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CYSTIC TUMOR OF THE ANTRUM.—OPERATION.

By J. M. SWAN.

On March 12th, Mr. TSING CHAN, aged 20, unmarried, occupation a farmer, presented himself for the removal of a growth situated on the right side of the face. It had been present for three years and was gradually increasing in size.

It involved the right superior maxillary bone (outer surface) from the insertion of the lateral incisor tooth to that of the first molar, the facial surface of the bone having been pushed outward and upward. Part of teeth were loosened, but not thrown out of line. Over a small area external to the alveolar process and at a point over the orbital surface there was distinct fluctuation. The roof of the mouth was undisturbed.

There was no history of pain having been present to any marked degree, and the man's general condition was good, though not presenting a very robust appearance.

On March 19th the case was operated on, a trochar first having been introduced at the lower point of fluctuation and about two ounces of a thin brownish serous fluid drawn off.

An incision was made extending from a point on the upper lip one inch to the right of the median line, upwards and outwards, and external to the infra-orbital foramen, thus avoiding the trunks of the infra-orbital artery and nerve, the incision being fully three inches in length. The teeth involved were extracted and the facial surface of the bone was removed with a small portion of the sack of the tumor, thus exposing the antrum, which was greatly enlarged and lined with the sack of the tumor.

In the posterior part of the cavity was a fully-developed tooth, corresponding in appearance to a lateral incisor, firmly inserted into that portion of the bone lying beneath the floor of the orbit, and from its length it must have reached very nearly through the floor of the orbit.

This tooth having been extracted, the entire sack was easily removed, it being but loosely adherent to the bony walls of the cavity. The sack presented a peculiar velvety appearance, was one-fourth inch in thickness and exceedingly tenacious.

The cavity was filled with absorbent lint and the incision carefully closed, an aperture being left external to the alveolar process for the purpose of dressing and the daily injection of a ten per cent solution of boracic acid.

The external incision united by first intention, and at this date, twenty-two days after operation, the cavity has almost closed; scarcely any deformity is noticed.

Remarks.—Doubt was entertained as to the correctness of the diagnosis, as the signs very strongly indicated disease of the superior maxillary, and the roof of the mouth was not in any way affected. In this case the method sometimes used of evacuating the sack and injecting a strong solution of carbolic acid or iodine, would have proved futile. The question arises, whether or not this tumor might be called a dentigerous cyst? Usually such a term is applied only to those cysts connected in some way with the normal teeth. In the above case the sack was closely adherent to the abnormal tooth, and on extraction quite a portion of the sack remained adherent to the tooth.

CANTON HOSPITAL,

Canton, China, April 10th, 1889.

OPIUM POISONING TREATED WITH ATROPIA-SULPHATE.

By J. M. SWAN.

On April 2nd, at four o'clock p.m., I was called into the city to see a Manchu, age thirty-six years, occupation soldier, married, family consisting of a wife and three children. About three hours previous to the time I saw him, he had swallowed a quantity of opium, with the intention of committing suicide.

The amount was estimated to be about a mace and a-half of the native prepared watery extract of opium which is used in smoking.

Found respirations eight to ten per minute, pulse 80, full and strong, pupils contracted to the size of a pin-head. With considerable difficulty the patient could be roused, but not to full consciousness.

One twenty-fourth of a grain of atropia sulphate was administered hypodermically, and the stomach-pump at once introduced, and the stomach thoroughly washed out.

There was a strong odor of opium given off from the contents withdrawn from the stomach, but no opium was discovered. A dram of brandy in hot water was administered by the mouth, the hypodermic injections of atropia being continued every ten or fifteen minutes. At first the patient seemed to improve, but soon the narcosis became deeper.

As I worked to great disadvantage and with poor assistants, I had the patient placed in a sedan chair and rapidly conveyed to the hospital. This involved about twenty minutes, and when the man was brought into the hospital ward his respirations were not over three per minute, there was no radial pulse, and marked cyanosis was present. The heart sounds were distinctly audible, but feeble. One-twelfth grain atropia was immediately given hypodermically, his feet were plunged into hot water up to his knees, and artificial respiration begun. In ten minutes the atropia was repeated in the same sized dose, the foot-bath being kept as hot as it was at all safe without danger of scalding. Very shortly after the third one-twelfth grain dose of atropia had been given, the character of the respirations changed.

The inspiration became deeper, and catching or spasmodic in character, showing a marked stimulus of the respiratory muscles. The respirations were now five or six per minute; the pupils were partly dilated. Hypodermic injections of brandy were administered three or four times during the evening.

Respiration and the pulse slowly but gradually improved. The stimulated respirations were quite marked during the greater part of the night.

The next morning the patient, though still rather sleepy and depressed, was able to take some nourishment; and by ten o'clock a.m. was able to sit alone on his bed; late in the afternoon of the same day he was quite himself again.

Remarks.—There is a diversity of opinion as to the real value of belladonna or its alkaloid in cases of opium poisoning. From a physiological point of view we certainly have a strong argument in favour of its use. The best proof of its efficacy is in the practical test. In this case reported the physiological effects of the drug were well marked, but not until about three-fourths of a grain had been administered. I believe its free use saved the life of the patient. Such an opinion is not based on this case alone, but also from past experience in its use. In two

other cases in particular of opium poisoning did I attribute success to the use of atropine.

In China, where cases of opium poisoning are so frequently met with, may we not have more cases reported with the method of treatment which is followed.

CANTON HOSPITAL,

Canton, China, April 16th, 1889.

THE ANTIDOTAL TREATMENT OF THE OPIUM HABIT.

By A. P. PECK, M.A., M.D.

As no one is aware of the extent of the traffic in opium among the Chinese, or of the use of it as an intoxicant, so no one knows the extent of the trade in opium-cures among the natives, or of the demand for them by opium-users.

The writer has met with frequent instances of breaking off the opium habit by smokers both by force of will without the aid of medicine, and also in connection with the use of some native remedy prepared for the purpose. There are doubtless hundreds of such formulæ scattered through the country, jealously guarded by the owners, or only transmitted to a favored few. But besides these, there are large dealers in this line; there is at least one firm dealing in nothing but anti-opium pills, which has branches in every province of the Empire. The account of their operations reads like the record of some of our great Western houses. Their employés are numbered by hundreds, and their advertising bills foot up into a surprising number of thousands of taels. There is said to be hardly a mart in the Empire, from the small village fairs to the largest "*huis*," where their posters cannot be found.

As the business has probably grown up in response to a demand rather than creating one, we may infer that the call for relief by habitués of the pipe is real and widespread, and it is not strange that the Foreigner establishing hospitals through the country should have application for this kind of medicine also.

If we acknowledge that the demand is one to be heeded, the question arises, How shall it be met? Without questioning the utility of the opium refuge, it may fairly be said that they have their limitations. There are many who cannot go to them; the distance is often great; home cares are exacting, or more exacting is the employer who will not allow his subordinate to take the time, for opium-smoking is not like an illness which incapacitates one for business.

Again, not every missionary physician feels that he can take the time from his other duties for the exacting demands of the care of a number of such patients. And the cures which are made under these circumstances do not seem to be more permanent than others. There is nothing in it which insures that the patient will not be beguiled into taking the seductive pipe again. The advantage which it has is in the moral influence upon the patients while under treatment. This is of value, but on the whole, for the reasons indicated, the writer has given up all attempt to look personally after such patients for the mere sake of ridding them of the opium habit, and given more particular attention for some years to the preparation of medicine which should meet all the ordinary range of indications, as far as possible, and yet not be open to the objection of being sought for its own narcotic effect.

This misuse of anti-opium pills, which seems to have come under the observation of some of our brethren, has not been known personally by the writer, although frequent and close inquiry has been made. If it exists, however, it is an evil which must neutralize to some extent the good done, and should be guarded against as much as possible.

The important point, however, is to provide such a combination of remedies as shall be antidotal to the effects of opium on the system, and so prepare it for the withdrawal of the medicine subsequent to the withholding of the pipe, that no overwhelming shock may be experienced, and it is for the purpose of speaking to this point that this paper is written.

First, in the writer's opinion, the one indispensable remedy is nux vomica. For some twelve years or more he has come to depend upon it in the treatment of the morphine habit in America, and of the opium habit as found in China, and with increasing confidence. The physiological antagonism of strychnia to morphia is well known, but, so far as the present writer's knowledge goes, has been but little insisted upon clinically. He has heard of one or two gentlemen in China who think highly of it, and perhaps there are others; but there has certainly been a conspicuous absence of reference to this point in print as one of therapeutical importance. Nux vomica may be considered invaluable as a tonic after the withdrawal of opium, and an extract of the whole nut is somewhat preferable, in the writer's opinion, to the alkaloid or its salts. It has usually seemed best to incorporate a little opium. Many of the cases applying are of men in active employment in business-houses or in Yamêns, who cannot afford to be incapacitated for work, and a remedy which enables them to get rid of the insidous habit while keeping about their regular avocations is a real boon. An extreme perturbation from the entire loss of the opium effect might be dangerous in cases of great exhaustion, and sometimes does discourage a patient from persevering to the end because of the discomfort. For these reasons, what would be a small dose of opium for a person not

habituated to it is often incorporated, so that for the opium-user the effect as an opiate is not noticeable and the stimulant effect of the small dose is obtained.

Belladonna, for its physiological antagonism to the toxic effect of opium, is also theoretically valuable in accordance with the established rules of relatively small doses to obtain this antagonism—(lethal doses of opium are not under consideration)—and also for its effect as a vaso-motor stimulant.

No apology need be made for the use of small doses of ipecac. in this combination, for its tonic action, particularly on the alimentary canal, in view of the abundant clinical teaching in regard to it.

But for the use of Phosphate of Soda, some explanation is perhaps necessary, although this powerful hepatic stimulant has long been a favourite with the writer, particularly in the treatment of intestinal derangements of children. Its use in this connection was suggested to him by other and competent observers; the hint was readily taken, however; and he believes it, even in small doses, to be a valuable adjunct in the treatment, helping to correct the glandular disturbance due to the prolonged use of opium, particularly by keeping a good supply of bile in the intestines.

Finally, the valuable digestive tonic and stimulant Piperine is worthy of attention. Those of us who have lived in malarial districts, and learned to rely on the aid which this alkaloid gives to Quinine, will be prepared to appreciate the assistance which it may give in these enfeebled cases. Perhaps its tonic action, as distinguished from the stimulant, is less generally appreciated than it should be.

The above-mentioned drugs, in varying proportions and combinations, have been used by the writer for some years, in the treatment of the opium habit, sometimes in liquid, sometimes in pill form. It is not exactly like the man's gun, which was loaded for bear if it should be a bear, and for squirrel if he saw a squirrel; but as the abuse of opium brings a pretty definite train of evils, the various indications are met to some extent at least by these antidotal drugs.

Just at present this hospital is using a compressed powder or pill made for us by Messrs. J. Wyeth & Co., of Philadelphia, U.S.A. Their compressed pills and tabloids are well known on both sides of the Atlantic, and the quality and style of these anti-opium pills as put up by them merit every praise; they are absolutely inimitable by the Chinese, and bear the transportation as well as other pills. The bottles, containing one hundred each, are landed with the Chinese characters *Chi yeu ling han*. Unlike most medicines dispensed from this Mission hospital, these pills are not given away, but are uniformly sold at the rate of fifty cents per hundred. The exact formula, as written for Messrs. Wyeth & Bro., is herewith given for the information of any who may choose to avail themselves of their help:

Recipe:—Sodii Phosphate exsiccat	1,000	grains.
Abstract Nux Vom.	650	„
Pulv. Opii	750	„
Triturate Ipecac.	150	„
Abstract Belladonnæ	250	„
Piperine	500	„

Ft pill No. 1,000.

Of these pills, from two to eight per day may be needed at first, according to the amount of opium previously consumed, to be gradually dropped one by one until both opium and medicine are stopped. Of course it is understood that the pipe is forbidden from the start. The majority of smokers are able to leave off by the use of one hundred pills or less.

The policy of thus making it easy for the unfortunate victims of the opium habit to break off, has sometimes been called in question, with the idea that they are more apt to relapse into the habit, knowing that they can get out of it again. If it be so, it is an argument in favor of the treatment, for it is the business of the therapeutist to accomplish the object he has in view in the most direct and practical way. There will be a percentage of relapses after any plan of treatment, and the question of policy should not be twisted into a question of casuistry; for, the cure of the habit, which is its own proximate object, is a question of physics. The reformation of the inebriate, our ultimate object, is a question of morals and of religion.

WILLIAMS' HOSPITAL,
P'ang Chuang, Shantung.

ACUTE PULMONARY TUBERCULOSIS.

By ROBERT COLTMAN, jr., M.D.

This disease is fortunately rare, so rare indeed as to make the diagnosis of it oftentimes a matter of some difficulty; indeed, the ordinary tuberculosis is often overlooked by physicians of considerable reputation. I remember a case I was called to see in the spring of 1883. A lady, aged 37, supposed she was suffering with dyspepsia. She complained of a pain in the left side just above the stomach. As I proceeded to examine her lungs she laughingly remarked, "Oh, I am all right there, doctor; my pain is due to dyspepsia, for which I have been treated thirteen years off and on." I however went on with my

examination, which revealed a cavity of some size. I announced consumption as my diagnosis. A few weeks later she had a severe hemorrhage, and the case went on with varying fortunes, the lady being, however, still alive when I left America in 1885. She had been in these thirteen years the patient of two medical men of good standing, and although she had, as she admitted, had slight colds at times and a constant dry, hacking cough, they had never examined her lungs. This was an instance of the slower form of the disease, but the form I wish to call attention to is very different, and although it cannot be overlooked, yet may cause a mistake in diagnosis, which is one of the most unpleasant things that can happen to the medical man, leading, as it does, to false treatment, and therefore doubtful prognosis.

FLINT makes a distinction between rapid tuberculosis and acute tuberculosis, which I think both clear and necessary. In rapid tuberculosis the disease runs its course speedily, the accumulation of the product, softening, ulceration, and the formation of cavities taking place in a few weeks. Cases of the acute variety differ in this: the tuberculous product is in the form of small, distinct, round tubercles, called from their size "miliary," which accumulate in immense numbers, and life is quickly destroyed by interference with the function of respiration, and a *high* degree of constitutional disturbance. In the one case you have the rapid breaking down into cavities, and in the other great constitutional excitement, overwhelming the powers of life before cavities form. In neither of the two cases I am about to relate was a post-mortem possible, and consequently my testimony will be regarded by some as doubtful, but the absence of any marked purulent or cheesy expectoration must be considered confirmative evidence.

Case I.—LI CHIN HAN, a young man of 21, of slight physique, but who had never been particularly unhealthy, was suddenly taken with a considerable hemorrhage, which yielded readily to treatment. Exploration of the chest failed to reveal any evidence of disease, though the action of both lungs was weak. Was put on tonic treatment. A week after the first hemorrhage a second occurred, followed by fever and a weak pulse of 120. No expectoration, slight hacking cough, profuse night sweats, rapid emaciation, and death in six weeks from first onset of disease.

Case II.—Mrs. C. H., age 22, American. Considered herself very strong and hearty, but of slender physique. Without any premonitory symptoms, was taken with a slight hemorrhage, saturating one handkerchief, on December 7th last. Careful physical examination next day failed to reveal any disease of the lungs; laryngoscopic examination, however, showed the larynx to be much congested. A second hemorrhage followed the next night. She was placed on tonic treatment, which apparently failed to produce any effect. Shortly after, she complained of pain below the fourth rib to the right of the sternum.

Appetite gradually failed, and fever in the form of evening exacerbations attended with much flushing of the cheeks set in. January 2nd.—Temp. showed 104°. Slight hacking cough with little or no expectoration, such as was brought up being frothy, watery mucus. Rapid loss of strength followed, and Friday, January 4th, she felt too weak to rise until after noon. Saturday 5th, she was unable to rise at all. Monday, she became slightly delirious and remained so until her decease, Thursday, at 5.30 a.m., January 10th. Bowels were constipated throughout. Urine free from albumen but showed a slight amount of sugar; respiration went up gradually to 42 per minute, pulse gradually going up and reaching just before decease to 180 per minute. Her grandfather died at age of 46 of consumption. Her mother died at 51 of diabetes complicated by a pulmonary complaint of some duration, doubtless phthisis. She had profuse sweats for about ten days preceding her decease. The treatment was supportive and symptomatic. Any treatment is useless in preventing a fatal termination, as all such cases are hopeless from the start, and our only effort must be in the direction of supporting the powers of life.

CHINANFU,

February 4, 1889.

NOTES ON CHINESE MATERIA MEDICA.—*(Continued.)*

By A. W. DOUTHWAITE, M.D.

ARSENIC.—*(Continued.)*—In addition to the varieties of this mineral given in my last paper, a very good Sulphuret of Arsenic may be obtained from the drug stores. It is known as *Hung Sing Shih* (紅信石), and, like the Yellow Arsenic, may be used for the production of Arsenious Acid by sublimation.

Arsenic Trisulphide, or "Orpiment" (雌黃 *Ts'z-hwang*) is used by the native doctors, chiefly for external application, and variously compounded arsenical powders, with remarkably fancy names, are in general use for the destruction of morbid growths, in much the same way that "Arsenical Pastes" were employed in Europe a few years ago.

HYDRARGYRUM, 水銀 *Shui-yin*, also known as 汞 *Hung*, is obtainable in any of the large towns in China; so our brethren who reside far inland are not dependent on the outside world for their supplies of Hyd.-c. Creta., Ung. Hydrarg., Blue Pill, and other mercurial preparations, which they can compound from native material.

HYDRARGYRI PERCHLORIDUM or "Corrosive Sublimate" 白降丹 *Peh-kiang-tan*, is manufactured by native chemists, but is too impure for medicinal use. I have used it for making the Yellow Oxide *(HgO)* by the following process:—Dissolve the soluble part of *Peh-kiang-tan* in boiling water; when cool, decant or filter off the clear liquid, to which add strong solution of caustic soda (鹼 *Kien*), until the yellow precipitate which is thrown down ceases to form. Then filter off the liquid, and wash the Oxide by pouring water upon it several times while on the filtering-paper, then dry it by exposure to the air, or by gentle heat. I have found an ointment composed of this Yellow Oxide of Mercury 2 grains, to Vaseline 3, invaluable in the treatment of the chronic corneal ulcers, and chronic blepharitis, so common among the Chinese. Liquor Ammonia added to the solution of *Peh-kiang-tan*, produces the "White Precipitate" or Hydrargyri Ammoniatum.

HYDRARGYRI SUBCHLORIDUM (水銀粉 *Shui-yin-fen*, or 輕粉 *Ch'ing-fen*) is usually met with in light, silvery scales, somewhat resembling silver mica, with which it is probably adulterated. Owing to its being so freely adulterated, it cannot be relied on as a therapeutic agent, but by subliming it in a glass or iron retort, conveying the fumes through a bamboo or glass tube into a tin box, a pure Calomel will be found adhering to the sides of the latter. A simple and easily made still and condenser of this kind will be found very useful for purifying such Chinese drugs as Calomel, Camphor, Sulphur, etc.

HYDRARGYRI OXIDUM RUBRUM (三仙丹 *San-sin-tan*), as sold in the shops, is a tolerably pure drug, but a similar preparation, known as 紅升藥 *Hung-sing-yioh*, contains a variable amount of Arsenic, which fact should be borne in mind when prescribing it in any form. This, and the Hydrargyri Nitratis (黃升藥 *Hwang-sing-yioh*) may often be used with benefit as an application to syphilitic sores.

(To be continued.)

MEDICAL MISSION WORK IN EASTERN AGRICULTURAL MONGOLIA.

By Rev. Jas. Gilmour.

In the spring of 1886, in a market-town in Mongolia, I was troubled at the daily sight of a crowd of people, many of them suffering from diseases which I knew I could heal, if they would only let me, with the medicines I had lying in a couple of boxes in my inn. The crowd was partly Mongol and partly Chinese. I could communicate with them in both languages, and was on friendly terms with all. They would consult me about their diseases, but, with only a very few exceptions, they one and all declined my invitation to come to my inn for medicines. One man even who brought his wife to have me treat her eyes, had me do so on the public street. Praying and thinking over the matter, God led me to see how to bridge over the gulf that separated the crowds of sufferers from me. They would not come to me, I must go to them. A Mohammedan medicine-seller seemed to be driving a thriving trade under a little cloth tent. I would get a cloth tent like his and try. It was with some fear and trembling that I set up my tent for the first time at a great fair, and during the first day I had very few patients, some ten or so. Happily, a Bible Colporteur was in the same town with his books, and as people would not have drugs they had books and preaching. The second day was little better at first; but later on, a countryman who had got medicine from me sometime before turned up at my stand, related to the crowd how my medicine had cured his wife, and went on to consult about some other patients' diseases. That started the thing. Others took courage and came forward, and from that day to this, wherever my stand has been seen, thither, as a rule, flocked the patients. I move about from place to place, attending local fairs, temple gatherings, and visiting large trading centres. I have stores of books and medicines at three places, and hitherto my means of locomotion has been at most times a donkey, which has carried my two medicine-boxes, the tent, books, and general belongings of my helper and myself.

The manner in which I have been received is great cause for much thankfulness. As a rule, everywhere I have been welcomed and trusted. Opposition has not been wanting; lying rumours have done their worst; medicine-sellers, who say I have ruined their trade, have combined against me; but the Lord has delivered me from them all and opened the hearts of the people to me wherever I have gone.

In seven months of 1886, I had between five and six thousand patients.

In 1887, I dispensed during nine months of the year, and had between twelve and thirteen thousand patients.

In 1888, I have had my tent out about nine months. I have kept no record of patients, but comparing the medicines used this year with the quantity used last year, I guess I must have seen nearly twenty thousand patients.

The going out on to the street seems essential to success among the people here. Times and again I have tried in-door practice, but it comes to very little. In the inn I can meet only about one-tenth of the patients I can see on the street.

The inconveniences of street dispensing are not few. The weather causes trouble. In summer the sun tries myself and my ointments, but latterly I have done something to combat the heat by putting a double roof in my tent. In winter the cold is excessive. Mild days with no wind are all right, especially when there is a good brick wall to the north; but when a wind pipes up, patients and doctor with one consent disappear. In spring, dust-storms are common, and I usually hold out on such occasions till patients fail. But Chinese and Mongols in Mongolia don't care much for dust-storms. Dust and all, patients keep coming; and I remember one day especially, in the market-place, when, with a good attendance, we had to keep on dispensing most of the day, though the wind was so high that it several times blew away the lids of the medicine-boxes, and the dust was so great that before we were finished, boxes, books, clothes, and faces were all one uniform colour.

Rain is a great perplexity. Not to go out on a cloudy day, when other traders go out, seems not right. To go out and be caught in the rain is not well, especially when, travelling as we do, changes of clothes are scarce. To bundle up our tent when a shower begins: sometimes we are hardly at our inn before the weather clears again. Sometimes too a seemingly slight shower becomes a tropical pour. One day, erring on the bold side, we did not take down our tent when rain came, and in a few minutes we were standing in the verandah of a shop, looking at a broad flood sweeping through our tent, with masses of straw and drift matter gathering against the tent-poles.

Another inconvenience is that good stands in good places are hard to get. Most of them are claimed by permanent traders, and to these we have to give way. Latterly, however, this has not troubled us much; we are so well known and so well received, that if we are anywhere within sight at all we do not want for patients and hearers. Drunken men and evil-minded men who oppose us have from time to time caused us some trouble, but through God's good hand upon us, we have always got over such difficulties without once claiming mandarin protection. Many of the Yamên people came as patients, and a word or two from such men in our favour goes a long way towards keeping bad men from molesting us.

One trouble is how to manage a crowd of patients in a market-place. This one shouts, that one is in a hurry, another is drunk and won't wait his turn,

another is a Yamên man and claims precedence of all; two or three women stand about painfully on their small feet, wiping the tears from their suffering eyes; still another man has waited "half-a-day" and has a long way to his home; the patient being dealt with, after getting his own medicine, wants something else for his mother, or his father, or his wife, or child, or for each and all of them, in fact there seems no getting to the end of his list. It is a happy thing if in the midst of such a pressing crowd a gust of wind does not pull up one of the two pins that hold the tent and throw the whole thing about our heads. To keep things in order, I have two forms; one is for myself and my assistant, the other is for the patients. I insist on every patient being seated as he describes his case. This prevents him and the spectators from pressing forward and crowding, as they are apt to do; and only one man is allowed to speak at a time. "First come first served" is the order of the day. As one patient is dismissed from the inner end of the form, each of the two or three seated and waiting their turn moves inward one place, and a new man takes the vacant seat at the outer end of the form. Ordinary countrymen submit gracefully to this arrangement. Proud Confucianists and Yamên men have to be made exceptions, and treated when they appear; and I always insist on giving the precedence to any female patients who may come. In this way something like order can be kept, and dispensing for ordinary cases can be very rapidly performed. On good days the number of patients may range from one to two hundred, and on one very extraordinary, very long summer day, at a great fair, in a great centre, when the dispensing went on from shortly after sunrise till about sunset, I think some four or five hundred cases were attended to.

Many cures are reported, some of them too extraordinary almost for belief. But the Chinese and Mongols believe them, and most, if not all, our patients are attracted by cases of cure they have known or heard of. Through God's good care over us we have had no serious accident. Great care has to be exercised in giving away medicines. Tell the patient as you like how and when to take the medicine, it is often of no use. He meets some friend who tells him to take it in some other way, and he does so. To take medicines in double doses is a common practice. Chinese doses of medicine are very large. A patient looking at the comparatively small dose of foreign medicine, thinks the foreigner has been mean, and given too small a quantity, and so he takes two doses at once. In most cases he quickly repents when he finds the small doses produce a great effect; but I have known men take four doses together and suffer no harm. One mother administered internally, in one dose, a quantity of ointment given her for external application! Next day she brought the infant in her arms, seemingly none the worse for the treatment. The mother was disappointed that the child was no better.

This inattention to directions has to be taken into account in dispensing, and makes it impossible to give some medicines, which if taken in large doses would do harm.

The amount of actual physical suffering relieved has been great. I am very thankful to God it has been so. But the dispensing of medicines is only a means to an end. The medicines are used as a means to create friendly points of contact with the people, and enable me to convey to them the knowledge of the Gospel. Keeping this object in view, our tent flies in front a sign of six characters: "The Gospel Hall of the Religion of Jesus;" at the one end is another sign: "God the Heavenly Father;" at the opposite end is: "Jesus the Saviour." Every dose of medicine, if it is a powder, is first put up in an inner wrapper containing some Gospel truth, printed in sixty-four characters; and as most cases require two or more doses, these again are parcelled up in a larger paper, containing some prominent truth, printed in two hundred characters. In this way Gospel truth is scattered far and wide over the district. Patients, too, are encouraged to buy books, but our main endeavour is to combine preaching and conversation with dispensing.

Some days we are entirely defeated as to preaching.

On reaching our stand we find a man already waiting for us. He is a countryman, anxious to get away home to cultivate his field, and asks for some medicine first. As soon as we get our tent up and open our boxes we attend to him, and by the time he is attended to, others come equally importunate and equally in a hurry. By the time they are attended to, others come, and so the thing may, and sometimes does, go on without break for a whole day. This sometimes happens, but not often. Even when the day begins so, a break mostly occurs, and then we can stand up and preach. As a rule, though we try to begin the day by speaking—and it is pleasant to find how long a crowd of patients and spectators will listen when things go well—sometimes things go excellently, and we have all the opportunity for preaching we desire.

Sometimes interruptions are the order of the day. The ideal order of things would be that I should have a preaching colleague, to go on to the street with me. Taking up his stand close to my tent, he would seldom lack listeners while I attended to the medicines. I have as yet not been able to find a Chinaman to do this permanently. The numbers who have listened to the Gospel have been great. In 1886, from a daily record kept, my guess was that the audiences amounted to over twenty-three thousand, in 1887 to over thirty-two thousand. That many of these carried away some intelligent impression of the truth is evident from what I have overheard people in the streets and fields saying of me when they deemed I was beyond earshot. The main facts and doctrines of Christianity have been stated and understood far and wide over a large extent of country, and in each of the three centres to which I most frequently resort, a few Chinese have believed and professed Christ.

What is now wanted for the full development of the system and reaping of the sowing, is a surgeon, settled at some point as head-quarters, and two or three men to be associated with me in the work of evangelisation. Of the surgeon there is a near prospect, but of the other colleagues I have heard nothing as yet.

One problem has been solved—how to get at the Chinese to doctor them. The thing that now occupies my attention is how to get at the Chinese to save them. The daily sight of crowds of men who need above all things the Gospel which I have to give them, oppresses me. I see no reason in the order of things why the inhabitants of this district should not make the same rush for the Gospel which they have made for the medicines. The dispensing of medicines has established friendly communications between us, and made them trust me to a certain extent. Is it too much to hope that the shrewd Chinaman will see that the doctrine I bring him is as much superior to the native doctrines as my drugs are to the native medicines? Where is the hitch? Is it that the Chinaman's spiritual perception is duller than his material perception? The hindrance can hardly be apathy, for in this district there are a number of sects which flourish, one of which, at least, seems, as far as I can learn particulars, to hold out only benefits in the next life. That sect seems to be well patronised. Why should not Christianity be equally well sought after? It cannot be merely that it is introduced by Foreigners. Foreign things a Chinaman takes to eagerly when he is convinced that they are better than his own. If the Chinaman could be convinced that salvation is true, all the characteristics of his life and nation would impel him towards Christianity. The trouble is, he does not believe salvation to be real, and he does not feel his need of it. Two things we have got to do. Convince the Chinaman that God's offer we bring him is of a real thing, and secondly, that it is of a thing he needs. This done, China will soon be Christianised.

WE have got to do it; not quite that. Except God do it, it will never be done. When we and our endeavours are such that God can use us, and He puts forth this power, the thing will soon be done. The mission-field of to-day perhaps stands in so much need of nothing as an increase of prayer and an increase of faith. With these two things we can definitely expect both that we should come more fully into the lines of God's working, and that the eyes of the Chinaman's heart should be opened. With this all will be right.

WORMS.

By Rev. JAS. GILMOUR.

One thing that has amazed me is the extent to which worms are present in the stomach and intestines of the inhabitants of eastern agricultural Mongolia. The Chinese do not use water-closets; pigs act as scavengers, but seem to refuse worms; and a foreigner living among the natives is struck by the quantity of worms passed in the ordinary course of nature.

In beginning practice among this people, I used to be puzzled by men giving descriptions of diseases which I could refer to no class of disease with which I had become familiar in Peking and other parts of North China. The symptoms were at times most complicated and the suffering great. After a while the thing began to dawn upon me that possibly worms might be at the bottom of some of these cases on which the patients had spent much money, taking courses of medicine prescribed by native doctors. A few experiments brought back some of the subjects of these cases open-mouthed with surprise at the quantity of worms discharged, though they had previously assured me there were no worms in the case. Every boy and girl seems to be infested with these parasites. Nearly every woman has from time to time dire attacks of pain brought on from no other cause; and men tell me tales of worms crawling up their throats. Looking around I am amazed to find how extensive is the trade in anthelmintic bon-bons. Every grocer's shop seems to have them, and nearly every peddler, selling odds and ends throughout the country, has a bottle or two in his store. Whence comes this universal plague? Is it the same all over China? I have not noticed it so much in the hospitals of Peking and Tientsin,—what makes the difference? For other places in China I cannot say, but out here in eastern agricultural Mongolia the style of eating generally lays the inhabitants open to taking into their systems all manner of germs. Dishes and chop-sticks, after being used are put away wet, and not cleaned before being again used. The climate is very dry and windy, and blows about dust continually, except on the very few days when rain falls. Food cooked and eaten warm is all right, and can hardly, between the pot and the bowl, catch germs, but at almost every meal food left over from former meals is also eaten, and this often without being re-cooked. Dry foods, such as cakes, scones, and bread in its many forms, are allowed to stand about uncovered, ready receptacles for the conveyance of germs to the mouth. In addition there is a form of diet here in summer called *shi fan*, namely, grain boiled, then passed through cold water, set aside and eaten sooner or later as needed. Standing about for half-a-day uncovered, or only partially covered, this one article of diet alone seems sufficient for the conveyance of any quantity of germs to the intestines. Then again, Chinese are hopelessly

dirty in their cooking arrangements. In their homes they seem not to know the rudiments of cleanliness, and out-of-door cooking is even worse. At temple fairs, porridges and breads are cooked in uncovered pots, low down near the ground, close to bustling pathways, where the dust of the earth, impregnated with all manner of things, is stirred up by the feet and garments of passers-by, and floated into the pots and cups and on to the cakes of the numerous petty traders. And all this food is eaten down, germs and all! The wonder is not that worms are generated, but that the high mortality of China is not even higher than it is. Fairs and temples usually happen in any one place only once a year, and can hardly account for the sowing of germs in the populace generally; but there is one place where the thing goes on all the year round—the market-place of Ch'ao Yang. There is a cheap food market, where things are really cheap, and there the cooking is done low down near the ground on the side of a bustling street, hardly ever free from dust, and that dust contains elements contributed from all manner of things, sewage included. Yet the food looks all right, tastes good, and is sold and eaten in large quantities, the customers being to a great extent countrymen come to the town to trade. From this as a centre it would be difficult to say to what extent disease is sown broadcast over the surrounding country. Perhaps, though, *the* most prolific source of germs is to be found in the quantities of onions, turnips, carrots, vegetables generally, melons, and fruit eaten raw. Little or no care is taken to wash or wipe many of these fruits and vegetables, and pears especially, which abound here, have a kind of sticky exudation which seems peculiarly fitted to catch and retain any minute particles which may come near. Washing of roots even when done is not done well, the natives seeming to have an idea that it is healthy to take a little earth in with the root. When such things are borne in mind it seems less wonderful that people here are troubled with internal parasites.

Santonine works wonders. The Chinese here are in the habit of saying that everyone has worms, but they are surprised at the large results of small doses of medicine. So much surprised are they that they have originated a rumour to the effect that Santonine causes worms, and are stout in upholding the falsehood. In support of their theory they declare that the truth of their report may be tested by putting Santonine in a cup with some blood, leaving it in a warm place, and in a little while worms will appear. So much for eastern agricultural Mongolia. But does not the same thing hold good for other parts of China, the great ports included? May it not be so that foreign doctors may be incredulous, or overlook the plague of worms among the Chinese, and be apt to ascribe the symptoms to other causes? I wonder. A strange story reaches me of a foreign lady who died in an open port of China of a disease which either defied or puzzled the doctors, or both, to such an extent that a post-mortem examination was held, in which it was found that worms were present in

great numbers where their presence had not been suspected. I have the story only by hearsay, and can hardly believe it. I surely must have been misinformed, but there have come under my notice numerous cases of prolonged and serious suffering in Chinese, where radical cures have been effected by anthelmintics in cases where worms were not suspected, and where the patients considered themselves insulted by the insinuation that their trouble was worms.

I use an immense quantity of Santonine and misuse very little of it. My medical friends make fun of the thing, seeing that some of them with large hospital practices do not use a tithe of what I need. What I would like to know is this, is eastern agricultural Mongolia specially fruitful in worms, or is the plague of worms universal over all China? Is or is not the large sale of worm-tablets, or bon-bons, as they seem to be called, universal throughout the whole Empire? The trouble may be local. Perhaps it is. I know another part of Mongolia, far distant from this, where tape-worm seems to be nearly universal. China is a large and diverse country, and different parts of it have different products. Meantime, till more information is forthcoming on this subject, when doctors tell me laughingly that it is my ignorance of other diseases which leads me to give undue prominence to this, I retort, in the same good humour, that their learning leads them astray and sets them to treating for indigestion and heart disease patients who could be set all right by a couple of Santonine lozenges.

LARGE URINARY CALCULUS.

By Robert Coltman, jr., M.D.

The December Number of the Journal contained an article by Dr. Kerr on combined lithotomy and lithotrity, which was very interesting. His suggestion of using a drill instead of a chisel and mallet, to reduce a large stone to fragments, seems to me a good one. I think also that in event of using a drill, a forceps should be devised somewhat lighter in bulk than any of the lithotomy forceps I have seen. It should combine lightness and strength and should have a sufficiently long handle to prevent it being in the way of the person operating the drill. I have not the genius to invent either the forceps or drill, but I feel certain our friend Dr. Peck, of Páng Chuang, could devise these instruments, that would be extremely useful and convenient and do much to lessen the danger

in extracting the larger calculi. I recently operated on a man for calculus, and had considerable difficulty in crushing the stone, which was larger than a turkey's egg; not because of the hardness of the stone, but because the crusher was too bulky to readily grasp it, and had they been less bulky they would have been too weak. I am sure a strong, light pair of forceps and a drill would have rendered the operation much easier. This case was interesting, in that it opens up work in a village never before visited by Foreigners.

Case.—Man, age 25, came to the dispensary, March 4th, complaining of incontinence of urine and constant pain in bladder and groins, also exacerbations of pain in paroxysms that were all but unendurable. Wore a large pad in the front of the body to absorb the urine, which constantly dribbled away. His brother, who came with him, reported that he had on three several occasions attempted suicide, twice by poison, once by hanging.

Having no hospital and no vacant rooms on either my own or my colleague's premises, I told him I had no way to operate. They fell at my feet and begged me to come to their home, sixty li south of the city, and operate there. I agreed to this, and on the 6th left the city, taking two assistants and the necessary instruments. On the 7th at noon performed the usual lateral operation and after some difficulty succeeded in crushing the stone and extracting it all. I then washed out the bladder with a 5 per cent solution of Carbolic Acid, and gave the patient Quinia Sulph. grs. viii et Morphia Sulph. gr. ¼. Patient rested well that night. The next three days gave Quinia Sulph. gr. ii, Morph. Sulph. gr. ⅛ three times daily, keeping the bowels locked. On the fifth day gave an ounce of Ol Ricini, which produced three stools. On the second day I tied a catheter in the bladder, and most of the urine passed through it. The stone, or rather fragments, weighed dry 1,305 grains, and a good deal was lost in washing out the bladder. Patient has not had a bad symptom, pulse never been above 90, and he is now nearly recovered. During my stay in the village I passed every evening talking to the villagers about our "*object*" in healing the sick, and my helper, Mr. Li, whom I left behind to watch the man, has sent to the city for more books, and reports the interest increasing.

CHINANFU,

March 19th, 1889.

A CASE OF SPORADIC SCARLET FEVER.

By SYDNEY R. HODGE, M.R.C.S., L.R.C.P.

The following case is of interest solely with reference to the source of the infection.

M. W., aged 3, foreign child, was first seen by me on Saturday, December 28th, 1888, for an eruption which her mother had noticed on her neck and trunk after her evening bath. I saw her first by lamplight and declined to give an opinion till the following morning. When then seen the child had a temperature of 104°·4, and complained that it hurt her to swallow. There was injection of the fauces, and one gland, at the left angle of the jaw, was enlarged; the tongue was covered with a whitish fur, through which prominent red papillæ were visible—the strawberry tongue. Her back and buttocks, chiefly the former, were covered with a rash, smooth and disappearing on pressure; it consisted of a number of very dark pin-points upon a rose-colour base, the small areas of skin between the patches being quite healthy; the rash was very irritable. Beyond a slight nasal catarrh, which the other brother had had for two or three days, there were no other symptoms, no rash on forehead, no suffusion of eyes, no cough, heart and lungs normal. The child had been ailing off and on for three weeks before with some disturbance and latterly with one or two attacks of ague. Dr. GILLESON kindly saw the case with me the same afternoon, and concurred in my diagnosis of scarlet fever. The case ran a typical course of a mild attack of that disease, nothing more serious than one or two slight attacks of angina supervening the continuous rapid pulse (so marked a feature of scarlet fever) and the general and large flaky desquamation at a later stage confirmed the diagnosis.

The question as to how the child caught it has been a perplexing one with the parents. She was residing at an inland station some 180 miles from Hankow, where they are the only Foreigners. She arrived in Hankow about the commencement of December, and resided on the Wesleyan Mission compound, which is situated three miles up the native city. There had been no case of the disease upon the compound. The child was taken to the Concession on two occasions only, the last being on Christmas Day, just three days before she was taken ill. The only case of scarlet fever that has occurred amongst the foreign community since I have been in Hankow was during last autumn, soon after the outbreak in Shanghai, and that case occurred in a young child on visit from Shanghai to a family that had had the disease in Shanghai before coming up. The child was strictly isolated, the disease never spread, and after her convalescence the little patient was removed to her home down river. I do not think, under these

circumstances, that we can suspect infection from that quarter, especially as the case occurred some three months before she was taken ill.

Only two other sources of infection, to my mind, remain:—(1) That the disease was carried by letter or Christmas present from England, of which at present I have no proof; or (2) That she caught it from the Chinese amongst whom she lived. If neither of these theories can be sustained, we must fall back upon the conclusion that the disease was auto-genetic, a theory entirely heretical according text-books, but which all recent researches into animal alkaloids renders possible.

It is with regard to the second theory—of infection from the Chinese—that I would like to elicit expressions of opinion. Although I have always believed no practitioner has ever yet seen a case of scarlet fever amongst the Chinese, and that it is believed not to exist amongst them, yet I understand that the last epidemic at Shanghai threw doubt upon this conclusion. I do not know that it goes for much that the old Chinese amah in attendance, who was perfectly familiar with measles, said this was a disease the Chinese did not know. Personally, I am not inclined to attach undue weight to the fact that no foreign doctor has yet seen a case of scarlet fever amongst the Chinese. They are backward in bringing anything to the foreign doctor, and it would not be till dropsy or some other complication had intervened that the case would be brought, and then with their very vague and inaccurate way of describing an illness, the real cause might never be guessed.

The China Medical Missionary Journal.

VOL. III. JUNE 1889. No. 2.

IS IT AN ADVANCE?

While the Officials of the Chinese Empire are building arsenals, making cannon, and equipping a Navy, the people are moving in a different direction under pressure from Western influences. In Southern China, numerous preaching halls are opened to counteract the influence of Gospel halls, and dispensaries are established to render the dependence of the people on foreign doctors unnecessary. Girls' schools, too, are opened in Canton, near to those of our Missionary ladies, with a view of taking away the scholars and saving them from contamination by false doctrines. The motives I attribute may be only a part of those which combine to produce the results indicated, and I only suggest what may be more or less at the bottom of movements which we have seen going on around us for some fifteen or twenty years. I propose merely to give a sketch of some of the dispensaries which have been inaugurated by the Chinese for the benefit of their own people.

The Fong Pin Sho (方便所) is now in its 15th year, and by the kindness of the managers I have the Report of the 14th year (1888). It is a volume of 57 leaves, the first ten of which contain the rules and regulations and and an official proclamation.

The chief object is to provide a place in which to receive homeless and friendless persons who are hopelessly ill. In a city like Canton there will be more or less of this class, and when it is known that formerly it was no uncommon thing for 200 persons to die annually in the streets, forsaken by employers or friends, and unnoticed by the street and city authorities, it is evident that a place for such people to die in was much needed.

The regulations provide as far as possible against being imposed on, and having the sick and dying left on their hands, but the statistics given below shew that a large proportion of those admitted are outcasts.

Following the rules are seven leaves giving a list of subscribers, the most of whom are officials who give five taels and under per month. The total receipts are Taels 2,236, with a balance from previous year of Taels 106. Two more leaves contain donations of medicines, bedding, clothes, etc.

Payments for all purposes amount to Taels 2,179, and the items occupy nine leaves.

Leaves 18 to 27 contain a list of 243 males and 87 females who recovered and were sent away.

Leaves 28 to 41 give the name, age, and birthplace of 469 males who died friendless. Of these, 385 were buried at the expense of Oi-Yuk-tong and 84 by the Fong Pin Sho.

Leaves 42 to 46 give the names, age and birthplace of 138 females who died friendless, 49 of whom were buried by the Fong Pin Sho, and 89 by Oi-Yuk-tong.

These statistics shew that of 937 admissions, 607 died, not one of whom had a friend or relative to pay for the burial.

Those who are already dead are not received, and some notice of those who die in the streets will appear in the sketch of Oi-Yuk-tong.

J. G. K.

We have received a printed circular from a student who has in view medical missionary work, asking 42 questions on the medical practice and superstitious customs of heathen nations. Perhaps very few of those to whom this circular was addressed have time to answer fully the long list of questions. Information on most of the subjects, as regards China, is to be found in books, a list of which we give below, and refer to them all those who are interested in medical missionary work in this great Empire. *Middle Kingdom.*—By S. Wells Williams, Ll.D.—Scribner, N.Y. *Social Life of the Chinese.*—By Rev. J. Doolittle. *The Medical Missionary in China.*—B. W. Lockhart. M.D. *Contributions to Materia Medica, etc.*—By F. Porter Smith.—Shanghai.—London: Scribner. *Medical Missions: Their Place and Power.*—By Rev. John Lowe.—London: T. Fisher Unwin, 26, Paternoster Square. *Occasional Papers of the Edinburgh Medical Missionary Society. Addresses to Medical Students.*—Black, Edinburgh, 1856. *Reports of Medical Missionary Hospitals in China.*

J. G. K.

SALOL AS A REMEDY FOR ASIATIC CHOLERA.

The Reports of the Academy of Sciences of Paris for December 31st, 1888, the 28th January and the 6th February 1889, contain an account of a series of experiments conducted by M. W. LOEWENTHAL, with a view to finding some substance which would destroy, or render innocuous, the cholera bacillus, while at the same time it should be harmless to the animal or person using the remedy.

M. LOEWENTHAL first describes a series of interesting experiments with various culture fluids, and he arrives at the conclusion that fluids which contain pancreatic juice preserve the toxic action of the bacillus of cholera. After experimenting with various substances he found that the addition of Salol, even in moderate quantities, to culture fluids of his pancreatic emulsion, which were innoculated with large quantities of cholera bacilli, rendered them sterile. This occurred even with pure cultures. He then experimented on himself by taking five grammes of Salol in the morning and five more grammes of Salol at 7 p.m. of the same day. No ill effects followed the ingestion of Salol in these doses. M. LOEWENTHAL therefore proposes to give Salol in two ways: (1) As a prophylactic, by giving two grammes at meal times three times a day; (2) When a person is attacked with cholera, he suggests that, on the appearance of the first symptoms four grammes of Salol be at once administered, and that this be followed by a dose of one gramme every hour, giving twenty grammes of Salol in the 24 hours.

At the meeting of the Academy of Medicine of Paris on the 5th of February 1889, M. CORNIL, Professor of the Faculty of Medicine of Paris, read a paper on this subject. He described the researches of M. LOEWENTHAL, which were conducted in the laboratory of M. CORNIL, where numerous animals were given toxic doses of cultures of cholera bacilli, with all due precautions to render the experiments trustworthy. Three different sets of experiments were carried out with the result that those animals which received doses of Salol *after* the ingestion of toxic doses of the cholera bacilli, recovered. The other animals, with one exception, died from the effects of the like doses of the bacilli, which were administered to them at the same time and under the like precautions.

M. CORNIL remarks that although these experiments are not absolutely conclusive, yet, "The results of these last experiments of M. LOEWENTHAL are all of a nature to furnish a very strong indication for the trial of Salol for the treatment of cholera in men, and it is that trial, and that trial alone, which will allow us to decide finally if the action of Salol, so certain in the culture experiments, and so probable in the animal, is confirmed or not in man."

These experiments were carried out in the laboratory of M. CORNIL, and they have received the sanction of that renowned pathologist. As we have no remedy

upon which we can rely with confidence in the treatment of cholera, it may be well to use Salol as recommended above; there are certainly strong reasons for giving it a fair trial.

The Lancet, March 2nd, 1889, and the following number, contained "An Inquiry into the Causation of Asiatic Cholera," by NEIL MACLEOD, M.D. Edin., and WALTER J. MILLES, F.R.C.S.E. These gentlemen, living in Shanghai, instituted a series of experiments with a view of verifying the discoveries of KOCH and other observers. They were enabled to see cases of the disease in all its stages, to make some post-mortems, and also to examine the cholera discharges and the contents of the bowels. Dr. MACLEOD also conducted experiments on animals. While nothing specially new was developed, still we are indebted to these gentlemen for a most admirable résumé of the question under discussion. Their researches are a model of careful experimental study, and the profession in China are indebted to them for thus calling attention to the subject. They have furnished us with an account of the knowledge of the causation of Asiatic Cholera brought down to date. The researches conducted in the laboratory of M. CORNIL, point to a new line of treatment with a reasonable hope for success. Those interested in the subject would do well to read the articles in *The Lancet* of March 2nd and the following number, and also to read the full account of the experiments of M. LOEWENTHAL as reported in the *Comptes-rendus de l'Académie des Sciences à Paris*, No. 27, du 31 Décembre 1888, pages 1169-1172, and 28 Janvier 1889, pages 192-193, with the remarks of M. CORNIL, in *La Semaine Médical*, 1888, p. 338, et 1889, p. 11, No. 6 du 6 Février 1889.

H. W. B.

The Committee to issue a call for a Meeting of the China Medical Missionary Association, to be held at Shanghai, May 1890, beg to offer the following report. A large number of votes have been received, all in favor of holding the Meeting. Below is a list of subjects proposed, with the names of the writers who have been elected. We take this method of notifying the result of the vote, and it is *earnestly requested* that all those named as writers give an *immediate* answer to the Secretary, either *accepting* or *declining* to write the papers for which their names are down. Should any decline to write, this will give time to confer with others and obtain their consent to furnish papers for the meeting.

H. W. BOONE,
Secretary.

Subjects.	Writers.
1.—Healing in Connection with Religion, in Old Testament Times	Dr. PORTER.
1.—Chinese Materia Medica: Its Value to Medical Missionaries	Drs. THOMPSON, PARK, DOUTHWAITE,
3.—Calculus: Its Prevalence in China	„ KERR, MACLEISH.
4.—Methods of Medical Missionary Work... ...	„ CREWS, REIFSNYDER, HODGE & MAIN.
5.—Training of Medical Students, and their Prospects of Success	„ NEAL, VON S. TAYLOR, KERR, MACLEISH, PARK, WOODHULL, SWAN & ROBERTS.
6.—Preaching to Dispensary Patients	„ MACKLIN, CREWS, DOUTHWAITE.
7.—Itinerant Medical Work	„ PECK, MCFARLANE, MAIN.
8.—Medical Nomenclature	„ HUNTER, KERR, FRYER.
9.—Necessity of giving more Prominence to the Evangelistic Side of Medical Work ...	„ ANDERSON, BEEBE, GILLISON.
10.—Advantage of two physicians working together in each large centre	„ LYALL, GILLISON.
11.—Advantages of Co-operation in Teaching, and Uniformity in Nature and Length of Course	„ WHITNEY, MORLEY.
12.—History of Medical Missions in China	„ THOMSON.
13.—Hip-Joint Disease: Its best Treatment of Chinese Patients	„ LYALL, WHITNEY, WENYON.
14.—A Collective Investigation into the subject of Fevers in China, with reference to the so-called Typho-Malarial Fevers	„ COLTMAN, WENYON, MURDOCK.

NOTE.—Should any of the above-named members be unable to attend the meeting in 1890, they are requested to write on the subjects for which their names are down, and to forward their papers to the Secretary of the Association, Dr. M. GALE, at Shanghai. These papers can be read at the meeting and published in the report of the proceedings of the Association.

H. W. B.

HOSPITAL REPORTS.

ANNUAL REPORT OF THE CHINANFOO DISPENSARY.

Dr. ROBT. COLTMAN, junr., in his full report, writes that with small exception "the Dispensary has been open every day," and that during a short absence Cholera became epidemic both in Chinanfoo and Chefoo. Reference is made to the want of hospital accommodation, "We need a hospital badly, and almost daily have to refuse important and interesting cases;" but our prospects are not very good. Then, touching upon the spiritual aspect of the work, the Doctor says,

Daily preaching has been carried on in the street chapel, in front of the Dispensary, to audiences of varying sizes, and although the apparent results are very scanty, yet many must have heard the word of life, and time will doubtless prove the efforts in this direction to have been valuable to some poor souls. In spite of the opposition of the powerful Literati and the rumours they have circulated against us, we have steadily gained ground with the public generally, as the following figures will show."

In 1886 the attendance was 5,714; in 1887, 6,189; visits to the dispensary during 1888 were 7,221; the operations, which numbered 399, included Amputation of Forearm and Penis, Entropion 25, Tumours removed 10, Mammary Abscess 3, Nasal Polypi 1, Hare-lip 1. The Doctor again alludes to the inadequate accommodation, and hopefully looks forward to the time when his sphere of usefulness will be extended, when he has "more commodious quarters and a separate waiting-room." He refers to the success he has met with in treating ulcer of the cornea: "My plan is to drop two drops of a gr. $\frac{1}{4}$ solution of nit. of silver into the eye, giving the eye perfect repose." In the large Serpiginous ulcers he rubs up iodoform with Ol Ricini and applies with camel's-hair brush once daily.

SECOND ANNUAL REPORT OF THE PHILANDER SMITH MEMORIAL HOSPITAL OF THE C.I.M. OF THE METHODIST EPISCOPAL CHURCH.

We have to acknowledge Dr. BEEBE'S report. It is a work of twenty-five pages and embellished with some seven or eight very suggestive specimens of Nanking art, by way of cuts, illustrating the Hospital and various phases of the Doctor's good work. Though gotten up more for those at home "whose contributions make the work possible," it is still very acceptable to the medical reader. The Report opens by contrasting the past year with the present: "The past year's work has been exceedingly pleasant and gratifying; the number of patients has increased; they are of a better character, more confident of our measures, more considerate of instruction, and withal displaying much better behaviour."

A few deaths occurred in Hospital, "but they occasioned no trouble." The district magistrate in one case was very kind; he came to hold an inquest, but considered it unnecessary "*exonerating* us from all blame in the matter." A pleasing incident is referred to, "a merit board" is the resultant of the successful substitution of antiseptic dressings for "a paste made of incense."

Page 15 gives the statistics of Hospital work: Out-patients first visits 4,686; Following visits 5,203; in-patients, men 195, women 16; total 10,100.

Surgical Operations.

Fistula in Ano	26
Tapping	9
Skin grafting	8
Injuries	5
Nasal polypus removed ...	6
Polypus of ear	5
Gangrenous toes removed ...	5
Preputial Calculus	1
Trichyasis	4
Hare-lip	4
Tumours removed	3
Pterygium	1
Amputation at knee-joint ...	1
Epithelioma of penis ...	1
Epithelioma of lip	1

"Thus another year closes and we go forward with added faith and increased confidence, because we know that the Lord has been with us, and we believe the promise of an Abiding Comforter."

Supplementary to Dr. BEEBE'S report is one emanating from Miss BUTLER of the Society of Friends, to whose efficacy in good work, in her position of matron and nurse, the Doctor gratefully refers.

At the last Annual Meeting of the Central China Mission, Bishop FOWLER, presiding, the Hospital School work was made the Medical Department of the Nanking University, and the following Faculty appointed:—

ROBT C. BEEBE, M.D.,
Dean and Prof. Theory and Practice of Surgery.

GEORGE A. STUART, M.D.,
Prof. Theory and Practice of Medicine.

LUCY H. HOAG, M.D.
Prof. Materia Medica and Therapeutics.

To be appointed.
Prof. of Anatomy and Physiology.

ESTHER BUTLER, (Chicago Training School)
Prof. of Practical Hygiene and Instructor in care of the sick.

FIRST ANNUAL REPORT OF THE MISSION HOSPITAL AND DISPENSARY AT CHIANG-CHIU.

London Mission Society.

Dr. FAHMY is much to be congratulated upon his first year's success in connection with the above Institution. The Doctor, speaking for himself, says: "The Hospital work is divided into two distinct, though intermingling, departments — Evangelistic and Medical. The former is of course the main object of the Institution, while the latter is the door through which we usher in these long-benighted heathen within hearing of the "Glad News" of Salvation. Services are held, in the Hospital Chapel, morning and evening; and every day the in-patients are taught to read and commit to memory passages of scripture and hymns. On out-patient days special evangelistic services are held.

The number of cases treated is as follows:—

Individual cases		3,371
Total number of consultations by out-patients (including dressing cases)		10,847
In-patients	included in the above	441
Female patients		643

Surgical Operations.

Present a long and varied list of 392, appended to which are notes on Amputation of Penis—HILTON'S Method: Amputation of Leg by CARDEN'S mixed method, as recommended by BRYANT; "it combines the advantages of the circular and flap without the disadvantages;" Excision of Elbow,—two cases; the single longitudinal incision was adopted, and in both cases a movable false joint resulted. Excision of Lipomatous-chondro-osteoma Cataract, 29 cases,—GRAEFFE'S Method, 5 failures. Iridectomy 9 cases; in 7 there was improvement of vision. Paracentesis Abdominis, 5 cases. 1 External Urethrotomy. The Doctor concludes by giving a complete and exhaustive summary of the diseases treated.

FOURTH AND FIFTH ANNUAL REPORT OF THE MISSION HOSPITAL AND DISPENSARY AT AMOY.

Presbyterian Church of England.

We regret that the little space at our command precludes the idea of doing justice to Dr. MACLEISH'S excellent report. We quote, "During 1887, the fourth year of its existence, the work of this Hospital was steadily maintained. Owing to the marked increase in the number of patients, the difficulties attending administration have been aggravated."—

The statistics for the year are as follows:—

Total number of individual patients	2,699
New patients (not treated in previous years)	2,139
Including females	521
Daily visits of out-patients for dressing	5,284
Visits to patients in their houses	294
Total number of consultations by out-patients ...	13,794
In-patients, including females	521
Surgical Operations	304

The only change of any moment in the methods of Christian work during the year, has been the employment of a colporteur by the Hospital. An experienced man having been selected, he was set to work in June. After spending a few weeks in the Hospital, assisting us in teaching the patients to read and repeat hymns and passages of Scripture, and in giving them religious instruction, he was furnished with a list of the names and addresses of old in-patients, in a certain district with which he was well acquainted. These he visited in their homes, using the introduction thus given him as a means of opening the door for his message. On returning to Amoy, he submitted a detailed report of his journey and of the visits he had paid. After another period of work in the wards, he was sent out to a fresh district, in course of time thus visiting patients whose acquaintance he had made in the Hospital. I am convinced that this is a most valuable means of following up the religious work done in the wards, and one that it would amply repay us to adopt more extensively.

We cannot but call attention to one remarkable phase of the Doctor's work, and that is, the feeding of his patients. Cooked rice *ad libitum* is supplied them at 13 cash per meal, and a profit realized; for not only are the cooks' wages and kitchen expenses paid, but a "sum of upwards of $35 handed over to the Poor Fund." If this be reduced to a small matter of arithmetic, it will be ascertained that the patient can have two good meals a day for $9 a year.

In the interesting "Notes" Dr. MACLEISH has embodied in his report for "professional readers," reference is made to some cases of complete corneal leucoma. In one case, a disc was removed from the centre of the leucoma by means of DE WECKER'S spring trephine and part of the atrophied iris and a membranous disc representing the lens, extracted from the opening.

Case *f* refers to the removal of a calculus composed of uricacid encrusted with phosphates, weighing 120 grains and measuring 1 in. × $\frac{13}{16}$ in. × $\frac{10}{16}$ in. in a boy of 9 years. The next case has reference to the lodgement of a calculous mass situated external to a dense cicatrical band crossing the rectum and some 2 in. within the anus. When broken up and extracted piecemeal, it was found to consist of some 300 grs. of concreted phosphatic crystals, some of which were large and well formed, along with masses of black earthy material. The patient and his agricultural friends in the Hospital agreed that this crystalline concretion exactly resembled those which they had sometimes found adhering to the walls of a pit, in which ordure had been long stored! Remarkable condition of multiple synovitis is then given,—both knees, ankles and wrists,—one elbow and several metacarpo-phalangeal joints being distended with fluid.

The case improved considerably under the use of mercurial strapping and iodide of iron. A well-marked case of aneurism of the first portion of the aortic arch, absorbing the sternum and threatening external rupture, was considered too far advanced for treatment. A case of Paget's disease of the nipple, developing into cancer, of adenoma of the breast in a man aged 25, and a case of true congenital dexiocardia, the apex-beat of the heart being about 1 in. below and a little to the outer side of the right nipple. We regret that we are compelled to compress the report for 1888 within narrow limits.

New-patients (not previously treated)...	2,070
Including Females 24·2% .	501
Total number of individual patients	2,788
Daily visits of out-patients for dressing	5,807
Visits to patients in their homes	200
Total number of consultations by out-patients ...	15,371
In-patients, including females	468
Surgical Operations	269
Vaccinations...	60

"A steady increase from year to year in the attendance of patients" is observed. Five students were under a systematic instruction and practical training throughout the year. The methods pursued in conducting the general and religious work of the Hospital remain substantially the same. "All the students and Hospital servants heartily assisted us in the religious teaching of the patients in the wards."

It is indeed, as the Doctor remarks, highly gratifying to be able to point out that this Hospital has now for nearly three years been independent of assistance from home, and it is much to be hoped "that its reputation for self-support will be maintained."

SOCIETY REPORTS.

Since the establishment of the Wuchang and Hankow Medical Missionary Association, meetings have been held monthly with more or less regularity. For the first two years, Dr. DEAS was our Vice-President and Dr. HODGE our Secretary. In addition to the impetus which such intercourse gave to reading, and also accuracy of observation, the meetings being held at one another's houses, have partaken largely of a social nature and brought us into closer fellowship; more than one happy evening has been spent in familiar chat after the meeting has been closed. From time to time the material of our hospitals has been used for the exhibition of cases of interest and for the discussion of cases for diagnosis. We have further in circulation amongst ourselves *The London Medical Record*, *Brain*, and the *Journal of the American Sciences*, and are contemplating making additions to this small circulating library. The following statistics may be of interest and use to the readers of the Journal :—

Number of Meetings held	14
Number of Members	6
Average attendance	3
Corresponding Members	2

The following papers and cases have been brought forward:—"An Obscure Case of Colic," "Several Cases of Fever," "Corneal Ulceration," "A Case of Convulsions of Doubtful Diagnosis," "Affections of the Eyelids," "Retention of Urine of Twenty Days' Standing," "Some Points in Recent Surgical Literature," "Ether and Chloroform," "Artificial Anus following Hernia with Spontaneous Cure," "Imperforate Anus," "Failure to Extract Senile Cataract, subsequent Absorption of Lens and Useful Vision," "Gangrene of Scrotum," "Hydrophobia," "Cholera."

The following cures have been exhibited :—Bilateral Syphilitic Choroiditis, Syphilitic Ostitis of Tibia and Ulna, Abdominal Aortic Aneurism (for diagnosis), Abdominal Tumour (for diagnosis), Case of Absorption of Lens after failure to extract.

The fourteenth meeting of the Wuchang and Hankow Association was held at the house of Dr. GILLISON, on Wednesday, January 30, 1889.

Present:—Drs. DEAS, GILLISON, MORLEY and HODGE.

The meeting having been opened by prayer, the previous minutes were read and confirmed. This being the first meeting since the election of new officers, thanks were moved to Dr. DEAS, retiring Vice-President, and to Dr. HODGE, the retiring Secretary and Treasurer; the latter posts, vacant by the transference of Dr. HODGE to the Vice-Presidency, were accepted by Dr. GILLISON. Dr. DEAS read notes of two cases of Meningitis and one case of Peritonitis, but in the hurry of his departure for home, the notes have unfortunately not been handed in to the Secretary. In the discussion on the latter case the general opinion inclined to extension from Pson's abscess. The symptoms had been somewhat marked, and in this connexion Dr. HODGE drew attention to a valuable paper by Dr. GOODHARDT, *Lancet*, February 26, 1887, on "Masked Peritonitis." It was then pointed out that Peritonitis might occur with (1) absence of pyrexia, (2) little or no pain, (3) a soft, instead of a hard, state of the abdomen, (4) either Constipation or Diarrhœa, the latter being of grave omen. Dr. HODGE referred to a case that he saw in England, where a man apparently in good health was suddenly seized with vomiting. The vomiting continued and became somewhat feculent in character at a later stage; there was little prostration, no elevation of temperature to speak of, and a fairly painless abdomen. The case was at first diagnosed and treated as Gastritis, and it was not till later on in the case that Purulent Peritonitis was suspected and confirmed by abdominal section. Unfortunately the operator contented himself with giving exit to the pus, and

never pushed his inspection to the site of the lesion. Dr. HILTON FAGGE (*Practice of Medicine*, Vol. II., p. 117) refers to a somewhat similar case with a similar mistake made by himself. The cause of both cases was probably similar—ulceration of the vermiform appendix.

PROGRESS OF MEDICAL SCIENCE.

Dr. DERLON, (*Rev. Gén. de Clin. et de Thérap.*) asserts that if antipyrin be added to *large* doses of quinine, the uncomfortable effects of the latter are avoided. He gives 3 gr. of antipyrin to 5 gr. of quinine. The antipyretic effect of the quinine is increased and the symptoms of quinism do not occur. Moreover, the combination is better borne by the stomach, and it is believed that "antipyrin modifies the reflex actions starting from the mucous lining of the stomach."—*Lond. Med. Rec.*

BRONCHIAL ASTHMA.

Dr. DUNN, in the *Therapeutic Gazette*, Aug. 1888, says, that when dyspnœa is very troublesome, the hypodermic injection of ¼ to ½ gr. of cocaine, combined with 1/12 to ⅛ gr. of morphine, gives instant relief.

MALARIAL URTICARIA.

"The eruption comes out at the beginning "of the second, or hot, stage, and disappears "during the third stage, on the advent of "of free sweating. It reappears with every "attack; and is, like the fever, cured by "quinine. The eruption comes out chiefly "on the abdomen, the trunk, the limbs, "and especially the anterior (extensor) sur-"face of the upper arms and thighs. It very "rarely affects the neck or face. In a first "attack, and when the temperature does not "exceed 104° F., the eruption is usually "discrete, but in severe cases it become con-"fluent. Urticaria is also met with in other "acute infectious diseases, but in none so "frequently as in malaria, in which affection it "appears with great regularity in the second "stage." As to its prognostic importance, while some do not consider it of much value, most are inclined to view it "as an indication "of a very severe and grave case, and not "improbably of the pernicious form. Such "cases urgently call for prompt treatment, "and the most speedy remedy is the hy-"podermic injection of hydrochlorate or "hydriodate of quinine."—*Lond. Med. Rec.*

THE PREVENTION OF SUMMER DIARRHŒA AMONG INFANTS, VIEWED IN THE LIGHT OF THE LESIONS.

By L. Emmett Holt, M.D., of New York.

"The purpose of this paper is to call attention to the fact that many of the so-called dyspeptic intestinal catarrhs of infancy, commonly looked upon as merely functional in character, produce lesions of considerable moment. These lesions are of importance, not so much in their immediate effects as in their relation to the severer forms of disease, particularly entero-colitis.

"While I have not yet accumulated sufficient statistics for publication, still enough has been learned so far to show that the figures given in most of our books are altogether too large, and that the vast majority of hand-fed infants are *very greatly overfed.*

"Difficulty and failure may result from this fact where every other condition for success has been attended to.

"In conclusion I would emphasize the following points:

"1. Children should not be overfed at any time, but especially not in summer.

"2. At this season, also, every dyspeptic catarrh should be attended to; many of these are promptly curable by merely clearing out the intestine and then cutting down the quantity of food.

"3. Should an intestinal catarrh, even a very mild one, continue for two or three weeks, one may be pretty certain that he has something more than a functional disorder to deal with.

"4. Every mild catarrh should be looked upon as the possible precursor of a severe type of intestinal disease, either near or remote.

"5. In the treatment of all diarrhœal diseases it should be borne in mind that there is something more to be considered than the bacteria and the products of decomposition, viz., the anatomical changes."

CORRESPONDENCE.

To the Editor
of the Medical Missionary Journal.

SIR,

Last autumn we opened a small hospital at Teh-Ngan-Fu, Hoopeh. Since then several things have perplexed my inexperience, and I should like to elicit an opinion from those who have worked out answers for themselves; to do which I will state, either for correction or approval, what seems to me the best methods.

First.—I was for some time doubtful how far it would be wise in endeavouring to teach medicine to Chinese students; but in the March Number of the Journal, just to hand, Dr. BEEBE'S views are laid out so clearly that I will take it as settled for Teh-Ngan.

Second.—Ought we to consider the reputation of the Mission in undertaking cases which must have a doubtful issue? The Church and the doctor are one; the Mission's reputation is my reputation, and my reputation is the Mission's, so I will not separate the two. Now if, considering my own operative inexperience, want of proper assistants, nurses, etc., I can still advise a man to risk his life for the chance of good, surely it becomes my duty to risk my reputation, for the rule, which knows of no exception at home, holds in China, that the medical man's first and paramount duty is to the individual patient who puts himself in his hands. By looking at this clear rule of action, we shall be saved much perplexity; whereas by casting up the chances of glory and risks of shame—for one implies the other—we are weighing distant uncertainties which our faith ought to leave with God, content to be obedient and take the step immediately before us in doing our duty to the patient. But I myself have little fear about the reputation of one who, doing his work boldly and carefully, thinks more of his patients than of his reputation, being sure that he will in the long run get the credit from the people for giving disinterested and honest advice.

The third question has perplexed me much more, What is the best way to bring our patients to the knowledge of Christ?—

for I will assume that the time of the medical missionary is all taken up by his patients. My ideas, I confess, are indefinite, but they are based chiefly upon the priniciple that the hospital is not a shovel to be used for filling the Church, but a free gift of the Church to sufferers; it is from the Church, and must always be given with the Church's message of peace, but it is to sufferers, and should be given, as Christ gave His gifts, with Royal bounty to all who come; and surely we are blundering, if not sinning, if we let our patients get the impression that our desire to see their names on our books is greater than our desire to see them healed. At Teh-Ngan we have a chapel in close connection with the hospital, but we do not compel the patients' attendance, or even request it, and there is no special service for them. Our desire is, as little as possible, to separate the teaching from the healing, and so every morning, before changing the dressings, and before the patients are allowed out of bed, so that there will be no distinction between those who might choose to kneel with us and those who would not, we read a short form of prayer in the wards, as much as anything that they may see how Christians begin everything with prayer. The form is suited to their ignorance. When Our Lord gave His disciples a form of prayer for all men to use at all times, He gave one which would tax nobody's faith, and which a deist might offer; so our form contains no doctrine beyond that of the existence of One God. It begins with the commandments, followed by sentences on the attributes of God, each being followed by a short response, in the form of a prayer, chiefly from the Psalms, then comes a prayer for the sick, and lastly the Lord's Prayer. It is hoped that, by repeating these simple sentences daily, the patients will carry something away with them. The rest, we think, should be taught by the bedside, soul with soul. The medical missionary's chief method, however, is not talking, but living and loving; his influence is the sacrifice of love. Love seeks for response and does things which might seem useless, just in order to prove itself; in this way love is puffed up, inasmuch as it seeks to make itself known; and so it seems to me that the less we leave to assistants and servants—and in a mission hospital there is no routine work—and the more personal attendance we give, the greater our influence. It will take time, and to do it the hospital, I know, must be smaller than one man could attend to if he be merely an operator-prescriber and general superintendent; fewer patients but more time to each; 25 beds I take to be enough; to do it also he must live near to his patients. In both of these we are fortunate at Teh-Ngan. It is by unfailing patience and untiring love, seeing in each patient the suffering of Christ, that we set before them some idea of the power of the Love of Christ. This daily, and a very few words will discover which soil is good and which barren. Our Mission has a number of itinerant evangelists, native and foreign, and for their use a list is kept of all in-patients, that any who have shown any desire for a for a further knowledge of the Gospel, may be visited in their homes.

This is the chief subject which I should like to see discussed in your columns.

I had intended also enquiring as to the experience of elder missionaries about out-patients, such a small number of whom ever come to me a second time, that I frequently catch myself dropping into routine, saying, It doesn't matter much, I shall probably never see him again. Also, as to the hopefulness of opium-curing and the rules for opium-patients. But I have yet a more practical query than either of these. A hospital is the best place to teach the Chinese what cleanliness means. One of our men visited an ex-patient in his home, and the man, a scholar, telling his friends about the hospital, finished, by way of climax, with, "Why there they wash the floors." But beyond washing floors, is there any cheap and easily-washed bedding which we can give them instead of their own *peimos*?

How far can we insist upon their changing their clothing, in bathing, and in not smoking in the wards?

I suppose, too, that we must each work out our own methods; but there must be many young medical missionaries beside myself who would be glad of intents, and this is my excuse for writing you at such length.

I am, Sir,
Yours truly,
ARTHUR MORLEY.

TEH-NGAN,
April 3rd, 1889.

To the Editor, Medical Missionary Journal.

Foochow, *March 14th*, 1889.

Dear Dr.,

Dr. CARLTON has a very kind, efficient helper in Miss JOHNSON, a trained nurse, and her hospital is in a flourishing condition. Our hospital building in the city is progressing finely, but we may not be able to occupy it before next fall. We shall know how to appreciate it after occupying such uncomfortable quarters during these first years of hospital work. We have had some things to encourage us in the old hospital, both in regard to medical and religious work. It is a part of the daily duty of each student to teach the patients under her care. At evening prayers they recite what they have learned through the day. My sister is usually present at evening worship, and the patients, especially the children, always seem pleased to be able to repeat something. Although these hymns and Bible verses are in many cases soon forgotten after they go home, we know that the Holy Spirit can use them even years afterwards for the salvation of their souls. I wish I could write you some articles for the Journal, such as you ask for, but after my necessary work is done there seems to be little time or strength left for anything else. Perhaps the time will come when I can do more to help on the good cause of journalism.

My class of medical students are ambitious and eager to learn. I find it no easy task to prepare daily lessons, so as to be able to help them a little in understanding their text-books. I think there is a great field in China for native medical women. The few women who are practising foreign medicine in Foochow, seem to be doing a prosperous business. I am called to obstetric cases oftener than anything else—always difficult cases, requiring surgical interference. A short time ago I was called three times in succession to cases of shoulder presentation, with descent of the arm. My next call was a case requiring craniotomy. I find the experience I gained while an interne in Prof. WINKLE'S Lying-in Hospital in Germany, of great service to me here. I hope my students will learn how, and have the courage, to manage difficult cases, some of them I am sure will.

It seems like presumption for one person to try to teach even the barest essentials in the different departments of Medicine, but it is the best we can do for our students at present. I hope the time will come when they will have better advantages.

During the three years we have received 180 patients into the hospital, and the number of new dispensary patients has been 2,950. The people of Foochow are not in a hurry to patronize a new doctor, but I hope a new hospital will prove an attraction. I have been presented with four tablets, two from in-patients and two from patients visited outside. But my most grateful patient was a young woman who in a fit of anger sought revenge by swallowing six needles. I gave her a prescription of olive oil flavored with anise, and advised a generous diet.

Judging from the joy with which she reported results of treatment, I think the whale was not more relieved when he saw Jonah safely landed upon the shore than was she when she saw the shining weapons of her revenge.

The March Number of Journal very interesting. Your "new filter" has solved a knotty question for me, as I had for a long time lost faith in those generally used.

My object in writing this letter was to send my subscription; however, since it is written, I think I will impose it upon you.

Yours truly,

X. W., M.D.

ODONTOMA.

By ROBT. S. IVY, D.D.S., Shanghai.

Two recently reported cases suggest the following:—

Odontoma, dental, exostosis, excementosis, hypercementosis, and dental osteoma are names applied to similar cases to those described and illustrated in your Journal under the title Odontoma. For a more exact name we prefer the term hypercementosis, as it serves more definitely to indicate the tissue involved. The cementum is the covering of the tooth-root, and in character closely corresponds to the bony structures, having its Haversian canals, lacunæ, bone (cement), corpuscles, etc., and of the dental tissues it is the most highly organized and forms the bond of vital union between the tooth-root and alveolus. One of the characteristics of this membrane is the power it possesses to resorb or upbuild the bony tissue by which it is surrounded. The cause of enlarged roots is the result of pathological disturbances, irritation of the pericementum by caries in one form or another being generally considered the primary one, though teeth are often seen with enlarged roots which are entirely free from decay, while, on the other hand, badly decayed teeth are frequently extracted without any such appearance. Other causes may be found in the deposit of salivary calculus or tartar, under the free margin of the gum, or the protrusion of fillings in the same position; both these, by continuous and persistent irritation of the soft tissues, will result in extracemental growth. Mechanical impact is another frequent cause of this condition; for instance, teeth which have survived some of their neighbours are required to do the duty formerly divided, consequently from excess of function the pericementum is irritated and stimulated. Opportunities of seeing such examples are not rare in cases where teeth get so irritated and tender, though there is no trace of decay, their owners insist on having them extracted as a speedy way of getting rid of the trouble, extraction of teeth under such conditions being attended with more or less difficulty, dependent on the extent of the enlargement. In some instances, not by any means confined to the lower jaw, as is popularly believed, the enlargement is so extensive as to result in the union of roots of molars or even to involve the alveolus and the roots of adjacent teeth.

Diagnosis of hypertrophied roots is most obscure, as no trace of the enlargement is noticeable over the affected part, and the growth is so gradual in formation that unless it assumes extensive proportions there is no discomfort, and even then the enlargement causing pressure on a nerve-trunk or some of its smaller branches, the pain is reflected to some other region. An interesting case is recorded, in which a boy was treated for epilepsy for six weeks without any result. On examination of his teeth, the lower molars were found to be much decayed, but he had had no pain in them. They were, however, removed, and the roots found to be much enlarged and bulbous. During the eighteen months succeeding the removal of the teeth he had not a single fit, though for many weeks previous he had two or three per day. As there was no complication of maladies, and as the trouble immediately ceased upon removal of the teeth, there could be no doubt as to the cause of the disease.

A frequent cause of facial neuralgiæ is found to exist in this condition, most persistent cases being relieved by the removal of one or more teeth.

The closure of Dr. DEAS' hospital in Wuchang has thrown additional strain upon Dr. GILLISON, only partially relieved by the fact that Dr. HODGE now sees out-patients once a week at Wuchang, that Dr. HASLEP

has commenced work, and that the Women's Hospital at the Wesleyan Mission is now open. Patients have come to the London Mission Hospital from four and five hundred li away, and the wards have been crowded to overflowing. It is cheering to know that all this has borne fruit and many have been added to the Church, no less than six patients being baptised, at one time, on a recent date. For this we praise the Lord!

It is opportune that at this juncture the Wesleyan Missionary Society are about to commence active operations again in their medical work. It may be well to remind our readers that this Mission was the first to commence medical work in Wuchang and Hankow. It was in May 1864 that Dr. PORTER SMITH (well known for his work on Chinese Materia Medica) arrived in Hankow; he very soon opened a small dispensary, and two native houses served as a temporary hospital. Subsequently Wuchang was visited on two days of the week, and a more substantial hospital erected at Hankow. The good work was carried on till 1879, being continued, after Dr. SMITH'S departure, by Dr. HARDEY, and then Dr. LANGLEY.

For want of a medical missionary, the work came to a premature close in 1879, from which date till 1884 nothing was done. In that year a small dispensary was opened by one of the married ladies of the Mission, and some 2,000 patients seen during the few months she had charge of the work. In the following year a specially-trained lady was sent out by the Ladies' Society, and for over 2½ years Miss SUGDEN has had charge of the work. During this period she has seen over 13,000 out-patients, and has made over 300 visits to the homes of the people, mostly for serious obstetrical cases.

At first a room in the Girls' Day School was used as a Dispensary, but soon became too small. A small building, containing simply a waiting-hall and consulting-room, was then built, and has done good service up till the present year. The rapidly increasing number of the patients made the provision of in-patient accommodation necessary, and the need was, last year, represented to the Home Committee. With commendable zeal and promptitude, the Ladies at once set to work and very quickly raised, amongst the ladies of Methodism, a special Jubilee fund of over £1,000. Last July the building was commenced, and last December it was opened by the English Consul, C. R. F. ALLEN, Esq. The building is quite free from debt, and a sufficient sum remained over to provide all instruments, beds and other furniture. It is a substantial two-storied brick building, 80 feet long by 30 feet wide, with suitable out-offices attached. The ground-floor rooms are laid with Portland Cement, and all the doors and windows are of Singapore hard wood. On the ground-floor, besides a Dispensary, consulting, waiting and nurses' rooms, there is one large ward capable of accommodating 12 in-patients: the upper floor contains 3 small private rooms, a set of rooms for the English lady who acts as matron, quite shut off from the rest of the building and with a separate entrance, and an operating theatre and operating ward which are also in a separate passage-way. No expense has been spared to make the building and its fittings as complete as possible. Whilst the general medical care of the hospital is in Miss SUGDEN'S hand, Dr. HODGE acts as her consulting and operating surgeon.

Further, part of Dr. HODGE'S own hospital for men will soon be ready for opening. A large and valuable plot of land has been presented to the Society on the same main street as our chapel and right opposite the chapel-door. On this it is in contemplation to erect a hospital for some 70 or 80 patients, with operating theatre and out-patient department, on the pavilion plan. Funds will only permit at present of the erection of a small part of the scheme, of which more at another time.

S. R. H.

HANKOW.

NOTES AND ITEMS.

At the recent election of Editors for this Journal, Drs. LYALL, BOONE, ATTERBURY and HODGE were elected to serve for two years. As Dr. GULICK declined to serve any longer as Business Manager, some changes had to be made, and Messrs. KELLY & WALSH, of Shanghai, became the Agents for the Journal. This firm will receive and attend to all Business Communications, Subscriptions, etc., while Articles intended for *The China Medical Missionary Journal* may be sent to any one of the Editors. Shanghai is, however, the place where the Journal is published, and it is more convenient and takes less time to send many communications direct to Shanghai than to let them go wandering up and down the Coast before reaching their final destination. All the proof-reading and other work of the Journal has to be done at Shanghai. It has therefore been deemed best to make the formal announcement that Dr. H. W. BOONE, Shanghai, is the Managing Editor, and that Dr. PERCY MATHEWS, F.R.G.S., has kindly consented to assume the duties of Associate Editor. All communications sent to Shanghai will receive prompt attention. All articles will be thankfully received. Communications on religious work in connection with the medical, about methods of work, medical students, their training, teaching, prospects, etc., about native remedies, how to utilize them, health resorts, mineral springs, society reports, and specially a review of series of cases with deductions as to methods of treatment. All Articles on these and many more subjects will be eagerly looked for and appreciated by the readers of the Journal.

The Right Rev. C. P. SCOTT, Bishop in North China, has applied for aid towards establishing a Medical Mission at Peking, to the Society for Promoting Christian Knowledge. The Bishop wrote :—This is a branch of work which is *most important* in connection with missionary work in China. The people are peculiarly distrustful of us, and are very hard to move by consideration of abstract doctrine ; but they are quick to perceive the value of medical science, and very ready to avail themselves of the skill of the physician in almost all ranks of life. The resources of our mission are small, and unable to do much towards such a work without running the risk of having to discontinue other works. The Bishop's plan was to commence with one fully qualified medical man, who would go out to China and acquire the language, and open up the work. There would be no need at first of expenditure in building, but the existing building at Peking required fitting up for use as a dispensary ; and drugs and instruments would be needed. The Bishop hoped eventually to have a second medical man to extend the work. A grant of £150 a year for three years was allowed, for the equipment and general maintenance of the Mission, such grant to include the passage of the Missionary and the cost of necessary drugs and instruments.

AMERICAN DENTISTRY IN CHINA.

From a very early day American Dentists have all but monopolized the practice of their profession at the various Treaty Ports of this great Empire.

The national ingenuity in all matters of mechanical invention has never been better shown than by the numerous improvements which have been introduced into the practice of dentistry by Americans ; their skill is recognized in all parts of the civilized world.

Here, in China we have been specially fortunate. Our dentists have been men whose ability in the practice of their specialty entitled them to respect both here and at home; while the older residents can remember that the dentists have been men whose social qualities and public spirit have gained for them the regard and esteem of the community of which they have been members.

The appointment of Dr. H. MASON PERKINS as official dentist and dental surgeon in ordinary to His Excellency the Viceroy LI, at Tientsin, and also as dental surgeon to His Excellency KUNG, Taotai at Shanghai, is only a just tribute to the merits of one of our prominent dentists.

Dr. PERKINS has always remembered the needs of the poor; as dental surgeon to the Roman Catholic School, and as honorary dental surgeon to St. Luke's Hospital for the Chinese, he has rendered valuable services.

We hope that the genial doctor will long live amongst us, and that, when he does retire, he will carry with him, in addition to our regrets, sufficient sycee to enable him to enjoy a well-earned repose.

THE DEBT OF COMMERCE AND SCIENCE TO FOREIGN MISSIONS.

It is already evident that the controversy which has been carried on during the last two years respecting the comparative success or failure of foreign missions is ending, as all well-informed persons knew it would end, in the triumph of the advocates of missionary work. It has called forth a mass of testimony, not only from the missionaries themselves, who are everywhere enthusiastic concerning the prospects of their fields of labor, but from English viceroys, governors, and military officers, and from diplomatic ministers, consuls, and scientific and other travellers in heathen lands, the vast preponderance of which is in the highest degree cheering to the friends of missions. Simply as one illustration of the results of missionary enterprise it may be said that in Africa, which is far from being the oldest field, there are ten American, twelve British, and thirteen Continental societies now engaged in work; with 620 stations, 710 missionaries, 7,500 native preachers, 175,000 communicants, 300,000 baptized members of churches, 226,000 pupils in schools, and 800,000 adherents. The controversy has been eminently useful to the cause of missions in compelling statements of the results attained, and in spreading the knowledge of them among Christian people, and it can be safely said that a great increase of interest has been created. There is, however, another phase of missionary results to which attention should be called. While the primary object is, of course, to bring heathen nations to a knowledge of the Gospel, the missionary has always been a pioneer of commerce, and has not infrequently rendered eminent service to the cause of science. In thousands of places commerce has had no foothold until missionary zeal had prepared the way, gradually creating the conditions of successful trade and a demand for the products of civilized nations. The measureless profits of missionary labor have been reaped by commerce in many parts of the world, which, but for these labors, would still be unvisited by the merchant ships of England, Germany, or the United States. Religious and humanitarian activity have often outstripped avarice in penetrating into unknown and barbarous lands, but when the way has been made clear and the possibilities of trade demonstrated, commerce has followed and gathered its rich harvests. It is evident, therefore, that the secondary results of missionary labor have been great, and that commerce owes a debt to missions which the largest contributions could never repay, and which is certain to grow larger with the lapse of time. Equally remarkable is the indebtedness of science to the missionaries who are now scattered over the globe. While they have translated numberless scientific works into foreign languages and everywhere established

schools which in time will create a demand for the best results of scientific investigations, their own contributions to positive science have been beyond estimate. Dr. CYRUS HAMLIN well says: "Hundreds of educated men have given accounts of observations in many lands, describing countries, climates, modes of travel, nations and races, their physical, mental, and moral characteristics, their social condition and habits, their religion, education, and government, their industries and modes of subsistence, involving a large contribution to our geographical knowledge." CARL RITTER, "the prince of geographers," confesses he could not have written his "*Ein-kunde*" without the aid of material collected and transmitted by missionaries, and there is not a text-book upon geography which does not show the results of their contributions. For our best knowledge of hundreds of the various branches of the human race we are indebted to the same source. The modern science of philology never could have attained its present importance without the knowledge of the dialects spoken among the minor tribes and supplied by missionaries. The cabinets of many of our colleges have been enriched with geological, mineralogical, and botanical specimens, and coniform inscriptions from Assyrian sources have been collected almost without number. Natural history, the science of comparative religions, medical science, and many of the arts also owe a debt to the missionaries which is scarcely ever recognized, but which is real and destined to increase as their labors are more extended. When to this is added recognition of the work they are constantly doing in extending a knowledge of all branches of science in heathen lands, awakening that desire for education which will sooner or later place the best that Western civilization has to offer within reach of all people of the earth, it is evident that science, at least, can not afford to speak slightingly of the broad work that is being done in the hope of bringing the world to the knowledge of Jesus Christ. The latter expression has come, in the process of time, to have a large meaning. It includes, not only the conversion of mankind, but the extension of commerce, the enrichment and diffusion of science, the spread of civilization, and the binding of all peoples of the earth together in universal brotherhood, with common interests and relations.—*Providence Journal.*

Dr. MACDONALD, late of the National Church of Scotland, Ichang, who left China on account of failing health, November 30, 1888, reports himself as having arrived in Melbourne on January 13th, 1889, much improved in health.

ARRIVALS.

Arrived in Hongkong, December 1888, JOHN C. THOMSON, M.D., in connection with the London Missionary Society, to have charge of the Alice Memorial Hospital. Also, in December 1889, JOHN KUHNE, M.D., in connection with Rhenish Mission, to have charge of the hospital of that Mission in Tung-kun City, 7 miles E. of Canton.

Arrived in Shanghai, April 19th, 1889, Dr. and Mrs. J. A. GREIG, C.I.M., for Manchuria.

Arrived in Shanghai, April 29th, 1889, Dr. and Mrs. YOUNG, United Presbyterian Church, Scotland, for Manchuria.

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