The China Medical Journal.

Contents of No. 4. July, 1909.

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**The China Medical Journal**

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KELOID FROM EAR-PIERCING.
Weight 5 lbs. See Consultation.
II. TREATMENT OF THE INSANE*

By C. C. Selden, Ph.D., M.D., Canton.

The patients in this hospital are drawn from two sources. About one-half are sent by the officials, while the others are brought by the families or friends.

As to history there is often little or none to be obtained in case of the former, but always in the case of the latter; although with the women it is often scanty, owing to the fact that they have been bought and brought perhaps far away from home, and all trace and memory of the family has been lost.

We provide three grades of fare with corresponding differences in price. The well-to-do patients pay for private rooms also, or for places in private wards. The officials pay a certain amount for their patients for clothing and bedclothing in addition to the payment for food and general expenses which is asked of the others. Thus the officials pay $5.00 a month, the families $4.00, $6.00, or $8.00 with an additional amount for private rooms and private attendants if required.

GENERAL TREATMENT:—THE ATTENDANTS.

The general treatment of the insane is of more importance than any special treatment. The first essential is the right quality of attendance. It is quite difficult to find perfectly satisfactory men; with the women it is somewhat easier. In America also this is true and so much so that it has become customary in some places to have the male wards in charge of female nurses with male orderlies to do

* Dr. Selden’s first article, “Opening of a Hospital for Insane,” appeared in the March, 1908 issue.
their bidding. Only in this way can kind treatment of the insane be insured. Women have better control over the men also than men have; the respect for womanhood found in the homelands persisting even when insanity has occurred. This condition would hardly obtain in China where women, instead of being honored, are rather looked down upon by the men.

The three principles we lay down for the treatment of the insane are the following:—*

1. These people are ill. When they speak and act unreasonably, it is not their fault.
2. This is a hospital, not a prison.
3. Although insane, these patients are yet men and women.

We have found that attendants under thirty years of age, especially men, are not suitable. They have not the necessary patience, are too quick tempered. The best age is from thirty-five to fifty years if strong physically. And they must be intelligent too. We try to find Christians for this work as we fear others might harm the patients by impure or ignorant superstitious talk; while Christians, if so disposed, have opportunity to comfort and enlighten and uplift.

A common fault among the attendants is that of using deception in order to induce a patient to comply with a request. He will be promised something good to eat, or that he may go home the next day or something in that line. This is very short-sighted policy. Many of the insane, particularly those not demented, very soon realize that they have been deceived, and their confidence is lost in that attendant and perhaps, furthermore, in the physician. And such patients have good memories too.

One cannot say too much about kindness in the treatment of these people. The writer remembers a foreign lady in China describing the antics of an insane man who was for a time confined on her premises. She said: "I should have liked to give him a beating." Now such treatment might have been effectual for the time being in quieting him, but it is surely not a curative measure. Of course, in many cases, kindness is not appreciated; but in many cases it is and highly. Not only is it in the end better for them if kindly treated, but it is very pleasing also to hear the witness given by certain recovered patients or their friends as to the way they have been cared for by the physicians.

At the same time one must be firm. It is possible to be kind even in one's firmness. Naturally enough, if the matter in question be

*The writer will gladly send to any one interested a copy of the rules we have found necessary for the guidance of the attendants in their treatment of the insane.
II. Treatment of the Insane.

of no great importance and the patient is becoming disturbed, it will be found better not to insist, for the time being to desist. But if it be a matter of importance, for example the giving up of a dangerous article or lying down or sitting when excited, one must not desist, but insist upon obedience and without showing fear.

One of the most essential qualifications is this fearlessness. The writer once entered with an attendant the room of a man who sometimes became suddenly violent. The attendant, who had greatly feared to enter, took this opportunity to sweep the room. The man jumped at, and without resistance, seized the broom from the terrified attendant who, forgetting all else than himself, fled through the door and away. The writer was thus left alone with the mad man who, however, with uplifted broomstick, followed the fleeing attendant, chasing him until another attendant came up from behind, disarmed and seized him. That cowardly attendant is, happily, no longer employed. He should have seized the man at once by the hands when in close touch, letting the broom fall to the floor. (For further, see heading: "Dangerous Patients."

Let all movements be slow. Rushing about and quick movements of the arms will sometimes frighten, excite, repel. Be calm and self-possessed.

And speak quietly. "A soft answer turneth away wrath," and with disturbed patients quiet talk will often soothe, whereas loud, cross talking will make them worse. Much can be done by persuasion. The writer came into the hospital one evening just as two or three women attendants were removing a fractious patient to an isolation ward. He stopped them and spoke in a quiet voice, reasoning with the patient that it would not be so pleasant down there alone, that it would be better to go back to her own ward and be quiet. After five minutes of such persuasive, reasoning talk the patient turned quietly and went herself back to her ward without giving any further trouble that night. It is often very satisfactory to appeal to their reason. Many have lost it only in a measure.

As to the number of attendants required that depends upon the kind of patients under one's care. Of the ordinary class one attendant can usually take care of a ward of fifteen or twenty. If among them there are several who must be fed and are otherwise quite unable to help themselves, that number is too large unless there are some patients who are able and willing to help. In the disturbed ward with the eight beds, all or mostly occupied, we have sometimes two attendants by day and one at night. In our whole hospital with 175
patients of all kinds, exclusive of such as have private nurses (5), we have now eleven attendants, that is, an average of about one to sixteen during the day, beside two to take charge of working patients. At night we sometimes have one attendant in the male disturbed ward. At night we have a watchman and watch woman—man and wife—who are supposed to go about together the whole night from one room to another. Only the "watchman's clock," which we hope to have before long, will show whether they do this or not. The woman can render assistance to her husband in the male wards if necessary, and the man can, if needed, help his wife in the female wards, which he would not be allowed to enter if his wife were not with him.

Beside these there are always certain wealthy patients who wish special attendants. In addition to the attendants for the insane it is necessary to employ several men for other lines of work. Thus a whitewasher has abundance of work to keep him busy and the carpenter and mason have no leisure from repairing and changing. These with the cooks, handy man, and door-keeper make up the staff of workers. But there are always some patients who are ready to help in one way or another—emptying of night-soil buckets, carrying water, etc.

THE PATIENTS.

Thus far we have spoken of the general treatment on the side of the attendants. But we must look also to the patients and ask what they want and what we can do for them.

New patients have their chains and fetters at once removed and, unless renting rooms, are taken to the reception ward, where they remain until newcomers necessitate their being passed on further or until, for some special reason, they must be removed earlier. In this ward we observe whether disturbed or not, filthy in habits or not, noisy or quiet, epileptic or otherwise. If very disturbed they are removed at once to the "disturbed ward."

The first thing one can do for the patients is to give them freedom. Most of them have been kept in chains and fetters and are brought to us in that state. We release them at once from the irons and, after a longer or shorter confinement in the reception ward for observation purposes (or their private rooms), and after separating the disturbed and dangerous ones, we give them the freedom of the compound. Patients fret if in confinement, especially is this true of the manic cases. They realize that they have been deprived of their liberty, and some believe they are being unjustly kept in prison. In many hospitals in the homelands every effort is made to relieve these peoples'
II. Treatment of the Insane.

minds of the idea that they are confined. The grounds are extensive and are surrounded by perhaps only a common open fence no higher than is used for any garden. But in China it is customary for private grounds and grounds of public institutions to be surrounded by a wall. To find himself within the large hospital compound with a wall about him does therefore not produce the effect on a Chinese man's mind that it would at home on one of us. In some places in the homelands the attendants wear no uniform whatever. This is also a precautionary measure; its aim being to avoid making the impression that they are soldiers or policemen.

Bathing.—Every person needs to bathe at stated times, and surely this is true of the insane. Some are brought to us who look as if they had been sleeping in a coal-box—so neglected. When they first enter they are given a bath and ever afterwards once a week. More frequently than this would be better; but, unhappily, owing to poor bathing facilities and cramped quarters we cannot get around the whole number oftener than once a week. In this performance many patients must have the help of the attendants, not always because of inability to do anything for themselves but often because of "hydrophobia." The writer remembers a woman with the look of utter horror on her face saying: "They wish me to bathe." But some patients are dependent upon the attendants for another reason—to protect them from drowning themselves. It is never safe to leave them to themselves.

Feeding.—Many patients understand feeding themselves and know too when they have too little or too much. But others must be helped. Manic cases are sometimes too busy in their mania to have time to eat much. Depressed patients are sometimes too taken up with their sad thoughts to want to eat. Some will have delusions of persecution and believe the food has been poisoned or is otherwise unfit for them, or that they are ill and cannot partake of it. Others are entirely indifferent as to whether they eat or not. Much may be done by persuasion for the first ones, while it will have no effect upon the last, the indifferent ones. To these the food must be taken and placed before them and, too frequently for the comfort of the attendants, it must be put into their mouths as well. The most will open their mouths to receive it, but certain ones will effectually resist, and must be fed by special means as described under another heading. Attendants must be cautioned against "poking" the food into the mouths too quickly.
Exercise.—These patients need exercise as much as any other people need it. The work performed by a certain number furnishes sufficient exercise for them. Others walk about the grounds voluntarily. For such as do neither, a time is set when all who are able to do so are taken out by the attendants and marched around the grounds together. They may be taught to march two and two in line or following our plan, to grasp a long, thick, light rope and walk after the leader. There will always be a few who must be tied to the rope to prevent them from running off or sitting down. Not only does this exercise help to keep the patients in good condition physically, but it gives them something to do, and therefore, for the time being at least, they are out of mischief or away from their own sad thoughts. And when somewhat weary they are more likely to sleep than they otherwise would be.

Receiving Visitors.—The friends and relations are in some cases very solicitous for their insane even to becoming a nuisance. They place all dependence upon the medicine which the patient is supposed to be taking, and they come to see its effect, overlooking the far weightier part of the treatment—the removal from old conditions, discipline, intelligent care, etc. And there are always a certain number who are still a little suspicious and wish to keep close watch of the treatment their insane are receiving. During these first years it has seemed necessary to be very lenient in this matter in order that all suspicion might be allayed. But too frequent visiting is of no use to the patients, and in some cases, indeed, frequent or infrequent, is directly harmful; the patients being distinctly more excited or more depressed in consequence of it. It is necessary to explain to such visitors that they are defeating their own ends, that the patient might just about as well be at home. On the other hand there are the indifferent ones upon whom a visit makes no impression whatever. In the homelands the visiting is regulated just as in any other hospital; days and hours being set. At that time one person may visit a patient if, in the opinion of the physician, it will not be harmful.

At this time close watch must be kept of food and any other articles which may be brought in to the patients. Especially must wine be absolutely prohibited as very harmful in many cases. We do not allow it to be brought to anyone. The Chinese are so universally accustomed to the use of tobacco that it would be very difficult to deprive them of it. We allow them to smoke when out of doors, prescribing, however, the limit to the daily consumption. We have at present one patient who, if no tobacco is allowed him, becomes very violent, but who, with a few short smokes a day, is usually quite
The writer remembers another case, a man who at certain times became in the truest sense of the word a "raving maniac," who could at once be distracted by the sight of an attendant making up a cigarette for him, becoming as quiet and amiable as one could wish.

Entertainment.—Much can be done to make the inmates of a hospital of this kind contented and to bring some cheer into their lives by providing simple entertainments, such as will not excite too much—music, magic lantern views, safe sports, etc. Somewhat allied to these are the religious services. We meet each morning for the reading of a short passage of Scripture—about ten verses—followed by an exposition of the same, singing and prayer. The whole occupies a half-hour. Many, it may be, get nothing from the service spiritually, but it provides employment and entertainment for them for that length of time, and who knows in whose heart there may not be a taking in of truth sufficient for salvation? Those whose intelligence is little impaired, and those who have recovered and have not yet gone home, are surely able to understand. Several have, we believe, accepted the Lord Jesus Christ as their Savior while still within the walls of the hospital.

Patients must be carefully guarded, lest they do injury to themselves. Several attempts have been made in this hospital by depressed or demented patients to put an end to themselves by drowning, hanging, and cutting themselves with broken tiles, etc.; happily without success, because of the vigilance of the attendants. In the home asylums no bands, suspenders or even handkerchiefs—which might be made into a string—are allowed the patients. The Chinese have always a ready means at hand in the waist band or string they all wear and which it would be hard for them to dispense with. They must therefore be carefully watched.

Employment.—One of the most humane and important points in the treatment of the insane is the providing of suitable employment. We find work for a goodly number in pumping and carrying water, scrubbing floors, emptying night-soil buckets, filling in low land with sand, breaking up stone for a prospective new building, in the vegetable garden and in the kitchen, in sewing and in doing many odd jobs. All the thin garments worn by the officials' patients and all the cotton bed coverings are made by the women who do the mending of the many worn and torn clothes beside.

For such work as breaking stone or carrying sand, where a goodly number are at work, it is necessary that an attendant be employed to
oversee. We find it necessary also, in the most of cases, to pay the patients a very little for their work—a cent or two a day, or some fruit or cakes. There are very few Chinese who will do something for nothing, and when insanity occurs this trait is not lessened. There is probably very little if anything gained in money in the employment of this labor since there must be paid overseers and since the patients work only a part of the day and leisurely. But the object is gained in the benefit to the patients themselves.

SPECIAL TREATMENT.

The Chinese theory as to the direct cause of insanity is that mucus is present in great amount and choking up the internal organs within the chest. Such as have insight into their mental condition will themselves sometimes speak of having overmuch "phlegm." The general treatment consists in the use of the chain and fetters. But the special treatment consists in the administration of a powerful emetic or an emetic with a drastic purge combined, such as the oil of aleurites cordata or croton oil. Recently we received as a gift a great quantity of a Chinese proprietary medicine which, as claimed by the accompanying circular, is efficient in curing insanity. The formula is given, and shows the medicine to be made up of ground croton beans, chalk, and sulphide of mercury; the amounts being also stated. Directions are also given for its administration. This medicine is elegantly put up according to the Chinese method, being enclosed in wax capsules as large as a cherry and correspondingly expensive; each dose costing forty cents. The gift was from one of the officials. He requested that we give the medicine a trial. For fear of giving offence we retained a half-dozen of the capsules which have not been and will not be used. After a time they will be returned with a polite and complete explanation of our system of practice. Of course such active emesis and purging will quiet a very disturbed patient for the time being, but it can have no permanently curative effect. We had an experience with the aleurites oil some years ago when some cakes containing the oil were brought into the hospital by a private attendant without saying anything to the physician. Several of the insane got hold of these cakes and ate them with the immediate effect of very severe vomiting, but without any permanent improvement in their condition mentally. If, in an emergency, one should wish to use such a remedy, one has less dangerous drugs at hand.

There are no specifics for insanity. Even general paresis which is, almost beyond doubt, a very late manifestation of nerve syphilis,
Uneffected by the administration of mercury and potassium iodide, the harm has been done many years before and is beyond cure.

*Remove Causes of Irritation.*—Owing to the great prevalence of the round worm we give santonine as routine treatment on entrance. Physical ills, as they occur, must be dealt with; women's diseases attended to, and all that can, must be done for the comfort of the creature. Intercurrent diseases are to be handled in about the same way as in other people. But one should always employ fluid medicines or powders washed down by fluids. Tablets and pills can be kept in the mouth for a time and thrown away, whereas one can observe the swallowing of fluids.

It may be a source of surprise to some to know that many patients who have been hard to manage because of their apparent loss of reason, become quite reasonable during the course of some intercurrent, physical illness and seem for the time being quite restored mentally, co-operating with the physician and attendants as well as any sane persons could. This may also occur under circumstances of suffering. An exceedingly disturbed patient was put into the continuous bath. The attendant had carelessly made the bath much too hot and had not properly adjusted the sheet. The physician came in just in time to find the patient in real suffering and frightened. He had the temperature of the water brought down and had the supporting sheet so changed as to make it comfortable, quietly reassuring the patient meantime that the bath would soon be all right and that he need not be afraid. After a little while he asked the patient whether he was comfortable or not and received as reasonable a reply as could come from any person and accompanied with his thanks, a thing that had not once happened before since being in the hospital.

When a patient refuses, even after persuasion, to take medicine, he will usually open his mouth if the nose be closed as will a child. The writer will not promise, however, that he will not let it all run out or blow it all out of his mouth over the physician's clothes. Keeping the lips wide open with the spoon will help to obviate this catastrophe or an attempt may be made to keep the lips tightly closed with the hand. In time the patient will get tired and will swallow. But there is no use in resorting to torture. If all other efforts fail a stomach tube may be introduced as described under the heading: "Refusal to take food." Although there is no specific for insanity, we are in the habit of administering a simple placebo in such cases as are receiving no medicine for special troubles.

*Further treatment* is mostly purely symptomatic.
Retusal to take Food.—When there is marked psychomotor activity patients may be too busy to take much nourishment. They lose flesh and become, sometimes, extremely emaciated and may even die of exhaustion. Depressed patients are sometimes too sad to take a sufficient amount of food or they refuse it altogether. For these two classes much can be done by persuasion or by giving less food but more frequently. There is another class—demented ones—who, from pure indifference, will refuse to partake of food. If brought and placed before them they will perhaps eat it. Or they will refuse it only so long as any one is watching. Leave it by their side and they will, when all alone, swallow it all very quickly. But they cannot always be managed so easily. Some refuse absolutely for days to take food or drink. It therefore becomes necessary to use special means to feed them. If the jaws are opened forcibly there is much danger of doing violence to teeth or gums or tongue, and even if opened and held by a gag, it is yet a most unsatisfactory method, because the patient will refuse to swallow and perhaps blow everything out of the mouth without any consideration for those who are standing about him. Humane, cleanly, easy of practice, and efficient is the use of the stomach-tube passed through the nose. The attendant stands at the head of the recumbent patient and extends the head so as to somewhat straighten the canal for the passage of the tube, which is wet with water only or with water and glycerine. Care must be taken that the tube reaches the stomach and especially that it is passed not into the lung as has sometimes occurred—happily not yet in this hospital—with the supervention of foreign-body pneumonia. The soft rubber feeding tubes always have a mark indicating the distance to which they must be introduced to reach the stomach. Guard against too sharp a turn of the tube at any point and pour in a well-stirred mixture of milk and beaten up raw eggs. We have a woman in our wards who for seven months, with the exception of a few days in the middle, was fed in this way. She received in two such feedings daily one-half a can of Anglo-Swiss sweetened, condensed milk (or its equivalent of other variety) dissolved in eight parts of rice-water, to which were added four raw eggs and a bit of salt. The milk amounted to the equivalent of about forty-five ounces of fresh milk; one can being sufficient for two days. With this feeding the patient—a rather small woman—kept her flesh very well. It occurred once that the digestion from some cause became impaired and all the food given by the tube was vomited up. For several days rectal feeding was resorted to—giving three or four ounces of warm milk with egg and pancreatin powder every three or four hours. At the end
of that time the stomach-tube feeding was resumed and with perfect satisfaction. The writer saw elsewhere in a hospital for insane a man who had at that time been thus tube-fed for two years. After pouring in the milk and eggs, some water or tea is poured down in order to wash what remains of the food into the stomach. After all the fluid is out of the tube the latter is withdrawn and at once carefully washed off and washed out with cold water and an antiseptic fluid and hung up over a large rounded projection to make it ready for the next feeding. In place of milk, meat juice, broths, egg-white, gruel, or other very fluid food may be used.

These milk-fed patients are very likely to be constipated. They should be placed in sitting position on the stool several times a day and, if not effectual, given medicine or, as we find it more satisfactory, a soap-and-water or other large enema. These very patients are as indifferent about the movements of their bowels as about the ingestion of food. If medicine be given the bowels may move at any time in the bed. But if an enema be given and the patient placed soon on the stool, much trouble can be avoided.

Sleeplessness.—This is a very common symptom especially in manic-depressive insanity and is distressing in the extreme. Many give the history of sleeplessness also just prior to the onset. Exercise during the day, a warm bath or a cup of warm milk or warm rice water just at bed time, freedom from disturbance by others if it can be managed, are often efficient in producing sleep.

Of drugs, sulphonial, trional, the Elemeneyer mixture of bromides—two parts each of potassium and sodium and one of ammonium—given in quarter to full drachm doses at bed time can be used. But paraldehyde is probably the least harmful and at the same time the most useful drug that one can employ. It is given in doses of thirty minims to a drachm or more and repeated if necessary during the night.

Disturbed Patients.—If all insane were quiet it would be no very difficult task to take care of them. Unhappily they are not all quiet. If there is a number of disturbed patients it is better to have them collected into one ward where they can be watched with special care.

Unhappily in his former paper published in the March (1908) number of this Journal, the writer omitted to speak of the advisability and indeed necessity of having a few small rooms opening into the disturbed ward or near by where certain of the worst patients, themselves disturbed and needing rest, may be placed, especially at night,
away from the others. This is both for their own sakes and for that of the others. The doors are left usually only partly closed. Having no little rooms designed for this purpose, we have improvised such by using strong upright poles to divide larger rooms into three compartments. Quarrelsome, troublesome patients can thus be fairly well separated.

Padded rooms are not necessary. Patients who are suicidal or who in lesser degree try to harm themselves, should be closely watched and confined much to their beds or their chairs or given safe employment.

It is very hard to manage this ward of disturbed patients if there are many occupants, with from six to eight patients; we have sometimes two attendants during the day who may be on hand together for mutual help; or one at a time, taking turns so as to get some relief from the constant strain. One attendant during the night is sufficient. Latterly we have made such regular use at night of the wire covering (to be described further on) that we have been able to dispense with the special night attendant.

The beds must be very strong and be fastened securely to the floor. This precaution will save much trouble and expense.

(To be concluded.)

FAECAL FISTULA IN THE SCROTUM.


In an issue of the C.M.J., for 1907, I reported a case of faecal fistula of a peculiar pathological condition. About twelve months since we had another such case of faecal fistula as the one I reported in the same situation, but pathologically different. The intestinal wall was extremely thin. After resecting about eight inches of intestine, we decided to use a Murphy's button, as the coats of the intestine were too delicate to endure the strain of sutures. The man did well for three days, but died suddenly on the fourth morning. On opening up the wound to recover the button, we found that the gut had perforated about three inches above the union. If only we had resected a more extensive portion of the intestine the result might have been different.

Three weeks ago my third case of faecal fistula left the Teian hospital (of which I have charge during the furlough of Dr. A. Morley.) About nine weeks since I was called at night to see the son of one of the officials in this city. The history given was that a fortnight before, during a scuffle with another youth, his scrotum was
grasped by his adversary, not an uncommon practice. Soon after his scrotum and penis began to swell; micturition and defecation became painful, but there was no vomiting or unconsciousness. Nearly all the native doctors of repute had been summoned and done their utmost by black plasters, opium, purgatives, and what not to increase the lad’s sufferings and hasten the crisis.

The lad was twelve years of age and greatly emaciated. He had not passed a motion for nine days. His scrotum and penis were greatly swollen, tense, glossy, and tender. Seeing his condition I refused to attempt any treatment unless they brought him into the hospital. The following morning he arrived. On admission the scrotum had burst on the right side and liquid faeces was freely exuding. For a day or two I did not interfere except to keep the part clean and give milk diet. His pulse was 120 and temperature 99. Then under an anesthetic I made a thorough examination. From the right external abdominal ring to the sinus opening on the lower part and anterior surface of the scrotum was a sausage-shaped swelling. Pressure upon any part of the track which was soft increased the quantity of faeces from the sinus orifice. A probe was easily passed for six inches along the sinus upwards towards the external abdominal ring and would have passed further. Only one track could be found. The left testicle could be manipulated, although the scrotal wall was indurated, but not so the right one. The abdominal wall was distended, the transverse and descending colon being full. In exploring the rectum I found it empty with the full bladder pressing backward upon the upper portion.

The bladder was emptied and a high enema of warm water very cautiously given, which responded almost immediately and satisfactorily. The contents of the fistula were pressed out from groin downwards through the opening in the scrotum, then well irrigated with boric lotion and lightly packed with gauze.

That day I gave six doses hourly of calomel, gr. $\frac{1}{2}$, with sodium bicarb., gr. 1, followed at night by ol. ricini, dr. 4. The next day nothing was passed per rectum but an abundance of soft faeces through the sinus. With the exception of the ol. ricini, which I gave on alternate nights, this form of treatment was repeated for four successive days, at the same time, as far as possible, keeping clean the sinus and orifice. On the fifth day I again anesthetised him and gave a high enema and thoroughly washed out the sinus. The day after, for the first time (except after the enemas), he passed a small motion. This he continued to do each day in increasing quantities with relatively diminishing
quantity through the sinus. His temperature, after the first two days, remained normal.

Our course of treatment after this first (?) normal action was as follows: Every other day calomel, gr. 1/2, sodium bicarb., gr. 1; every two hours for six doses, followed with ol. ricini, dr. 4. His diet consisted of only milk and "shee fau" until a week before his discharge, when he was allowed rice, eggs, fresh milk, mien, and a few vegetables.

The sinus was syringed twice a day with boric lotion and lightly packed. The lad was not allowed to move, but lay on his back the whole time, passing his motions into a pad of cotton wool. Gradually faeces ceased to exude from the sinus, but only a faecal fluid. This too soon discontinued and the orifice of the sinus closed by granulations. For a week after this I did not relax my rigidity as to treatment, except adding cod liver oil and syrup ferri iodide, each drs. 2, bis diem.

The lad became fat, the fistula orifice was invaginated, but he noticed flatulence along the course of the sinus. He was allowed to get up and walk about for two hours, a course I encouraged, as I was very anxious to see whether or no the closure was weak and would easily yield to the least strain. But my fears were groundless. Soon he left the hospital to the joy of all, and has since been to see me twice a week, and everything is satisfactory.

The problem which this case has presented to me is, what happened at the time of injury and during the course of healing? As is seen by the photo (Fig. 1, A), which was taken a week after he left the hospital, the track of the fistula is swollen, and what is not seen, it is hard, but not adherent to the skin. The right testicle is felt at the lower and inner part of the fistula considerably higher than the left one. It is, or rather it feels larger than its fellow, probably due to adhesions. I learned that for one or two years a swelling had been noticed in his right groin, but being Chinese no definite information could be obtained. This no doubt was a hernia.

Now, if the hernia had become strangulated, it would probably have
A Case of Intestinal Fistula.

C. S. H., a girl aged 12 years, was admitted into St. Luke's Hospital on November 28th, 1905, suffering from abdominal trouble. She was stated to have had an opening at the navel since birth and a swelling in the abdomen for a year. She was a well grown girl, but
rather wasted and looked ill. On examination it was at once seen
that there was a fistula in the middle of the abdomen and a mass on
the right side. The fistula was fecal and was situated about an
inch below and to the left of the umbilicus; on careful enquiry it
seemed probable that it was not, as had been at first stated, conge­
nital, though it dated from very early life. The right half of the
abdomen was occupied by a tumour composed of two parts, one above
and one below the level of the umbilicus, both soft and giving slight
fluctuation, which passed from one side to the other and seemed covered
only by skin. The bowels acted per anum, but some fecal matter
also escaped by the fistula.

The child was put on a tonic mixture for some days with a view
to operation, and endeavours were made to get the abdomen clean, but
a few days later the lower of the two tumours burst and discharged
pus. On December 8th chloroform was given and the abdomen
explored. The opening into the tumour was first enlarged and
examined, and it was found that the finger passed easily upwards
towards the upper tumour, which was then incised and an abscess
cavity opened. These two cavities were separated by a thick mass
resembling to the feel a transverse band of muscle, but apparently of
inflammatory origin. This was cut through and the fistula was then
enlarged enough to admit a finger, which seemed to pass in the
direction of the abscess, but exploration of the latter seemed to lead into
the abdominal cavity, and intestines were felt. As it was thought
that the risk of further exploration, in view of the fecal character of
the fistula and the septic state of the other wound would be great, it
was decided to do no more, and the wounds were cleaned up, drained,
and partially sutured.

It was a pleasant surprise to find that no signs of peritonitis
appeared, but a few days later, in dressing the wounds, the head of a
round worm was seen projecting from the deeper parts of what had
been the lower tumour. This was removed, and a copious motion
followed it, which was removed by irrigation. The deeper parts of the
wound towards the middle line where the hand had seemed to move
freely in the abdominal cavity gradually became shut off by adhesions,
but large quantities of fecal matter continued to pass through both
parts of the wound where the tumour had been. Gradually what
appeared to be prolapsed bowel began to show itself at the upper open­
ing while the lower one began to close, and it became evident that
whether or no the abdomen had been opened there was now a colotomy
opening into the hepatic flexure of the colon. This was gently
irrigated, and it was found that the bowel between this point and the fistula could be washed out, and further irrigation per rectum showed that the original fistula was situated between the anus and the new colotomy. The rest of the wound healed up well, and it was decided to leave the colotomy open for a while in the hopes that the fistula, which had been found at the operation to be difficult of access, might have a chance of healing while short circuited. The parents of the child were by this time very tired of staying away from home and wished to take her back, and as there was nothing to do but keep her clean and wait they were allowed to do so on promising to bring her back in a few months. This they never did, but when visiting the part of the country where they live, about a year later, she was sought for and found to be very well, fat, and strong, with the colotomy acting nicely and the fistula showing as a sinus, which seemed nearly healed, but could not be explored for lack of instruments.

The interest of this case seems to me to lie in the fact that the patient did not get peritonitis and that nature seems to have performed a very successful colotomy with a minimum of assistance from the surgeon. Whether the worm found had anything to do with the case, or whether the abscess had been of appendicular origin and the worm simply a late intruder, it is not easy to say.

BIER'S HYPEREMIC TREATMENT.

By A. W. TUCKER, M.D., Shanghai.

Hyperemia as a therapeutic agent has been handed down to us from the ancients. For instance the application of heat and cold, the blister, the counter-irritant, etc., are all examples of its use. But it remained for Bier to develop it to a scientific basis and to demonstrate its practical usefulness.

Inflammation is now looked upon as a conservative process on the part of nature in an attempt to rid the tissues of the microbial invaders and their toxins which have attacked some part of the body. Its function may be described as an excretory one. Of the phenomena of inflammation the most striking is hyperemia. So Bier's treatment in producing hyperemia or increasing an already existing one, has as its object the artificial stimulation of this excretory function. This it does by causing more blood to circulate through the part, thereby bringing more of its antimicrobial action to the fight and carrying away the poisonous products. Also, by supplying more food
to the tissues of the part rendered hyperemic, it renders them the more fit to withstand the attack of the bacteria.

Hyperemia consists of two varieties—an active and a passive. In a general way the active may be said to be arterial, and the passive venous. Theoretically it would seem that the active would have the greater effect in treatment, but in practical work it has proven otherwise.

The objects to be attained in Bier's treatment may be stated as follows:

- To diminish pain.
- To arrest or at least to lessen infection.
- To prevent suppuration.
- To avoid operation, or when this is impossible, as when pus has already formed, to substitute for an extensive and mutilating one a less severe one.
- To hasten repair, as is shown in case of delayed union of fractures.

There are many ways of producing an active hyperemia, though as a rule heat in some form, generally dry, is used. This form has not been very successful in treating infections; its chief use being in non-bacterial diseases. As I am dealing chiefly with infection, we will pass on to the passive.

The production of passive congestion is accomplished by two methods—the elastic constriction and the cupping.

The Elastic Constriction.—This form is the oldest and the most frequently used one. Unfortunately this method is only applicable to the limbs, head, penis, and scrotum. It consists of applying a few turns of a thin rubber bandage, about 2½ to 3 inches in width, to the proximal end of the part to be rendered hyperemic. But in affections below the elbow and the knee the constriction should be applied just above these points, as it is impossible to constrict the interosseous veins. In parts other than the limbs an elastic band is used instead of the elastic bandage. As the bandage at times causes irritation, it is best to first apply a few turns of a bandage of some soft material and then apply the elastic one over this.

In all cases the part should be observed for some time after the application. There should be no pain, the pulse must be felt distal to the bandage, the color should be bluish red and the part should be warm. The degree of constriction is only learnt by experience. If too loose, no hyperemia will take place, and while no harm is done, no good will result. If it is too tight, the pain will be increased, the part will become cold and of a blackish color and the pulse will not be felt; the arterial blood having been stopped as well as the venous, and the vitality of the part is endangered.
The length of time for leaving on the constriction varies with the case. As a rule for the first few days it is kept on for about 16 to 20 hours a day in two treatments, that is, it is on for 8 to 10 hours and then left off for 2 to 4 hours and then reapplied. In the interval the part should be massaged and elevated to favor the return flow. The length of time for constriction per day is gradually lessened according to the indication of the case.

If suppuration has already taken place, the part must be incised, for while Bier's treatment will often prevent the formation of pus, it will not cause the absorption of it when it has once formed. But only an incision large enough to allow the escape of pus is necessary. The wound should not be packed, but dressed by laying sterile gauze over it. For the first few days the pus will be increased in amount, but escapes freely while the constriction is on, and then rapidly diminishes.

The second method, that of cupping, has the advantage over the first in that it is applicable to any part of the body. It consists of a cupping glass, suitable to the part, which has attached to it a rubber bulb or syringe which will produce suction. The rim of the cup having been smeared with some ointment as zinc oxide, the cupping glass is applied completely over the part and a partial vacuum is created. After five minutes' suction the cup is removed for three or five minutes and then reapplied, and so on until the treatment has lasted for about forty-five minutes. In case suppuration has taken place a small incision is made; the cup being applied over the incision. The wound is treated in the same manner as in the constriction method.

Here again the danger is overdoing the suction. With the proper amount of suction there should be an increased inflow of blood and but a slight decrease in the outflow. The part should be red and without pain. Pain is our best guide, as it is in the constriction method. The suction should be just short of that which will cause pain. If it is too powerful the part will become blue; stasis having taken place, and necrosis is very liable to take place.

My experience with this form of treatment has been limited, and also limited to the constriction method. The following are the results of my cases:—

Tubercular Joints.—In four cases of tubercular ankle joint I had no result, though the treatment was extended over a long time. My technique was most probably at fault, but also they were all long-standing cases, and in this form of treatment, as in all others, the earlier the treatment is instituted the more chance is there of success.
In three cases of infection following amputation the pus was increased for about two days and then rapidly cleared up, healing much sooner than I had hopes for.

In two cases of cellulitis—one of the foot—I had a good result, and one of the hand took much longer than in other cases, but finally healed.

In five cases of compound fracture I used it as a prophylactic, and in none of them was there an infection. This is the first time in China that I have had five cases running of compound fracture to stay clean.

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ON THE KILLING OF ORGANISMS.

By Dr. Assmy, Chungking.

In No 1, 1909, of the Journal, Dr. Wolfeudale, Chungking, asks: "How can or how does congestion kill an organism, viz., staphylococcus, tubercle bacillus, and a host of others?" In other words: "How does Bier’s ‘Stauung’s hyperæmie’ act?"*

As by tying a rubber bandage around a limb new substances are not introduced into the body, it is evident that the healing media must be performed in the body, especially in the blood or lymph.

In his book: "Hyperæmie als Heilmittel, Prof. Bier himself expresses the opinion that the serum works as a germicide, that it kills the microbes; other factors may help to bring about the healing effect, but they are of less importance. To the same or about the same point speak a great number of observers (Buchner, Noetzel, Laqueur, Colley, Joseph, and others†). Out of this number, however, Buchner observed later on that the leucocytes form a ferment or enzyme, which is able to destroy microbes to digest them.

In 1908 von Graff—Innsbruck‡ denied the bactericidal and also the antitoxic properties of the serum, standing on bacteriological experiments. So did Frangenheim—Koenigsberg.§ who experimented on rabbits. Gironi states that Stauung’s hyperæmie does not increase the bactericidal properties of the blood serum. Jochmann and

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* Meyer and Schmieden in their treatise: "Bier’s Hyperemic Treatment" have used the German term "Stauung’s hyperæmie," because there is no word in the English language to be found to determine this special kind of hyperemia, produced either by elastic bandage or by suction glasses.

† Cit. after Bier: Hypersemie als Heilmittel. V. Ed. p. 143 ff.


Baetzner* found during their experiments (to be mentioned farther on) that the bactericidal powers of blood serum are comparatively small.

Several other experimenters rely on phagocytosis (Metschnikoff) in order to explain the working of the Stauung's hyperaemia. Von Graff (1. c.) looks on phagocytosis as the principal factor of healing. Tarantini, Joseph, Schliep, von Félegyhazi are of the same opinion; the latter laying also great stress on the formation of new connective tissue in the granulation of wounds and sinuses. Von Leyden and Lazarus† found in limbs treated by Stauung's hyperaemia the number of leucocytes increased, doubled and even trebled.

Of course these enormous numbers of leucocytes may accomplish a rather effective phagocytosis when stimulated by stimulins or bacterirotropins or opsonins (Wright). That the accumulated leucocytes are stimulated in a very high degree in parts under Stauung's hyperaemia, is not at all wonderful, as Wessely‡, experimenting on the eye, has shown that anti-bodies, generated in the body, may be accumulated by hyperemia in every part of the organism.

Other observers have gone farther. Heile§ says that under the action of the Stauung's hyperaemia (and also of the Roentgen rays) the leucocytes are destroyed, that the proteolytic ferment contained in their plasma (Buchner's entyma) is set free and acts on the albumen of the bacteria and the cells of the body.

In any case the microbes are destroyed, either by the bactericidal power of the serum or by phagocytosis or by the action of the proteolytic (tryp tic) ferment or by all together, and, theoretically, put out of action.

Practically the effect of the Stauung's hyperaemia is not always the abatement of inflammation and suppuration. There are well-known surgeons who deny the effectiveness of the Stauung's hyperaemia wholesale. And any medical man who has had the chance to try the Stauung's hyperaemia on large series of cases, acute and chronic, must have noticed that the effect varies. One case reacts readily, another perhaps goes from bad to worse; and even one case at first shows a decided turn to the better and then, without apparent cause, improvement ceases or even the inflammation and suppuration make rapid progress. Very luckily the latter course is the exception as far as I have seen. But it happens certainly in a number of cases, mostly in tuberculous disease of bones and joints.

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† Cit. after Bier: Hyperaemie als Heilmittel. V. Ed. p. 146.
‡ Cit. after Bier: Hyperaemie als Heilmittel. V. Ed. p. 142 and 143.
The newest researches on ferments and antiferments of the blood are, after my opinion, very likely to throw light on this chaos. The polynuclear leucocytes contain a ferment; which ferment, when set free by the destruction of the leucocyte, acts in a proteolytic, trypptic way, converting albumen in albumoses and peptone which are taken up by the body. In this way abscesses or inflammatory infiltrations are reabsorbed and disappear. But after Weigert (Gesetz der Ueberregeneration) nature makes always great efforts for regeneration. So, very often too many leucocytes are attracted and destroyed, too much ferment is freed, which works proteolytically not only on microbes and diseased cells, but it may even attack the healthy tissue. Under Staunung's hyperæmic one sees very often an astonishing flow of pus from an open abscess or a sinus, or one sees the sloughs on the surface of an ulcer converted into a pus-like fluid, healthy looking granulations shooting up underneath. But one may also see an abscess grow rather astonishingly quickly or tissue break down which before did not look necrotic or even inflamed.

Generally nature guards itself against these too strenuous efforts of the proteolytic ferment. Mueller and Peiser* and Jochmann and Baetzner† have in human and animal blood found a ferment which counteracts the proteolytic ferment of the polynuclear leucocytes in about the same way as the antitoxines neutralise the toxines. They called it antiferment. It is, after Jochmann and Kantorowicz, a kolloid, as are all antibodies. The blood of different persons contains at different times different quantities of antiferment. The changing quantity (and perhaps quality also,) of the antiferment may, after my opinion, account for many surprising features in the treatment by Staunung's hyperæmie. No "case" is exactly like any other; even the same case is perhaps to-morrow quite different as to his ability to form antiferment. Wright proved that the opsonic index of the blood is subject to changes; the opsonins being produced in the blood at different times in different quantity (or quality). So in parts under Staunung's hyperæmie, at different times smaller or bigger numbers of the accumulated leucocytes are opsonised to a different degree; devour more or less microbes, and a greater or smaller amount of proteolytic ferment is set free. Proteolytic ferment and antiferment stand in relation to each other. Formation of proteolytic ferment provokes increase of antiferment in the blood (G. von Bergmann.)†

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It may be possible to find out "phases" of the ferment and the antiferment and regulate the Stauung's hyperæmie accordingly, just as Wright has worked out the rules for tuberculin treatment by estimating the opsonic index.

Mueller and Peiser, resp. Jochmann and Baetzner (1. c.) have led the way. The first found, that by washing out "hot" abscesses and suppurating wounds with fluids containing antiferment (hydrocele, ascites) they were able to arrest the too copious formation of pus and the unwanted resolution of tissue. On the other hand, the latter injected in "cold" abscesses and in the callous tissue around sinuses, fluid containing proteolytic (trypsic) ferment (gained from abscesses formed by injection of turpentine oil) or pancreatic trypsin and succeeded in converting the contents of the cold abscesses and the sclerotic tissue into substances readily absorbed. By estimating the index of ferment and antiferment [which could be done either after the method of Jochmann and Mueller (digestive action of ferment on gelatine cultures) or after the method of Gross and Fuld (digestive action on a clear solution of casein)] one might perhaps find out which of the two is wanting in the serum of a special kind and act accordingly by increasing the amount of ferment resp. antiferment present in the body. This may be done either directly at the sight of inflammation or suppuration (Mueller and Peiser, resp. Jochmann and Baetzner) or by introducing the ferments in the circulation and accumulating them in the desired place by Stauung's hyperæmie (Wessely).

Stauung's hyperæmie and the treatment with ferment and antiferment have one thing in common: the tendency to treat disease on physiological lines.

Perhaps the combination of Stauung's hyperæmie with either ferment or antiferment treatment, as the case requires, may give very good results.

Surgical Treatment of Tubercular Disease.


One of the commonest diseases here in China (and probably in other countries) with which we are confronted, is tubercular disease of joints, bones, glands, and skin. Phthisis belongs to the province of the physician. The treatment of such disease is most disappointing. Ulcers and sinuses appear to resist our most careful and radical methods of treatment. Are we not all too familiar with our old
enemy, "the chronic tubercular sinus?" It seems to defy our every effort and persists, like a *monstrum nulla virtute redemptum a vitis*.

In conversation upon this subject a few months since, a very able surgeon informed me—with a certain amount of reluctance—that he had finally decided to leave severely alone most, if not all, cases of tubercular disease. Such a decision could but claim our sympathy, if not assent. Although some of us have frequently felt almost compelled to arrive at the same decision, yet in spite of our hopelessness and helplessness, have we continued to excise, erase, scrape, use acid carbolic pure, iodoform, etc., etc.

Last summer we seemed to be afflicted with a special consignment of tubercular cases, either occupying our beds, or attending daily the out-patient department for change of dressing. One day—or rather night—it occurred to us in our despair to try—to us—a new method of treatment. We had heard, and of course for a long time tried iodine in the form of tincture, or iodoform, but had never heard of, or used the liniment iodi. This we decided to do. The result was so surprising and satisfactory that we prosecuted the treatment more vigorously with increasing success and satisfaction.

The first case which we seriously undertook to treat, was that of a lad with tubercular disease of his right elbow. As usual a native doctor had acupunctured the swollen member, and like the unclean spirit of old, who decided to enter his human dwelling accompanied with "seven other spirits more wicked than himself," the "last state of that man (lad) was worse than the first." Having a poisoned hand myself, I asked my colleague, Dr. R. T. Booth, to operate for me. He excised the joint and carefully removed every vestige of disease. Every possible care and precaution was exercised to secure a good result. After a few weeks, with the usual treatment of dry dressings, the condition of his elbow was, as experience of similar cases proved us to expect it would be, i.e., healed to a certain degree, but with several sinuses persisting. We again put the lad under chloroform and thoroughly scraped the four or five sinuses, from which pus was freely discharging. Then we thoroughly swabbed the sinuses with liniment iodi; we did not put in any drainage, but merely bandaged and replaced it on an angular splint. Two days after we took off the dressings, and to our surprise and joy there was not a particle of discharge. Every day we swabbed the sinuses with liniment iodi, and they healed as though touched with a magic wand. Before leaving the hospital he had secured splendid movement. He could write with a Chinese pen and manipulate his chopsticks with celerity.
Surgical Treatment of Tubercular Disease.

It is quite unnecessary to record other similar cases, or describe the many cases of tubercular abscesses, ulcerated glands, skin ulcers, etc., which have all entirely healed under this treatment.

Our experience after nearly six months is, that although liniment iodi acts well upon ulcers and sinuses of a mixed infection, the result is not quite so rapid, or satisfactory, as is its action upon tubercular disease.

Our modus operandi is as follows: We operate, or scrape (which is not exactly surgery) as usual. Then we swab thoroughly with the liniment iodi. This is composed of: iodine 5, potassium iodide 2, glycerine 1, and spirit vinum rect. 40 parts. The strength is then 1 in 9½. A piece of cotton wool, twisted around the end of a probe, forms a good swab, and can be graduated according to the size of the sinus. The liniment is applied every day. The application does not cause pain, except a slight momentary sensation when applied to some surfaces, neither does it destroy the tissues as does acid carbolic pure. Granulations do not become excessive. At the first application we insert a thin piece of gauze, or pack lightly, but never after the first dressing. (Gauze plugs and strips for drainage have undoubtedly been responsible for many 'chronic' sinuses.) From the first we give internally a mixture containing syrup ferri iodi, drachm 1, and potassium iodide, grains 5, three times a day.

In cases of large phagedenic ulcers, which form so large a part of our clinics, we first of all either scrape, or foment, to get access to the ulcer surface. Then the liniment iodi is applied daily. One of the worse cases of this character that we have been called upon to treat, included the entire dorsum of the man's foot and four toes. It was scraped and liniment iodi used from the first. To-day it is almost completely healed without any signs of the usual extensive granulations.

One is—or ought to be—very reticent about rushing into print with "things medical or surgical," especially touching the all-absorbing subject of "tuberculosis." We happened to mention this method of treatment at a meeting on Kuling, and as I have received several letters from those who have tried it since they left the hill, in which they speak of the satisfactory results, I make no apology for publishing it in our Journal.

So far we have failed to discover any reference to its use for these cases in available medical literature. Perhaps it has been and is still being used by my more enlightened and progressive compeers. To
such this article will read very much like the *parturient mones, nascetur ridiculus mus,* but to others, who are willing to persevere with this particular form of treatment, we can wish them no higher joy or greater satisfaction than up to the present has been our reward.

**THE OPHTHALMO-REACTION IN TUBERCULOSIS.**

By C. M. Lee M.D., Wusih.

On May 8th, 1907, von Pirquet announced that the application of diluted tuberculin (25 per cent.) to the skin of children produced a characteristic reaction. The reaction, obtained by applying tuberculin in the manner in common use for ordinary vaccine, consisted of a typical red papule which was observed in nearly every tuberculous patient. The reaction was not observed in non-tuberculous patients.

Eight days later Wolff-Eisner reported that a drop of 10 per cent. tuberculin in the eye of a tuberculous patient caused a reaction-injection, etc., of the conjunctiva; that this reaction did not occur when the patient was free from tuberculosis. In a book of 200 pages called "The Ophthalmic and Cutaneous Diagnosis of Tuberculosis" (1908) Wolff-Eisner gives a complete review of the subject, which was then something under a year old. The clinical use of the Ophthalmo-reaction was undoubtedly first suggested by this author, but not in a safe form. Valée, in confirming the discovery of Wolff-Eisner, said the test should not be used on man on account of the pain and general severity of the reaction.

On the 17th of June Calmette, of the Faculty of Medicine at Lille, reported to the Academy of Sciences that a 1 per cent. solution of purified tuberculin dropped into the eye gave the reaction, as announced by Wolff-Eisner, but in such a mild degree as to be perfectly safe for use in man. Thus though the clinical use of the ophthalmo-reaction was first suggested by Wolff-Eisner, Calmette, with two of his pupils, after a series of experiments perfected the technique now generally and safely used.

Calmette's method for preparing tuberculin for use in the eye (*French Medical Journal, July, 1907*) is as follows: Tuberculin is precipitated with 95 per cent. alcohol, dried, and a 1 per cent. solution in distilled water is made. This should be fresh as it becomes cloudy on keeping and spoils. One drop of this solution is dropped into the eye of the suspected patient. The patient's head should be tipped

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*Read before the Shanghai Branch, 1909.*
The Ophthalmo-Reaction in Tuberculosis.

well back and the under lid should be supported for half a minute with the finger after the tuberculin is instilled. The eye should not be rubbed. In mild reactions there is reddening of the caruncle and slight injection of the conjunctiva. In medium reactions there is added to the redness a mucoid exudate which may glue the lids together after a night's sleep. In severe reactions there is marked conjunctivitis. Some patients, those in whom the medium and severe reactions are seen, complain of heat and discomfort, but not of pain. I hope this short description has already been anticipated by personal observation on the part of those present, as I am anxious to hear this subject discussed.

The theory of the ophthalmo-reaction is as follows, according to Wolff-Eisner. (Alb. Med. Ans., July, 1908): "Individuals with tuberculous lesions have all the time in their blood bacteriolysins to the tubercle bacillus. All tuberculins contain at least fragments 'splitter' of tubercle bacilli; when these come in contact with the patient's bacteriolysins endotoxins are set free from the fragments of bacilli and cause the phenomena of the reaction. Analogous phenomena have been observed in the study of immunization to pollen in hay fever... as well as in the investigation of immunity in various infectious diseases. It is noted that the frequency with which convalescent typhoid fever patients react to the conjunctival tuberculin test may be due to the superabundant production of bacteriolysins, so abundant that they affect not only the typhoid bacillus but other bacteria as well.

"Failure to react to either test (the cutaneous or ophthalmic) in cases of undoubted tuberculosis the author considers an unfavorable prognostic sign, indicating that the organism lacks the capacity of reacting with protective forces against the poisons of the disease." In this connection I should like to mention a case of my own. The patient, a girl of about twenty years, acquired the opium habit in attempting to control an aggravating cough by means of the pipe. The sputum was full of bacilli and the history definite, but the conjunctiva failed to react to a 5 per cent. solution of tuberculin. Her vitality was at the lowest ebb from the disease helped on most efficiently by the drug. In other words her resistance was nil. If she has not succumbed to the disease already, she will shortly. She has no bacteriolysins, so the end is sure.

Of the Prognostic Value of the Test.—Wolff-Eisner's patients in the first stage of the disease, if they failed to react, did badly. "A promptly appearing, severe reaction indicates a favorable prognosis. The more severe the reaction the better the prospects of a cure. A
quickly occurring, mild reaction, or a failure to react, suggest an unfavorable prognosis. A delayed mild reaction indicates a healed or latent lesion. These principles apply also to the reactions from the subcutaneous injection of tuberculin (Acto Med. Ams., July, 1908), though chiefly to the cutaneous test, Wolff-Eisner believing that the cutaneous test is the prognostic procedure, while the ophthalmic test is the better for diagnosis.

The contraindications are any of the diseases of the conjunctiva, but most especially tuberculous disease. Dr. Satterlee, of New York (Jour. Am. Med. Assn., November 21, 1908), reports a case of permanent injury to an eye, subject to recurrent attacks of conjunctivitis after the instillation of a 1 per cent. solution of tuberculin. I find no reports of injury from a .5 per cent. solution even in children. Diseases of the uveal tract are contraindications according to some observers. One of my own cases gave a history of injury, with what was probably retinal hemorrhage, with temporary blindness during childhood. Subsequently a good useful eye resulted. The reaction in this eye was in nowise different from that in the other eye, which was tested later, except that the reaction was slower in manifesting itself in the injured eye.

When the reaction is very severe boric solutions are recommended, or a combination of three per cent. cocaine solution with a one per cent. solution of adrenalin. The French, Dumarest and Arloing, use a one per cent. solution of adrenalin, they saying that "its almost instantaneous vaso-constrictor action, even in drop doses, produced an intense ischæmia and afforded the patients considerable relief." They prefer this to the adrenalin and cocaine.

Of post mortem evidence as to the value of the test we have little. What there is, is in favor of the value of the reaction in diagnosis of the early stages of tuberculosis. Comby in one hundred and thirty-two cases obtained a reaction in sixty-two. Post mortem examination in six showed latent tuberculosis; while of the seventy which did not react, post mortem examination of four showed tuberculosis absent. Eppenstein (Medizinische Klinik, September 8th, 1907) gives the following: "In a case of meningitis which reacted positively after the instillation of a one per cent. tuberculin dilution, without clinical evidence of pulmonary tuberculosis, the sediment of the lumbar fluid showed a great increase in the number of lymphocytes. However tubercle bacilli could not be discovered. The post mortem confirmed the clinical diagnosis of tubercular meningitis. In addition to this, only a wholly insignificant healed tuberculous lesion of the apices was found."
The Ophthalmo-Reaction in Tuberculosis.

In a paper (Jour. A. M. A., December 14, 1907) Dr. Baldwin, of Saranac Lake, N. Y., says: "Dr. J. Woods Price has carried out some experiments in rabbits which will be published later." It occurs to me that here is another practical way in which the ophthalmo-reaction might be tested and the post mortem results made accessible. Such work could not but be of the greatest value in getting at the reliability of the test we are considering. The evidence clinically rests, of course, on the reliability of the observations of those who have used the method. And of this I need only say that the names of those concerned are of such prominence in the world of medicine that we must accept their almost unanimous opinion that the ophthalmo-reaction is of decided value in the diagnosis of tuberculosis. In this connection some tests comparing the value of the tuberculo-opsonic index, the Von Pirquet tuberculin skin test, and the ophthalmo-reaction are very instructive. Lincoln, of Chicago (Jour. A. M. A., November 21, 1908), made a series of studies as indicated above. The results are thus summarized:

1. The three tests do not agree in every case. Eighty per cent. of the cases that yielded positive results to both the Von Pirquet and the conjunctival tests, were verified by the opsonic index. The Von Pirquet and conjunctival tests agreed in ninety-two per cent. of the non-tuberculous, in sixty-nine per cent. of bone and joint tuberculosis, and in sixty-four per cent. of the cases of pulmonary tuberculosis.

2. In spite of the disparity in the results of the tests on the same cases, the sum total of positive results is very nearly the same for each of the tests.

3. As is to be expected theoretically, the more advanced the disease, that is, the lower the reacting power of the individual, the smaller the percentage of positive results to the tuberculin tests. There were only forty-five per cent. von Pirquet reactions positive and thirty-three positive conjunctival reactions among the advanced cases of pulmonary tuberculosis, while there were seventy-seven per cent. and eighty-seven per cent. respectively, positive among the cases of surgical tuberculosis.

Clark, of the Dept. of Research, Chicago Tuberculosis Institute, says: "Notwithstanding the condemnation which it has received, it seems, judging from the literature, that the test is of great value and one that will be used extensively." This seems to be the opinion approximately of all writers on the subject, yet there are not wanting others who warn us not to frighten patients needlessly.

In conclusion I would emphasize these points: (a) that there is post mortem evidence of the reliability of this test, (b) that comparison with the skin test and the tuberculo-opsonic index points towards its reliability, (c) and that work on the lower animals offers a further means of investigating its reliability. I would further ask all who use the method in future to note what effect the anemia and general asthenia of chronic opium smokers have on the appearance of a reaction.
CASES.

Case 1. No bacilli sputum.
5. Advanced pulmo. Sputum pos. Slight

The above tests were all made with a .5 per cent. dilution.

Since writing this paper I have received a letter from the Professor of Practice of Medicine at the U. of Va. He says that the reliability of the ophthalmic test is certain. But he objects to it on account of the danger to the eye. He prefers the skin test, which is just as reliable and perfectly safe. The reactions of skin and eye occur when there is only infection of bronchial or other glands. Hence the test is very delicate.

UNTREATED GREEN STICK FRACTURE OF THE TIBIA AND FIBULA.

By W. H. Jefferys, A.M., M.D., Shanghai.

Patient: Tsai Ka-zang, male, aged 13. When one year old sustained fracture in the lower middle third of the left leg. The tibia was broken higher by a couple of inches than the fibula. There was apparently no success in treating the accident, and twelve years later, on the 22nd September, 1908, the boy was brought to St. Luke's clinic.

The accident happened in his first year, that is, while quite an infant. Apparently the tibia was bent somewhat more than a right-angle, but not fractured through, while the fibula was probably completely divided. The patient was unable to walk, owing partly to the great shortening and partly to the anterior bowing of the whole limb. He could stand, uncertainly, upon his right foot and left toes. The point of the upper fragment of the tibia pressed upon the arch of the foot and there was some posterior subluxation of the ankle-joint. The skiagraph shows very prettily the condition before operating. The lower fragment of the fibula is seen as a shadow on the tibia and astragalus. There was some union of the fragments; the tibia was strong and solidly united; the skin over it had ulcerated and healed.

Operation.—A portion of the tibia, two and a half inches long, was excised at the angle of fracture. This was the least amount that would allow the contracted leg to straighten itself. The lower end
UNTREATED FRACTURE OF BOTH BONES OF THE LEG.

See Page 250.
In Consultation.

Shenchowfu, Hunan, April 7th, 1909.

Editor China Medical Journal,
Shanghai.

Dear Editor: The article on Symmetrical Gangrene in the current number of your Journal, by Arthur F. Cole, M.R.C.S., L.R.C.P., of Ningpo, is very interesting. If you will pardon this intrusion, I should like to add a little, and if it should prove of help to a brother practitioner, I will be more than repaid.

In practice at home covering twelve years before coming to the mission field I saw six cases of symmetrical gangrene. I was fortunate in getting a very complete history in each case. They were of a peculiar nervous temperament some would call high strung. In two of the cases hysteria had been for years a pronounced feature, so that in one of these, when the burning, itching, and tingling, sensations were complained of and there was no rise of temperature, the attending physician put it down as hysteria.

Keen's Surgery (Saunders & Co., Philadelphia, Pa., and London) (page 325, Vol. 1) says: "Raynaud's disease, of which gangrene is merely an occasional ultimate result, is often described as a neurosis characterized by extreme excitability of the vaso motor centres." He farther states that Pitres and Vaillard, whose views have not been widely accepted, ascribe it to a primary peripheral neuritis.

If you will indulge me to farther quote from this author. "In consequence of some comparatively trivial cause, or apparently without
any, the arterioles of a finger or toe are stimulated to such strong contraction that the circulation is more or less completely cut off, and if this persist long enough, gangrene results. A fit of passion or other excitement may be sufficient to produce the phenomenon, or it may be due to reflex irritation from diseased uterus, stomach, or other organ, but in the majority of instances it arrives from the effects of cold, even of very moderate degree; the symptoms closely resembling those of frostbite, although the tissues are not frozen. Hence it is more frequently seen in winter than in summer.

"One or more fingers or toes, which have previously been subject to tingling, itching, and pain, suddenly become as cold, white, and motionless as if dead or frozen (so called dead fingers). The condition is accompanied by burning or lancinating pain, in spite of anesthesia of the skin, and is known as local asphyxia. Instead of becoming anemic the finger may be passively congested, swollen, and painful, presenting a bluish, mottled, or purplish appearance, as though constricted at its base. This latter condition often succeeds the former or alternates with it in limited areas. It is called local syncope. If recovery results without gangrene, the syncope soon gives way to active congestion, the finger becoming intensely hot, red and painful. This process may be repeated indefinitely at longer or shorter intervals; sometimes months or even years apart without resulting in mortification, even though the discolored skin so nearly succumbs as to become covered with vesicles during the attacks."

But our interest centres about what treatment to give to these cases before the line of demarcation is clearly defined, so as to warrant surgical interference.

My first case at home a consultant suggested that I try some form of arsenic. I hit upon Fowler's Solution as being very convenient. I started to give this patient one drop doses every eight hours, and increased the dose one drop each day until thirty drops were taken at a dose; then decreased one drop each day in the same ratio until I got back to one drop doses. I was gratified to find the case improve; the tingling, itching, and intense burning was soon relieved. It did not always stop the actual death of tissue, but it did seem to exert a marked effect on restraining the line of demarcation. Just to make myself clear on this point, if the gangrene threatened to extend to the knees and above, the discoloration after taking the arsenic would blanch out and recede. In one case the discoloration continued to recede until it finally became stationary at the ankles. Since then I have used this treatment in all forms, and in senile gangrene its effects were pronounced enough to almost make me think of it as a specific.

I would be pleased to hear of my brother practitioners here in China using it and reporting.
In Consultation.

I also found codine very helpful in controlling the nervousness and irritability until a patient is thoroughly under the effects of the arsenic.

Electrolysis will be found useful after the swelling is starting to subside and the nerves are regaining their tone.

At some future time I should like to offer a few comments upon medical etiquette as I find it in China.

Fraternally your brother in His service,

Fred. C. Krumling, M.D.

Seoul, Korea, April 23rd, 1909.

DEAR DR. COUSLAND: At our recent Medical Society meeting we had some discussions on dysentery and its treatment, and it raised the question as to what is done in China. Can you tell me, without too much trouble, the routine treatment in China for dysentery, both acute and chronic, and also tell me in what the celebrated Shanghai "sprue" treatment consists?

If you have a "sure cure" for the parasitic form of chronic hemoptysis, we would be more than happy to learn that also. That disease is very common here, and as yet we have not hit on the right remedy. At the present time I have a patient, who is very patient indeed, in that he has faithfully followed up his course in the dispensary for chronic hemoptysis, but although he has been under my care for six or eight months, it seems impossible to cure him. He improves in general health, and all goes well until about once in a month he has his hemorrhages, and they are very severe indeed. Beta-naphthol, creasote, and terebene have all been recommended and faithfully tried both in this case and in many others, but with no permanent effect.

Will you not be thinking of making a trip over to see us in Korea some of these days? It would be a pleasure to meet and converse with you.

With best wishes,

Yours sincerely,

W. B. Scranton.

Tsao-shih, via Hankow, Hupeh.

DEAR DOCTOR: A case of pseudo hypertrophic muscular paralysis attended as an out-patient some time ago, a boy of about eight years of age. The case was a typical one; the lad being only just able to climb up his own or somebody else's limb, if lain down. I send the note as a contribution to the distribution of this complaint.

Yours truly,

E. F. Wills.
DEAR DOCTOR: I sent you reply to your queries re our local parasites about three weeks ago; since then I have made the acquaintance of two new friends.—Necator Americanus and Fasciolopsis Buski (D. Crassum). I had been on the lookout for their ova for about six months, but failed to find. The past fortnight has brought two cases of each in the same time. I have both the ova and worms; the latter with help of thymol, as ol. eucalypti failed with the Necators completely. I am not sure if you have heard of the "Lao San" worm. I had often heard of it, but never met it till the Fasciolopsis Buski appeared; it is the "Lao San" worm; both patients were apparently infected there; one on quite a short visit. Assistants who recognised the shape of the worm said it was the "Lao San" parasite. One case had constant epigastric pain (apparently gnawing in type) with nothing to account for it; the other is a big belly with profound anaemia. He had same condition last year and got well. The Necator cases come from near, every one of them living just outside the city walls, engaged in farming.

I hope to strike more gold as time goes on, and if so will write you.

Yours sincerely,

J. C. P. BEATTY.

Batang, via Tachienlu, W. China,
April 3rd, 1909.

DEAR DOCTOR: Enclosed please find photo of an interesting case of keloid in a Tibetan boy of eighteen years, first noticed about five years ago soon after piercing his ear for earrings, as the Tibetan custom is; one on ear, another on chin and one on neck. His father removed them once with a sword. I removed them again as much as was practicable; the removed part weighed about five pounds. His father is similarly afflicted, but to a milder degree. Keloid is rare among Tibetans.

Truly yours,

A. L. SHELTON.
Rhenish Mission Hospital at Tungkun.
Groundplan of the second building.

River-side.
1. Waiting-room for outpatients.
2. Dispensary.
4. Men's
5. Room for special treatment of women.
7. Waiting-room for outpatients, getting medicine.
8. 9. 10. 11. 12. Private- and isolation-rooms, (2 beds each).
12. Registration-room for inpatients.
13. Consulting-room for paying patients.
15. Room for instruments.
16. Passage to the operating room. (also used as dark-room.)
17. Staircase, leading to the house-chapel.
18. Passage to the river-side.
20. Store-room.
22. Microscopical department.
23. Room for warders.
24. Room for male patients (20 beds).
25. Room for male patients (20 beds).
26. Liegerhalle with 11 beds each.
27. 28. Liegerhalle with 11 beds each.
29. Day-room.
30. Washing-room.
31. Closet.
32. 33. Entrances to the cellar.

Note.—This plan was received too late for inclusion with the memoranda in our last issue.—(Ed.)
The yearly subscription to the China Medical Missionary Association is $4 Mex., payable in January of each year. This includes the Journal and postage on the same, whether local or foreign.

All changes of address, departures on and arrivals from furlough should be notified to the Secretary and to the Presbyterian Press. Members are requested to invite new comers to join the Association.

The Editors will be obliged if all those who are building hospitals will send copy of plans and detailed description (in duplicate if possible). These will be loaned, on application, to members who are proposing to build.

Editorials.

"A really too careless old stork
Got lost making calls in New York.
He dropped in—yes he did,
Where he hadn’t a bid
And created no end of talk."

We have received several letters indicating that there is still uncertainty in the minds of some about the date and place of the next Association Conference. The place is Hankow and the date has been definitely fixed, by an overwhelming majority of expressed wishes, for China New Year 1910.

The matter of local arrangements is in the hands of a committee, of which Dr. Booth, Hankow, is chairman. He is also chairman of a sub-committee on Programme Dates. The programme itself is in the hands of what was originally a large committee, which has sifted down to some eight members, of which Dr. Jefferys, Shanghai, is chairman; Dr. Cole, Ningpo, is in charge of the Surgical section; Dr. Hume, Changsha, of the Medical section; Dr. Shields, Soochow, of the Educational section; Dr. J. Preston Maxwell, Engchun, via Amoy, of the Exhibits; and Dr. J. L. Maxwell, of Research Committee matters. There are other members of the committee who, it is hoped, will develop other lines of interesting matter.

It should be clearly understood that this is to be the finest conference in our history, the most interesting, the most practical, the most helpful and the most scientific. It should also be understood that contributions of papers, exhibit matter, advice, and especially contributions of living delegates, will be received with
wide open arms. All papers contributed will be published in the Journal, whether read at the conference in fact or by title. Let each member of the Association make up his mind that he will do or die in the attempt to contribute some definite thing to the total of the conference.

Dear Dr. Cousland:

The voting re date of Triennial Conference is as follows: 40 votes—38 for New Year and only 2 for April.

This, I suppose, will settle the matter. The exact date must be settled later.

Sincerely yours,

R. T. Booth.

* * *

We read with a heart-full of interest and deep-seated joy for suffering humanity’s deliverance the following paragraph printed as news in a Shanghai daily of March 4th, 1909:

More Pink Peril.

"At last a cure for seasickness has been discovered. The remedy, which goes by the name of ‘Zotos’ and is made up in the form of little pink capsules, is said to be infallible, and if we may judge from a recent experiment on a cross-Channel trip this claim is fully substantiated. Thirty-eight young ladies who were returning to Paris to school were persuaded to try this remedy before setting out from Dover, and not one of them was seasick, although the passage was by no means a smooth one. All the school-girls remained on deck throughout the crossing, and though they were quite well throughout, a ‘mere man’ on board, who had not taken ‘Zotos,’ was seasick during the voyage. The ordinary dose of this new remedy is one capsule half-an-hour before, one at the time of, and one half-an-hour after sailing."

"It is a shame to take the money" for such news!

* * *

Another source of heavenly joy has come to us in the form of a leaflet from Parke, Davis & Company, of Detroit, Michigan, headed, "SHALL THE DOCTOR TRUST TO CHANCE?"

The treatise opens as follows:—

"It is a fact—not so well known to the medical profession as it ought to be—that there are upon the pharma-
ceutical market to-day quantities of so-called therapeutic agents whose medicinal value *is essentially a matter of conjecture.* (Italics ours.—Ed.) Some of these preparations are wholly or partly inert; others are abnormally, dangerously potent—conditions due primarily to variation in the active constituents of crude drugs, and secondarily to the fact that certain manufacturing pharmacists cannot or will not standardise their products.

"In view of this grave situation, shall the physician write his prescriptions haphazardly, trusting blindly to chance or good fortune, or, by prudent specification insist that the medicines dispensed upon his order shall carry with them a warrant of efficiency and safety?

"There can be but one answer."

That hits the nail right on the head. There can be but one answer, and that is, *Yes, it *is essentially a matter of conjecture.*" Furthermore, "*the physician shall continue to write his prescriptions haphazardly, trusting blindly to chance or good fortune.*" What in thunder else is there for him to do?

* * *

We have received and read with the greatest satisfaction the June Recorder, which is a Medical Missionary number. Besides being green with envy of their having secured such excellent copy on the subject so dear to our hearts, we have no feelings other than pleasureable. Dr. Tatchell's paper on the "Qualifications of the Medical Missionary" covers the ground, and we are tempted to reprint it in full. But as we all receive the Recorder as well as the Medical Journal, it is hardly worth while to do so. His recommendations, however, it is well to repeat here by way of record.

"There are three suggestions then, we would submit, which we believe would in the future obviate any suggestion of inefficiency, whether in matters concerning the spiritual or the medical side of hospital work:—

1. That Mission Boards are careful to see that medical workers seeking appointment on the mission field are actuated by Christian devotion and are spiritually efficient.

2. That in connection with all Mission Boards a Medical Advisory Committee, composed of Christian medical men and women of ex-
perience and repute, who are acquainted with the conditions of missionary work, should enquire into the credentials of candidates for medical missionary service to see that they are professionally efficient.

3. That all intending medical missionaries should be required to undertake a full curriculum at a good university or recognized medical school, where a course of at least five years of medical study is enforced before granting a degree.

Some day we may be tempted to give our clerical brethren a treat on our own part, and tell them how deeply we appreciate their virtues, and possibly also indicate a few lines by way of improvement.

* * *

We are merely going to chat about a certain failing or weakness of our great profession at large, a weakness common to us all, a weakness perhaps emphasized in us as medical missionaries, but far, far from being peculiar to us.

CANT is one of those nasty things that owe their special nastiness to the fact that they are wont to associate themselves with what is good. Cant is a parasite which in common with other parasites has a predilection for the more highly specialized hosts, and the better the host the more tenaciously it sticks. It is an intellectual tape-worm which chooses among human animals those in the more highly specialized walks of life and makes itself at home in the vitals of their character. It grows long and slimy and wriggles and squirms, but fattens the while.

Yet cant does not entirely confine itself to any walk in life or to any profession, though, as we say, the better the host the more likely the infection with this platyhelminth. Therefore we find it chiefly in the profession of religion and in association with the ministry. But there is a medical cant and a law cant and a servants' cant and a beggars' cant. Among beggars in America cant is often recognized under the form of "home and mother and the desired railroad ticket." The bargain table, the price $2.98 or the expression Zeh-pung are cant of the shop-keeper variety. Cant simply oozes from the skin and trickles from the nose of the patent nostrum exploiter. Life insurance agents, politicians, breakfast food advertisers, all have their genus of parasite and keep it well fed.
Dryden recognized this when he spoke of "the cant of any profession." And we often know the beast by sight or feeling even when we do not stop to label it. But we do not desire to-day to muck-rake our neighbors' characters; we desire to face with you honestly our own failings in this respect that if by all means we may get rid of this horrid thing and as physicians speak simply, honestly, wisely, and without fear, for cant is neither honest nor brainful, and is ever the coward.

Webster says of cant:
1. "An affected, singsong mode of speaking." (This is merely its mode of expression).
2. "The idioms and peculiarities of speech in any sect, class, or occupation." (This is the rosy side).
3. "The phraseology of a sect, used without sincerity; an empty, solemn speech implying what is not felt. Religious hypocrisy, etc."

These do not exactly fill the bill. Let us try to do better than any of these somewhat stilted definitions. We would define cant somewhat as follows:

A bogus truth liable to be mistaken for a genuine lie.
A brainless bluff at a laborious truth.
A truthful lie enunciated for the purpose of deceiving oneself into deceiving some one else.

We purpose to divide Medical Cant into three groups and shall designate them:
1. The cant of the tired (or lazy) brain.
2. The cant of the dull conscience.
3. The cant of the plausible scientist.

And it is of the last, the least obvious, that we shall have most to say.

1. The cant of the tired brain.
Mother. How do you suppose Sammy got this pain in his stomach?
Doctor. I suppose he must have eaten something that disagreed with him.

(Next morning Sammy vomits a worm and the doctor makes a new diagnosis.)

Aunty. What do you suppose Tillie ate to give her this rash?
Doctor. Did she have any fish yesterday?
Aunty. No, but she had tomatoes the day before.
Doctor. Did she? Well, it must have been the tomatoes that did it.

(That evening two more come down with measles.)

Patient. Do you think cold cream would be good for a rash on my back?
Doctor. Why, yes, I think so.

(Two weeks later he has a "look see" and prescribes protiodide internally.)

Hostess. Doctor, is it true that appendicitis should *always* be operated on at once?
Doctor. Yes, invariably.
Hostess. That is funny. Dr. Kelly, of Baltimore, told me that there are some cases where it is better to postpone the operation.

(Situation embarrassing.) Apologies to Dr. Kelly.

Doctor. Gentlemen, I have made a careful vaginal examination, and there is a tender mass in Douglass's pouch. It is undoubtedly a prolapsed and adherent ovary.

(Opens the abdomen and finds a small carcinoma of the rectum. Oh! that he had made that rectal examination that he thought of making, but did not!)

Now the trouble here is two-fold. Firstly brains will get tired and secondly people will ask fool questions. But such answers do a world of harm and throw both discredit and distrust on the profession and particularly on the individual. When the worm comes up it is evident that the Doctor made a mistake. As a matter of fact he didn't since Sammy did eat something which gave him a pain. But Mamma knows jolly well that whatever other varieties of worms Sammy may have eaten, he did not eat that kind, and so the Doctor gets the discredit which he deserved. His brainless bluff at a laborious truth was *called* by the worm.

We have the following suggestion to make:—

1. When tired talk little, and unless you think before you speak, do not speak.
2. Do not be afraid to use freely such expressions as,
There is not sufficient evidence to say—
I am not yet decided,—
I think we can say to-morrow,—
I must study the thing yet awhile,—
The appearances are so and so, but I do not yet feel positive.
So far from breeding lack of trust, such expressions breed trust. People like to be studied, not jumped at. Moreover people are not fools and should never be mistaken for such. When preachers hedge on ribs and whales and other such intellectual welsh-rarebits, we think them foolish, not because we think they believe, but because they take us for infant intelligences and do not desire to disturb our supposed daydreams. But when they come out frankly and say that "something is not compatible with modern ways of thinking and that either we fail to understand the narrative or the narrative does not represent fact but interprets truth, then we know that they do not ask us to put a square plug in a round hole and that they are sincere and seek truth and give us credit for the same."

With regard to fool questions. We are persuaded that it is worth while to answer all medical questions, fool or otherwise, with thought or not at all. Of course there are limits to this remark. When a person turns and asks you in a drawing-room full of people what you suppose was the matter with her aunt's cat that had a fit a week ago, we should acquit you of unprofessional frivolity if you should say that "you suspected cat-alepsy," or "tom-sillitis." But such a question as that about the operation for appendicitis should be answered carefully for one's own sake. We may say if we like: "This is too sweeping a question to be answered off-hand," but it is perhaps better manners to make a guarded statement such as "the exceptions to immediate operation for appendicitis are very few. But one may choose one's time in some cases." The answer is true; it is safe and it is sufficient. We often realize that an answer is not really desired. The asker is merely making conversation, and a careful answer is not sought and will bore the hearer. We can only recommend brevity and humor as on the cards. But a brainless answer which merely gets out of the situation, paves the way for future trouble and cultivates a careless
and negligent habit of professional thought, which is comparable to the thoughtless cant of the sentimental religionist who drags in religion by the ears and gives it a shove on general principles.

In the explanation of scientific facts between physicians and laymen (doctors and patients) loose talk is rampant, partly because of the off-handness of many occasions, partly because of the quasi-scientific attitude of the hearer, often because of the carelessness of the speaker. If the average scientific explanation given by physicians to patients were repeated by phonograph before the county medical society, it would be unanimously voted, humorous, but unscientific twaddle.

2. The Cant of the Dull Conscience.

We do not here refer to the vicious conscience which advises criminal abortion, with whom evil is evil. Cant is not a tool in the kit of the moral burglar. We refer to plausible phrases that slip for convenience from the lips of the moral sluggard, the man who is afraid his patient will go through his fingers if he is too strict with him, whose eye is on the pocket of his victim, or who is more or less of a simple moral coward.

Patient. Doctor, do you think there is much risk in my eating strawberries and celery from the Chinese market during the cholera time?

Doctor. Well, perhaps not if you do not do it too often.

(The internal argument here is, I know there is a big risk, but will not balk you and so make myself unpopular. The chances are it will go all right).

Patient. Doctor, I want to get married. As you know I had venereal trouble, but I am nearly well, and I think I might go ahead, don't you?

Doctor. Well, you are not yet cured, but I guess, with constant treatment, you won't do any harm.

The physician knows the clap is not yet cured, and he puts in fearful danger some pure woman by his damnable platitude. His place is to tell the truth, not to rejoice the heart of his patient by giving him professional sanction to run risks, to deceive himself. Raw vegetables are dangerous, uncured clap is a deadly peril to womanhood. The physician's duty is clear as day in these matters.
His advice may not be followed; often he knows it will not be so if he is honest. That is not, however, warrant for giving poor advice. That does not affect the physician's duty in the case.

Some may be aware that we hold views on the patent nostrum question. The physician who deliberately prescribes drugs or preparations of which he does not know the composition, is a shirk and a fraud and is guilty of cant of the dull conscience variety. He is making a brainless bluff at a laborious truth. He is a medical sneak-thief.

3. The Cant of the Plausible Scientist.

We come now to something far more delicate, far more subtle, something which it is perhaps beyond the will power of many to entirely control, and yet something which is within easy, even if not unconscious, recognition of each one of us. We would go further and say that it is already proved to be within the recognition of the world's faculty of medicine.

We wonder if we shall be able to express to you a correct interpretation of that form of thought on which only the shadow of cant has passed, but the avoidance of which is the ripe fruit of the finest scientific minds, the refined gold of scientific diction. Let us try, and pardon our heavy stepping.

On the border line between the cant of the tired brain and the cant of the dull conscience and the cant of the plausible scientist, where the three meet, we hear such expressions as "threatened with consumption," "an attack of typhoid malaria," "a grippish cold," "threatened with typhoid" and the like. They are make-shift, they are moral and mental greased planks, and they are scientifically plausible but untrue. Epilepsy is epilepsy, grippe is grippe, consumption is consumption; there is no such thing as typhoid-malaria, and a man who is threatened with typhoid has typhoid. To label ailments with vague and deceptive labels, like the conferring of knighthood upon grocers, may be convenient in the extreme, but is, after all, a bluff at the real thing.

But this is too self-evident. We are aiming at something far daintier, far less tangible. One of the healthiest signs of the times in medical literature is the determination generally evident to draw the sharpest lines along the boundaries of ascertained facts and to limit the expression of theories to the strict realms of
The older medical literature is replete with unreasoned theory, but this was largely so because the fact-horizon was so narrow that the theoretical was all in sight. It was as if one were standing on an apple balanced in ethereal space.* One could see all round and beyond the horizon, but little this side of it except one's vest buttons. To-day we stand surrounded by an expanse of scientific facts and though the unknown is still vastly greater than the known, the known is sufficiently extended as the barrel of a rifle, to give many times its length in accurate projection.

Osler's Practice of Medicine largely owes its preëminent popularity to the combined facts that it is the most perfect expression of the new era and that it came into being at exactly the moment when the medical body was hungry enough to appreciate it. So far as we have noticed, Dr. Osler never overstates a scientific fact, and whenever he lets go a speculation, it is based on a sufficiency of sound reason to give it legitimacy. Since the appearance of this book, many others, great and small, have followed the master worker. So much so that one laughs at times to see a writer become immersed in cant in the effort to appear to be deeply scientific.

We find the books of this newer era among the most popular of all books in the hands of the busy man, a cause of just congratulation on the part of the authors and of their readers.

In former days one might look for such an expression as this. "The ascaris lumbricoides lays its eggs in the ileum in order that they may be passed from the host at stool and so becoming disseminated and reingested, perpetuate the species." One nowadays feels resentful that to this humble-minded parasite should be attributed such wealth of foresight and insight.

Even so late as his Lane Lectures, Sir Patrick Manson comes not infrequently perilously near this same pitfall, as, for instance, when on p. 74 he tells us of "the cause of filarial periodicity, we may be assured that it is an arrangement in the interests of the parasite." One nowadays feels resentful that to this humble-minded parasite should be attributed such wealth of foresight and insight.

Even so late as his Lane Lectures, Sir Patrick Manson comes not infrequently perilously near this same pitfall, as, for instance, when on p. 74 he tells us of "the cause of filarial periodicity, we may be assured that it is an arrangement in the interests of the parasite." Now here, as in the other places alluded to, we know very well what is meant, and we are very ready to believe that the fact is in the interests of the parasite, but as for believing that the human superficial capillary circulation was arranged to dilate in
sleep in the interests of the filaria nocturna so that night biting mosquitoes might come chow chow them, this is quite beyond our credulity. We have chosen an example from Dr. Manson's wonderfully interesting book for the very reason that the author is the concentrated, solid, compressed extract of all that is most brilliant and most modern in the profession and yet . . . . Well, we find solace therein for our own lapses into the science that does not quite know and the reason that does not quite think.

We are getting somewhere near the point. By modern medical writers a fairly well-recognized fact may be stated without apology. If the fact has not been established or is still under judgment, this should be admitted or hinted at. Theories, surmises, guesses are all admissible if separated from facts by a full stop . . . . and if the reasoning, however slim, by which they are backed, be reason indeed and not moonshine.

Some years ago we heard a talented and highly educated Hindu woman say that in an eager desire to acquire a fine English style, she had read each year, for seven years, "Green's Short History of the English People." And success was so attained. She spoke with elegant diction and as perfect English as we have ever heard, barring once or twice. And we should like to venture the prediction that an almost perfect freedom from medical innacuracy of thought and expression and especially of medical cant, would be acquired by a yearly reading of Osler's Practice of Medicine for seven years and, one might incidentally add, a very solid foundation in medical principles.

We would say the same of John Asshurst's Principles of Surgery, but alas that wonderful book is out of date, a classic but a back number. The last edition is 1893.

Do you remember the two quotations at the opening of Osler's book? One from Hippocrates, "Experience is fallacious and judgment difficult," and one from Plato, "And I said of medicine that this is an art which considers the constitution of the patient and has principles of action and reasons in each case."

Principles of action and reasons in each case. If we stick to that there will be little room in our thoughts and in our words for the cant of the plausible scientist; let alone any other description of medical cant.
We cannot leave this subject without saying something on the cant of the missionary, of even the medical missionary. We have a very loving and a very human sympathy for the splendid enthusiasm of the missionary in his work. We are missionaries. Our enthusiasm is just as certain to win out as if it already had attained, but we missionaries, as individuals, do not get enough criticism; we are too isolated, we run our own shows, we make our own reports, and we must be enthusiastic, but we exaggerate in our own minds; some of us do, at least in our written reports and in our speeches, the perfection and imperativeness of our personal doings. From the neophyte who wants to make sure that he does not waste his precious life in the sacrifices he is making, to the two-year old who is “the only physician among ten million needy ones,” on to the seasoned veteran who has been pretty well flattered at home and still on to the grey hairs that have fought the fight and feel pretty sleek over it; the internal satisfaction would be sifted to something like the facts by a little more criticism. I am afraid that this is as true of medical work as in other lines of mission enterprise. We see things called hospitals, and praised for their glorious work and enthusiastically supported by some self-comforting individual who has never seen them, things which are not really up to the impression given about them. And the whole difficulty lies, not in the fact that the institution is not admirable, deserving, doing a good work and so on, but that the idea thereof, the name thereof, the things said about it are inflated and exaggerated.

Before coming to China we read much on medical missions and on missions in general in this land. And we have seen many mission institutions which we found not actually up to the ideas thereof presented in what we had read about them. It was merely that in the effort to be optimistic, to be enthusiastic, to make the thing go, there had been a too liberal a use of the dictionary; the pencil had been dipped in the gold paint, the good woman was a “noble spirit,” the busy man a “veteran hero,” the dispensary a hospital, the school a college, the college a University and a rented village chapel the centre of a vast promising field of Christian enterprise.
We believe in mission work down to the ground, we are red hot with enthusiasm about it, we tremendously admire the rank and file of missionaries and hold that they are doing the most interesting and the most worth-while work that is being done in the world to-day. For that very reason we should have more power, far more power if we reported ourself with greater reserve, with greater simplicity, with the utmost simplicity. We have a good thing and are doing it well, just as well as any other set of average earnest people would do a good thing, but self-advertising, exaggeration, self-pity, and above all cant, must as surely as night-fall darken the full joy of useful and efficient service.

A PURE DRUG SUPPLY.

MORE ANSWERS.

LIST OF CHEMISTS.

*British Drug Co., London.
*E. Merck, Darmstadt.
*Burgoyne, Burbidges & Co., London.
*C. J. Hewlett & Son, London.
*The Shanghai Dispensary.
*Parke, Davis & Co., Detroit.
*Ferris & Co., Bristol.
*Johnson & Johnson, New Brunswick, N. J.
Charles Yarrow & Co., London.
Knoll & Co., Ludwigshafen.

*Answered.

QUESTIONS.

1. Do you publish unqualifiedly the full and accurate formula of every product of your manufacture?
2. Do you believe in product patents and make use of the same?
3. Are your laboratories open to inspection by both the medical and pharmaceutical professions?

We should be glad also to have your answer to the question:

4. Is it your practice to manufacture what is commonly known as "patent medicine" to be sold either under your own name or under that of other firms?

The following answers to our letter have been received since our last issue:
Dear Sir: We beg to acknowledge receipt of the copy of your circular letter sent to manufacturers of pharmaceutical goods in different parts of the world and will reply to same more in detail at an early date.

Yours very truly,

Davis and Lawrence Co.
By Harvey H. Watkins,
Manager.


Editor The China Medical Journal.

Dear Sir: Owing to the absence of the writer your letter of the 1st of January has not been replied to before.

We may at once state that we do not put forward what are generally understood as patent medicines, but have for many years disclosed the composition of the various articles we supply under our trade marks.

We have a considerable sale for our foods for children in the English ports of China, and our laboratories are quite open to the inspection of medical men and chemists.

Under separate cover we are forwarding you pamphlets giving particulars of some of our products, for which we have a large sale.

We are, Dear Sir,

Yours faithfully,

Allen and Hanburys, Ltd.

61 Doshumachi Sanchome, Osaka, April 20th, 1909.

Editor The China Medical Journal.

Dear Sir: I beg to acknowledge the receipt of your esteemed favor of 20th ultimo, the contents of which are carefully noted.

In reply to yours I beg to say that I have not any my own proprietary medicine. I am selling pure drugs and chemicals manufactured in prominent factories in both the inland and abroad. I am therefore not able to answer for the topics mentioned in your letter.

Yours sincerely,

Kihri Konishi.

Bristol, April 2nd, 1909.

Editor The China Medical Journal.

Dear Sir: Your letter of January 1st, which was acknowledged on February 19th, has now been laid before my Board of Directors.

In replying to your letter I am instructed to say that the business conducted by this Company consists chiefly of the supply of pure
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drugs, chemicals, pharmaceutical and galenical preparations, prepared according to the British Pharmacopoeia, United States Pharmacopoeia, and other standard authorities, surgical instruments, appliances and sundries to hospitals, dispensaries, medical missions, private practitioners, and others.

In addition to the classes of drugs enumerated above, the Company also manufactures concentrated tinctures, fluid extracts, standardised preparations, and compressed drugs, all of which are guaranteed to be of the full strength and composition stated in the labels.

My Directors respectfully submit that the nature and class of the business conducted by them does not come within the scope of your enquiry, and that it is unnecessary therefore for them to reply to your questions categorically.

I am, however, instructed to say that—

(1). This Company does not manufacture patent medicines.

(2). That all necessary information respecting any preparation sold, which is not prepared according to a published formula, is supplied to the medical profession.

(3). That the Directors are always glad to receive visits from customers or prospective customers and to show them anything which is likely to interest them in the showrooms, laboratories, or warehouse of the Company.

In conclusion I am to add that the Directors are very desirous of extending their already large business connections with medical missionaries in various parts of the world, and that they will be very pleased to receive orders or enquiries from any members of your Association who are not already customers.

The greatest care and attention is paid to the execution of all foreign orders, and your members may depend on receiving from FERRIS & CO., LTD. drugs and appliances of the highest quality, carefully and securely packed, at moderate prices.

I have the honour to be, Sir,

Your obedient servant,

H. HOLDEN TOWNSEND,
Managing Director of FERRIS & CO., LTD.

SHANGHAI, MAY 15TH, 1909.

Editor THE CHINA MEDICAL JOURNAL.

DEAR SIR: I refer to the conversation we had a few days ago and do not hesitate to state that whenever we publish a formula of the products of our manufacture, we publish it fully and accurately.

We do not manufacture what is known as "patent medicines," and our laboratories are open to inspection to medical or pharmaceutical men. We have certain not patented products, as for instance somatose, the manufacture of which is a secret and not shown to the public.

I am, Dear Sir,

Yours respectfully,

For the FARBENFABRIKEN VORM. FRIEDR. BAYER & CO.,

M. A. STEMPHEL.
Dear Sir: We are in receipt of your favour of 30th March, and have re-written our letter of the 23rd February, omitting the word "Private" and adding an explanation to our reply to question No. 2.

We enclose our amended reply.

Yours faithfully,

Burroughs Wellcome & Co.

LONDON, May 3rd, 1909.

Editor The China Medical Journal.

Dear Sir: Referring to your letter of the 1st January, we beg to advise:

1. The labels of our products bear the list or formula of medicinal ingredients contained, and we direct your attention to the 'tabloid' and 'soloid' products, etc., mentioned in pages 11 to 178 of Wellcome's Medical Diary, 1909, copy of which we had the pleasure to send you a short time since.

2. If you refer to patents for synthetic products, we do take out such patents in common with all other chemical manufacturers on the same principle that patents are taken out in the engineering and other trades to protect inventions. If you refer to patents for a combination of medicinal ingredients or to elements or to natural substances, we do not take out such patents.

3. Our works and laboratories as well as the Wellcome Physiological Research Laboratories and the Wellcome Chemical Research Laboratories are open to inspection by both the medical and pharmaceutical professions.

4. We do not manufacture what are commonly known as "patent medicines" to be sold either under our own name or under that of other firms.

To demonstrate the scientific nature of our work we are sending you, under separate cover, pamphlets giving a description of the Wellcome Physiological Research Laboratories and the Wellcome Chemical Research Laboratories. These institutions, although separate from our firm and under separate control, conduct scientific investigations and tests, the results of which are embodied in the products which we issue.

Yours faithfully,

Burroughs Wellcome & Co.
London, April 30th, 1909.

Dear Sir: Your circular letter of the 20th ultimo is, as you are probably aware, a somewhat unusual one for us to receive, and we are quite content in China as elsewhere to trust to the reputation which has been gained by over half a century's trading with that country to maintain our position there, but as we recognise the name of some gentlemen on your editorial staff for whose views and wishes we entertain great respect, we have pleasure in responding to your several enquiries as follows:

(1). In the great majority of cases our products are prepared according to a formula of the British Pharmacopoeia or other authorised standard, and the labels show the standard in question. In most other cases we embody on the label the active ingredients the preparation contains, and where we do not, we are always ready to furnish them, if applied to.

(2). We are at a loss to understand the meaning of your term "Product Patents," and so regret being unable to answer this part of your enquiry.

(3). We are always pleased to welcome and show to any of our correspondents—medical—or in our trade, our laboratories.

(4). As far as our own manufactures are concerned our answer to No. 1 covers this enquiry as far as our customers are concerned, whom we understand you to refer to by the words "other firms" we are of course prepared to make up any preparation they may order, and the terms or conditions under which they sell it, we have naturally no voice in.

We may add you are quite at liberty to publish or to withhold, exactly as you like, the above replies, but if published at all, we should like them published as a whole, and to this condition we have no doubt you will accede.

We remain,
Yours faithfully,
Dakin Brothers, Limited.

J. Harrison Dakin,
Director.
Dear Sir: Your favor of the 13th ultima was received and read with much interest. I will send you as soon as it is published a copy of my paper on "Standardization of Materia Medica Products," read before the American Therapeutic Society, which I am sure will interest you.

You will note that the paper gives an account of the work in which I have been engaged for the last thirty years. You may also be interested to know that I came very near entering the medical missionary service and going to China.

The condition of the medical press in this country in its relation to advertising business is one that has much to do with the low status of pharmacologic products, and I cannot help feeling that your taking up the cause of pharmacology and insisting upon a higher standard for manufacturing pharmacists is quite remarkable and at the same time entirely compatible with the medical missionary service.

Reform is greatly needed in the materia medica supply business, including the advertising of materia medica products, and it is certainly an interesting condition of affairs to witness the reform being taken up by the missionary medical journals and reflected back to America.

I recently received a letter from Prof. Oliver T. Osborn, of Yale University, in relation to the paper I read at New Haven, which may prove of interest in this connection. The following is a copy of the letter:

"I have read the reprint of your article on "Standardization of Materia Medica Products," and wish to commend its excellence. You have presented the subject splendidly, and your persistent effort for pure, assayed drugs is worthy of the highest commendation."

In my reply I expressed my earnest conviction by saying:

"The approval of those members of the medical profession who are familiar with the subject of standardization in its broadest sense is what I desire above all else, for they realize that the standardization of materia medica products, and the maintenance of such standards, is far more important to the American people than any one of the minor problems now hindering its accomplishment.

While the great object in view has not been accomplished, it is certainly true that immense progress has been made during the last thirty years, and it is only a question of time before those of us who desire to secure the establishment and recognition of pharmacology as a profession will have our desires realized, although possibly not along the lines we have individually advocated.

Individuals and methods are of small value in comparison with the great end we have in view, and I am sure you will agree with me that it is the end and not the means we are most anxious to secure."

With kind regards, I am,

Yours very truly,

F. E. Stewart.
Editorial.

FONG TS'UEN, CANTON, May 26th, 1909.

Editor THE CHINA MEDICAL JOURNAL.

DEAR SIR: I am glad the JOURNAL has taken such a strong stand upon the patent medicine question. Well done the C. M. M. A. It was an excellent idea printing in full those replies from the various firms. Now every one of us knows exactly where we stand with regard to them.

Yours very sincerely,

JOHN KIRK.

Hongkong, June 1st, 1909.

Editor THE CHINA MEDICAL JOURNAL.

DEAR SIR: Let me say something more about our CHINA MEDICAL JOURNAL. I enjoyed it for twenty years; must, however, confess that I read it in a selfish way, in a parasite-like way feeding on the experiences of others. It ought not to be so, and the young members of the Association ought to realise what a great privilege it is to have a JOURNAL through the medium of which they can, if not describe interesting cases, at least ask for advice and information on difficult points. Friendship and communion of thoughts being kept up we are strong and will get a victory for our Master.

With best wishes for your work.

Yours gratefully,

DR. J. E. KÜHNE, M.B.

TALI FU, April 20th, 1909.

Editor THE CHINA MEDICAL JOURNAL.

DEAR SIR: The work you are doing through the JOURNAL is a real help to medical men who are in isolated places in China.

With kind regards,

Believe me,

Yours very sincerely,

W. T. CLARK.

China Inland Mission.

Soochow Hospital, Soochow, May 19th, 1909.

Editor THE CHINA MEDICAL JOURNAL.

DEAR SIR: You are making a great success of the JOURNAL.

With kindest regards,

Most sincerely.

W. H. PARK.

WUHU, CHINA, April 27th, 1909.

Editor THE CHINA MEDICAL JOURNAL.

DEAR SIR: May I add a word of the pleasure and profit I get from the JOURNAL? Its helpfulness and high standards are an increasing joy with each new number.

Very truly,

HENRY S. HOUGHTON.
When Dr. Jefferys began his work in Shanghai, he very much wished for a medical phrase book which would give him what cannot be found in any of the "Primers," or "Methods" of the Chinese language, and that was a sufficiently complete set of colloquial phrases to enable the young physician easily to acquire a vocabulary to be used in his clinical work. There being nothing of this sort available, with very commendable zeal he prepared a small manual in Shanghai "Thoo-bak." At the request of many friends, an enlarged edition of this has been issued in Mandarin. The material seem to be very carefully selected and classified under a large number of headings, thus covering nearly every variety of expression needed in carrying on a dispensary or hospital. The Chinese is supposed to be colloquial Pekinese Mandarin, but it is quite usable in any Mandarin-speaking part of the empire. The terminology is not technical, but colloquial. The book is intended not only as a phrase book for the use of the young physician just beginning clinical work in China, but also as an adjunct to other works upon the language to be used by those who expect to engage in medical work. Physicians of many years' experience will still find it suggestive and helpful. At the end of the book there are a number of prayers for use on various occasions. The book cannot be too highly commended to students of the Chinese language among lately arrived medical missionaries. It may be procured at the Presbyterian Mission Press, or of other booksellers.—Shanghai Times.

G. A. S.

MOSQUITO NOTICE.*

No Stagnant Water—No Mosquitoes.

Mosquitoes carry malaria and other diseases. Mosquitoes cannot multiply except in stagnant water. Where stagnant water cannot be abolished the use of kerosene sprinkled on the surface so as to form a film will kill mosquito 'wrigglers,' as it prevents them breathing when they come to the surface.

Old tins and bottles, broken crockery, flower-pots and unconsidered articles of this kind capable of holding rain water should be carefully collected from the garden and backyard and placed in the house refuse receptacle for removal.

Tubs, kongs, water plants, flower-pot saucers or other vessels of water which cannot be dispensed with should be emptied or sprinkled with kerosene once a week.

Gardeners' kongs, dug-outs, wells and water barrels should be done away with; water for the garden, etc., being derived directly from the tap or, if that be impossible, the kongs, etc., should be oiled once a week or kept securely covered so that mosquitoes cannot get to the water to lay their eggs.

Have the water from kennels, chicken coops, etc., regularly emptied out.

Keep drains and rain water roof channels clean and clear and in good repair. Gully traps that are not frequently flushed, should be oiled weekly.

Shallow rain water pools and slushy places can generally be obliterated by a scratch drain or levelled with house ashes, ponds and ditches by filling-in with house refuse covered with a little earth or ashes.

Ornamental ponds may be kept free from mosquitoes by small fish but, if mosquito 'wrigglers' be found, the water should be oiled weekly preparatory to filling-in.

A weekly inspection of house and surroundings should be made. It may be remembered that a small unheeded pot of water will suffice to breed sufficient mosquitoes to irritate a whole neighbourhood.

* Shanghai Health Office.
Reports of Local Branches.

PEI-TAI-HO SUMMER MEDICAL CONFERENCE.

DEAR DOCTOR: Your committee had hoped to hand you a programme at a much earlier date, but encountered difficulties unforeseen at the time of first general letter, chief among which was the lack of voluntary offers for the programme. Suffice to say that of the fifty and more replies to our November proposition, practically all are in hearty accord.

Time of Meeting.—Most favor the August date, and the Rocky Point Association have kindly granted us the use of the hall from August 3 to 6 for morning sessions only.

Many physicians not employed by Missions have expressed their desire to join such a summer association and two are giving very valuable assistance on this Summer's programme. The committee beg to extend herewith a cordial invitation to ALL qualified physicians to be present and take part in all the sessions of the conference.

Your committee trust that the outline programme herewith submitted, will be approved by your presence at each session and by a careful preparation to contribute something to some of the papers and discussions. All may in this way cooperate to make our conference a good success.

Yours in behalf of the committee,

J. L. KEELER,
Ch'ang-li-hsien,
North China.

March 19th, 1909.

PROGRAMME.

Beginning at eight thirty sharp and closing at eleven.

Tuesday, August 3rd.

(1) Opening exercises by the committee.
(2) Appointment of officers for the Conference pro-tem.
(3) OBSTETRICS (paper). Modern methods as contrasted with those of the Chinese. How can conditions be improved? (Discussion invited.) By Dr. Melissa Manderson, Woman's Hospital, Methodist Episcopal Mission, Peking.
(4) TRACHOMA (paper). Its complications and treatment. (Discussion invited.) By Dr. Wm. McClure, Wei-hui-fu, Honan.
(5) DISCUSSION (if time permit). Short reports of any notable cases.

Wednesday, August 4th.

(6) TUBERCULAR DISEASES (paper) with special reference to joints and rectal sinuses. Operative and conservative treatment. (Discussion).
By Drs. Francis and Emma Tucker, Pang-chia-chwang, Shantung (via Tientsin).
(7) BISMUTH PASTE (paper). In the treatment of sinuses. By Dr. Ida Stevenson, Methodist Episcopal Mission, Tientsin.
(8) BIER'S HYPERÆMIC TREATMENT; its scope and results. By Dr. Walter Phillips, Newchwang, Manchuria. (Discussion invited.)
(9) DISCUSSION. Are modern hospitals practicable in China? if not, why not? By Dr. S. O. McMurtry, Wei-hui-fu, Honan.

Thursday, August 5th.

(10) BUBONIC PLAGUE (paper). Diagnosis, macroscopic, microscopic, treatment, prophylaxis. By Dr. Morhead, Tang-shan. (Discussion invited.)
(11) SOME RECENT CONTRIBUTIONS OF BACTERIOLOGY TO DIAGNOSIS AND TREATMENT, by Dr. Charles Young, Union Medical College, Peking.
(12) PREPARATION AND USES OF CHINESE FOOD-STUFFS IN THE TREATMENT OF DISEASE. By Dr.
The China Medical Journal.

James A Greig, Kirin, Manchuria. (Discussion invited).

(13) Incidence of Cancer: reports of various hospitals of North China as to age, sex, organs most affected, treatment, etc. By Dr. Charles Lewis, Pao-ting-fu.

Friday, August 6th.

(14) Review of the Opium Question (paper) and any notable results of the International Conference, Shanghai. By Dr. A. P. Peck, Tientsin. (Discussion.)

(15) Hydatids (paper). By Dr. E. J. Stickney, Shao-chang (via Peking), Chihli.

(16) Short Reports of any notable cases during the last year. (If time permit.)

(17) Discussion as to the Organization of a Summer Medical Association. Appointment of officers and any unfinished business.

(18) Picnic to Lotus Hills at 5 o'clock.

Saturday, August 7th.

(19) Baseball.—Doctors v. Dominies.

REQUESTS.

[1] That all papers be type-written (if at all possible.)

[2] That doctors possessing microscopic slides of general interest, or specimens, such as stones, tumors, etc., bring them along to the Conference.

[3] Bring any new medical books, magazines, hospital plans, hospital reports, college courses of study, etc., to the Conference, where they will be listed for the reading circle.

W. M. S. HOSPITAL.

Dear Mr. Editor: I have sent postcards to all the fraternity who may possibly be at Kuling this season, but will you kindly give it the wider publicity of the JOURNAL that through the great kindness of the C. I. M. authorities we are to have a room in the school building, which will practically be at our disposal for the last two weeks in July and the first three in August. This will form a sort of reading room, laboratory, club, etc., for the members and visitors, who we hope will make the best use of it by bringing slides of anything interesting. We have a good microscope on the spot, literature (? Ed.) hospital plans, etc., etc.

The first meeting of the season will be held at 2.30 p.m., Tuesday, July 20th, when the president, Dr. R. T. Booth, will give his address.

Yours sincerely,

JNO. WM. PELL.

TAKEN, HUPH, May 26th, 1909.

PEKING.

The April meeting of the Peking Medical Society was held in the assembly room of the Union Medical College, Wednesday, April 7th, at 8.00 p.m., with the president, Dr. Aspland, in the chair and eleven members present.

The minutes of the opening meeting and the Constitution were read.

It was then moved, seconded, and carried that the names of Dr. Eliza Leonard, Dr. J. H. Ingram, Dr. Thomas Cochrane, and Dr. George D. Lowry be spread upon the records as charter members of the Society, as these persons were not able to be present at the opening meeting.

The first paper of the evening, "Cases of Defective Development of the Female Genitalia," by Dr. Wm. H. G. Aspland, not only explained several interesting cases of defective development, but by a careful study of the development of these organs in the embryo, the causes of the defects. The second paper, "A Case of Hydatid Cyst of the Liver," by Dr. John M. Stenhouse, was an interesting paper, describing the symptoms, operation, and recovery of the case, also an account of the cause and distribution and treatment of such cases. A discussion of the papers followed.
Reports of Local Branches.

A vote of thanks was extended by the Society to the writers of these interesting and instructive papers.

FREDERICK E. DILLEY, Secretary.

Manila Medical Society.

Notice of May Meeting.

PROGRAM.

Presentation of Cases.

Drs. Keller and Jones.—Decompression operation for fractured base of skull.

PAPERS.

Dr. Baldomero Roxas.—Sobre ciertas manipulaciones complementarias para la protección del periné durante el período de expulsión.

Dr. Robert B. Bean.—The relation of racial morphology to disease. A study of 70 Filipinos in Malecon Morgue.

Miscellaneous and unfinished business.

PROCEEDINGS OF APRIL MEETING.

Presentation of Cases.

Dr. Sison presented two interesting clinical cases.

Case I. Anemia.

The personal history, physical examination, and laboratory findings gave no clue to the etiological factor.

Case II. Chronic Interstitial Nephritis.—Claudication.

This case was interesting due to the presence of claudication. Alcohol was not an etiological factor, venereal diseases denied, but the patient used tobacco in excess.

The report of Dr. Musgrave and Nichols on the Bombay Medical Congress is reserved for a future number.

Notice of June Meeting.

PROGRAM.

Presentation of Cases.

Captain H. H. Rutherford.—Internal eye diseases.

Dr. Benito Valdez.—A case of pygopagus.

PAPERS.

Dr. G. Singian.—Spinal Anesthesia.

Dr. Charles S. Banks.—Harmful species of mosquitoes in the Philippines and their morphology.

Dr. H. D. Kneedler.—The relation of mosquitoes to disease.

Dr. A. J. McLaughlin.—Sanitary measures against mosquitoes.

Miscellaneous and unfinished business.

PROCEEDINGS OF MAY MEETING.

Presentation of Cases.

Dr. N. M. Saleebey presented a case of aneurism of the transverse aorta. History of five years' duration. The left side of face and the left arm were swollen. Left radial pulse was lost and the left temporal pulse was diminished.

Drs. Phalen and Kilbourne, a case of pulmonary spirochaetosis. The organisms are similar to the spirochaete refringens. Large numbers of spirochaetes found in the sputum, 15 to 20 in single field of a one-sixth objective. Buccal secretions have very few organisms, while the sputum is teeming with them. Drs. Keller and Jones presented a surgical case. The patient fell from a street car and fractured the base of his skull. A blood clot had formed in the right temporal region, the side in which the paralysis occurred. This was removed and patient made an uneventful recovery.

Dr. Jackson presented three pathological specimens. Two of these were the large intestine from cases of bacillary dysentery. The third was carcinoma of the pyloric end of the stomach with a cyst formation, the size of a walnut, in the fundus.

PAPERS READ.

Dr. Baldomero Roxas.—Sobre ciertas manipulaciones complementarias para la protección del periné durante el período de expulsión.

The technique of this manipulation is based upon a knowledge of the functions of the internal part of the levator ani muscle. Any unequal and imperfect dilatation of this muscle during labor might give rise to dystokia. In order to secure an equal and perfect dilatation the following manipulation is suggested: Introduce the index finger of the right hand, followed by the other fingers, into the vaginal orifice and apply to the left side of the vaginal wall. Do the same with the left hand to the opposite vaginal wall. Now, gently pull in the fashion of a massage movement from above, outward and downward. In this way distension is secured and hence
passage of the fetus is facilitated and the danger of tearing the perineum is lessened.

Dr. Robert Bean. — The relation of racial morphology to disease. A study of 70 Filipinos in Malecon Morgue.

Dr. Bean first classifies the subjects he has studied and then states: Great interest attaches to this classification because of the association of different diseases with the Iberian, Primitive, and Australoid as well as with the Blends.

The majority of the causes of death are chronic affections. Tuberculosis leads with 41 per cent. beri beri, 14 per cent. senile debility, 6 per cent. chronic enteritis, 5 per cent. septicemia, 5 per cent. and other diseases in less number.

The most significant facts are that 70 per cent. of the Iberians, 56 per cent. of the Blends, and 32 per cent. of the other types died of tuberculosis, whereas only one Primitive, and not one Australoid, died of tuberculosis. But 53 per cent. of the Primitive and 20 per cent. of the Australoid died of beri beri, and only one Iberian died of beri beri.

Dr. Bean then states: I would not draw any far reaching conclusions from this, but only suggest that the species to which any individual belongs should be taken into consideration in the etiology of such diseases as beri beri and tuberculosis. It is put forward simply as a plausible factor in the etiology of these two diseases.

The paper closes with the following inferences. The Filipinos were originally composed largely of two systematic species of man which I have termed Primitive and Australoid. To these have been added Chinese and European elements, especially in the cities and along the littoral of the islands.

The elementary species represented by the European and Chinese are now in greater abundance than the systematic species, and the Blends constitute about one-half of the littoral population.

The European mestizos and the Blends are apparently more liable to tuberculosis, whereas the original Filipinos are comparatively free from the disease, but succumb to beri beri more frequently.

THE AMERICAN SOCIETY OF TROPICAL MEDICINE.

Sixth annual meeting held at the United States Naval Medical School, Washington, D.C., U. S. A., Saturday, April 10th, 1909.

PROGRAM.

Morning Session. 10.00.


2. — Secretary's Report.


5. — The Classification and Morphology of the Plasmodia of Malaria. Charles F. Craig, Fort Leavenworth.


7. — Some Analogies Between Malaria and Syphilis. William H. Deardorff, Marianna, Arkansas.


Afternoon Session. 2.30.


16. — The Diseases of Grain that may be of Etiologic Significance in Pellagra. Carl L. Alsberg, Bureau of Plant Pathology, U. S. Department of Agriculture.

Discussion to be opened by George Dock, New Orleans.


* Title subject to change.
THE MURDER OF DR. LALCACA.

LONDON, July 2.

An Indian student shot at and killed Dr. Cawas Lalcaca, of Shanghai, in the Imperial Institute, last night.—Exclusive Service.

Foreign residents of Shanghai and very many Chinese will read this telegram with deep regret, for the death of Dr. Cawas Lalcaca removes one of the best known and most prominent members of the community. Brief as are the telegrams conveying the sad news of his death, it is yet quite plain that the assassin intended to murder Sir William Curzon Wyllie only, and that Dr. Lalcaca being in the immediate vicinity was struck accidentally by the last shot in the revolver. Probably Dr. Lalcaca rushed forward to render assistance, as he would have been quite ready to do even in such dangerous circumstances. Dr. Lalcaca had only been a few weeks in London, and those who knew him would be the last to believe that he best had given cause for such deadly animosity, even to a fiery tempered Indian student. Dr. Lalcaca was the son of a well known and highly respected Civil Servant of India, the late Mr. Cusetji Lalcaca, Superintendent in the Postal Service. He was born in Ahmedabad, Gujrot Division, India, in 1863, and took preliminary medical degrees in Bombay. In 1884 he went to London, where he qualified as L.M., L.R.C.P. Later on he won his M.D., Brussels, and in 1886 he arrived in Shanghai and established a practice.—North-China Daily News.
Medical and Surgical Progress.

Internal Medicine.

Under the charge of Edward H. Hume, M.D.

THE DISEASES OF CHILDREN.

Two very ingenious methods of treatment are reviewed in the January issue of Archives of Pediatrics.

1. For the Treatment of Incontinence of Urine.—(Abstract from Gaz. Med. de Paris.) In addition to correcting hyperacidity of the urine, it is necessary that the patient should be systematically roused in order to empty the bladder. This is most effectual when it can be done at the critical moment—just before micturition. In some cases satisfactory results may be obtained by laying the child on a pad containing two layers of metallic gauze separated by a dry cloth. Each sheet of gauze is connected by a wire with a loud electric bell placed beside the bed. The first few drops of urine are sufficient to complete the circuit and reflexly arrest the flow of urine. It is stated that two to five such experiences suffice to secure spontaneous awakening on the onset of micturition.

2. An interesting article by Dr. E. W. Scripture discusses the nature and diagnosis of tics. In their treatment, while Fowler's solution is useful, *the treatment of tics* on a hysterical basis demands treatment aimed at the mental condition. The patient is told to hold a mirror before himself and to watch for the tic. When he first sees it he is to repeat it five times voluntarily. His first attempt at imitating his own act is often ludicrously inadequate. The failure of the imitation is specially marked when the tics are unconscious ones. You explain to him that he must try hard to imitate himself exactly and must keep up the effort until it is not necessary. The explanation of the method is as follows:—Perfect voluntary imitation of the unconscious act trains the mind to doing exactly the same act consciously. Thereafter the act is no longer an involuntary subconscious one, but a voluntary conscious act. The tic has been killed.

The Treatment of Pertussis.—Sior (Jahrb. fur Kinderkrankh. abstracted in Archives of Pediatrics, December, 1908) regards euquinine as a specific for pertussis. The usual dose was a centigram (gr. ⅓) for each month and a decigram (gr. 1½) for each year, morning and night. The maximum dose was four decigrams (gr. 6). In young infants and in those children who could not be persuaded to take the drug by the mouth, suppositories of the same dose were found equally effectual. Under the influence of euquinine the attacks became milder, their number diminished, retching and vomiting ceased, cyanosis disappeared, and the duration of the disease was considerably shortened.

The Diagnosis of Pertussis.—Kolmer (Archives of Pediatrics, December, 1908) shows that early in pertussis there is present a leukocytosis which affects mainly the small lymphocytes. These changes are characteristic, serving in a great many cases to diagnose pertussis.
before such diagnosis can be made from the clinical symptoms.

Urinary Infection.—A common cause of fever in childhood.—Lippe (Archives of Pediatrics, January, 1909) discusses those obscure cases of illness in children which are neither typhoid, malaria nor tuberculosis, and shows that not a few of them are primary urinary infections.

Such infections are more common in infancy than in childhood, and more prevalent in the female. Constant symptoms are fever (often high, even reaching 106), pallor, anorexia, and disturbance of urination, which is usually frequent and often painful. The pain, however, may cause the child to hold the urine as long as possible, thus reducing the frequency of urination. A chill is common in older children; this may be periodical, daily, or every other day, followed by fever and even pronounced sweating. Six interesting cases are recorded. The first, that of a girl of fourteen months, who developed fever without apparent cause, with somewhat rigid neck, but without Kernig's sign, a peculiar rolling of the head. She was irritable, vomiting several times without nausea. On the fourth day a leukocytosis was found, and urinalysis showed albumin, pus, bacteria, etc. Urotropin brought about recovery in ten days. Still another cause was that of a girl of nine months, who had had chills and fever for three months, which was called malaria, though quinine was without effect. Widal reaction was negative, plasmodia malariae were absent, but a leukocytosis was present. Temperature varied from 100 to 104.6. The urine showed albumin and pus. Urotropin was without effect. But acetate of potash in 6-grain doses with 1 dram of freshly made infusion of digitalis every four hours stopped the chills and fever, and the urine became clear in three weeks.

From a study of the cases, Dr. Lippe came to the following conclusions:—

(1). In any acute febrile disturbance in infancy not accounted for by gastroenteric or respiratory infection (particularly in a female) suspect urinary infection; examine both chemically and microscopically.

(2). Atypical fever cases may prove typical by making an urinalysis.

(3). In case of high temperature, if physical signs of pneumonia do not develop, look to the urine for a diagnosis.

(4). Enuresis may mean cystitis or cystopyelitis.

(5). Chills and fever with negative findings as to malaria in the presence of a leukocytosis calls for an examination of the urine.

Fresh Air in Pneumonia.—Kilmer (Journ. of the A. M. A., 1908, July 25th) reports on the value of fresh-air treatment in both lobar and broncho-pneumonia. In a series of thirty-six cases, representing both types, and of all degrees of severity, with positive diagnosis in every case, there was but one death. The treatment was as follows:—Initial dose of castor oil or calomel, mustard poultice to chest, sponging to reduce fever, cutting down diet to one-half strength, light expectorant every two hours for six to eight doses in twenty-four hours, keeping the gastro-intestinal tract clear, abundance of fresh air, rest. This low mortality in a fatal disease of childhood was very gratifying.

Resorcin Injections in Ascariasis.—Winocouroff (Centralbl. fur Kinderkrankh., 1907, abstracted in Archives of Pediatrics, December,
NOTES ON THE PREPARATION AND USE OF BACTERIAL VACCINES.

II. The Use of Vaccines.

The use of bacterial vaccines may be considered under the following heads:

I. The prophylactic use of vaccines.
II. Cases suitable for vaccine treatment.
III. The choice of dose and frequency of administration of the dose.
IV. The methods of administration of vaccines.
V. The use of "stock" vaccines and of mixed vaccines.
VI. The immediate and remote effects of inoculation.

I. The prophylactic use of vaccines.

—This is a subject of itself, and cannot be dealt with fully in these notes. In preventive medicine the principle of inoculation has been applied to plague, to typhoid fever, and to Asiatic cholera. In each of these diseases a certain amount of active immunity appears to be conferred by specific inoculation, and various methods of carrying out the principle are still on trial. Experimentally it may be shown that rabbits enjoy a comparatively high degree of immunity to the endotoxin of the meningococcus after inoculation with this micro-organism (Horder and Gordon), so that it is possible that children might be profitably inoculated in the presence of an epidemic of cerebro-spinal meningitis. The susceptibility of rabbits to infection by staphylococci and streptococci may readily be lowered by the prophylactic use of moderate doses of vaccines prepared from these micro-organisms. The question arises whether a similar result might not be brought about in patients who are to be submitted to operations involving some risk of pyogenic complications afterwards, as in removal of the tongue or appendix or rectum. In this case the inoculations would best be performed some weeks or so before the operation. One of the writers (W. G. B.) has in this manner prepared a patient for excision of the tongue.

II. Case suitable for treatment by bacterial vaccines.— Infective disease-processes may, for the purpose of these notes, be considered as:

A. Local infections
   (a) chronic.
   (b) acute.

B. General infection
   (a) chronic.
   (b) acute.

The order in which the above processes stand, represents, in the experience of most observers, the degree of response yielded to vaccine-therapy. For in brief it may be said that the more local and the more chronic the infective process the better the response to specific inoculation. There are some exceptions to this statement, dependent upon the nature of the infecting micro-organism and the condition of the patient, but the rule holds good in general.

A. (a) Chronic local infections.—

This group has yielded the best...
results to vaccine-therapy up to the present time. The infective processes that have been dealt with are enumerated below, under the headings of the micro-organisms producing them.

(i) Staphylococci.—Chronic local infective processes which are most often due to this micro-organism are furunculosis, carbuncle, sycosis, pustular acne, some forms of eczema, certain chronic suppurating sinuses, ciliary blepharitis, etc. Of these, boils react best to the treatment; so well do they react that a cure, more or less long standing, may confidently be promised to the patient. Historically the first of the staphylococcal infections to be treated by Wright’s vaccines, they still remain as the most responsive to this new therapeutic measure. Taken as a whole, the furunculosis group of cases stands almost alone in respect of the constancy of results obtained with the treatment. So much so that a comparatively guarded prognosis must always be given in the other cases. Here individual cases often do remarkably well, but in some the results are disappointing. In cases of acne, particularly, good results must never be promised, however much they may be hoped for; when the vascular element is dominant and the infective process slight no response at all may be obtained; the patient, oft-times too sanguine on account of the glowing testimonial of some friend whose lesions were of quite another kind, must be led to modify his expectations, if not altogether to sacrifice them, so far as inoculation treatment is concerned. Some cases, even of purulent acne, are very deceptive; the pus may prove on cultivation to be almost or quite sterile. As regards the nature of the micro-organism present in furunculosis, carbuncle, and sycosis, the coccus is usually Staphylococcus aureus, whereas in acne it is usually Staphylococcus albus. There are biochemical differences between these two classes of staphylococci, which need not be entered into here. Ciliary blepharitis is an affection which usually responds well to vaccine treatment in so far that recurrent attacks can usually be prevented. In some cases a cure is effected. In the case of sinuses left after the bursting of abscesses, or after operations, it is of great importance to commence the treatment early. It goes without-saying that efficient surgical measures must always be undertaken in conjunction with the inoculation treatment; to overlook an abscess or to neglect proper drainage of a sinus is but to court disappointment. Vaccine-therapy is often an adjuvant, but never a substitute in sound surgery.

(ii) Streptococci and pneumococci.—Chronic local infections by these micro-organisms are less common. Pyorrhoea alveolaris, however, is usually due to Streptococcus salivar us, and may respond well to vaccine treatment, though here again obvious measures for the drainage of abscesses and deep pockets in the peri-odontal membrane must be attended to; teeth that are inevitably doomed, must be extracted, or failure is bound to result. Chronic suppuration in the nasal sinuses, when streptococcal in origin, sometimes responds favourably to inoculation, and the method should always be given a fair trial in conjunction with other steps. Pneumococcal arthritis, occasionally a chronic affection, merits treatment by vaccine.

(iii) Gonococci.—Chronic gleet often responds well to the treatment, but care must be taken to identify the micro-organisms present in individual cases. Secondary invasion of the urethra by staphylococci (especially) is quite
common in chronic gonococcal urethritis, requiring inoculation by *Staphylococcus aureus*. That form of gonorrhoea which shows recurrences of the discharge after long quiescent periods seems to react favourably to inoculation.

(iv) *B. coli*. Various infections of the urinary tract are those most often submitted to treatment by specific inoculation. The results are not, in the experience of the writers, so uniformly good as is commonly held by many authorities. There appears to be in most cases considerable or complete alleviation of the symptoms, sometimes sufficiently marked to make it clear that the improvement is due to the vaccine, and the amount of pus in the urine becomes much less or altogether absent. But in many cases the micro-organism does not disappear from the urine, even with careful and prolonged use of the vaccine. Contrary to what might be expected, a state of colon bacilluria is usually unaffected by vaccine treatment.

*Mucous colitis* associated with the colon bacillus yields little or not at all to the treatment in the experience of the present writers. *Chronic otitis media*, due to the same micro-organism, sometimes responds well. The same may be said for cases in which a *chronic sinus* has become primarily or secondarily affected with this micro-organism.

(v) *B. typhosus*. Suppurating foci, which are *sequels to typhoid fever*, should be treated by vaccines. Dr. Andrews has recently obtained good results in a very intractable case of periostitis due to the typhoid bacillus.

(vi) *M. catarrhalis*.—Affections of the nose, adjacent sinuses, and upper respiratory tract by this micro-organism have all been treated by inoculation, but the results are usually somewhat disappointing. The same statement applies, so far as the experience of the present writers goes, to the vaccine treatment of bronchiectases, in which condition the flora is usually very varied.

(vii) *B. tuberculosis*. In any local tuberculous affection it is always worth while giving tuberculin a good trial. In most cases the lesions are so slow, both in their progressive and in their regressive changes, that arguments concerning the efficacy of tuberculin in the treatment of them are notoriously difficult. Probably the skin tuberculides do best; *joint affections* respond fairly well, so also do certain cases of *genito-urinary tuberculosis*. The results are less certainly promising in *glandular affections*, in *bone disease*, in *phthisis*, and in *tuberculosis of the serous membranes*. In phthisis the conclusions are so difficult as to be almost worthless, for the patients are usually receiving other forms of treatment at the same time, the results of which are known oftentimes to be good. And even if the enthusiast in specific inoculation convinced a phthisical patient that fresh air was unnecessary in view of the certainty that tuberculin would cure him, a good result would prove nothing, since phthisis not infrequently gets well, or becomes quiescent without any treatment at all.

A (b). *Acute local infections.*—Under this heading come more cases of streptococcal origin, and fewer cases due to staphylococci. In *erysipelas*, which is almost always a disease due to infection by *Streptococcus pyogenes*, recovery seems frequently hastened by one or two doses of streptococcus vaccine. Early administration is very important, especially in infants, for the disease may undermine the patient's
resistance before the response to the injected vaccine can take place; it must constantly be borne in mind that the treatment depends for its results upon a mechanism of active immunity, and active immunity presupposes a modicum of effective vitality. In cellulitis, again, the dominant microbe is usually streptococcus, even when, as is often the case, the infection is mixed (e.g., streptococcus and staphylococcus). In acute abscess, the causal micro-organism having been isolated from the evacuated pus, inoculation may hasten healing. So also in empyema sinus (usually pneumococcal); in peritonitis following perforation of stomach or bowel, after irrigation and drainage (colon bacillus, staphylococcus streptococcus); and in post-operative suppuration of wounds.

Acute boils and carbuncles (usually staphylococcal) apparently tend to abort more often when treated with an early dose of vaccine than when not so treated. Certainly experience does not show that any ill-effects follow such treatment, although it is true that these conditions, once developed, tend to cure by the older methods. It must be remembered, however, that either of these lesions may prove more serious than at first sight appears. This subsequent development may be due to the position of the lesion, e.g., near the inner canthus of the eye, leading to orbital abscess or even meningitis, or due to the general condition of the patient, e.g., the enfeebled resistance of old age. Therefore it is that any chance of influencing the patient's immunity beneficially by vaccine treatment at an early stage should be undertaken. A boil, although only in the indurated stage when first seen, may be encouraged to break down by using large doses of vaccines, when it is obvious that it will do so in the ordinary course of events.

In two cases of cerebro-spinal meningitis due to the meningococcus one of the writers (T. J. H.) employed vaccine treatment with apparent success, the cases recovering. In one of the cases so treated there was a striking absence of the marasmic stage of the disease which usually follows the acute febrile stage in children; the patient convalesced very rapidly indeed. But in three other cases no such good followed the treatment. The recent introduction of potent anti-sera for intraspinal injection will probably be found to yield better results. The combination of anti-sera and vaccine may be tried in intractable cases.

B (a). Chronic general infections.
—These are somewhat limited in number. In chronic gonococcal arthritis very good results not infrequently follow the use of vaccines. In chronic staphylococcal pyaemia the inoculation appears at times to assist in bringing about a cure. The results of treatment are not very pronounced, especially if the lesions present are in connection with the bones. The best treatment in these cases is a combination of surgery with vaccines. In chronic infective endocarditis, whether the micro-organism present be the streptococcus, Pfeiffer's bacillus, staphylococcus, or gonococcus, the treatment by vaccines, though sometimes fraught with encouraging results for a time, probably never ultimately saves the patient. Here, again, it is likely that to ensure success, the remedy must be applied early, earlier than most of the cases are at present diagnosed; yet so futile are all other modes of dealing with this distressing disease that a good trial of specific inoculation should always be made.

B (b). Acute general infections.
—In this group of diseases the
The employment of vaccines has been of a very tentative kind, and when administered it is very difficult to form correct conclusions as to the good effect of the treatment. In *pneumonia*, where the natural course of the disease gives a good criterion by which to judge of the effect of any form of specific treatment, the crisis does not appear to be hastened by the employment of pneumococcus vaccine. It may certainly be said that when recovery does occur from septicaemia, the patient having been treated by inoculation, the manner of the recovery does not vary much, if at all, from that sometimes seen to occur without any such treatment.

*Puerperal sepsis*, *osteomyelitis*, *ulcerative endocarditis*—these and other forms of acute generalised infection are diseases of such a serious nature, and usually end so fatally that the tentative use of appropriate vaccines is quite justifiable, provided all the other known aids to recovery are employed. A case of osteo-myelitis of the ilium, which was obviously on the downward path, treated by one of us (W. G. B.) appeared to recover concurrently with the inoculation of a staphylococcal vaccine obtained from the patient's own organism. Since the introduction of specific inoculation antisera have fallen into disrepute, it would seem undeservedly so; the combination of both methods of treatment is eminently rational and not seldom appears beneficial. Immediately the diagnosis is made a full dose of anti-serum should be given, preferably beneath the skin; this should be followed by the use of the proper vaccine as soon as it can be prepared.

Of the use of vaccines in the treatment of *typhoid fever* the present writers have had no experience, but a prolonged case of *Malaria* fever treated by one of them (T. J. H.) appeared to respond very well.

The diseases and disease-processes mentioned above by no means exhaust the list of those which have been submitted to vaccine treatment. But they include the great majority of them. Scarcely any infection exists, local or general, chronic or acute, of known micro-biology, which has not been dealt with by specific inoculation. Even a case of actinomycosis has been recorded as cured by this means. Of the innumerable morbid states that have been so treated without any convincing evidence that a causal micro-organism has been isolated detailed mention need not be made. Like all new forms of treatment, the scope of specific inoculation is at present being made as wide as pathology itself; when the disappointments have been properly noted, and the successes temperately recorded, some proportionate view of the usefulness of the method will doubtless be revealed. In the meantime no curb need be put upon any reasonable trial of this principle of treatment; rather should every opportunity be taken of testing its efficacy. The only desiderata are careful technique and an unbiased review of results. As in the employment of other systems of treatment, so here; much room exists for accurate observation, but none for enthusiasm.—By T. J. HONDER, M.D., F.R.C.P., and W. GIRLING BALL, F.R.C.S.
UTERINE MYOMA. BY C. E. DUDLEY, M.D.

The patient was a colored woman about forty years of age, married several years, nullipara. Examination showed the following conditions, which would speak strongly against the diagnosis of uterine myoma:

1. She had not had the usual uterine hemorrhage that ordinarily goes with myoma, but on the contrary had had repeated periods of amenorrhea, which could not be accounted for by the presence of tuberculosis or other systemic disease. Her menstrual periods did not ordinarily recur oftener than once in six weeks.

2. The uterine canal, measured by the sound, was not more than two and one half or three-quarters of an inch deep, a very rare condition in uterine myoma. In almost all such cases the canal is much lengthened.

3. On abdominal palpation the tumor could be moved independently of the uterus. This would indicate that if there was uterine myoma it must be rather loosely connected with the uterus by a pedicle.

4. Palpation showed unmistakable fluctuation over a large part of the area of the tumor; in fact palpation gave the impression of a semi-solid ovarian tumor with some solid portions. Upon opening the abdomen a uterine myoma was found closely adherent to the visceral and parietal peritoneum, so that enucleation was very difficult. There were attached to this growth two sacs containing fluid, one on each side, which proved to be enormously distended Fallopian tubes; one of them the size of a small orange and other half as large. The two ovaries adherent to the tubes were normal. The tubes were universally adherent to the parietal and visceral peritoneum by very strong old adhesions, so that an enormous amount of what might be called gentle violence was necessary to get them out without breaking. The tubes were first freed from adhesions and brought out without rupture through the abdominal wound. The tumor was then freed and removed by an incision through the upper part of the cervix uteri; the broad ligaments having been first ligated and severed from the growth. These ligaments were then sutured together by end to end approximation; an incision having been made through the anterior wall of the remaining portion of the cervix into the vagina, and a gauze drain having been introduced from above into the vagina. The peritoneum was closed over the broad ligament, and the abdominal wall closed without further drainage.

Here was a case of extensive double hydrosalpinx complicating a rather large myoma, in which large portions of the distended tubes were adherent to the tumor. I do not recall a case of uterine myoma in which the conditions above described so strongly indicated the diagnosis of an ovarian tumor. Of course the loose connection of the myoma with the uterus accounts for the scanty menstruation and the amenorrhea and for the normal length of the uterine canal. The difficulties of diagnosis were great and were made greater by the fact that a fluctuating mass was easily apparent.
I operated under suspended diagnosis and stated before the operation that I could not make a positive diagnosis. The gentleman who sent the case to my clinic is to be congratulated on the correctness of his diagnosis under extreme difficulties. The patient recovered without complication. — Surgery, Gynecology and Obstetrics.—February, 1909.

Correspondence.

Yung-chun, May 31st, 1909.

My Dear Doctor: I find I was mistaken in my statement about the omission of the wire gauze from Messrs. Montgomery and Ward's catalogue. It is there, but is not noted in the index.

With kind regards,

Yours sincerely,

J. Preston Maxwell.

Tsao-shih, via Hankow.

In the January number of the Medical Journal, p. 37, you recommend treating cholera cases on "a newly born infant." Had not this better be corrected, as our beneficent intentions may be misunderstood by men who are learning English?

Yours sincerely,

E. F. Wills.

My Dear Doctor: How can you tell that the treatment recommended by us is not excellent till you try it. About seven and a half lbs. is the dose.—Editor.

Wenhuifu, Honan, June 2nd, 1909.

Dear Doctor: As you are not doubt interested in wire gauze I send you a sample received a few days ago from Montgomery Ward & Co. They have the same as this in 16 mesh (this is really 14 mesh, although marked 16 mesh by them). The 16 mesh is 5 cents gold per foot.

Yours truly,

W. McClure.

Personal Record.

Mitchell.—At Pok-lo, South China, on May 13th, of typhoid fever, Isabella Little, M.D., C.M., wife of Dr. I. E. Mitchell, of the London Missionary Society.