that efficient adjuncts and substitues are within reach.

THE TREATMENT OF DELIRIUM TREMENS.—Lancereaux (Bulletin Medical), maintains that the first indication in the treatment of a case of delirium tremens is to control the excitement which is dependent upon the toxic action of the alcohol upon the nervous system and is responsible for the sleeplessness, and sometimes for a fatal issue. The patient is to be isolated and, preferably, placed in a dark room, so as to be removed from all sources of irritation. Of drugs, bromine is uncertain in action, and opium and morphine are efficient only in large doses; chloral hydrate, on the other hand, is certain and prompt in action. From sixty toninety grains are at once given, together with a little morphine. If sleep do not set in in the course of ten minutes an injection of a sixth or a third of a grain of morphine is given. If necessary the dose of chloral may be repeated after the lapse of three hours. Subsequently the interval may be prolonged. When the acute manifestations have subsided, strychnine or nux vomica is to be administered. Sodium bicarbonate may be required for the gastric condition and hydro-therapeutic measures for the general condition.

A SIMPLE PROCEDURE FOR THE DRMGNSTRATION OF TUBERCLE BACILLI IN SPUTUM.—P. Kaufman (Centralb. f. Bakterial, u. Parasitenk.,) 1892, Bd. xii., No. 4,5: The cover-glasses are prepared as usual, and stained with hot carbol-fuchsin. After this they are washed in boiling water from one to five minutes. By this washing the other-

microörganisms are decolorized, and a clear, beauful picture remains.

The bacilli are not injured or altered in form by this method as in those in which strong acids, etc., are used. The methods is not recommended for sections of tissues, because of the swelling and coagulation which the boiling water causes. The simplicity of the method certainly recommends it to the practitioner.

DIGITALIS IN PNEUMONIA.—Strzover, (Meditzinshoe Obozrenie,) reports concerning the abortive treatment of croupous pneumonia by large doses of digitalis.

The preparation used was the infusion of digitalin leaves 2 vel 4:200, simple syrup 30, a teaspoonfull to be given every half hour, the whole to be taken in twenty-four hours.

In the writer's nine consecutive cases under this treatment, temperature fell on the day following the beginning of the treatment from 40 to 38° C., and the subjective phenomena markedly improved, the patient feeling practically well.

In the incipient stages the lungs became free from abnormal signs in a day or two, while in more advanced cases complete resolution was brought about on the seventh day. In none of the cases were there any toxic manifestations.

DIPHTHERIA AND ITS RELATIONSHIP:—As a curiosity of the current literature, the following extract is made from an article by Leibig, in the (N. Y. Med. Rec.) "The organism, diphtheritic, reaches the human economy by means of uncooked food, perhaps also in water, in the form of a small, insignificant larva, and here begins the progeneration in the production of ova. Diphtheria is caused by a living organism. This may be either winged or unfledged—infecto originalis. The constitutents of true diphtheria consist in spirals, ova, granules, episperm. The so-called membranes \* \* are chemically and physiologically identical with the factors originally deposited in the intestines, and are partially their products of separation."

MILK DIET IN NEPHRITIS.—From a comparative study of the utility of the milk-diet in the various forms of nephritis, Ralfe, Lancet, concludes that the best results are obtained in cases of acute or subacute nephritis in which the diuretic action of the lactose of the milk increases the flow of urine and relieves the dropsy; whilst in cases in which

degenerative changes have taken place and the heart is already failing, it is better to give a more solid and more stimulating food than milk, which shall at the same time be easily assimilable and not highly nitrogenous.

SALOL IN THE STOMACH AND INTESTINE.—Dr. Paul Cornet (Le Prog. Med.), says as the result of experiment with the above drug: (1) Salol is at first decomposed in the intestine. (2) Salicylic acid is found in the stomach two or three hours after the ingestion of thirty to forty-five grains. (3) Salol is not completely decomposed in the intestine, for some is detected in the feces.

#### Books and Lamphlets.

AN INTRODUCTION TO THE STUDY OF DISEASES OF THE SKIN. By P. H. Pye-Smith, M.D., F.R.S., Fellow of the Royal College of Physicians, and Surgeonto Guy's Hospital. Philadelphia: Lea Bros. & Co. 1893. Toronto, Carveth & Co.

This handbook is a reprint of the author's chapters on diseases of the skin, written in 1886, to complete the unfinished work on medicine by the late Hilton Fagge. There are some additions made to these well known chapters, which were revised in 1888 and 1889 The author in the present volume has made extensive use of reports of dermatological cases at Guy's, and from the pathological and clinical transactions. The appendix, being new, and formula will be welcomed by all, especially by the general practitioner. The author is so well known that comment on the subject mattes is unnecessary. He has added some diagrammatic wood-cuts to demonstrate the local distribution of diseases of the skin. They are a new feature and will be found very useful. Altogether the work is an excellent one, and we think our readers will be well repaid by the reading of it.

ACCIDENTS AND EMERGENCIES; a Manual of the Treatment of Surgical and Medical Emergencies in the absence of a Physician. By Chas. W. Dullis, M.D., F.C.P., Phila., Physician to the Rush Hospital, etc. Fourth edition, thoroughly revised and enlarged, with new illustrations, Philadelphia: P. Blakiston, Son & Co. Toronto: Carveth & Co., 1892.

A capital little book, not only in the absence of a physician, but in his presence. It contains a great many points which nearly every physician and surgeon may read with interest and profit.