SURGERY IN CHINA.

(Continued).

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Continuation of Section I.—The History and Present Position of Chinese Native Surgery.

Chinese Theory of Surgery.*

The Chinese have a phrase "Shen Fah," which means "hand methods," or, more freely, the methods of employing the hands in the operations requiring their use, which phrase is a fair equivalent of our word "Surgery," though they use the term in a much more limited sense. According to the Golden Mirror of Eminent Medical Authors previously referred to, the operations of surgery are eight in number, viz.:

1. Palpation.  5. Depression of Elevations.

For the practice of each of which minute directions are given, though to small purpose, if the numerous cases of maimed fractures and dislocations that come under my notice in Hongkong form any gauge of the average practitioner’s handiwork. Necessity has compelled the contrivance of ten forms of surgical apparatus, which with the nine acupuncture needles form the surgeon’s complete armamentarium, as follows:—

1. Bandages;
2. A Wooden Cudgel for application to the soles of the feet, evidently as a stimulant in cases of insensibility from any cause;

* Chinese Chrestomathy, p. 525; China and the Chinese, vol. ii., p. 71; The Chinese as they are, p. 224; Memoirs of Father Ripa, p. 67; China Medical Missionary Journal, vol. iv., p. 192.
3. The Broad Supporter, a sort of splint of cowhide, five inches long by three inches wide, bound by strings to a wounded part;

4. Climbing Cords, suspended loops by which to take hold as if for climbing, and used in combination with the following;

5. Piled Bricks, as shown in the accompanying illustration. Their use seems to be much the same as the Western methods of suspension in the application of apparatus for the treatment of some spinal troubles. In the illustration the surgeon is represented making the necessary manipulations previous to his applying the lumbar splints, about to be described, while an assistant removes or replaces the bricks under one foot of the patient or the other according to directions from his superior;

6. Back Splint, made of pine wood, three inches broad, extending from the loins to above the shoulders, and shaped so as to fit the spine; used in displacements of the vertebrae;

7. Lumbar Splint, composed of four thin slips of bamboo connected by strings, so as to form a sort of corset;

8. Belt of Bamboo Slips, resembling the Gooch splint of the West;

9. Pine Compresses, seemingly exactly the same as the lumbar splint, excepting in respect of their use, which is to close and compress a wound;

10. Knee Cap, a bamboo ring, with four projecting pieces of bamboo, bound over the knee, so as to fix the joint or steady a fractured patella.

In connection with the subject of fractures and dislocations, one is tempted to quote in full Father Ripa's* now classical personal experiences of Chinese surgery during his travels in North China in the early years of this century but the passage is lengthy. Suffice it, therefore, to illustrate the treatment of a displaced rib:—

"A third operation was now performed, during which he made me, still stripped to the waist, walk in the open air, supported by two persons; and, while thus walking, he unexpectedly threw a bowl of freezing cold water over my breast. As this caused me to draw my breath with great vehemence, and as my chest had been injured by the fall, it may easily be imagined what were my sufferings under this infliction. The surgeon informed me that, if any rib had been dislocated, this sudden and hard breathing would restore it to its natural position. The next proceeding was not less painful and extravagant. The operator made me sit upon the ground; then, assisted by two men, he held a cloth upon my mouth and nose till I was nearly suffocated.

'This,' said the Chinese Æsculapius, 'by causing a violent heaving of the chest, will force back any rib that may have been bent inwards.'"

* Memoirs of Father Ripa, p. 67.
Massage Bat.

Massage Pestle.

*Copied from Dr. MacGowran's Article.*
The sixth operation of surgery, which I have rendered "Shampooing," is worthy of more than passing notice, since in addition to the general idea of massage it has developed into a science resembling in some respects, and rivaling in detail at least, the now famous Swedish Movement Cure. Massage in its simpler form, consisting of tapping, kneading, pinching, chafing, and pommelling the body all over, is widely used as a remedy for muscular fatigue, nervousness, headache, paralysis, pelvic disorders, labour, etc., and also as a simple luxury, the barbers being the operators and concluding their daily shaving and dressing operations with a sound pommelling to the back and limbs of such of their patrons as can afford to pay for it.

This, as well as the more complicated system of massage combined with air-swallowing and muscular exercises, is of great age, being traced not to the usual Hwang Ti (2697 B.C.) legendary though that emperor be, but some twelve centuries beyond him. Into the history of the system, however, I shall not here enter, referring for that and for a full description of its theory to a paper on the subject by D. J. Macgowan, M.D., Wenchow, in the Customs Medical Report, No. 29, 1884-85; and here passing directly to a brief account of the frictions and movements themselves, taken from that paper.

The period of air-swallowing and friction exercises is to be divided into three parts of one hundred days each. After certain preliminary carefully described inhalations of the sun's air on the first of the moon, and of the moon's air at the full moon, all is ready for a commencement being made. During the first month friction is to be made by two youths, each on alternate days, they rubbing the patient's abdomen with the right hand and from right to left, at first lightly, but gradually increasing the pressure, and this for an hour three times daily. By the end of the first month the services of the youths may be dispensed with, when a form of shampooing is to be practised by the patient himself, thumping his ribs with a bag filled with waterworn pebbles, weighing a pound, three times daily. During the third month a pestle about six inches long, or a round bat somewhat longer, is to be employed for pounding the abdomen three times a day; they are to be made of hardwood, and their form is to be as shown in the illustration. Meanwhile friction and pounding the ribs is to be continued. During the fourth month the bat and pestle are to be alternately used along with friction, and this completes the first period of one hundred days.

From the fifth month of the exercises the bag of pebbles is to be used continually till the close of the eighth month, which closes the second period of a hundred days. During the third period the back is to be pounded in

* China Medical Missionary Journal, vol. iv., p. 186; Customs Medical Report, No. 29, p. 42.
like manner. During the whole three hundred days it is directed that continence be maintained, except once between the hundred-day periods; and ever afterwards, except once in fifty days.

On completing these exercises, muscular movements are to be commenced, of which there are twelve kinds, namely:

I. Stand erect and firmly, retain the breath, bring the flexed hands together on the chest, knuckles meeting, keeping the mind at absolute rest.

II. Stand on the toes and extend the arms literally, with eyes fixed, mouth closed, and mind perfectly quiescent.

III. Maintaining the tiptoe posture, raise the arms above the head and bring the hands together with palms turned upward, joints closed, tongue pressing roof of mouth; clench the fists and bring the arms firmly and slowly down.

IV. Raise one arm above the head, palm hollowed, eyes directed towards it, inhaling through nostrils, and forcibly and slowly bring down the arm. Repeat with the other arm.

V. As if pulling the tails of nine bulls, stand on one foot bent and extended forwards, the other extended backward; cause the air of the pubic region to move forcibly, thrusting one arm forward, the other backward, eyes fixed on the clenched fist. Repeat, reversing the legs.

VI. Extend the arms forward, as if pushing out and drawing in, seven times.

VII. Head inclined, with a hand stretched behind the neck. Repeat with other hand. Maintain erect posture, with gentle breathing.

VIII. Sit with legs wide apart, pressing the hands on the floor, and forcibly raise them, eyes fixed, mouth closed; rise and bring the feet together.

IX. Turn the arms alternately across the chest, fixing eyes on the hands, the mind meantime settled.

X. Assume the posture of the "crouching tiger," one knee bent, the other stretched backward, head turned upward, palms resting on the ground.

XI. Bend forward, placing the hands at the back of the head, so as to cover the ears; close the teeth, press roof of mouth with tongue.

XII. Finally, keeping legs erect, bend forward, with fixed eyes and upturned head, the hands clasped on the ground; rise; stamp twenty-one times, and stretch the arms alternately seven times; then sit cross-legged, each leg in turn, with closed eyes.

The above exercises are to be performed three times daily for an indefinite period, and with them are to be gone through certain supplementary exercises for the development of individual groups of muscles, which Dr. MacGowan describes in detail. Exercise is recommended to be taken in the open or in woods, and it is again and again provided that in going through
the exercises there is to be no thinking: the mind must be absolutely quiescent.

In conclusion, regret is expressed that owing to the business vocations or inconsiderateness of youth, this means of averting disease is deferred till old age, when it can be of no avail.

Obstetrics.

The subject of Chinese obstetrics is from the physician's point of view an interesting and a wide one, but in its surgical aspect a vanishing point. Midwifery is left almost exclusively in the hands of ignorant women, and the harm done by them in cases presenting the slightest difficulty is incalculable. Death to mother and child is the ordinary ending of any case in which nature fails to expel the fetus.

Huge lacerations of perineum, vagina, and cervix are among the minor evils of their "surgery": uterine rupture not unfrequently attends their meddling. In two cases of cross presentation I found the child's arm torn right off, in one case at the elbow, in the other at the shoulder. When the head presents, and, on account of pelvic deformity or otherwise, does not pass the brim, they are simply helpless, but do not say so until the patient seems dying, and one is often called to cases of this description where labour has already been a week or more in progress.

Dentistry.

Dentistry in China like most other subjects that have come under consideration is of hoary age, but is very imperfect, and is mixed up with deception on the part of its professors on all hands.

The cause of toothache is the presence of worms in the teeth:—the dentist having scarified the gum, and meantime deftly introduced certain artificial worms to the mouth with the spatula he is using, leisurely and gravely picks them out, and exhibits them to his patient, who is usually for the moment cured by the combined influence of the bleeding and the mental effect of having himself seen the cause removed.

A tooth is to be extracted: a "loosening powder," perfectly inert excepting when calomel is an ingredient, is applied to the gum; and then the dentist, ingeniously diverting the patient's attention by external manipulations with the left hand, with the right extracts the tooth either with the fingers or by means of a pair of coarse forceps he applies concealed under a cloth. It is stated that extraction can only be accomplished when the tooth is already more or less loose, and that a tooth firm in its socket is beyond the powers of the Chinaman, who meeting such can only resort to his worm theory and cure the pain.

The insertion of artificial teeth, though rude in both its methods and results, seems at least to be one honest department of the Chinese dentist's art, and was practised in China ages before its introduction into Europe, made of bone or ivory. The tooth is fastened to an adjoining one by means of copper wire or catgut string; while if more than one are wanted they are made in a single piece, and similarly fixed by a wire or string passing through the compound tooth and attached to such natural teeth as may remain in the jaw.

Inoculation.*

Inoculation for small-pox has been practised in China, where it would seem to have originated, since the close of the tenth century or the beginning of the eleventh, and is almost universal, excepting where it is being displaced by the milder prophylactic, vaccination, which was introduced at Canton in 1805 by Mr. Alexander Pearson, a surgeon of the Honourable East India Company's Service.

The usual age for inoculation is one year, and methods vary, but the most common are four:—

1. The lymph or crust is rubbed down with water, and a pledget of cotton impregnated with this solution inserted into the child's nose;
2. Crusts are dried, reduced to powder, and a small quantity of the powder blown up the nose;
3. The child is dressed in clothes that have been worn by a small-pox patient;
4. A wet nurse is employed who has just nursed a child with small-pox.

When the operation is successful, in seven days the child becomes feverish, and in three days more the spots appear: when unsuccessful, it is usually repeated on the fourteenth day.

Syphilis.†

Syphilis and other venereal diseases were observed and described in China in most ancient times, syphilis having been prevalent in South China at least as early as the ninth century, while gonorrhoea and soft chancreas, with their attendant buboes, cystitis, nephritis, and epididymitis, are described at a very much earlier period even than that.

Syphilis seems, indeed, to have originated at Canton. Tou Hou-ch'ing † in his Dermatology, written in the eleventh century, says:—

† Customs Medical Reports, No. 9, p. 40; No. 27, p. 12; China Medical Missionary Journal, vol. iv., p. 194.
‡ Notes on Chinese Literature, p. 82.
"Venereal ulcers were formerly unknown. An examination of their origin shows that they arose in Canton towards the close of the Wu Wei period, and calamitously overspread the land; and now, in the early part of the present cycle, the human frame has deteriorated, and the seasons are irregular, and sexual intercourse is very liable to communicate the syphilitic poison. Once effected, the morbid action is of more than ordinary violence, penetrating the marrow of the bones and permeating the muscles, flowing into the blood-vessels, and entering the male and female genitals, or abiding in the system or coming to the surface, or attacking the intestines or the orifices (i.e. eyes, nostrils, mouth, ears, arms, urethra). There are some lesions that from beginning to end remain in one place, and there are some that move to other regions; some that leap from one viscus over one adjacent to a more distant one, and some that remain fixed in one organ. The various appearances are numerous, each requiring its special treatment."

It was certainly from Canton that the disease spread over the rest of the empire, while from Canton there was an easy passage for it on board the trading junks to Japan, where it is heard of at the very beginning of the ninth century, and an equally ready mode of propagation westwards by caravans or the vessels of the Arabians, who even earlier than this were carrying on a considerable traffic between Canton and the Arabian Gulf.

That syphilis had its genesis in China may be open to question: but certain it is that the Chinese first adopted its mercurial treatment, not only the drugs but even the methods used for ages being practically identical with those most prevalent in the West to-day.

The great controversy, still in progress, as to the merits of this treatment, too, was opened in Far Cathay. One of the last clinical lectures I heard in the Edinburgh Infirmary was a discussion as to whether mercury should be used in the treatment of syphilis or not, and the lecturer, then surgeon in charge of the Lock Wards, while still using the drug, expressed his belief that its efficacy is but small, and its evil effects considerable: we find Tou Hou-ch'ing seven or eight hundred years ago discussing the very same question, answering it most emphatically in the negative, and professing his own ability to neutralize the effects of the mercurial poison in the case of those who already had been subjected to it in course of treatment by other physicians. "I, on the contrary," he says, "am able also to expel the mercurial poison, so that to the end of his days the patient shall not suffer."

Moreover, it is stated in the Golden Mirror of Eminent Medical Authors (1717 A.D.) that, while mercury appears to effect a speedy cure, it merely drives the poison into the bones, whence, after a protracted lodgment, it reappears in the forus that we designate secondary and tertiary. In spite of
the strictures on mercury, however, it has retained its position as a standard mode of treatment both in China and in Edinburgh, and in the former the popular belief is that the salivation is the syphilitic poison flowing out.

As to Chinese methods of using it, we may pass over its internal administration in various forms, but it is noteworthy that it has been extensively used for ages in the form of fumigation and mercurial vapour baths, local and general, just as is most fashionable in some quarters of the West at the present moment.

As an efficient fuming prescription, take the following:—

Lead, mercury, 3 a six candareens;
Cinnabar, olibanum, myrrh, 5 a five candareens;
Dragon's blood, realgar, wood of aquilaria agallo-chum, lign aloe, 3 a three candareens.

(N.B.—One candareen = 0133 oz. avoirdupois, and one mace = ten candareens = 1333 oz. aavor.)

To be pulverized, wrapped up in paper to form a wick, and put in a lamp.

The patient is to be covered over, and while the vapour bath is in progress successive mouthfuls of cold water are to be taken and frequently renewed as it becomes warm. Inhalation is to be through the nose, and the object of the cold water is to preserve the teeth from the influence of the mercurial poison. The treatment is directed to be followed three times on the first day, and once daily afterwards.

To remove syphilitic blotches and for syphilides, alum and rhubarb in equal parts are mixed with water, and rubbed on the affected part, the theory held by many being that secondary and tertiary symptoms are not so much a further development of the disease as the result of the use of the calomel. In fact, as a matter of routine, after cure seems to have been accomplished drugs are taken with the object of driving the calomel out of the system, a usual prescription being a combination of Chinaroot (Radix Smilacis) with Red Pepper (Xanthoxylum Alatum), the rationale of whose action is that the calomel is supposed to combine with the Red Pepper, and so pass off from the system per anum.

Such in outline is the history of Chinese Native Surgery and its present status, culled from the various authors indicated, read in the light of my own experience of the Chinese. The result of my effort to thus bring together in a concise form what is known on the subject is, I trust, to add a not entirely uninteresting chapter to the history of the world's surgery; and its importance lies in the fact that an intelligent knowledge of what has been and is, is a very essential qualification in those who would aid in establishing a new and better order of things.
A Case of Brain Surgery.

By Robert Coltman, Jr., M.D., Teng-chou-fu.

On the 26th of December last I was called in consultation by Dr. P. G. Cornish of Flagstaff, Arizona, U. S. A., to see with him a man who had been severely injured in a fight. We proceeded by railroad to Canon Diablo some thirty miles distant, and were met at the station by the man who had done the injury, with the remark "Doctors I've killed a man I guess, but he deserved it."

Our informant had a whiskey bottle half full in one hand, a plug of tobacco a foot long in the other, and with his trousers stuck in his boots, hat on one side, and bloodshot eyes was a typical cowboy on the rampage. He led us to a section house about a hundred yards back of the station, up one
flight of stairs, and there by the light of a smoking kerosene lamp we beheld a horrible sight. A poor Mexican half sitting half reclining on a rough wooden plank bed, his forehead battered in, his swarthy face and black beard full of blood, eyes black, and swollen as large as hens eggs so that it was impossible to open them. As he could not understand any English we sent our drunken guide to hunt for an interpreter, and while he was gone we washed his face and head. We found he had been struck a frightful blow with the barrel of a Winchester rifle, right on the forehead, making a somewhat slanting wound three and a half inches in length diagonally across the forehead from right to left.

The section boss soon came in to interpret, and the man who was fully conscious was told to keep still while we explored the wound. First washing our hands in a 1 to 1,000 bichloride solution we introduced a finger, each in turn, and came to the conclusion the skull was badly comminuted. That much depression existed, and that an operation was imperative. Our interpreter explained to the man the danger of delay, but he would not hear advice and told us he would not submit to any operation. As we could not return to Flagstaff that night, we secured lodging in the camp of a sheep farmer near by, and after cleansing the wound and applying several layers of wet bichloride compresses left him.

He suffered greatly during the night and at daybreak sent us word to come and do what we thought best. After breakfast we visited him and found him still conscious but in great pain, temp. 101°.5, pulse 100° and intermittent. We at once etherized him and enlarged the wound by an incision from A to B in accompanying diagram, this enabled us to fully expose the injury. As there were several pieces of bone lying loose in the wound we were not obliged to trephine but picked these out exposing the dura mater much torn and ragged. The fractured plate C-D was driven into the brain.
substance causing a linear hernia of mangled brain substance denuded of meninges an inch and a half long. This we concluded was injured beyond repair and taking a sharp knife pared it off along the line of fracture, it weighed perhaps 30 or 40 grains. Then with elevators we succeeded in raising the larger fragment into its proper place. Several spiculæ of bone were removed by bone forceps and then the wound was flooded by a warm 1 to 4,000 bichloride solution, and closed by interrupted suture leaving the bottom of the line A B open for drainage, but covered with a half dozen layers of bichloride lint, the whole covered with waxed paper. His recovery was uninterrupted and on January 18th, twenty-three days after the operation, he was going around the house and yard, as though nothing had happened. Up to that time no symptoms of epilepsy, forgetfulness nor in fact any symptoms of brain injury had appeared. As I left Flagstaff on January 20th, I do not know his subsequent history. His assailant who remained in the room all during the operation in custody of the sheriff seemed much interested in the proceedings, once he remarked "Doctor please don't let the poor monkey die." He was acquitted on the ground of self-defence though from all accounts the attack was made in the pure wantonness of drunken frenzy.

THE TWO EXTREMES.

BY EDGAR WOODS, JR., M.D., T'si'aghiangpu.

There is probably nothing so unsatisfactory to the missionary doctor as the treatment of opium suicides. So many cases cry "wolf, wolf" when there is no wolf, and again neighbors and youngsters to see some fun and how the foreigner will act, will put off for him post haste when a case of suicide occurs. A pitiful story is put up and the doctor thinks there is a life to save and follows the messenger, only to meet with cold suspicious looks on the part of the family and find he is not wanted. A glance round for his messenger and he has cleared out, making the foreigner appear as though he has forced himself upon them. Often when the doctor does attend, it is like drawing an eye tooth to get relatives of the suicide to do what is necessary for the patient. My experience has been that without my native teacher I cannot turn a cog. Two widely differing cases about the worst and best I ever had, I recount.

The last day of the Chinese year there was an urgent call at our gate to come to a suicide. I generally have my teacher enquire into the case to see if it is genuine and whether the messenger is a member of the family, as I have been fooled so often. This time though as the day was fast fading away, leaving just enough light to let us see that the man looked respectable and as he pressed us so eagerly to hurry, we started without any questions. A long walk
was before us, over both forks of the canal, down the street to the east gate, a long stretch through the city, then out the west gate over muddy flag stones and to cap the climax, 50 yards more over a by-path through mud ankle deep. My poor teacher, Li, not having his boots, had a hard time of it and fell behind us. Just as we reached the muddy path, our guide quickened his steps and calling back to us, "Just here it is," he disappeared among a group of straw houses. Several minutes elapsed before Li caught up and we made for an open gate through which a light was faintly streaming. As we entered, a man met us and Li asked, "Where is the man that wanted us to see a suicide." "I don't know" was the reply, but at the same time he lead the way to an open door where several people were standing. We were received in a negative sort of a way and there, on a table was a young fellow about 20 held down by several men. The minute he heard a foreigner was there, a big scuffle ensued, and such swearing and cursing at the foreigner one never heard! Great commotion followed, Li and two or three old women yelled at the patient in no gentle terms and the young men were earnest in their efforts to rebuke, while at the same time they clapped their hands over his mouth to prevent such another explosion. When things had quieted down a little, we asked after our guide but all were as ignorant as babies of him, though we felt morally sure he was behind the partition listening to us at that very moment. They told us the patient had been wild this way for an hour or two and they were afraid he had swallowed opium. The fellow was either drunk or possessed of the devil or both, but certainly exhibited no signs of opium poisoning. Li then proceeded to give a short lecture on the meanness of such treatment, bringing us so far in the mud for nothing and he wanted to know if they were not going to observe the custom and send us back on donkeys or barrows. Several at once professed eagerness to do so, but unfortunately it was so late, they could not hire them. By this time the people began to stir themselves to be polite to us and one man lighted a lantern and said he was sorry they had no conveyance but he would light us home. So we departed and to add to our discomfiture it was lightly drizzling. After entering the city we sent our guide back, our former guide we have never laid eyes on to this day, since he disappeared among the clump of houses. Poor Li was greatly disgusted and disposed to complain, though usually so good-natured, but I tried to cheer him up by telling him that what we did, we did for Jesus' sake and he would appreciate it if others did not; but with no overshoes and wading through such mud it is no wonder he was cast down, even though next day was New Year's day.

The other case, the call came for us a bright sunny May morning. The teacher put the preliminary questions, such as, "Was the messenger a member of the suicide's family?" "When did the suicide swallow the opium?" "What
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for " etc., etc., and getting a satisfactory reply we followed the man down the canal bank. The patient was about 40, had quarrelled, and swallowed opium to spite the other party. He was a Shantung man and his boat friends were much concerned about him. Of course he was lying flat on his back, dozing away, nobody having gumption enough to keep him awake. Indeed rarely if ever have I found relatives or friends exercising the patient to keep them awake. The patient was refractory so that his mouth had to be pried open and the mustard poured down him, after which he was walked about and given copious draughts of hot water. The sun was beating down on us very hot, and being near the floating bridge we had a large audience. Every order the doctor gave was sung out by 8 or 10 people in the crowd and if the friends of the man failed to understand, almost the whole crowd, it seemed, would yell out the directions to them. It seemed like ages before he vomited, but finally a second dose of mustard thoroughly emptied him. Cautioning them to keep him walking and not let him sleep, I took one of the party home with me to bring back a bottle of strong coffee. During the afternoon several of his friends called and were very grateful for saving the man's life, butting their heads at a great rate and thanking me profusely. This is one of only two cases that I can recall where any one returned to thank us.

MEDICAL NOTES FOR NON-MEDICAL READERS.

No. III. Diarrhoea and other Bowel Complaints.

BY S. R. HODGE, M.R.C.S., L.R.C.P. (Lond.)

A medical friend has called my attention to an omission in my previous article. I had intended to strongly recommend an afternoon siesta in the hot weather. Yes, my dear friend, I am deliberately, and with the full possession of my senses, recommending missionaries to take an hour or an hour and a half's sleep under a punkah in the hottest part of the day.* No doubt some will think it a wicked waste of time, but I undertake to say that for the majority it will prove to be a saving of time. Get up early and work in the cool of the morning, but rest during the heat of the day.

The class of complaints to which I intend devoting this and the following paper are amongst the commonest in the tropics, and it is not easy to know the very best way to put the subject plainly before my readers. Perhaps a few general remarks, first, will clear the ground for more detailed ones later on. Remember then that diarrhoea itself is not a disease, it is a symptom, for which we have to seek the cause. It is true that sometimes, unable to find the cause, we have to treat the symptom, but, nevertheless, we should diligently

* Dr. Hodge writes from Hankow.—(Ed.)
seek to trace the cause of the trouble. Next, never make light of an attack of diarrhoea, more especially if it is repeated. Taken early it is, in the great majority of cases, perfectly amenable to treatment (unless the forerunner of some constitutional disease) whilst many a neglected diarrhoea has proved fatal. It is nature's warning of danger within; she is doing her best to get rid of something harmful and we should ever heed her voice. And now remember these three general remarks on treatment, viz., that the first and most important thing in diarrhoea is a good dose of castor oil* (not chlorodyne if you please, my friend!), that the second thing is absolute rest in the horizontal position, and the last thing is cold slop diet in small quantities. A man who knows little more than what I have already written about diarrhoeas will be able to successfully combat most attacks.

The commonest cause of acute diarrhoea is some error in diet. Some undigested material, remaining in the bowel, sets up irritation and nature endeavours to expel it. This she will generally accomplish if left to herself, but a good purge of castor oil (one ounce) or Gregory Powder (1 drachm) will very much help matters. This form of diarrhoea is frequently, though not always, accompanied by a furred tongue and some spasmodic pains in the abdomen. Common sense dictates that for a day or two the diet should be carefully restricted to soups, light milk puddings, arrowroot, corn-flour and such like things, whilst 10 grains of Gregory taken three times a day will soon put the stomach into good condition; and here, I may digress for a minute, to say a few words upon how to take that very nauseous stuff called castor oil. Children will frequently take it very well made into an emulsion with hot milk and drink off quickly, others will take it nicely in peppermint water. For adults the oil may be floated on strong beef tea which has been well seasoned with pepper and other condiments, or brandy may be employed. I prefer the last named vehicle and can recommend the following method: success depends upon attention to detail. Take two tumblers and half fill one with weak brandy and water. Into the second put half an ounce of pure brandy and then thoroughly wet the whole of the inside of the glass with it, which is accomplished by tilting the glass till the spirit runs to the edge and then gradually turning the glass round. The object of this is to coat the glass with alcohol to which the oil will not cling; a gentleman should, similarly, wet his moustache thoroughly with the brandy. On to this pure brandy now pour an equal quantity of water, and in the centre of this carefully pour your oil in one unbroken blob. Taking the weak brandy and water in your left hand, and the oil and brandy in your right, you rapidly drink the latter.

* N. B.—Gentlemen, said a celebrated physician in London lecturing to his students, the first thing in diarrhoea is castor oil, and the second thing in diarrhoea is castor oil, and the third thing, gentlemen, is castor oil!
Medical Notes for Non-Medical Readers.

and at once commence very slowly to drink the former: then lie quietly down. Most people will not taste the oil and I have never yet failed to get a patient (including myself) to keep it down when administered after this fashion. Those who have conscientious scruples about taking brandy can observe the same method with peppermint water.

Worms are a frequent cause of acute diarrhoea and even produce dysenteric symptoms, the ova being taken in with imperfectly washed vegetables or unboiled and imperfectly filtered water. (Take note!) These worms are long round worms, tapering at both ends, and are white or pinkish when passed. In this condition the tongue is generally clean, but not always: still diarrhoea, with a clean tongue, justifies a suspicion of worms. There are no other special symptoms diagnostic of worms (and even this one is by no means distinctively symptomatic) and we can only say that, in the tropics, worms should always be kept in mind in all forms of intestinal troubles. In adults irregular attacks of colic, dyspepsia, vomiting and diarrhoea, often coming on suddenly, and frequently accompanied by much straining; in children fretfulness, picking at the nose, disturbed sleep, with twitchings, irregular motions not unfrequently containing a little blood and even convulsions and other serious symptoms; all these may indicate worms and will justify a trial of santonine. The dose for an adult is 5 grains given on an empty stomach the last thing in the day, and followed by a purge in the morning; this may be repeated once or twice. The quantity of santonine which some people think a child can take is, to say the least, extraordinary. I once heard (I will not vouch for the truth of the story) that one zealous brother gave his child nearly a teaspoonful. I believe the child recovered. Still such an experience is certainly not to be considered a precedent even though this gigantic dose expelled an army of worms (my informant was inaccurate on this point!) Children under 6 will do quite well on one grain, and under 12 on two grain doses. The powder, which is quite tasteless, may be put on the smallest child's tongue with a little sugar. This should be repeated two or three nights and then a good purge given; if a child, or adult can be made to take the santonine in olive oil, this is an advantage, as the oil cannot be absorbed by the stomach, thus ensuring that the medicine is not absorbed before it reaches the intestine. One final word to allay the fears of anxious mothers who may be greatly troubled at the number of worms their child may pass. Cobbold, in his standard treatise on entozoön, gives authenticated cases of 300, 400, 500 and more being passed by children, and every medical missionary is familiar with the quantity a Chinese child will often expel. Such cases are not common in foreign children, but a mother need not be frightened if any of her children, after santonine, should pass half a dozen or more.

(To be continued).
NOTES ON CASES.

Auto-Lithotomy.

By A. W. Douthwaite, M.D., F.R.C.S.

About two years ago a man about 30 years old came to my hospital, with the usual symptoms of a large urinary calculus. The poor fellow was in great distress, and suffered intensely when he tried to walk, so I advised immediate operation. As he was unwilling to be cut, I made an attempt to perform lithotrity, but found the stone so large that when grasped by the lithotrite the instrument would not lock, so it was evident that it could only be removed by lithotomy. The man had promised his friends that he would not submit to any cutting operation, so had to return home, a distance of sixty miles, on foot, to obtain permission, ere he dare allow me to operate. I never expected to see him again, for he was so emaciated by suffering that I thought he would probably die on the road.

Last August, however, he turned up again, looking much better and stronger, but complaining of incontinence of urine. I told him he could not be cured unless the stone was removed, when to my surprise he assured me that the stone had removed itself, and that he had it at home among his curios!

This was too much for my credulity, so I put him under chloroform and made a thorough examination of his bladder. Sure enough the stone had disappeared, and in the space between the left ischium and the anus was a long irregular cicatrix, exactly in the place where the incision is made in lateral lithotomy.

Here, according to the patient’s account, an abscess formed after he reached home, and when it broke, the stone, which he said was as large as a duck’s egg, was expelled from the bladder.

This is the first case of the kind I have met with, or heard of, but there may be others on record of which I know nothing.

Lupus.

In 1889 a Chinese woman named Liu was admitted to my hospital to be treated for lupus, which was spreading rapidly over the upper part of her chest. I gave chloroform, scraped the ulcer, and afterwards applied Ung. Iodi., giving Pot. Iodi. internally.

The disease was arrested, and the patient returned home, but came again the following year in a worse condition than ever.

The same treatment was adopted and again the progress of the disease was checked, but the ulcers never completely cicatrized.
In 1891 I procured a supply of Koch's tuberculin, about which at that
time the civilized world had gone crazy. This I tried on Mrs. Liu, who lived
near my house, and was willing to undergo any treatment likely to give relief.

For three months I continued the injection of tuberculin, in very minute
doses, and at the end of that time every portion of the ulcer, which extended
from the lower third of the sternum upwards over both shoulders, and round
the neck, had healed, and firmly cicatrized. The woman then went to live in
some distant part of the town, and I saw no more of her till last October,
when she again applied for admission into the hospital.

Her chest was greatly disfigured by the brawny cicatrix, which drew her
breasts close together, but there had been no return of the disease in the parts
affected.

On each cheek were large lupus ulcers, and the right lower eyelid was
also affected.

As I had no fresh tuberculin I decided to try a mixture of creolin and
glycerin, from which I had obtained good results in the treatment of leprous
ulcers.

Lint, saturated with creolin-glycerin was laid over the diseased parts every
day, and covered with oiled paper. No other treatment was tried, and in a
few weeks the ulcers had almost healed. When she left the hospital early in
November only a few small scabs could be seen on her cheeks, the rest of the
ulcerated parts being covered with a smooth cicatrix.

As this treatment is easy, free from danger, and withal cheap, it is worthy
of extensive trial in all skin diseases of a tubercular nature.

DANGER FOLLOWING CHLOROFORM ADMINISTRATION.

BY DAVID C. GRAY, M.B., C.M.

Patient, a priest, Ssu Chi by name, aged 21, was admitted to the Hospital
in September last, suffering from a gunshot wound of the left hand and after
a few days' residence consented to operation.

On the morning of the 14th, about eleven o'clock, chloroform was
administered, patient going under rapidly and giving no trouble or cause for
alarm throughout the operation.

Dr. Westwater performed partial amputation of the left hand and the
operation being completed, within half an hour, with no abnormal loss of
blood. The chloroform, which was administered on a folded towel, was
removed some minutes before the dressing was completed.

During the next ten minutes or so the patient's respirations and pulse
were good, conjunctival reflexes perfectly re-established, and he was able to
open his eyes and look about him, although he could not be got to give any reply to interrogations.

His condition now became rather suddenly unsatisfactory. The right arm which was flexed became suddenly rigid, the jaws clenched, the head was thrown backwards, the muscles of the neck becoming rigid and the chest fixed, but nothing resembling a general epileptic seizure occurred.

This condition of spasm lasted for about half a minute and the breathing which had become suddenly shallow, ceased, the face pale and the pulse weak and rapid.

Artificial respiration was commenced, the patient inverted and 30 m. of brandy were injected subcutaneously, this was followed by some improvement in pulse but none in respiration.

The battery was applied, one pole to the chest wall and the other to the region of the phrenic nerve, with at first no seeming advantage.

Hot sponges were applied over the cardiac region, brandy again injected and the battery re-applied, but on any cessation of artificial respiration patient showed no effort at natural respiratory movements.

After the lapse of half an hour natural respiration became gradually established, at first abdominal and then thoracic, pulse speedily improved and in about three quarters of an hour from the time the first alarming symptoms were observed patient could be considered out of danger; at no time were there any signs of lividity.

Patient although not robust appeared in good health and did not take opium. Urine contained no albumen. Heart sounds normal. The points which appear worthy of note are:—

1. The lapse of time between the removal of the chloroform and the first signs of danger.
2. The absolute cessation of all respiratory movements.

IS THERE REAL MODERN DEMONIACAL POSSESSION?

BY THE REV. SIDNEY L. GULICK, KUMAMOTO, JAPAN.

A concensus of non-Christian countries on the above question would be of great value in itself, beside throwing much light on the much disputed question as to the reality of the possession described in the New Testament. It would also give much information as to the actual psychic condition, as to beliefs, fears, etc., of the mass of the inhabitants of the world. This information can be best secured only by and through the missionaries; for to be thoroughly reliable it must be collected by well educated men who are both
Is there Real Modern Demoniacal Possession?

acquainted with scientific forms and methods of thought and also with the people; he must not only be well acquainted with them, but he must also be thoroughly trusted by them. Except the missionaries of the Gospel of Christ, there are few who fulfill all these conditions. For the above reasons, may I ask help in securing such a consensus? Before asking definite questions, the simplest course may be to give briefly the facts as I have learnt them in Japan, which will illustrate what is wanted.

A part of the people of Japan (the ignorant superstitious classes) believe in the actual possession of men and women by foxes, badgers, dogs, snakes, live-men, dead-men, and fierce-gods; each kind is determined by distinctive phenomena, which phenomena are largely convulsive. I have myself seen and talked with persons thus afflicted. They deny that it is a nervous disease; but assert that possession is the cause of the disease; the diseases produced by possession are many, whose cure is procured only by deliverance from the possessing spirit. Prayer and exorcism are the chief means used for deliverance. It is commonly said that these special convulsive phenomena are rapidly disappearing, due it is often added to the progress of scientific civilisation and the decreasing fear of evil spirits. Some cases of cure are told in which the strong will and energetic command of a friend prove sufficient. The occult phenomena of second sight, trance, foretelling events, etc., are also attributed by the common people to possession of some kind. Some persons are said to "use the foxes," i.e., to bewitch others, subjecting the individuals to the control of the foxes. What I have seen leads me to think that ordinary mesmerism or hypnotism may be a sufficient explanation for many of the phenomena, though I do not feel clear that it will account for all. Further investigation is needed before definite conclusion can be reached. I have not heard of any cure attempted in the name of Jesus Christ, although I believe the phenomena to be very much like those described in the New Testament and that probably they demand the same explanation. The questions then I wish to submit to the individual members of the Medical Missionary Association, and to beg for answers are:

1. Do the common people in your field believe in actual possession by evil or animal spirit?
2. Have you yourself seen any of the phenomena of the so-called possession?
3. If so, please describe minutely?
4. In what ways are cures actually secured? by medicines or by exorcising formulae, prayers, faith, strong will?
5. Is the cure ever attempted in the name of Christ? with what success?
6. What special diseases are usually accompanied or caused by possession?
7. Do you believe these phenomena similar to the New Testament demon-possession?
8. Do you yourself believe in actual possession by spirits, or others? and in deliverance, by prayer to and command in Christ's name?

9. Or do you believe a sufficient explanation to be found in the beliefs, superstitions and fears of the people?

10. May the phenomena be partly or largely or wholly explained by hypnotism?

11. Do you know of any one who has made a specialty of the subject in your field? if so, who? (give name and address.)

12. Do you know of any magazine articles or books that throw special light on this subject? (name author, title, publisher, etc.)

I shall deem it a great kindness if the above questions are answered as fully and explicitly as possible. I am aware that I am asking no slight thing of those who are already extremely busy; I would not think of it but for the great value of the light it will throw on the New Testament narratives, as well as on important psychic problems.

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CLINICAL OBSERVATIONS ON SPRUE, AND INTRACTABLE WHITE DIARRHŒA.

BY DUNCAN J. REID, M.B., C.M., Shanghai.

At the last Missionary Conference in Shanghai, it was suggested that it would be a good thing for medical missionaries in different parts of China, to record from time to time, in the Medical Missionary Journal, their observations on the diseases prevalent in the different parts of China. So far as I am aware this excellent suggestion has not been acted on, at least in any systematic way.

Now, there is a disease that one meets with here in Shanghai, and also in the out-ports of China, which would, I am sure, form a very good subject for clinical observation by the members of medical missions in China. I refer to the form of chronic diarrhœa, which usually goes by the name of "Sprue."

This disease (sprue) generally shows itself in foreigners who have been resident in China for some years. It may have begun as an attack of ordinary diarrhœa; but more frequently, I believe, as white diarrhœa, with suppression of bile. When fully established, it gives rise to frequent pale or grey stools, which are usually frothy, often surprisingly copious, and are accompanied by flatulence. The patient often complains of colicky pains, which are usually succeeded by a motion, and are often relieved by it.
After the disease has lasted for a little, and often from a very early period, the patient begins to suffer from irritation of the tongue and the mucous membrane of the mouth, and ultimately the throat; and this irritation is succeeded by inflamed patches on these parts, which may ultimately extend, so that the tongue looks simply a mass of raw flesh. He gradually and steadily loses flesh; the voice becomes husky; and swelling of the lower limbs comes on towards the end.

Now, I have no intention of giving, even were I competent to do so, anything like an exhaustive dissertation on the disease in question. I shall however refer to the different points on which information would be useful, and make such remarks under the different heads as may bear on my own experience of the disease.

Aetiology.

It would be well to obtain as much information on this head as possible. Very often the patient is unfortunately unable to suggest any cause. All that he may tell one is that he began to have diarrhoea at a certain date, and that it went on in spite of treatment. Among the cases I have seen, one or other of the following causes appeared to have been at work:—

1st. Irritative Dyspepsia. Several of the patients suffered from this form of dyspepsia, for some time previous to the onset of the diarrhoea; and in these cases, this form of indigestion and possible cause of sprue, appeared to have been set up by one or other of the following conditions:

(a.) Excess in eating.
(b.) Excessive use of stimulants.
(c.) Insufficient exercise.
(d.) Loss of grinding teeth.
(e.) Constipation.

2nd. Derangements of the liver. I think no one, after seeing the pale stools of a sprue case, can avoid coming to the conclusion, that an imperfect action of the liver is one of the principal, if not the most important cause. Here, in Shanghai, especially during spring and autumn, attacks of suppression of bile with white and usually loose stools are frequent, and I feel sure that these cases, if neglected, may often end in sprue. The "hill diarrhoea" of India, which, in many respects, resembles sprue, if it is not exactly the same disease, begins in much the same way as the white diarrhoea one sees here, namely, by a chill.

3rd. Malaria. From the fact that one generally sees sprue in persons who have been long resident in the East, one is inclined to think that malaria must, to some extent, enter into its causation.

Anatomical Characters and Pathology.

It is so universally admitted by medical men, that it is, in the majority of cases, impossible to cure an advanced case of sprue, in China, that such
patients are usually ordered home before the disease has terminated fatally, and it thus very rarely happens that one has an opportunity of determining the condition of the organs. By most authorities, it is generally stated, that all that is to be seen is a thinning of the coats of the intestine, with enlargement of the solitary follicles of the same, and in some cases evidence of previously existing peri-hepatitis.

If one is to judge from the state of the tongue and mouth, the stomach and the upper part of the small bowel ought to be in a violent state of catarrh; probably coated with mucus; and quite unfitted for either digesting or absorbing. Many of the patients I have seen, suffered from piles, indicating that the portal circulation was impeded. In most of the cases, the liver dulness was normal.

If any one will take the trouble to examine the stools of sprue, under the microscope, he will find that they consist of almost pure cultivations of rod-shaped bacilli. In the specimens I have examined, two forms seemed to predominate. The one a bacillus, with a beaded structure, as if five micrococci had been fused into one long bacillus (length 1-4,000th of an inch, and breadth 1-32,000th of an inch); but the great bulk of the examined material appeared to be made up of a smaller form, which was a bacterium-shaped organism resembling bacterium lineola (length 1-16,000th of an inch, and breadth 1-39,000th of an inch.) The whole mass of the stool seemed to be chiefly composed of these two organisms, which would account for the enormously abundant yeast-like stools seen in this disease. Whether these organisms ought to be looked on as the cause, or the result of the disease, I am unable to say.

Treatment.

As with the other parts of my paper, I have no intention of trying to make this division at all exhaustive. I merely wish to indicate briefly what appears to me to be the proper mode of treating the disease, and to refer shortly to the drugs I have used for this purpose; and then, in conclusion, to give short notes of a few selected cases which seem to bear on the different points I have touched on.

If we are correct in assuming that the action of the liver is at fault; that the quantity of bile is deficient; that the stomach and bowel are in a catarrhal state and coated with mucus; and that digestion is almost arrested, absorption difficult, and also that the contents of the bowel are liable to pass into an active state of fermentation; then it is evident that all treatment must be directed to:—

1. Stimulating the liver.
2. Relieving the catarrhal state and getting rid of the mucus.
Clinical Observations on Sprue, and Intractable White Diarrhoea. 23

3. Giving food that shall be pre-digested, or that shall be as easily digested as possible, and that shall be as little likely as possible to ferment.

4. Trying to arrest any tendency to fermentation.

And after all these conditions have been overcome, we may begin to try to arrest the diarrhoea, if it does not then stop of itself.

To these ends, I shall consider the treatment under the two heads of food and medicine.

Food.

The food, as I have already said, should be such as requires little or no digestion; be easily absorbed; and not be liable to undergo fermentation.

Solid food is, therefore, not, at any rate at first, admissible. Nor is milk, in my experience, suitable. It seems to me to form only hard curds, and to pass on undigested, and this even when peptonised, at any rate in the beginning of the treatment. The food should be given in small quantities and frequently, so as not to load the stomach. It is therefore not sufficient to give the patient general directions about his food, or to simply tell him that he is only to take "light things," but a carefully arranged dietary must be made out, for every two hours from the time he gets up until he goes to bed. This may consist of:—

Soups.

Whey, either alone or thickened with cream.

Beef juice, or pounded raw beef.

Jellies.

Tea and stale bread in moderation.

Some infants' foods answer well. (Nestle's or Benger's).

Vegetables. These are important but must be used cautiously, and only things like vegetable marrow, or cauliflower tops should be given.

Fruit. As a rule no fruit is well borne. Stewed pears or stewed apples are generally liked and may suit.

In the extreme cases where no form of vegetable or fruit is found to agree, then the juice of lemons or oranges may be given in the form of fresh lemonade or orangeade.

As the case goes on and improves, peptonised milk may be tried and sometimes suits well.

Wines and stimulants are, as a rule, to be forbidden.

Medicine.

The two medicines that I have seen do most good in this disease are, salicylate of soda, either alone or combined with tincture of opium; and powder of ipecacuan, either alone or combined with bicarbonate of soda.

The indications were:—

1. To stimulate the liver.
2. To relieve the catarrh and remove the mucus.
3. To arrest the fermentation.

And these indications are as well carried out by these two drugs (ipecacuan and salicylate of soda) as by any that I know. Small doses of perchloride of mercury were suggested some years ago, and have been successfully employed in cases of this disease. I have tried it in one or two cases, but it was not well borne.

Seeing a case of sprue, or supposed sprue, for the first time, I usually begin by giving the salicylate of soda in 15 gr. doses, three times a day, for a day or two. This usually improves the symptoms, and the patient may feel better, especially as regards the distressing symptom of flatulence. Salicylate of soda is a very good hepatic stimulant, and also acts as an antiseptic, and the colour of the stools may therefore be improved. The diarrhoea however, probably goes on as badly as ever.

After a day or two, the ipecacuan may be begun. This drug is also a powerful hepatic stimulant, and has the property of producing copious, loose, rather watery, bilious stools. I usually give it along with bicarbonate of soda.

R. Pulv. ipecac. grs. 15
Sodae bicarb. grs. 10. misce. Signa. One night and morning.

If the patient were very weak, I should only give the ipecacuan once a day, say at bed-time; or if in a still more exhausted state, I should even prefer to try small tentative doses to begin with.

The effect of the ipecacuan is generally to increase the frequency of the motions, which are however altered in appearance, somewhat after the manner of the change that occurs in the stools in cases of dysentery, after treatment with that drug. Notwithstanding the increased frequency of the motions, along with which the patient may lose weight, he usually declares that he feels better and stronger.

After a day or two, i.e. when three or four of the ipecacuan powders have been taken, they may be stopped and the salicylate of soda resumed along with a few drops of morphia or laudanum, two or three times a day; or this drug may be given three times a day, and one of the ipecacuan powders given at night, for a few days longer.

After the case has assumed the character of an ordinary case of chronic diarrhoea, astringents may do good, and of these I should be inclined to try nitrate of silver, or bismuth.

Change of air undoubtedly helps convalescence.

I need not, I think, point out how very important it is in cases of the kind, to watch the effect of treatment from day to day, and that this cannot be done without a careful daily inspection of the stools.
Clinical Observations on Sprue, and Intractable White Diarrhoea. 25

I should not like any of my readers to run away with the idea that I have been describing a sure and infallible way of treating this persistent disease. As I have already remarked, it is admitted by all medical men to be a difficult disease to cure, and it would be a good thing to have more light thrown on its pathology and its treatment. I therefore only give these few imperfect observations and suggestions, as a beginning to further notes on this disease, which I hope to see contributed to the Journal by writers in different parts of China.

Before concluding, I should like to point out, that although I have all along only referred to the disease as "sprue," and spoken of it as if it were a disease as easily recognisable as scarlet fever or measles, I have no doubt that under the name "sprue" are often included diseases which are quite different from one another in their pathology, although to the most careful observer they may appear to be exactly the same disease. On these grounds there may be some who will say, given a case of intractable white diarrhoea, having all the usually recognised characters of sprue, that the final diagnosis is impossible, until one has seen the effect of treatment, i.e., that if the diarrhoea were curable it was certainly not sprue.

Whether this is a correct position to take up or not, there can be no denying the fact, that here in China we have a large number of cases of intractable diarrhoea, with pale stools, and accompanying inflammation of the mouth, and rapid emaciation, and call the disease or class of diseases what one likes, I think it would be well to have all the information on them we can get.

I have added a few cases, which whilst not all cases of sprue, illustrate in some particular the different points I have touched on.

Case 1. This is a good specimen of diarrhoea beginning with dyspepsia due to bad teeth, and which was fast passing into a state, at least resembling sprue, if it was not actually that disease.

Case 2. This was a fairly typical case of sprue of a mild type.

Case 3. This was a case of imperfect action of the liver, with pale stools and is just the class of case that, if neglected, would before long have passed into the intractable form of diarrhoea, and possibly sprue.

Case 4. This was one of dysentery, but the lady had been seen by several competent doctors, and had been declared by them to be suffering from sprue. The symptoms of chronic dysentery and sprue are often very similar.

Case 5. The improvement in this case of intractable diarrhoea, or sprue, under the treatment with ipecacuan and salicylate of soda, was certainly wonderful; and the good effect of change of air is worth noting.
Case 1. Mrs. A...... B......, about 40.

This lady was seen first in the month of August 1889. She had then been suffering from diarrhoea for several weeks, with 3 or 4 motions in the course of the 24 hours. These were clay coloured, and, although loose, were not watery. They were also, at times, frothy, and she suffered frequently from flatulence. She had long had bad teeth, which were much decayed and were covered with tartar. When seen, the tongue was covered with bright red inflamed patches, as were also the gums and the inside of the mouth generally. The tongue was extremely tender and she was thus unable to take anything but the plainest of food.

She was put on a mixture of

R. Tinct. opii dr. 1.
Sodae salicylat " 3.
Sp. ammon. aromat., 4.
Aquam ad oz. 8. misce. Sig. oz. ½ thrice daily.

And at the same time carefully dieted.

Under this treatment she did fairly well, and the tongue and mouth were much improved. But still the frequent motions continued, loose and pale in colour, and she was still much troubled with flatulence and colicky pains. She said, also, that the mixture made her sick, so it had to be stopped. This was in the middle of September.

I then gave small doses of pulv. rhei co., 3 times a day, and digested milk, with soups.

With this she lost the colicky pains, but the motions remained as frequent as ever, pale in colour, and very deficient in bile.

She was next given a mixture of

R. Ammon. chloridi dr. 3.
Aquam ad oz. 6. misce. oz. ½ thrice daily,
with R. Pulv. doveri grs. 5.
Pulv. cretae aromat. grs. 10. misce. One at night.

Under this treatment it appeared as if she were going to improve very much. The motions were only once a day, and solid, and were at times of good colour. The mouth was still rather sore.

However, in the beginning of November, she seemed to fall back again, began to have frequent motions once more, and to suffer from flatulence.

At this time she was put on

R. Pulv. ipecac grs. 2.
Sodae bicarb. " 5. misce. One night and morning.

And for food
Milk, soup, chicken, and stewed fruit, with fresh lemonade to drink. Food to be given every 2 hours.
At the same time the sodae salicylate mixture was ordered every 6 hours.

This treatment commenced on the 12th of Nov. 1889, and under it she improved very much, and a week later it is noted, that "she had two motions on the previous day, both of which were natural in colour and consistence. The tongue and mouth are almost normal in appearance, but the former still feels somewhat spongy. She looks and feels much better and stronger, and has an excellent appetite."

After this, the patient remained practically well, although on one or two occasions she had a slight return of the diarrhoea, accompanied with the passage, at times, of lumps of undigested curd; and a slight return of the irritation of the tongue, but nothing like what she used to have. She was very anaemic.

I therefore ordered Rochelle salts dr. 1 each morning.

And during the day

Tinct. ferri perchlor. gtt. 2 gradually increased until she was taking 10 gtt. thrice daily.

She was taking the same food as before, but had all milk peptonised.

She was also given fruit in the form of stewed pears.

After this, she had for some time, trouble occasionally with her mouth, but, so far as I am aware, has had no return of the diarrhoea.


Seen first on the 28th December 1891. Six months before, he had had, in Manila, what was called by the doctors there "Catarrh of the bowels."

He had had all sorts of treatment, and of late had not been quite as ill as he used to be, but still the diarrhoea went on; two or three motions a day; he had got very thin and weak, and was still losing flesh. The motions were pale, or grey in colour, and had, usually, a sort of scum on the surface. He suffered very much from flatulence. There was no blood in the motions, but at first there used to be a little mucus at times. For some time past he had suffered from an irritation of the tongue, mouth, and throat, so that anything hot or spicy pained him.

He was put on ipecac grs. 15.

Sodae bicarb grs. 10. misc. One powder to be taken at night.

Of these powders he only took three, with the result that the diarrhoea completely disappeared, and the motions were normal in appearance. He then left for Japan, and when there he had a return of the diarrhoea, as the result, he said, of having eaten some beans. He then of his own accord took three more of the ipecac powders, and was all right again.

He returned from Japan on the 18th February 1892, and the note then made, was:—"For the last twelve days he has been very well indeed, and
feels better than he has done for the last six months. He has gained flesh, and has an enormous appetite. The tongue is still rather irritable."

I have made several enquiries about this patient, since he returned to Manila, and am told that he has been quite well.

Case 3. Rev. Mr. M..., age about 30.

Seen 28th January 1891. He had influenza about two months before, and since then had suffered from diarrhoea, with pale stools, and from flatulence. When seen by me he was much emaciated, and the stools I saw were clay coloured and contained a little mucus. The tongue was normal.

After a few days preliminary treatment he was put, on the 3rd of February, on

Pulv. ipecac grs. 4, at night.

And as there was great improvement in the motions, he was, at the end of a week, given cod-liver oil and maltine; and the note on the 18th of February is, that he finds himself quite a different man, and is gaining weight and flesh. The bowels are normal.


She had been three years in China. Before coming out here, and for 2 years after her arrival, had been in good health. About 18 months ago, she had an attack of dysentery. This dysentery began as an attack of ordinary diarrhoea, then loose stools accompanied by mucus, and lastly stools with mucus and blood, and straining. This lasted for about 6 weeks, and then she seemed quite well. She remained quite well for about 6 weeks or 2 months, when she began to suffer from diarrhoea, with copious, pale, frothy stools. She suffered also very much from flatulence. Several doctors told her that she was suffering from sprue, and that she must go home. She had lost weight, inasmuch as she was reduced from 110 lbs. to 89 lbs., and that with thick clothes on.

For the last three days the symptoms had assumed those of acute dysentery, with frequent motions, straining, blood and mucus. Motions 6 to 8 in the 24 hours. She had a good deal of pain in the belly. Tongue was furred, with enlarged papillae.

The following was recommended for food, at intervals of two hours:—

Whey and liq. carnis.
Soup.
Custard pudding.

To apply a fomentation to the belly.

R. Pulv. ipecac grs. vii.
Soda bicarb. x.
Bismuth carb. v. To take one morning and night.

23rd. She retained the powder, and had a good night, sleeping 5 hours.

B. 0 during the night, but 3 times after 5 a.m. with ipecac stools, some mucus,
but no blood. The tongue had quite lost its irritable appearance. Temp. 99.5.

24th. B. 3 during the night. They were watery ipecac motions. As she seemed to have some difficulty in arranging what to take in the way of food, I recommended as follows:—

9 a.m. Whey and liq. carnis.
11 " " custard pudding.
1 p.m. Soup " liq. carnis.
3 " Whey " do.
5 " Tea, toast and cream.
7 " Soup and liq. carnis.
9 " Whey.

Can drink fresh lemonade ad lib.

26th. Had a good night. B. 4 yesterday, no straining, and no blood nor mucus. B. 0 during the night.

29th. B. 1 yesterday, fecal and partly formed. B. 1 this morning formed, and almost normal in appearance. Tongue clean

31st. B. 3 yesterday, ipecac stools containing neither blood nor mucus.

Omit the ipecac powders.
R. Pulv. doveri grs. v.
Sodae bicarb. " v.

Feb. 2nd. B. 0 for 2 days, and she seems stronger.

18th. Has gone on improving, and has been able to be out several times and is gaining weight.

This patient went home shortly after, and was, I believe, pretty well there. I have not heard of her for some time.

Case 5. Mr. R……., aged about 45. Seen first on 18th July 1892. The history given me was, “For the last year he had been troubled with colicky pains in the lower part of the belly. They came on at intervals of a few days, accompanied by diarrhoea with 8 or 10 pale greyish stools in the course of the day. The motion generally came with a rush, and after that he feels better, but very weak for some time after.”

When seen, his belly was distended with wind, tympanitic all over, appetite very poor, and for a long time he had been living on nothing but slops. He said he was so weak, that when he had lain down he felt as if he could never rise again. Heart sounds normal. Liver dulness normal. In addition to the number of times he goes to stool, the stools were so enormous, that it seemed astonishing where it all came from. He said he was sure he passed in the stools far more than he took as food. His usual weight is 150 lbs., but it was then only 105 lbs. The tongue was covered with a thin creamy fur, moist and very irritable.
He was recommended to take Sodae salicylate grs. 15, thrice daily, before meals, and given minute directions about what he was to eat. He was however allowed a fairly free dietary, but was recommended to take little at a time and often.

19th. B. 5 this morning. He had no colicky pain. Tongue clean. The motion that I saw was grey in colour and frothy.

23rd. Says he has been feeling much better since he began with the powder. So far as the diarrhoea is concerned, however, it is as bad as ever. His tongue is better, it is a little furred to-day, but is less irritable than it was. Says he has gained 3 lbs. during the last week. He had a return of the old pain last night, and had to take some laudanum to relieve it. During the night he passed a large quantity of clear urine of light specific gravity.

Hab. pulv. ipecac grs. 15.
Sodae bicarb. grs. 10. misce. Tales 6. One night and morning.

24th. He kept the powder he took last night, and also the one of this morning. B. 15 or 20 times during the night. Tongue is moist and clean at the tip and edges, but is a little furred in the centre.

25th. Had the powders as directed. B. 16 yesterday during the day, but only twice during the night. He says he had a better night than he has had for some time. No pain in the belly. B. 4 this morning, grey and frothy, and containing a good deal of undigested peas.

To continue the ipecac powders, and to take the following mixture twice during the day:

R. Liq. morph. acet. gtt. vii.
Sod. Salicylat gr. x.
Aquam ad oz. ss. misce.

7th August. B. 0 since yesterday. This is the first time that such a thing has happened to him, for many months. He also passed a large quantity of pale coloured urine. He has felt better since he began the treatment, than he has done for many months.

8th. B. 2 this morning, but for 36 hours before that, not at all. He has lost weight during the time he has been taking the ipecac, but at the same time he feels much better and stronger, and can now do things that he could not do before. His face seems to me less pinched than it was.

To stop the ipecac, and to go on with the mixture.

9th. B. 0 since my visit, until this morning, when he had one motion. He had not been for 36 hours before that.

21st. Since I saw him last he has had no diarrhoea. He has a very good appetite, and is taking his food well. In fact it is difficult to satisfy him. The one or two motions he has had were formed. This morning he has had a
little diarrhoea, and has a nasty cough and he thinks he must have got a cold. The motions are bilious and watery.

Hab. pulv. ipecac grs. 15 to-night.

21st. Kept the powder last night. B. 0 during the night, but twice this morning. The motions were not copious, and he had no pain. He feels much better today.

Hab. pulv. ipecac grs. 7½ to-night.

28th. For the last week he has had only one motion a day. All solid or semi-solid. He has felt very well, but is still very thin.

Recommended him to take some maltine.

4th Sept. The state of the bowels continues to be satisfactory. A few days ago he had a little pain in the belly, and colicky pains, but he took a dose of castor oil, and this seemed to put him all right. He can now work and walk about, without feeling fatigued as he used to do. He has, however, to be careful, as his bowels are easily upset, after which he has one or two loose motions.

Recommended him to take a trip to Japan.

15th Nov. 1892. He returned from Japan about the beginning of this month. He says he had a little diarrhoea occasionally, when he was in Japan, but it is now quite gone. He gained 32 lbs. during the time he was away (weighing 98 lbs. when he left, and 130 lbs. on his return).
In the last number of our Association Journal, we stated that we would as time and opportunity offered, recur to the research and medical progress of the past year, as faithfully recorded in the pages of the volumes of the Annual of the Universal Medical Sciences, adapting it in as far as we are able to seasonable necessities. As it is not difficult to forecast in the near future perplexities regarding the treatment of diarrhoeal diseases, it will not be out of place to recapitulate something of the etiology of cases of the summer diarrhoea of children, with perchance an illustration or two and suggested lines of treatment.

In the first instance comment is made with regard to the strong evidence of the bacterial origin of most cases of summer diarrhoea and the tendency to attribute too much to the direct action of micro-organisms, and to ignore many conditions, which are also concerned in the production of the disease. "Germs flourish only under favourable conditions, the most favourable of which is an undigested and decomposing fluid mass in the stomach and intestines." Hence undigestable food, overfeeding, by leaving an undigested residue, or anything which diminishes the digestive power, is a predisposing cause of the disease. The discovery of the germ renders our knowledge exact and positive where it was before uncertain and theoretical, and furthermore we have learned the importance of giving greater attention to the general dietetic and hygienic management of our cases.

We are told that Hue, of Rouen, reports some interesting observations, made during a severe epidemic of cholera infantum, in a ward containing no child over 10 years old. No breast-fed child was ill, the victims all being among those fed on cows' milk. This milk was obtained from two cows, well cared for, and every care was taken of the various vessels in which the milk was placed. The disease began in from one to four days after birth, and was very fatal, death occurring in from twenty-four to forty-eight hours. The milk was first boiled, without effect upon the epidemic. It was then sterilized, the ward was cleared and thoroughly cleaned, and the walls washed down, when the epidemic at once ceased. Lactic acid was freely used, without any apparent result. Saint-Philippe calls attention (Journal de Médecine de
Bordeaux) to the close relationship existing between the intestinal canal and the skin, and believes that prolonged baths at too low temperature may be the cause of digestive disturbances which may lead to diarrhoea.

Passing on in review, treatment is now entered upon, and it is remarked with some degree of truth that "the writers seem to be far less positive regarding their ability to feed weak and delicate children than they were a few years ago." And it is admitted that theoretically the difficulties have been largely overcome, inasmuch a food can be prepared, chemically, to be almost identical with breast milk, yet it is most uncertain in its action, sometimes acting admirably and sometimes being entirely rejected. Blackader (Montreal Medical Journal) attributes part of the failures to changes which take place in milk during the process of sterilizing, he recommends partial sterilizing thus rendering it more readily digestible. He suggests that if the Arnold sterilizer is used the process should be continued but twelve or fifteen minutes, cold water being placed in the pan at first. Soxhlet, in the course of some interesting remarks upon modifying sterilizers so as to make them more simple, points out one fact which must not be forgotten, viz., that though sterilizing accomplishes but one thing—the destruction of bacteria—it may render the milk less digestible. When fresh milk can be obtained it should not be resorted to. When employed the same rules must be observed both with regard to dilution and preparation as for unsterilized milk. He believes that it should always be boiled when digestion is imperfect. As in former years, the use of milk in the more active stages of diarrhoea is disapproved by most writers, and in the first stages, especially if the onset is sudden and severe, no food whatever is advised for many hours.

Water may be freely given, unless there is excessive vomiting, or weak brandy, and water, chicken-broth, or barley water. When milk is begun it should be largely diluted, 1 part being used to 8 of water, the strength being gradually increased. Cream well diluted, is sometimes tolerated better by the stomach than milk. Other foods more commonly referred to are meat broths, meat juice, and white of egg.

With regard to medicinal treatment, though we note that the pharmacopeia is more or less generally included, little has been said of Carbolic Acid Resorcin and Naphthalin. Bichloride of Mercury is still used but is on the wane. Faith in drugs is unquestionably decreasing while more reliance is placed in hygienic and dietetic measures, and over-drugging is probably less prevalent than in former years.

The learned editor (Dr. Sajous) is of opinion that the general plans of treatment in ordinary cases of dyspeptic diarrhoea and acute enterocolitis, as described by various writers, while varying widely in details, are surprisingly similar. At the outset, even if the case is first seen after several
days of illness, an evacuant is given. For this purpose rhubarb, a saline laxative, castor oil, or calomel is commonly employed. Calomel is probably more generally selected than either of the other drugs. It is administered either at a single dose, or in divided doses frequently repeated. By the latter method \(\frac{1}{10}\) or \(\frac{1}{4}\) grain is given every half hour or every hour until 1 grain has been used.

Thoroughly tritivated with sugar of milk and administered dry on the tongue, either as powder or compressed tablet, it will be retained and not efficiently when the stomach is too irritable to tolerate any other drug. By some the calomel is continued in the later stages, a minute dose being given several times a day. The evacuant is followed by bismuth, acids, alkalis, and, perhaps, an antiseptic. Opium is used by a majority of writers, and, when administered rationally, is an agent of the greatest value. It should not be used until decomposing matter has been removed from the alimentary canal. When the passages are small, infrequent, and of bad odour, it is decidedly contra-indicated, and it should not be pushed to narcotism in any case. It should never be combined with the ordinary diarrhoea mixtures, which are usually given at short intervals, but should be administered alone, and at intervals varying with the symptoms.

Saint-Philippe denounces the use of opium even in small doses, and believes its effects are far worse than those of diarrhoea—the majority of writers who have used opium with proper discrimination do not share these views. Salol is recommended by Moncorvo in the diarrhoea of marasmic children. It may be given in daily doses, varying from \(2\frac{1}{2}\) to 20 or 30 grains. Others again write disparagingly of the drug.

Several reports have been made throughout the year with regard to the action of lactic acid, and some insist that its use should be restricted wholly to green diarrhoea. We are in accord with what may be almost a consensus of opinion, namely that in some cases, it may have proved of value, but on the whole it is uncertain and unreliable. It may be recalled that it should never be given immediately after the meals as it oftentimes causes vomiting, and the coagulation of the milk into solid curds.

Antipyretics find few advocates. A prolonged temperature, ranging so high as to demand antipyretic treatment, is met with in but a small proportion of cases. An attempt at reduction of temperature by sponging and by the removal of decomposing matter from the intestinal tract, and the prevention of further decomposition by irrigation, is far more natural than the administration of antipyretic drugs. Harrington (Omaha Clinic) speaks highly of acetanilid. He employs it in doses of 2 to 4 grains for children from 1 to 2 years of age, to be repeated every four hours, combined with a full dose of whisky.
Antipyrin has been proposed as a substitute for opium for the relief of pain and nervous symptoms, and is, no doubt, in some conditions, a drug of considerable value. Muselli (Journal de Médecine de Bordeaux) has used it in diarrhoæal conditions, but has observed no constipating effects—though some have not been fortunate in its use. Saint-Philippe speaks of it in the highest terms. In suitable doses he has never seen it act badly, even in infants. Mackenzie (Chicago Medical Times) advises arsenic when the passages are large and greenish, the tongue clean, with a bluish hue, with incurved tip and edges. For haemorrhages and bloody passages oil of turpentine is highly commended especially by W. V. Wilson. He combines it with opium and sometimes with bismuth. Sulpho-carbolate of zinc is claimed to act as an intestinal antiseptic, sedative to the stomach, antispasmodic, and astringent. For vomiting creosote naturally finds a number of active advocates. Harrington administers $\frac{1}{2}$ of a drop, every thirty minutes in water or elixir of pepsin. Wilson has the creosote triturated with bismuth and sugar of milk. He also recommends a solution of carbolic acid and lime water as a most soothing combination, which quickly checks vomiting when there is fermentation of food. Fowler's solution is said to be serviceable in vomiting with profuse watery diarrhoea, the dose being very small. Mechanical treatment in as far as stomach-washing and irrigation of the colon are touched upon, has received but little attention during the past year. The value of both procedures is too well established to admit the supposition that they are falling into disuse.

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PRESIDENTIAL ADDRESS.

To the Members of the China Medical Missionary Association.

Dear Brethren:—

Having elected me to the post of President of our Association, it is my pleasant duty to address you, thanking you for the honour you have conferred upon me. I cannot make promises as to what I shall do in return for this honour, and to show myself worthy of your confidence, beyond assuring you that I shall continue to do all I can to advance the interests and urge the fulfilment of the objects of the Association at the head of which you have placed me. But although the President is the nominal head of the Association, the Editor of our Journal must of necessity be the link which binds us all together. He and the Secretary and Treasurer, do most of the work connected with the management of our Society, every member of which should do his utmost to aid them by doing heartily whatever service he is called upon to render.
Dr. Mathews is a busy man, like the rest of us, and those of our number who have survived the ordeal of getting a book through the press in China, know what a strain it must be upon him to edit in such an admirable manner the "China Medical Missionary Journal." Moral: Respond promptly to his requests for articles!

But our raison d'etre as an Association is not merely the enrolment of a number of men into an aimless society, and our Journal was not intended to be a mere record of interesting cases and successful operations. These have their place, and are very helpful, but we aim at something higher and of more permanent value. On us devolves the task of investigating many subjects bearing on the welfare of the people among whom we dwell, and of enlightening them on many matters about which they are ignorant.

We have to sift the Chinese Materia Medica; to find out and test the therapeutic resources of the country; to introduce modern science in place of superstition and magic; to train students, and educate them in all that constitutes the science and art of medicine and surgery; to prepare books, which in course of time shall replace the accumulations of ignorance upon which for many centuries Chinese medical practice has been founded; and above all, to lead men to God; to tell them of a Saviour's love, and to inculcate by precept and example the "Enthusiasm of Humanity," the spirit of our Divine Master, who "went about doing good."

It was in order that we might help one another to the attainment of these and other objects that our Association was formed, and for which it continues to exist. The pages of our Journal show that much has been accomplished during the past six years, but that is only an earnest of greater things to be done in the future.

Most of the senior medical missionaries are in charge of old established hospitals, where the daily routine of work requires all their strength and energy, but we look with expectant confidence to our younger men to carry on with vigour the work already begun.

At the meeting of the Association held in Shanghai in 1890 several committees were appointed to undertake the collective investigation of various diseases; to collect information on materia medica; to prepare a vocabulary of medical terms, etc.

These committees, as such, have proved conspicuous failures, but individual members of them have done and are still doing good work. I have in my possession a list of terms compiled by our indefatigable confrère Dr. Kerr, and I believe others are being compiled by members of the Committee on Nomenclature. Work of this kind must of course be very slow, but it is satisfactory to know that it is being done, and that in due time the lists will be published.
This brings me to another subject which I have long wished to see broached. The initiation fee of one dollar and the annual payment of two by each member of the Association, has created an ever-increasing fund, for which there has thus far been no use; and many are asking, "For what purpose are we required to pay this yearly subscription?"

On referring to page 212, Vol. IV of the Journal, I find that it was decided at the Association meeting in 1890 to use the "Dues" collected for defraying the expenses connected with the committees then appointed.

Such being the case, I think it will meet with general approval if we authorize the appropriation of a portion of the fund referred to for the purpose of printing Dr. Kerr's "Vocabulary," and other lists of terms which may afterwards be presented for the approval of the Association. These lists should be returned to me, as "Chairman" of the Committee on Nomenclature, as soon as possible, with such corrections and suggestions as may be considered necessary, and thus we shall in the course of a few years, get together the material for that great desideratum, a "Dictionary of Medical and Scientific Terms," without which the confusion which now exists in the terminology of translated books is unavoidable.

My worthy predecessor in office Dr. Lyall, refers in his valedictory address to the need of occasional conferences, and I hope the officers of the Association will be able to make arrangements ere long for at least one such meeting.

The Association shall not fall asleep if I and my colleagues in office can keep it awake, and although we must not despise the day of small things there is no virtue in being content with our present little attainments, while such unlimited possibilities lie before us.

A. W. DOUTHWAITE.

Chefoo, 15th February, 1893.

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The Right Rev. the Bishop of Massachusetts,
Phillips Brooks, D.D.


The Church of English-speaking people has sustained a heavy loss in the death of "PHILLIPS BROOKS." "A man of the broadest mind and wisest culture (consistent with orthodoxy) the American church has ever known. His influence was great and growing greater every year." "Telegrams from England have reached this country testifying that kingdom's deep interest in this great man; great not as a student, or theologian, or mere orator; but as a man who impressed his fellow-men with great thoughts of God and Christ; bringing
God nearer to men and lifting up men to God. A man to whom nothing was
great save God and Christ; that he thereby might enter upon the greatness
and blessedness (Southern Churchman). Then the Churchman repeating what
he was not tells us what he was. He was a man; and his manhood was so totus
teres atque rotundus; so altogether smooth and round, of its kind, and in its
manner; he was such a knight of Prince Arthur's Round Table, that this
American people weep and lament for him, and American (and English)
churchmen pray:

"Eternal rest grant unto him, O Lord.
And let perpetual light shine upon him."

OFFICIAL NOTICES.

The following have been duly elected members of the Association, viz.,
Toy Walter, B., Beattie, D. A., Bliss Ruth, Halverson, S. L., Bliss, E. S.
and Fahmy, A.

Election of Delegates to represent the Medical Missionary Association of
China at the Eleventh International Medical Congress at Rome.
September 1893.

Notice is hereby given that Dr. B. C. Atterbury, who is now in the
United States, has been nominated to attend the above mentioned Congress,
so that members of the Association are therefore requested to vote or com-
municate with the Secretary in reference to this matter. Elected delegates
who intend to read papers at the Congress are reminded that they must write
and inform the Secretary-General, Prof. E. Maragliano, Istituto di Clinica
Medica, Ospedale Pammatone, Genova (Italy), stating their intention and
notifying him of their subject.

S. R. Hodge, M.R.C.S., L.R.C.P.,
Hon. Sec., Hankow.
NOTICES OF BOOKS.

We have received a booklet entitled " A Treatise on Fevers," written by Dr. Douthwaite and " designed for the use of non-medical missionaries residing in the interior of China." Although the author is " strongly opposed to clerical missionaries dabbling in medicine " yet his common sense recognises that there is a real need for help to those missionaries who " are frequently compelled by circumstances to undertake the treatment of the most complicated cases of sickness." Indeed from this point of view there is little but praise to be given. The introductory remarks are good but he might suffer some alterations. Sun-flowers, which are plentiful in some parts of China, might be added to the list of drainers of the soil— the remarks on temperature might be supplemented by a few words on the temperatures of children, the fruitful source of untold anxiety to young mothers—surely every effort should be made to do absolutely away with closed drains running through a house, and if such efforts are unsuccessful would not the safer advice be leave the house at once. We would emphasize the remarks on the washing of vegetables. We are glad to see that Dr. Douthwaite is neither afraid of punkahs nor cold baths in the treatment of fever. There are three remarks on the general management of fever cases we would like to make: (1). More accurate directions should be given as to the quantity of food a fever patient should take—most amateur nurses overfeed. (2). It would be useful to point out that in all feverish conditions, except such as preclude any moving of the patient, the use of two beds, one for day and one for night, adds greatly to the comfort of a patient, and that in chronically feverish conditions, or in malarial fevers which do not speedily yield to treatment, a change of air is the best of all medicines. (3). The routine recommendation of opium for sleeplessness, irrespective of its cause, is, in our opinion, strongly to be condemned and is the one unfavourable criticism we have to pass. Surely the directions in disinfection of clothing are, to say the least, questionable. When dealing with such a virulent poison as that of scarlet fever the only safe thing to do, when clothes cannot be disinfected in a disinfecting oven, is to burn them. To sprinkle with a 5 per cent solution of carbolic acid is playing at disinfection, and though destruction may seem expensive, it is infinitely cheaper than a recurrence of the disease which may cost a valuable human life. To simply tell a layman that the diet of typhoid " should consist chiefly of milk " is not much help to him—quantity, frequency, and directions how to take the milk should all be added. Would not hot irrigation of the intestinal canal with a 1 per cent solution of creolin be a better treatment of the diarrhoea, than lead and opium? But we mention these things in a
friendly way, and only with a desire to add to the value of a little book which will, we trust, be an untold blessing to many a lonely missionary.

S. R. H.

PRELIMINARY NOTICE.

We are indebted to the eminent publishing firm of W. B. Saunders of Philadelphia for the following works which arrived in time but for acknowledgment only, viz.:

' A Manual of Medical Jurisprudence and Toxicology', by Henry Chapman, M.D., etc., etc., with thirty-six illustrations. Price $1.25.

'A Manual of Practice of Medicine', by the same author, divided up into several sections, each section being prefaced by a chapter on general symptomatology.

'An American Text-Book of Surgery', by a collaborative staff of thirteen writers and edited by WM. W. Kean, M.D., LL.D. and J. William White, M.D., LL.D. Price, cash—$7.00; sheep $8.00; half Russia $9.00.

Notes on the Newer Remedies, their therapeutic applications and modes of administration by David Cerna, M.D., PH.D.

'The Scientific and Industrial Magazine, edited by John Fryer, LL.D., Shanghai.

We have before us the number for the present quarter. It begins with a most elaborate account of the World's Columbian Exposition—giving a description of the buildings with 14 illustrations so as to have a picture of them before our eyes as well as before our minds. After that follows the Rules and Regulations. Then comes a detailed account of the fourteen departments:—Agriculture, Horticulture, Machinery, Electricity, Transportation, Fisheries, Woman's Work, Mines, Forestry, Fine Arts, Manufacture and Liberal Arts, etc. After this follows more Rules and a great mass of miscellaneous notes covering altogether some 50 pages which make up the half of the whole number. The other half is occupied with Zoology very fully illustrated with beautiful illustrations of Birds, with Notes on the Investigation of the Causes of Crime, etc., making it a very interesting number.

The Chinese note tells us that the Editor is going to discontinue issuing the Magazine for a twelvemonth as he himself intends going to the World's Fair. This number also completes the seventh volume. We very heartily congratulate the readers on getting such a useful Magazine for young China. When they begin to study Western methods they will find these volumes of immense service to them for they are not only beautifully illustrated [but also very thoroughly explain very many subjects.]

T. R.


This is a useful practical publication and one we thoroughly recommend to our friends throughout the country. The Publishers' notice convey their thanks to Dr. Douthwaite 'for advice and material' and suggest that "further help from him and other medical brethren will be much appreciated and utilized in the improvement of future issues." The contents table reads thus:—

1. Diary with Dates of Chinese Festivals, etc.
2. Register of Dispensary Patients.
3. Vaccination Register.
4. Obstetric Register.
5. Drugs, Instruments, etc. wanted.
6. Table of Doses.
7. The Principal Poisons and their Antidotes.
8. Table of Corresponding Degrees on the Thermometric Scales of Fahrenheit, Reamur and Celsius.
9. Average Frequency of the Pulse.
11. Obstetrical Tables.
12. Postal Rates.
The Missionaries’ Anglo-Chinese Diary for 1893.

A companion work to the preceding and issued by the same enterprising “Mission Press” and as its name implies is for the missionary pur et simple. Graceful acknowledgment is equally made to those who have assisted in its compilation. The Publishers amid their many labours are to be congratulated upon the issue of this useful unpretending series. The subjoined will give an idea of ‘Contents’:—

1. Diary with Dates of Chinese Festivals.
2. Stations Visited.
3. Enquirers Examined.
4. Admitted as Candidates for Baptism.
5. Baptisms.
7. Funerals.
8. Suspended.
9. Excommunicated
10. Restored to Communion.
11. Discourses Delivered.
12. Days Spent in Itinerating; Distances Travelled; Cost of Itineration.
14. Books Sold, etc.
15. Postal Rates.

We beg to acknowledge the receipt of a most interesting brochure “The Physician; His relation to the law, and the legal rules governing the collection of his Fees.” By H. G. Blaine, A.M., M.D., etc., Toledo, Ohio. Dr. Blaine has given us within the space of 46 pages a fund of most useful information, to which we hope to refer later on. Dr. Main’s Annual Report of the C. M. S. Hangchow Medical Mission for 1892 accompanied by Hospital Notes by Mrs. Main comes equally too late for anything other than courteous acknowledgment.
HOSPITAL REPORTS.

CHURCH OF ENGLAND MEDICAL MISSION AT PEKING.

We are glad to note the growth of this new work as reported by the physician in charge of it, Dr. A. Marston. She writes as follows:—“Our medical work was commenced in the summer of 1890 by opening a dispensary for women and children in the mission compound. As it was entirely a new enterprise, and the doctor herself a new comer, with difficulties of language, etc., to overcome, progress was rather slow at first, and the want of suitable premises was a great drawback. The year 1891, however, showed distinct advance. Thanks to the liberality of friends a good sized property, close at hand, was purchased for the medical mission. The services of Miss Parsons were also obtained as dispenser, and a young native Christian woman was placed under training as assistant. The new dispensary was opened in October of that year, and the attendance of women and children has increased steadily since, though with fluctuations, owing chiefly to inclement weather. Since the commencement of the work the number of patients has been as follows:—

Out-patients (new cases)...... 2,000
Attendances.................. 4,000
Visited at home.............. 114
Number of visits paid........ 270

Thirteen women and children have been received as in-patients, but it is impossible to do much in this department of work with our present buildings. There have been some accessions to the Church, and a considerable number of the patients are present at the Sunday services, from time to time.”

MEDICAL WORK IN THE SOOCHOW DISTRICT.

Dr. Park in his Report of Work in the Soochow Hospital says:—

Last year I prefaced the hospital report by a few remarks rejoicing over the fact that it was once more, for the first time since 1884, to be signed by two foreign physicians.

This year alas! I am once more left to sign it alone.

After remarks on country work, he speaks of the wider reputation gained by the hospital, and gives an interesting account of one of the causes, from which we make full extracts:—

There are said to be 2,648 “official residences” in Soochow, occupied by expectant mandarins, to say nothing of the scores actually in office, and during the ten years the hospital has been established here, I have often wondered how it was that nothing ever happened to any one of high rank to cause them to turn to the hospital for aid and thus publicly acknowledge its existence and merits.

The something, happened this year, not to the person of the high mandarin himself, but to some one whose life or death involved his official existence, and the impression made by the cure was the same as if it had been performed on his own person.

A nephew, who stood in the place of a son to the commander of the Governor’s troops in this province, had a falling out with his uncle’s aide-de-camp, and calling in assassins to his aid, undertook to kill the man one night in May, as he was returning from a bath house, accompanied by a single attendant and unarmed.

They fired two shots at him with pistols, but these failing to take effect, they cut him down with swords and then, as he lay on the ground, hacked his head to their hearts’ content and left him for dead. The attendant fled and reported what was going on, and
runners from the YamSn came and carried the unfortunate man home, and sent post haste for the foreign doctor. I found him in a room, the doors and windows of which were closed tightly to keep out the air. The air was so bad it made my head ache to stay in it 15 minutes, and in the midst lay the poor man on a couch, tossing and turning in a raging fever, and complaining of pain in his right hand, which was dangling at the wrist, and which he was holding up and moving to and fro in a way most pitiful to see. I made as thorough an examination as I could under the circumstances, and then retired to the reception room to think. I knew if the man died in the hospital it would be all the worse for the hospital, but on the other hand, as long as there was life it was my duty to do all I could to save him, and leave the result to a Higher Power.

Examination at the hospital revealed eleven wounds. Five were across the top of the head, ranging from three to six inches in length, all of them to and into the bone, and one of them quite through to the dura mater, though fortunately neither membrane nor the brain were injured. Several of the wounds were in slanting directions, and when the sword struck the skull, it clipped up great pieces of the bone. One large skin flap was turned down over the forehead almost to the eye, and there had been no effort to replace it. A long cut extended from the left forehead across the bridge of the nose, splintering it somewhat, then through the corner of the right eye and down on to the right cheek. Three great gashes were on the side of the neck, and as the man was quite fleshy, they had gaped open, one of them to the extent of at least four inches. One of these cuts also extended through the helix of the right ear. There was a thrust into the left elbow joint striking the head of the radius, which could be distinctly seen with the mark of the sword upon it. The most painful wound of all, however, was the one at the wrist of the right hand. As I have already said, the hand was hanging down. The wound was on the back of the hand and the sword stopped just short of the arteries, else the man never would have been seen alive by me. It was almost exactly in the joint, only a small piece of one of the bones forming the joint being chipped off. We cleaned the patient up, removed dead bones, replaced skin flaps, put the arm up in splints, dressed all the wounds with antiseptic gauze soaked in creolin oil, relieved the pain with morphia, reduced the fever with quinine and soon had the satisfaction of seeing our patient begin to improve. On about the third week the anticipated trouble with the hand began. The wound had about filled with granulations, but some pus managed to filter down among the tendons of the hand and arm and set up an inflammation. Failing to subdue the inflammation, I decided upon a counter opening and drainage. This the patient and friends would not hear of, and I was debating the point of telling them he might go if they would not let me treat the case as I saw best, when they proposed a solution of the difficulty; I should go on treating the wounds and they would have a native doctor to treat the inflammation. His treatment consisted of cold poultices of green herbs pounded to a pulp, with an occasional steaming over a bowl of a hot decoction of grasses, followed by spraying the parts with “sam shu,” the spray being formed by the doctor's lips. The poultices were renewed every morning and as, after a time, merely having them pounded, did not seem to make them as effective as they might be, he sent for his pupil and made him sit up all one night and chew the herbs for next morning’s poultice. He also sent for this same pupil one day after the pus began to escape, and made him try to draw it out with his mouth.

Theoretically this ought to bring the pus out in abundance, but as I saw it, it was a failure; pump he ever so hard he could only get out a very little. After a time the
poultices caused so much irritation of the skin, I had to have them stopped.

Progress was slower than it would have been with proper drainage, but in the end the hand made a very good recovery. The elbow never gave any trouble and got well without any stiffness whatever. The wounds on the head, neck and face healed as rapidly as we could expect, and though they left large scars the patient manages to hide most of them with his hat, collar, and a pair of tremendous spectacles.

As soon as we felt quite certain the man was out of danger, we sent to the General for a hundred dollars for the hospital, and the hundred dollars came. By and by a Chinese pay-day came round, and we sent for another $100 and got it too.

Then as I was leaving for Japan he made me a personal present of $40.00, and the day I started sent me an official document conferring upon me the honorary mandarin button of the 5th rank and appointing me honorary official surgeon. I asked him to confer a mandarin button upon my assistant, Dr. Dzung, who had helped me so faithfully with the case, and while I was in Japan he complied with that request also.

Report of Nanzing Dispensary.

We give below extracts from the above report of work carried on by Mr. C. K. Marshall in connection with Dr. Park's hospital in Soochow.

Nanzing clinic days are only nine in a month, so as to free myself for country work the rest of the time. In my trips to the country the patients always come on boat for treatment and drugs, and in the boat I talk to them about Jesus as their Saviour. On several occasions I had patients come on the boat in the evening for treatment, and I would talk about Jesus, and they listened till late in the night before they would leave. Several patients told me they were praying to the true God and expressed their desire to be saved through Jesus.

I am glad to report that God is opening the way amongst the higher class. I have been invited to their houses to talk about the foreign drugs, and always talk about the foreign doctrine. Some of the wealthy have come to the preaching also, and have promised to help the dispensary by giving money to buy drugs. I have received from three families here $44, and would have got more, but many did not wish to give for fear the money would go towards renting chapels and opening schools. So they prefer to wait and see how I will conduct the dispensary, but many are anxious for a foreign doctor who will stay amongst them. This is very natural, for the drugs and much of the treatment are from foreign countries, and they wish to see the dispensary carried on on a larger plan. I hope the time is not far off when the Board of Missions will send a doctor here. There are a great many towns near here, where profitable medical work could be carried on.

G.

Doshisha Hospital and Training School for Nurses.

Sixth Annual Report.

Kyoto, Japan.

We are happy to extract from the above report some facts about the earthquake sufferers. As soon as information of the great calamity of October 28th was received a passport was applied for by telegram for permission to take a corps of physicians and nurses to that region. On its receipt two days later we started with a full supply of medicines, surgical appliances, dressings, etc., Dr. Buckley taking full care of the hospital in our absence. President Kozaki preceded us by a day, and arranged as far as possible for our coming. We were cordially received by government officials, and entered upon service at once. We were soon joined by Dr. Kawamoto of Kobe, and later by Rev. Mr. Clark, of our mission and by four of our Doshisha College students. A large room in a school-house, one of the
very few buildings remaining in the city that could be safely occupied, was assigned us for service; school desks, placed together and covered with mats, served as tables; the large yard in front as a waiting room; while straw mat pavilions made admirable hospital wards. The brief service was heavy and the injuries treated were of exceptional severity. Fractures, dislocations and flesh wounds predominated. These latter were especially severe about the head, face and back, and having, in most cases, received no attention, were in a filthy and dangerous condition. Kindness and sympathy characterized the attentions of the well to the injured,—the latter being brought on litters, in such numbers that by ten o'clock in the morning, the common clinic yard and the street in front of the building, would be well filled with the sick and their friends. The patient submission of the injured, their courage in suffering, and their confidence in and appreciation of the service rendered, contributed much, toward sustaining the members of the different corps in the difficult performance of their work. Earth vibrations continued during the time of the service, as many as sixty-six being recorded in one day at the meteorological station at Gifu, but they did not interrupt the work of our corps, though at night they sometimes sent us hastily into the yard. It was a somewhat novel experience to conduct surgical work when, in the midst of an operation, patient, surgeon and nurse would find themselves shaken and separated from each other by the strong earth vibrations, while among the less injured patients and friends there would be a general stampede for the door."

MEDICAL NOTES.

Koch's tuberculiu, of which so much was expected when preparing our last report, I have abandoned in the treatment of pulmonary phthisis, the results in some cases showing it to possess even when used with the utmost care and in small doses, alarming capabilities for harm. Some of our cases, steadily growing worse under its influence, began to improve when the tuberculiu was abandoned and a different line of treatment pursued. During the year, as previously, I have practised, in some cases with gratifying results, intra-pulmonary injections, the long needle made especially for this purpose conveying the medicine directly to the pulmonary cavity. The object aimed at, both by injection and by treatment, has been to favor fibrous hardening of diseased lung tissue. I have recently, in the case of a cavity communicating with a bronchus, alternated these injections with the new germicide, the peroxide of hydrogen, with encouraging result. About 28 per cent of all the deaths in Japan are due to tuberculous disease.

The treatment of Kakke (Epidemic Multiple Neuritis) has continued so satisfactory during the last year as to merit notice in this report. Not a case of death from this disease has occurred in my practice now for five years, though during this time our large Doshisha College has passed through two epidemics (one severe) of this affection, and three cases have been brought into the hospital in the last stages of the disease ("shōshin" commencing heart paralysis) and from which the Japanese physicians predicted certain death. The treatment pursued is, in general, soda salicylate combined with spirits ether nitrate, and potash acetate if the kidneys are inactive, with strophanthus if the heart is weak, and with sodium bromide if labored breathing and rapid heart beat show that "shōshin" is beginning. With these remedies, and with the avoidance of rice from the dietary, and a change, in certain chronic cases, from the plain to a moderate altitude, I now approach the treatment of kakke confident of success.

I am not aware that this combination of treatment, with the prominence given to sodium bromide in "shōshin" is em-
ployed by others than myself and a few of my medical friends to whom I have spoken of my experience. I therefore give it notice in this report.

"G."

THE ANNUAL REPORT OF THE MEDICAL MISSIONARY SOCIETY’S HOSPITAL. 1892.

We subjoin a few extracts from the following:

"The evangelistic work has been carried on as usual, the chapel being always well filled for daily morning prayers. The books placed in each ward have been largely used and many of the patients have shown a marked interest in the Christian religion. Sixteen united with the 2nd Presbyterian Church which is in connection with the hospital. The addresses of in-patients have been forwarded as usual to the missionary in charge of work nearest to where the patient lives. Favorable reports have thus been received of patients that have returned to their homes. The two hospital schools have been well patronized and the instruction thus given we may well believe bears excellent fruit."

Statistics give: In-patients 1,074, out-patients 23,671, operations on in-patients 1,562, on out-patients 2,408, including extraction of teeth 690, vaccinations 100. The tables contain the statement of 59 lithotomies, with not a single death. 84 cataract operations, with restoration of sight in 67 cases, and partial benefit in 9. Of the 50 obstetrical operations, there were requiring forceps 31, requiring version 7, craniotomy 7, delivery of head left in utero 1, manual assistance 5. Added to these operations or causes of extraction of placenta 9, shoulder presentation 7, hydrocephalus of fontus, hydatiform mole, each 1. Our reviewer here reports at length upon case No. 3, Cesarean section, but it may be recalled that Dr. Swan, the operator, himself has kindly given us an article upon the same case. Vide Vol. VI, No. 3, Page 173.—(Ed.)

The two following are interesting cases:—

Sarcoma of the Skull.

The cut accompanying is from a photograph of a large tumor of the skull, Mr. Wong, a Khia youth aged sixteen, a student by occupation, came into the hospital May 17th for the removal of this tumor. History:—

No hereditary disease was in the family, who are well-to-do people living in Canton. The youth had always enjoyed good health until nine months previous to entering the hospital, at which time a small and very painful growth appeared over the occipital protuberance. This growth steadily increased in size, spreading under the scalp until one-third of the surface of the skull was covered.

On presentation, portions of the growth showed distinct fluctuation, but the greater portion was very dense and hard, the entire tumor being firmly attached. The principal symptoms complained of were pain, headache and vertigo, the latter but slightly present after times of special exertion. A diagnosis of sarcoma which probably involved the skull was made, and the patient and his friends were informed, not only of the danger of the operation but of the certainty of the growth to recur, probably at an early day. They insisted very strongly on an operation, even though the patient might not survive it.

After a week of preparatory treatment the operation was performed on May 25th. The tumor was quickly dissected off, haemorrhage being largely controlled by an Esmarch bandage. The centre of the base for some two inches in circumference involved the outer plate of the occipital bone, and this portion was thoroughly scraped and the thermo-cautery applied to the surface of exposed skull. The patient suffered profoundly from shock and the wound was not permanently closed for over four hours, at the end of which time he fairly rallied. The weight of the tumor was two and one half pounds. The wound united readily and
Sarcoma of the Skull.
Excision of Lower Jaw.
the patient was discharged in June. At this time however there was some pain and slight enlargement indicating an early return of the affection.

In this case the important question was between operative and non-operative interference. The best authorities, such as Erichsen and Gross, recommend operative interference even though the relief be temporary. The extreme urgency of the patient and his friends for an operation also warranted the risk which was involved.

Erirsch of Lower Jaw.

Mr. Ng, farmer from Tsang-shing, aged thirty-four and married, appeared at the hospital on May 4th for the removal of a tumor involving the left side of the lower jaw. The growth had been present for three years and was gradually increasing in size. Pain of a dull aching character had been constantly present, and besides a recently marked difficulty in deglutition, as well as great inconvenience in taking food.

The growth was diagnosed as a form of sarcoma, probably the round-celled form, and involved the body of the jaw from the angle on the left side almost to the attachment of the masseter muscle on the right.

The patient was much reduced and anemiac and showed a cancer cachexia, but no enlargement of the neighboring glands could be detected. After a week of preparatory treatment nearly the entire body of the lower jaw was excised in the usual way, a semi-lunar incision being made under the lower edge of the bone, thus leaving the mouth intact. The disease was confined to the jaw, but the tumor had grown backwards rather than forwards, filling the mouth and pressing upon the base of the tongue. After removal the tumor weighed one and one-fourth pounds. The geno-hyoid and other muscles were gathered up and attached along line of incision, but after the wound was closed difficult deglutition and dyspnoea were so marked as to require an assistant for some hours to steady the ligature which had drawn forward the muscles which had been attached to the symphysis. No support but the hand of an assistant would answer, as the patient was very restless. Most of the wound healed by first intention, and the patient was discharged cured on May 28th.

It may be noted that this case was peculiar in that the tumor extended so far past the symphysis, thus greatly complicating the operation, also that it extended backwards so far making the dissection of the attachments along the inner side of the jaw more difficult. The accompanying sketch is from a photograph of the case before and after removal.

"G."

SECOND ANNUAL REPORT OF THE ICHOWFU DISPENSARY IN CHARGE OF THE AMERICAN PRESBYTERIAN MISSION. 1893.

Dr. Chas. F. Johnson's neatly prepared mimeographic report recounts faithful work for the past year. He tells us that the total attendance has been 2,570. Of these 1,043 have been new cases and 1,527 return visits. The surgical operations have been but few, and though the number of new cases has been less than last year still it is encouraging to note, the greater number of return visits evidencing some confidence in the foreign "medicine shop." We further note that Dr. Johnson has assumed charge of Dr. Neal's class during his furlough. He concludes a very interesting report by devoutly acknowledging the Divine care which has guided us through another year, and with a prayer of general applicability "that the coming year may see more accomplished for the Master under Whom we are serving."

P. M.
To the Editor of
THE MEDICAL MISSIONARY JOURNAL.
MY DEAR DR. MATHEWS.
In accordance with your request, I venture to send to our Journal, some of the thoughts which suggest themselves upon retrospecting the work done in the hospital during 1892.

My long cherished wish for a medical colleague has this year been realized, in the appointment of Dr. G. P. SMITH for the Tientsin and country work.

The results of this appointment have been most gratifying. First, the patients have benefited not a little, the treatment being far more thorough than it could possibly have been in the hands of only one medical man. In addition, Dr. SMITH has from time to time done medical work in the towns and villages near Tientsin; and thus thousands of sick and suffering ones have been treated who must otherwise have been beyond our reach and power to help: for having no fully qualified native assistants, and no time as yet to train such, it has been beyond my power to attempt this most interesting and encouraging form of medical missionary work.

A glance at the statistics for 1892 indicates progress and growth in every department. 5,711 patients have been treated in the dispensary, representing 16,572 visits, while 622 have been received into the wards of the hospital.

One delights, in thought, to follow these patients to their homes and to think of the goodwill, friendship and gratitude to God which we believe scores of them cherish.

Reports come to hand from time to time which impress on us the far reaching influence of medical missions, a thought which is always calculated to encourage us during those times of despondency which probably come to every medical missionary and are due to diverse causes. It may be the distrust and antipathy to foreigners which your patient displays, or his stupidity, leading him at times to thwart all one's efforts at aseptic surgery, or his self-opinionativeness which makes him often despise advice and medicine alike.

Of such reports two have specially cheered us. First the case of a patient treated in the spring for hepatitis and jaundice, who upon reaching home, removed his family idol-shrine and succeeded in inducing four neighbours to do the same. A father and two sons in the same village who became in-door patients through his recommendation, have also become enquirers for admission into the church.

Mr. WALKER of the Scot. Nat. Bible Society states how cheered and helped he was when upon one day endeavouring to sell some Scriptures in an anti-foreign town in Shantung, a man in the audience exhorted the by-standers to purchase them, saying: "This is a good doctrine. I have just returned from Tientsin, where I was treated in the hospital and learnt about this doctrine." He furthermore insisted in helping Mr. WALKER to convey his books to the next town, seeing he had some difficulty in obtaining assistance.

Regarding the medical work, it is interesting to note a case of vesical calculus (uric acid, with covering of phosphates) weighing 4½ oz., of twenty years' duration. I removed it by the median perineal incision, and had
very little hemorrhage; in one month the case left cured. This is the first case of vesical calculus which I have had occasion to operate on. Others have come but refused treatment.

The faithful recording of one's failures in medical work is often most helpful to others, though humiliating to the writer. I thus venture to mention what I have had to learn from bitter experience, that in the excision of simple tumours of long duration and large size whenever any of the skin is adherent it should invariably be removed, as in the case of malignant tumours, otherwise sloughing of the flap will in all probability occur. This accident has happened in my experience twice: (1) Case of molluscum fibrosum, weight over 20 lbs., duration 20 years. (See accompanying sketch). (2) Case of lipoma of perineum, weight about 5 lbs., duration 8 years. Recovery I am thankful to say occurred in both cases but it was greatly retarded by extensive sloughing of the portion of adherent skin I had omitted to remove.

Who of us has not felt discouraged in the treatment of chronic dysentery!

I had a case which resisted treatment for weeks and in which the usual remedies had all been tried, it yielded very rapidly however to 1 dr. of a crude infusion of the Ailanthus Glandulosa root-bark. (See Medical Reports, Chinese Customs Service 1884.) This drug has a great reputation in Tientsin. In Dr. Frazer's hands it has been most useful, and the French R. C. nurses use it very extensively among the Chinese. Would you kindly solicit the views of your colleagues in China upon the drug. Seeing it grows wild (going by the name of ch'ou 大靑 in Tientsin) this ought to be an easy matter. We have given the new modification of ipecacuanha powder (pulv. ipecac sine emetine) a trial in several cases of dysentery but it does not seem to be a great improvement on the old form, any way several cases were unable to retain even 15 grs.

Concerning spiritual results, we have had the joy of receiving some into the church and of taking others on probation. During the autumn there were not a few deeply interested in the Gospel as a result I believe of special prayer which was being offered for us in England by many earnest Christians, most of them poor labouring men, not poor however in faith, or the power of prayer.

This letter is however, I fear, far too long for your correspondents' column, so I will not add more.

Believe me,
Sincerely yours,
F. C. ROBERTS.

SHANGHAI,
March, 1883.

MY DEAR DR. MATHEWS.

I will do the best I can with regard to my medical experiences and observations in China.

In the spring of 1891 it fell to my lot to do the evangelical work in connection with our mission in Chinkiang.

I concluded that some medical work, such as I could do, would assist me in opening new stations, and in gaining the good will of the people generally.

Of course I had to turn away many cases, some of which I did not understand, and others of which I was not prepared to treat. I was able to cure many cases of itch, sore eyes, chills and fevers, etc., and to help many other troubles.

It is not now my object to give an account of the medical work done, but to give some extracts from my diary illustrating the Chinese physicians' way of practicing medicine.

A thin, pale and haggard Chinese boy appealed to me one day for help. I found on examination that his liver was very much enlarged, and that the native physician had performed acupuncture on his stomach in many places.
I also recall another case of a young girl. She had suffered for some time with pain in her shoulder. It was heart rending to hear her wailings and pleadings as her relatives held her for the painful operation.

I was often appealed to by Chinese suffering with chronic sores, many of which I believe were made chronic by using a black sticking plaster, that confines all discharges, and these inflame and convert small sores into large and chronic ones.

My cook's child had small pox. The physician prescribed a bed and pillow of damp clay. The child soon died.

I saw a Chinaman take a white powder, spit in it, stir it with a chopstick; then put some of it around a woman's tooth, strike her a light blow under the chin, and then lift the tooth out with his fingers without seeming effort. The woman went off spitting blood, and complaining that he did not pull the tooth without pain as he had promised.

The following prescription was given in my hearing as a sure cure for leprosy. Get a snake just three feet long, cut it up into short pieces and broil on tiles over the fire. Take the pieces that rolled off the tiles while broiling, cut up fine, mix with rice and a certain medicine, and give to a snow white duck without a single black feather.

In a few days the duck's feathers would all fall off. The leper was then to eat the duck which would surely cure him.

I came across a physician, who claimed to be able to cure any disease without medicine by simply rubbing the parts affected. He said that when a man's spirit revolved rapidly he would keep well; slowly, he would become sick, and, if it ceased to revolve he would die. He claimed that he could increase the revolutions of the spirit at any point of the body and thus cure any disease whatever. He is now doing a flourishing business in the city of Yangchow.

Yours sincerely,

R. T. Bryan.

The Newberry Library,
Chicago, Ill., U. S. A.,
Nov. 14, 1892.

My Dear Sir,

The Trustees of the Newberry Library desire to have the reports and other publications relating to the subject of medical missions fully represented in the medical department of the Library; and they beg to ask that you will kindly send to the Library reports of hospitals and dispensaries, and any other printed matter relating to the subject. You will receive by this mail a copy of our present list of medical periodicals.

Your co-operation in making this collection will help to illustrate the beneficial work of missions, will contribute to the advance of medical science, and be highly gratifying to the Trustees.

Any expense you may incur for postage or other charges will be promptly remitted to you.

Yours very respectfully,

E. W. Blatchford, President.

W. F. Poole, Librarian.
THE TREATMENT OF CHOLERA.

NOETHNAGEL and KAHLER (Münchener Med. Wochenschrift, August 16, 1892) have, at the request of the Austrian government, published some suggestions for the treatment of cholera. The use of dilute hydrochloric acid (8 or 10 drops in a quarter of a glass of boiled water) after meals, the relief of constipation by enemata of boiled water, and the careful treatment of already-existing gastric or intestinal catarrh are advised. Colds must be guarded against, and attention given to general hygiene of the body (baths, exercise, sleep). Every diarrhoea must be treated as if it were a choleraic diarrhoea. The patient must be put to bed, if possible, after a warm bath or a hot sitz-bath, with warm compresses on the abdomen, the nourishment limited to barley-broth, and tincture of opium, with tea, rum, or cognac, given. If nausea or vomiting appear, carbonated, not alkaline, water is recommended. All drinking-water must be first boiled. Before the patient is put to bed an energetic, cold rubbing down is of value, but this should be supervised by the physician. Calomel comes into consideration only in the very beginning of the disease.

For the treatment of a well-established cholera attack the tannin enemata recommended by CANTANI are best suited,—1/2 to 2 litres (quarts) of boiled water, at the temperature of 30° to 40° C. (102.2° to 104° F.), in which 15 to 20 grammes (3¿ to 5 drachms) of tannin are dissolved, are discharged into the intestines by high irrigation. This procedure is best suited to the premonitory stage, but can be of use in the fully-developed algid stage. The tannin has a limiting action on the development of the comma bacillus, but is also supposed to counteract and favor the quick elimination of the cholera poison from the blood.

In the stage of asphyxia, in order to counteract the thickness of the blood, hypodermatic or intra-venous injections may be used with advantage. For the first, 2 litres (quarts) of distilled water are boiled for half an hour in a vessel, the mouth covered with cotton, 6 grammes (1½ drachms) of carbonate of soda and 8 grammes (2 drachms) of sodium chloride dissolved in it, and cooled to 40° C. (104° F.) This fluid is injected, by means of a large, hollow needle, through a fold of skin of the abdominal wall into the cellular tissue. The skin is first to be made thoroughly aseptic. Instead of a syringe, a burette is connected with the needle by a rubber tube. The whole apparatus should be previously disinfected. In the course of a quarter to a half-hour 1½ litres (quarts) of the solution can be introduced. The skin of the thigh or interscapular region may also be chosen for the injection, and the resulting swelling can be reduced by massage. If after the third injection the relief is transitory, intra-venous injection is to be tried. For this the same solution can be used, or a solution of 5 grammes (1½ drachms) sodium chloride, with 10 grammes (2½ drachms) sodium sulphate to 1,000 grammes (1 quart) of water, previously thoroughly filtered and sterilized as the other. In a quarter of an hour, from 2 to 2½ litres (quarts) can be injected into a vein in the arm. The first appearance of the algid stage is the indication for these procedures. For stimulants, champagne, fermented mixtures, heavy wines with the addition of 10 to 20 drops of ether, tea with brandy, subcutane-
ous injections of camphor in olive-oil, in the proportion of 1 to 9, warm baths, energetic and long-continued rubbing with alcohol, or with cloths dipped in ice-water, and warmth to the extremities, are useful.

In case of muscular cramps, injections of morphine are useful. The treatment of the typhoidal condition often observed must depend upon the individual case. It is important to watch for and treat renal complications, and especially to bear in mind the necessity of maintaining the general nutrition.—The Boston Medical and Surgical Journal, September 8, 1892, p. 247.

HABITUAL CONSTIPATION.

Two patients had had absolute obstruction for some days, so that symptoms of incipient paralysis of the bowels were present. Severe meteorism, vomiting, oppression, anxiety, loss of strength, cold sweat, feeble pulse were caused by the enormous hard, dry masses found in the rectum. In view of the necessity of immediate relief, two pieces of wood were shaped like a glove-stretcher, the ends smoothed and oiled.

Dr. Ising introduced this through the sphincter and into the focal mass, and stretching the sphincter energetically, began to loosen the hard masses. In about twenty minutes very offensive gas was given off; he then withdrew the instrument, gave an enema of cold water, and kneaded the belly with a cold wet cloth wrapped around the hand. The bowel was quickly emptied and comfort restored.—Dietetic and Hygienic Gazette.

PAPAIN.

Dr. G. Herschell, in a memoir on "Indigestion," describes the origin and nature of this ferment, and cites the evidence upon which its powerful peptonizing influence was established. Experiments conducted with a view to deciding whether the substance produced true peptone or not resulted in conclusive proof that the former was the case. For practical purposes, says Dr. Herschell, as a digestive ferment, to be given medicinally, papain presents the following advantages over pepsin and pan-creatin:

1. It will convert or digest many more times its own weight of meat than they are able to.
2. It can be used when pepsin and pancreatin are contra-indicated or powerless. (This latter, as known, is the case when the stomach contents are too concentrated or insufficiently acid. Under these conditions pepsin is of little or no value, while papain acts energetically).
3. As regards albuminoids, it combines in itself the joint action of pepsin and pancreatin.
4. It can be given combined with acids, alkalis, or antiseptics, as indicated by the demands of the case.
5. It has a local action on the stomach that pepsin has not.
6. It is not so repulsive to the mind as pepsin, as it is purely vegetable.

Thus, papain is indicated in deficiency of the gastric juice, excess of unhealthy mucus in the stomach, irritable condition of that viscus, and duodenal dyspepsia.—Canada Medical Record.

SYMPHYSIOTOMY.

On Tuesday, November 22nd, Dr. W. J. Smyly, Master of the Rotunda Hospital, Dublin, performed the operation of symphysiotomy, the first of the kind, we believe, in the United Kingdom since 1782. At the time of going to press (nine days after the date of the operation) mother and child were doing well.—The British Medical Journal.

We take the two following extracts from the N. Y. Medical Journal; they were presented at a meeting of the Society of the Alumni of Bellevue Hospital:

THE PRESENT STATUS OF DRAINAGE IN SURGERY.

Dr. A. M. Cartledge, of Louisville, read a paper on this subject. He presented the following summary:
1. The principle of artificial drainage in surgery, while very ancient, is imperfectly understood, and is oftentimes as much a factor for evil as for good.

2. Though our knowledge of the principles which govern a healthy regeneration of wounded structures has greatly advanced, and our progress in wound therapeutics kept pace, we fail to appreciate how artificial drainage can be altogether dispensed with in surgical practice.

3. To lessen the use of artificial drainage it is necessary to thoroughly apply the principles of asepsis and antisepsis, combined with buried sutures, fixation, and alimentary or systemic drainage.

4. Where from any reason exudation cannot be controlled, its removal by drainage is a safer surgical measure than any attempt at sterilization in situ.

5. The time required for primary drainage is from twenty-four to sixty hours; to wait longer is to encourage trouble; to remove it sooner than in twenty-four hours is taking risk not warranted in the premises.

6. Capillary is to be preferred to tubular drainage in wounds other than those of the large cavities. For this purpose absorbable material should be selected, catgut being the best.

7. Where it is desirable to combine hemostasis and drainage in the same measure, the strips of iodoform gauze, as recommended by Mikulicz, fulfil a most useful purpose.

8. Where natural drainage can be utilized without producing unsightly cicatrices, artificial drainage should be dispensed with; when feasible, combine the two.

9. Wounds involving the brain and spinal cord had best be drained to avoid mechanical violence to the function of delicate structures by retained serum.

10. Necessity for artificial drainage will most often arise in wounds invading the large cavities; herein flexible tubular drains (glass) best meet the requirements, aided or not by materials acting by capillarity.

11. The method of secondary suture after primary wound secretion is over, advised by Kocher, seems to possess no advantage over drains that have to be removed, and certainly is not to be compared, in convenience, comfort, etc., to the patient, to absorbable capillary drains.

A NEW OPERATION FOR THE RADICAL CURE OF INGUINAL HERNIA.

Dr. George A. Baxter, of Chattanooga, Tenn., read a paper on this subject. He presented an operation radically different in principle from any before given. It consisted in a prolongation of the incision, after the ordinary management of the sac and after ligation through the internal ring into a more or less extensive laparotomy as the exigencies of the case demanded; lifting the neck of the sac into the abdominal opening above the ring and its fixation there by a deep suturing; cutting off the sac close above the peritoneum and its closure by buried suture; and a final closure of the abdominal opening by this and a more superficial set of sutures which passed across above the closed sac and peritoneum and underneath the deep fascia, and were intended to approximate the homologous tissues of the abdominal wall. The ring was closed with crucial sutures dipping over the spermatic cord and traversing the tissues, and the inguinal canal closed with deep sutures alone.

He specified the following points of originality: A line of incision suitable for any inguinal hernia, by the fixation of the sac above the peritoneum a deflection of all abdominal expansive force from the ring and canal, the thickened lining of the internal ring, and the method of closure of abdominal incision. The advantages alleged were: Quick cure with avoidance of the necessity of a truss, deflection of expansive force from the internal opening and canal to the abdominal parietes. Advantage in being able to approach the
constriction either from without or from within. Avoidance of the necessity for traction on the sac or its contents. Ample room for treatment in diseased conditions of the sac or contents.

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CANCER OF THE BREAST.

Cheyne (Lancet, Aug. 13, 1892) insists that in all cases there should be free removal of the skin, especially over the tumor—very free indeed if the skin is actually the seat of disease; complete removal of the breast, bearing in mind its great extent; removal of the pectoral fascia coextensive with the breast and right on to the sternum along with a thin layer of the muscle behind the tumor and the main part of the breast; removal of the fascia over the serratus magnus in the axillary region, and of all glands and fat from the axilla by a clean dissection; if the tumor is adherent to the pectoralis, removal of large strips of that muscle. It should always be borne in mind that the object of the operation is not simply to remove the tumor, but to rid the patient of her disease, and that can only be done by removing, as far as possible, all of the probable seats of recurrence.—N. Y. Medical Journal.

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INTENSIFICATION OF THE CHOLagogue PROPERTIES OF CALOMEL.

Dr. R. Mansell-Jones (Brighton) writes: With reference to the remarks made in a recent number of the British Medical Journal as to the fact that the cholagogue and purgative properties of calomel are greatly increased by its combination with minute doses of the perchloride of mercury, I may state that salicylate of soda has a similar effect, and great care should be taken not to administer these medicines in full doses, within several hours of each other, as their action is likely to prove extremely violent. On the other hand, a grain or two of calomel given at bedtime, and followed in the morning by a draught containing about 10 grains of the salicylate, will be found highly beneficial in torpid liver.—British Medical Journal.

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DR. HARE’S CHLOROFORM INVESTIGATION.

Dr. Hobart A. Hare, of Philadelphia, writes to us, that, having been asked to undertake a research at the expense of the Government of His Highness, the Nyzam of Hyderabad, India, with the object of reconciling, if possible, the conflicting views concerning the action of chloroform, he is anxious to receive from American physicians and surgeons records of any cases where it was noticed that the heart stopped beating before respiration, or respiration stopped before the heart. Notes concerning any such cases will be considered strictly confidential, provided the reporter states his desire that his name shall not be mentioned in the report of the research when it is finished. Otherwise due credit will be given for any information received.—N. Y. Medical Journal.

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PRURITIS.

La Medecine Moderne recommends menthol and acetic acid for pruritis.

R Menthol ............... dr. i.
Alcoholis .................. " vijss.
Acum destillatam........... " xv.
Acid Acetici .............. oz. vj.
Ad q. s.
Misce et fiat lotio.

To be applied twice daily.

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TREATMENT OF SMALL-POX BY DARKNESS.

Gallavardin, as the result of his experience since 1876, finds “that if patients suffering from small-pox are uninterruptedly kept in a room from which all solar light is excluded, the disease presents no period of suppuration, and that in consequence the subsequent scarring is infinitesimal.” The inception of this “experience” must have been based upon the old superstitious practice which once prevailed so intensely that small-pox patients were shut up in darkness, and their beds surrounded with red.
curtains during the whole of their illness. The red curtains are now pretty nearly given up, but the darkness still appears to be credited with some mysterious curative virtue. A more injurious practice really could not be maintained than that of darkness in a sick-room. It is not only that dirt and disorder are results of darkness—a great remedy is lost. Sunlight is the remedy lost, and the loss is momentous. Sunlight diffused through a room warms and clarifies the air; it has a direct influence on the minute organic poisons—a distinctive influence which is most precious—and it has a cheerful effect on the mind. The sick should never be gloomy, and in the presence of the light the shadows of gloom fly away. Happily, the hospital ward, notwithstanding its many defects—and it has many—is even here in China, so far favoured that it is blessed with the light of the sun whenever the sun shines. In private practice, the same remedy ought to be extended to the patients of the households, and the first words of the physician or surgeon on entering the dark sick-room should be the dying words of Goethe: "More light! more light!"—(Ed.)

THE DOSE OF SANTONIN FOR CHILDREN.

Dr. Demme considers the smallest efficient and perfectly safe dose of santonin to be from one-sixth to half a grain, or from one to one and a half grain a day. As a vermifuge he always associates santonin with calomel. —Revue des Maladies de l'Enfance.

A PRACTICAL STERILIZATION APPARATUS FOR SURGICAL AND BACTERIOLOGICAL USES.

In the Centralblatt für Chirurgie, No. 39, S. 788, Kronacher gives a description of a sterilizing apparatus for instruments, etc. It is made of copper, and has for its object the use of both moist and dry sterilization. The instruments are placed first on a removable tray and immersed in the hot soda solution and boiled. The vessel containing the hot solution is then removed, and the articles to be sterilized replaced in the apparatus and subjected as long as desired to dry heat. —University Medical Magazine, January, 1893.

THE SITTING POSTURE DURING DELIVERY.

Dr. J. T. Webster, in the Medical Brief, gives the following reasons for preferring the sitting or squatting position to the dorsal decubitus during labor: 1. Because the law of gravitation naturally assists in the expulsion of the fetus. 2. Because the leaning of the body forward, and pressing of the abdominal muscles against the thighs, assist materially the expulsion during contractions of the womb. 3. It relieves the colon, lumbar nerves, and perineum of the weight of the child. 4. It avoids the continual getting up to evacuate bowels or empty the bladder. 5. It prevents the laceration of the perineum by relieving it of the downward pressure against it. He especially observed that as soon as cases assumed this position they were satisfied, and were greatly relieved of all the unnecessary pain and discomfort of labor.

RECTAL FEEDING

May be carried on by means of a mixture of two eggs, twenty grains of pepsin, ten grains of chloride of sodium, and six ounces of water (Detroit Emergency Hospital Report). This mixture should be slightly warmed, thoroughly agitated, and then gently introduced into the bowels by means of a syringe. To facilitate the entrance of the fluid into the intestines, it is well to put the patient in a position with the hips much elevated above the head; either the knee-chest position, or with two or three pillows resting beneath the hips.

TOBACCO SMOKE.

A large number of investigations have been made by Dr. Tassinari on the influence of tobacco smoke on the germs of cholera, anthrax and pneumonia. His method of
research was to line the interior of hollow balls with gelatine containing the germs of the diseases named; tobacco smoke was then passed through these globes for from ten to thirty minutes. The surprising fact was then established that at the expiration of that time the bacilli of true Asiatic cholera and pneumonia were completely destroyed, whatever the kind of tobacco employed for the purpose. The gelatine was absolutely sterilized by the tobacco smoke. The anthrax bacillus was more resistant, however, while the bacillus of typhoid was scarcely acted on at all.—Medical Record.

PERIODATES, A NEW REMEDY FOR CHOLERA.

According to the Münch. N. N., the name Periodates is applied to an alleged mineral substance long known to the learned world, which is said to possess the wonderful property of destroying not only the comma bacilli, but the poison (toxin) which they produce. The experiments made with the remedy in several cholera barracks of Hamburg are claimed to have yielded surprisingly favorable results. (???)—Pharm. Post, p. 1,209, Nov. 13, 1892.

THE HEALING OF WOUNDS BY FIRST INTENTION THROUGH THE USE OF SALICYLATE OF SODIUM.

Dr. J. T. Hall of Chicago writing in the International Journal of Surgery after recounting several very successful cases says: "I use from 10 grains to 2 drachms, each of pure, salicylic acid and bicarbonate of sodium to the ounce of water, reducing the strength as the wound heals, always applying it either with gauze or three or four thicknesses of muslin, and keeping the wound moist with the solution until closed. I found with this, as with other dressings, that they should not be used with cotton, as there is in the process of repair a constant waste being thrown off which should not be retarded or confined by the use of cotton."

Suture of the lung has been carried out by Dr. Guermonpréz in a man of eighteen, whose pleura had been opened for a pyoneumothorax, and had been followed by a persistent bronchopleural fistula. Portions of six ribs were removed and the orifice of the fistula was sutured with catgut. The patient made a slow recovery, but was finally able to resume work.—Med. Record.

TO LANCE A SWOLLEN TONSIL.

Do not try to get round the anterior pillar of the fauces, but go straight back through the soft palate, and no effort on your part can possibly bring the knife into any relation at all with the carotid vessels. Open the upper part of the tonsil.—Christopher Heath, M.D., in International Clinics.

COCAINE AS A SURGICAL ANÆSTHETIC.

GABRYSZEWSKI has employed cocaine anesthesia in the clinic of Professor Rydygier in several hundred cases, and not only in cases of minor operations, but also in those of herniotomy, exploratory abdominal section, extirpation of glands, certain operations on bones, etc. The author uses a 2.5-per-cent. solution, injecting up to 0.05 gramme (½ grain) of the alkaloid when operating on limbs, but never exceeding 0.02 gramme (¼ grain) in operations about the head. Even operations on bones can be made totally painless by means of these injections. Cocaine anesthesia offers the advantage over chloroform narcosis in that the patient's consciousness is left intact, and its use is without danger, provided, of course, the procedure is carried out by experienced and competent hands.—Gazeta lekarska, 1892. Universal Medical Journal.

HYPNOTIC EFFECT OF WARM BANDAGES.

Warm baths, as is well known, produce a calming effect, and tend to bring sleep, and Allendorfer has attempted to apply such a method in patients where a sedative effect is desired, and yet where a bath is inapplicable (Jour. de Med.) His method
consists in wrapping the lumbar region and belly with linen cloths soaked in warm water, and then covering them with oiled silk or rubber cloth, so as to prevent evaporation, while the whole is kept in place and loss of heat prevented by a flannel cloth. This procedure is of ready performance, and the author says that by this simple means he has obtained the most astonishing results in the treatment of insomnia. By dilating the large vessels of the intestinal tract, by the warmth applied, a condition of anaemia of the brain is produced, favoring sleep. These large intestinal vessels have very properly been termed the waste-gates of the circulatory system.—*Med. Rev. Toledo Compend.*

**Epidemiological Society.**

J. F. Payne, M.D., F.R.C.P., President, in the Chair.

*Wednesday, January 18th, 1893.*

**Epidemic of Dropsy.**

A paper was read by Dr. Kenneth McLeod on a remarkable epidemic of "dropsy" which prevailed in the cold seasons from 1877 to 1880, and in several parts of Sylhet and Assam in that of 1878-9, as well as in Mauritius from November, 1878, to June, 1879, bringing together the facts and the different views put forward as to its nature and causation under the heads of (a) the persons attacked (b) their environments, and (c) the origin and diffusion of the disease, and concluding from these conditions that (1) it was not due to cold and damp, malaria, insanitary surroundings, deficient food, anaemia, or any other constitutional causes; (2) it was rather epidemic than endemic; (3) the cause of its origin in Calcutta was obscure, but it spread thence and elsewhere solely by human intercourse, though (4) its diffusion was slow and influenced by seasonal and other conditions. After quoting the opinion of Chevers, Fayrer, Cornish, Moore, and others that it was not a form of beri-beri, although that name had been applied to a number of diseases essentially different one from the other in their etiology and pathology, and agreeing only in the presence of dropsy, he suggested the designation of "epidemic dropsy," and gave the following definition: "A specific disease marked by the sudden appearance of general anaasarca, mostly preceded by fever, vomiting, and diarrhoea, and accompanied by a rash, mild remittent fever, and disorder of the bowels; urine varying much, but rarely albuminous, and never suppressed; frequently attended by pains in the limbs and almost always by dyspnoea, marked and progressive anaemia being a constant symptom. In the latter stages pulmonary oedema and pleural and pericardial effusion were frequent. The mortality varied from 2 to 40 per cent., according to circumstances, death from lung or heart complications occurring at any period, and often suddenly. The duration of the disease was from three to six weeks. The disease was communicable by personal intercourse and conveyed by human agency, but its diffusion was feeble and greatly modified, and limited by seasonal and climatic conditions."

Sir W. Moore, Dr. Manson, and the President took part in the discussion. Dr. Manson, who had seen many cases of the disease, maintaining that its occurrence in the cool season only, the presence of anaasarca and the absence of peripheral neuritis, sufficiently distinguished it from beri-beri whilst the President saw no reason to doubt its malarial or telluric origin.
NOTES AND ITEMS.

Pasteur's seventieth birthday was celebrated on the 27th December with remarkable honours. What would his father, a humble tanner of Artois have said, had he lived to have seen the memorial tablet, erected in his white house bearing these words:

*Ici est né Louis Pasteur, le 27 Déc. 1822.*

A writer in the Encyclopedia Britannica, signing himself W. D., reminds us that even the purely critical portion of Pasteur's work would be enough to immortalize his name. To be immortal, as Renan described immortality, is to work at an immortal object, as science is, or at whatever is true and good and beautiful. These are destined to exist as long as the human race, and are everywhere surprising us by their presence. Science may never entirely succeed in lifting the Isis veil (even Pasteur, "Prince of Science," failed in some of his most cherished attempts); but to have done one's duty, to have done well, to have worked until the close of the day, will afford us if not a consciousness of great achievement, at least a title to fellowship with the great.

The Hon. Treasurer begs to draw attention to the election of Dr. Gillison of Hawkow, to the office of the Treasurership of the Association, and that all monies must now be made over to him.

THE CHINESE IN THE UNITED STATES.

The number of Chinese in the United States is probably less than 120,000 at the present time. Of course the great majority of these are to be found on the Pacific Coast. The census of 1890 gives the number in California as 71,681. Large numbers, also, are to be found in Oregon, Washington, Idaho, Nevada and Wyoming.—Ex.

A MISSIONARY MEDICAL COLLEGE.

The Board of Regents of the State University have recently granted, conditionally, a charter providing for the organization of a "Missionary Medical College" in this city. The proposed institution is to be under the auspices of the International Missionary Society. This Society has headquarters on East Forty-fifth Street, where lectures have been given for several years. The Society supports six dispensaries in New York and two in Brooklyn, under the general supervision of a medical director.

A few years ago this Society attempted to secure a charter from the State Legislature enabling it to teach medicine and grant diplomas. The bill was so loosely drawn, or at least made such slight demands on those wanting a medical diploma, that it was strongly opposed by the Legislative Committee of the State Medical Society, and its passage prevented just in time. We are told now that it was "withdrawn" by its backers, but our impression obtained at the time was that it was beaten out of sight. Under the new charter the provisions or conditions which may prevent the new college from ever becoming a diploma-mill seem reasonably good. These conditions are:

1. No students are to be received except those pledged to do missionary work.

2. The candidate must present either a certificate of admission to a college approved by the Board of Regents, or a certificate of graduation from an approved high school, or he may be admitted without these certificates by passing examinations under
the Board of Regents and securing fifty counts. The requirement for other medical schools is only sixteen counts.

"3. The prescribed course of study is to cover four years of nine months each.

"4. The graduates of this school must pass the same examinations under the State Board as the graduates of the other regular schools in order to receive certificates of graduation."

The objects of the school are praiseworthy; whether its organization is wise or necessary may well be questioned. It is a difficult and expensive thing to educate medical students properly, and no new college can do it without much labor. It would be a mistake to think that a poor doctor may be excused because he is a good Christian. The new college will bear watching.—Medical Record, N. Y.

But still with honest purpose toil we on:
And if our steps be upright, straight, and true,
Far in the east a golden light shall dawn,
And the bright smile of God come bursting through.

WILL CARLETON.

IS WOMAN INFERIOR TO MAN?

DELAUNEY thinks she is, and with some fear and trepidation we reproduce a summary of his celebrated article on the question.

Woman more prognathous than man. Muscular system less developed. Her foot flatter and less arched. Average difference in height, four and one-third inches. Voice an octave higher. In animals, female voice always higher. Respiratory capacity of woman a pint less than that of man of same size. Temperature higher in man. He eats more. He absorbs more oxygen and exhalas more carbonic acid. Pressure of blood higher in man, though pulse less frequent. A million more red globules in a cubic millimetre of man's blood. Males of birds and mammals nearly always superior to females. In domestic animals, males always larger. Skull of man more capacious, in the proportion of one hundred to eighty-five. Brain heavier (one hundred to ninety) even in men and women of same weight. The frontal lobes, the seat of highest intellectual faculties, less developed in woman. Girls grow faster than boys till they are seventeen, after that the man keeps on growing, the woman stands still. Woman more precocious, physically and intellectually, than man; a characteristic of inferiority. Woman wanting in originality. Although incomparably more women than men study music, women furnish no composers. So in painting, science, philosophy, etc. Not man's equal where profound thought, reason, imagination are concerned. Compare lists of twenty men and twenty women most distinguished in poetry, painting, science, belles lettres, etc. Woman an imitator only. Never invented anything. In the evolution of tastes and ideas, woman marches a century behind man.

A fine specimen of the egg of Æpyornis, the extinct giant bird of Madagascar, and obtained from Southern Madagascar, was exhibited at a recent meeting of the Zoological Society of London. It will be remembered that this egg is about 13 inches long, and of the capacity of 150 hen's eggs.

A curious case occurred recently in the out-patient department of one of the London hospitals. A woman attending for fibrous stricture of the rectum said she had swallowed a sovereign and a half about a fortnight before, "when larking." The surgeon in attendance examined the rectum and removed three sovereigns from the stricture with a pair of forceps at one grip.—Medical Record, N. Y.

The Highest Court of Germany has decided that legal human life dates from the beginning of labor, and that its destruction before full term is not murder. This decision opens a wide avenue of criminal possibilities. —ib.
Dr. B. C. Atterbury of China, formerly President of the Society (International Medical Missionary), was then introduced to the meeting, and received a warm welcome. With the earnestness born of experience, he told of the value of Medical Mission work as seen by him in China, and related some thrilling instances of the great success attending this line of effort. He congratulated the Society upon the progress it was making, as evidenced by the present meeting, and told how this fact had been impressed upon him during his recent journey home. Whilst passing through China, he had met no less than four of the students of the Society, all fully qualified men, in different towns, where they were doing good service.—Medical Missionary Record.

The corner stone of the Protestant Episcopal Cathedral in New York City was laid December 27th with ceremonies that were most beautiful and impressive. The exercises were held in a great tent, cruciform in its design. There were seats only for one thousand persons, who were admitted by card—a comparatively small portion of the great company who would have been glad to share in the ceremony. The choir, one hundred in number, furnished music of the highest order. After the opening exercises, Dr. Thomas Robinson Harris read the list of articles contained in the box deposited in the corner stone. They included a number of periodicals and a copy of the new Book of Common Prayer. The box was then closed and placed in the receptacle prepared for it with the customary service. The address was given by Bishop Doane, of Albany, after which the exercises closed just as the setting sun threw a brilliant glow across the scene. The exercises throughout were most impressive in their solemn and stately simplicity.—Ext. N. Y. Independent.

The China Inland Mission reports 123 additions to its force the past year, making the whole number now engaged in that work 512, occupying 94 different points.—The Missionary Reporter.

Miss Hu Hing-eng of Foochow, China, is expected in Philadelphia to resume her medical studies, this month. She had previously prosecuted her work at the College for three years, but on account of her own and her father's health she was obliged to return to China temporarily.—Medical Missionary Record.

On the occasion of the Dowager Empress birthday next year the Shanghai Mercury informs us, "that forty li of streets will be decorated, and for this purpose 1,200,000 pieces of red silk each about forty feet in length have been ordered from the government silk looms of Hangchow, Soochow and Nanking;" it will be noted that if these fees are reduced, they total some 910 miles.

We would remind our correspondents that as the system of subscription to the Shanghai Local Post Office ceases on the 31st March it will be necessary for them to provide themselves with stamps, and stamp all their mail matter—otherwise postage which will be collected in Shanghai, will have a very demoralizing effect upon us in course of time.

Mr. Lewis, who we hope soon to welcome back to China writes to The Messenger from Crieff in Scotland: "This is a most charming spot and to-day is the most perfect I have ever seen. The sky is azure blue and the mountains stand out against it clearly cut. The air is exhilarating in the highest degree, and nature looks at her best. Crieff, I think, is almost a perfect place for the jaded worker from China to come to. It really ought to be better known there. I am very much better than a year ago. Still Dr. Maxwell, when I saw him in Banffshire lately, mid August, was of opinion that I ought not to leave home till the middle of
next year.” This was written September 21st. Later he writes that he will be in London in October and will then consult physicians.

It is scarcely a figure of speech to say that "woman is the corner-stone of heathenism." Notwithstanding their degradation, heathen mothers have immense power over their sons. This fear of a mother's curse prevents many Chinamen from listening to the claims of the Gospel. An intelligent Hindu exclaims: "It is the women who maintain the system of Hinduism." Christ and His Gospel are the only levers that have raised the nations. But in all the Orient only a woman's hand can adjust these levers to the corner-stone.—Med. Missionary Record.

One of the most impressive services held on New Year's Day was that in St. Paul's Cathedral, London. About 3,000 of the unemployed in that city, with all the Tower Hill leaders, marched up the aisles and took three times the number of seats provided for them. Canon Holland preached a sermon full of sympathy for them, recognizing to the full the need of social reforms to relieve the suffering. He was listened to attentively. At the close the men formed in line outside the Cathedral, gave repeated cheers for the Canon and then went home to Camberwell, singing the "Marseillaise" and "The Starving Poor of England."—The Independent, N. Y.

Mrs. SNOOPER: "Isn't that a very peculiar perfume that Mrs. HAMBURGER has commenced to use lately?" Mrs. SKIDMORE: "It's carbolic acid. She wants to make people believe she's been to Europe."—Life.

The medical college at Nagasaki, Japan, now occupies the recently completed building. There is an average attendance of three hundred students, with dormitory accommodations. Museums and laboratories are well arranged for work. A number of microscopic anatomical preparations are in readiness for the Columbian Exposition at Chicago. At the rear of the college is a spacious hospital, with few occupants at present, for this is a good year (no cholera) for Japan.—Medical Record, N. Y.

A correspondent to a home paper writes:—"The following personal anecdote about the late Sir RICHARD OWEN may interest your readers, containing, as it does, a curious and but little recognised fact. Many years ago, standing on the kerbstone in Pall Mall with the learned professor, he laughingly told me that I could not tell which was my right hand. I immediately held out my right hand. But he objected. Remarking that he had not said that I could not show him my right hand or extend him my right hand, but that I could not tell him which was my right hand—that is, that I could not describe it in words, so that one who had never heard of the distinction, we make between the right hand and the left would be able to find it. I thought that that would be easy enough also, until I thought it over, and then I had to give it up.

"Said the anatomist: 'There are plenty of criteria within the body which define its place, such as the heart, the liver, and the duodenum; but on the outside of a perfectly formed human being there is nothing to distinguish the right hand from the left, and no one can describe it in words so that an ignorant person can find it. If people were ambidextrous, and were not taught from childhood to use one of their hands more than the other, it would be almost impossible to know which is which. I often think of this when I hear anyone say to some one whom he wishes to stigmatise as a fool, that 'he can't tell his right hand from his left,' as I do also when I read what God said to Jonah about Nineveh, in which were 'more than six score thousand persons that cannot discern between their right hand and their left hand.'"
PHILIP HENRY AND MARRIAGE.

When PHILIP HENRY was settled at Worthenbury, he sought the hand of the only daughter and heiress of Mr. MATTHEWS, of Broad Oak. The father demurred, saying that though Mr. Henry was an excellent preacher and a gentleman, yet he did not know whence he came. "True," said the daughter, "but I know where he is going and I should like to go with him." Mr. Henry records in his diary, long after, the happiness of the union, which was shortly consummated: "April 26th, 1680. This day we have been married twenty years, in which time we have received of the Lord 20,000 mercies—to God be glory!" Sometimes he writes: "We have been so long married, and never reconciled, i.e., there never was any occasion for it." His advice to his children with respect to their marriage was: "Please God, and please yourselves, and you will please me," and his usual compliment to his newly-married friends: "Others wish you all happiness, I wish you all holiness, and then there is no doubt but you will have all happiness."—The Bombay Guardian.

It is calculated that the Bible has now been translated into so many tongues that it is accessible to fully 1,000,000,000 souls. This leaves nearly 500 millions unreached, many of whom, however, cannot read at all and have no written language.—Ex.

CEMENT FOR MORTARS.

J. R.—Melt together equal parts of gutta-percha and shellac in an iron vessel, on a sand bath. Apply a thin coat of the mass upon the strongly heated fractured surface; press forcibly together, and allow to cool. —Bulletin of Pharmacy.

SOME CRUEL THINGS FOR ANTI-VIVISECTIONISTS TO LOOK AFTER.

Castrating horses, pigs, sheep, dogs, cats, etc.; docking horses' tails; hunting foxes, hares, rabbits; hooking fish for sport; shooting pigeons at matches; poisoning rats with strychnine and arsenic; fattening geese for pate de foie gras; trapping rabbits.—Ex.

We quite agree with Mr. W. H. LEWELYN, the well-known anti-vivisectionist, that the present Act for the regulation of experiments should be amended. The licence as at present issued prohibits torture; but certificates can also be obtained which permit it. The right of vivisection, if granted at all, as we think it must be, should be so jealously guarded that no animal should suffer but with reasonable probability of an ultimate good. No certificate should be granted but to physiological specialists of recognised eminence.

A NEW USE FOR CATS.

Cats are being extensively used in New Zealand for the destruction of rabbits. The owners of one estate are so pleased with the efficacy of the new "cure" that they have given an order for five hundred cats. It is not, however, understood, the British Medical Journal reports, that the anti-vivisectionists see any reason to interfere, seeing that only a money profit, and not the increase of knowledge or the relief of suffering, is in view.

SEA-SICKNESS.

The old method of treating sea-sickness is again recommended by Dr. Ames BRUNTON in the British Medical Journal. A leather strap is strapped tightly around the lower part of the thorax and epigastrium and is kept on until the traveller has gained his sea-legs. It is sometimes better to add a pad over the epigastrium. In commenting upon this, the Medical Record inquires why it is that our sweet sisters, whose dear little epigastria are tightly and often even painfully pressed by the cruel corset, should suffer so universally from the most distressing of ills.
THE ENGLISH VIEW OF IT.

Quarantine may be defined as an elaborate system of leakiness; impossible if it be complete, because implying isolation and arrest of intercourse; useless and dangerous if incomplete, because inviting a false reliance and offering a false security. Medical inspection, with the powers of detention, was a more real precaution and more easily made effective; but under the circumstances it was only a sieve, which would strain off the coarser majority of cases, but through whose many apertures the more subtle were already passing, and would pass.—Medical Record, N. Y.

THE RETIREMENT OF SIR JOSEPH LISTER.

The eminent originator of modern antisepic surgery, having attained the age of sixty-five, has been retired from his post as lecturer on clinical surgery at Kings College Hospital, London. The rule requiring his retirement on account of age has been commented on quite freely as an unnecessarily harsh measure, for the distinguished surgeon is no less capable and active to-day than when he was invited down to London. The hospital does not altogether lose his services, for by a special act of grace Lister will continue for a year longer to occupy his position on the attending staff.—N. Y. Medical Journal.

SULPHUR FUMIGATION IN CHOLERA.

Fumigation by sulphur is older than most writers state, dating back not to the last century only, but to the time of Homer. The following passage occurs in the Odyssey, after the slaughter of Penelope's suitors, when their dead bodies formed a huge mass of lifeless flesh:—

"Anon yet spake the chief
to the dear nurse Eurycleia: Fetch me brimstone,
Sweet'ner of taints, and fetch me fire, old woman!
That I may fumigate the hall.

She fetched him fire and brimstone, and Odusseus
Right thoroughly fumigated everywhere,
The common hall, men's room, and all the courts."—Ib.

SEARCHING FOR LIGHT FROM ANOTHER REALM.

The lecturer on theosophy had concluded his long and able address, and stood looking at the audience. "If there is any question," he said, "that any of you would like to ask me before I sit down, I should be pleased to answer it." Amid the deep silence that followed this remark, an earnest looking man near the door rose up and said: "I'd like to know, Professor, if anybody has ever yet discovered a reliable and certain cure for warts?"—Medical Record, N. Y.

By the way, the prevalence of typhoid fever in the upper classes in England is one of the things which puzzles medical men. Significantly called by the poor "the dirt fever," typhoid ought to be about the last thing on earth an English gentleman or lady would be liable to. That typhoid should be rife among the aristocracy—say, of Rome—would be comprehensible. The Italians, princes and peasants, are not a particularly clean race; they do not use more water, as a rule, than is strictly necessary, and the drainage of Rome is vile. And yet in those Roman palazzi, where there are cesspools by the door, and where not unfrequently mounds of offal may be found not far from the grand staircase, typhoid is not nearly so prevalent as in the sanitary-engineered, up-to-date "stately homes of England."

We find the following in a recent number of the Oxford Magazine:—(North-China Daily News, March 11th.) "To-day and next Saturday (at the Indian Institute, at 5 p.m.,) Oxford has an opportunity of hearing
one of the greatest living sinologists. As a distinguished Chinese scholar recently put it, "Dr. Edkins is to all other Europeans at present in North China as the thumb is to the fingers." His subjects are not abstruse points of philology, but rather of general interest to all whose interest lie in the direction of Comparative Religion or Mythology.

The dedication of the A. G. Main's Hospital, Seventh-day Baptist Mission, Shanghai, took place last December; it was an interesting ceremony and largely attended by ladies and gentlemen, foreign and native. 'H. W. B.' writes in February Recorder:

"Dr. Ella F. Swinney gave a very clear account of the medical work of the hospital. The building had room for 40 beds, but only two of the four wards with 24 beds were to be used at present. The dispensary work had been conducted for nine years in that place and in the native city. The trips into the country, from Thursday afternoon until Monday morning, had been much appreciated by the people. These trips would now have to be discontinued, or carried on at long intervals, for the work at the hospital day and night would occupy all her (Dr. Swinney's) time until reinforcements arrive.

Dr. Boone spoke of the privilege to be acquainted with Dr. Swinney and to see something of her work from its beginning. He knew that she had to build up and to carry on her labors under very great difficulties, and that she had always been in straightened circumstances from lack of adequate support. He had learned to admire the Doctor for the wisdom and good judgment she had displayed and for the Christian spirit which animated her in all her work. After the guests had inspected the hospital, they partook of a collation. The buildings are well adapted for all needs. The architect, Mr. Kingsmill, and Dr. Swinney, also, may be congratulated on knowing how to accomplish so much with the limited means at their disposal."

"We understand (North-China Daily-News of Jan.) that Mr. Webb, ex-Consul General of the U. S. to Manila, has been singularly fortunate in procuring large subscriptions for the mission to convert America to Islam. His immediate object is to have a minimum of Rs. 80,000 for the first three years of the mission in the States. Mr. Webb has full confidence in the eventual success of the arduous undertaking to convert America to the Mahomedan faith." Mr. Webb recently remarked, say an exchange, that "The Western world is waiting to be Islamized." Mr. Webb is doubtless very much in earnest and we would fain encourage him, were we able. It occurs to us that since the matter of the Rupee has entered so evidently into his calculations, has he, equally considered the depreciation of silver? Mr. Webb's project has a charming air of insouciance about it exactly in keeping with a remark recently attributed to the Cardinal Archbishop of Westminster, to the effect, that he looked forward to the Romanizing of 30,000,000 Englishmen in the not too distant future. The late Mr. Samuel Weller would we think, have characterized these schemes, as 'pretty.' We however wish them all the success they merit. —ED.

Dr. Porter writing to Dr. Hodge from Pang-chuang, Shantung, Nov. 26 says:

"In reference to the Leper Controversy which has been inaugurated, it may be interesting to you to know that it is very infrequently seen in the North in the range of our hospital circuit. I had five cases only last year and I do not recall seeing any cases in previous years. Dr. Peck tells me that he never saw but one and that was at Dr. MacKenzie's hospital. I once saw a case with MacKenzie at Tientsin. While this is true of Chiluli and
the region about us, I have been told by Dr. Hunter that he has seen “Lots of Cases” chiefly from the mountain region south of Ching-chou Fu. I have a theory that the leprosy of the north in Shantung has come from the pilgrimages to Mountain Tai where thousands of wayfarers meet, many coming from the South. Whether one could verify such a theory is uncertain. The non-contagious character of the leprosy we see might seem to militate against such an idea. But union in fight and living would make the contagion more likely.

Dr. Peck has returned and I turn over my medical work to him.

The Shanghai Mercury has recently given a table showing differences between values of local stock from 31st December 1891—31st December 1882; reading “Actual Loss” Tls. 10,994,274.

METEOROLOGICAL NOTES. CHEFOO 1892.
Lat. 37° 35 min. 56 sec. N. and Long. 124° 22 min. 33 sec. E.

I. Temperature (Fahrenheit.)

<table>
<thead>
<tr>
<th>Month</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>15°</td>
<td>50°</td>
<td>30°</td>
<td>35°</td>
</tr>
<tr>
<td>Feb.</td>
<td>12°</td>
<td>50°</td>
<td>30°</td>
<td>38°</td>
</tr>
<tr>
<td>Mar.</td>
<td>20°</td>
<td>59°</td>
<td>35°</td>
<td>39°</td>
</tr>
<tr>
<td>April</td>
<td>34°</td>
<td>84°</td>
<td>52°</td>
<td>50°</td>
</tr>
<tr>
<td>May</td>
<td>47°</td>
<td>89°</td>
<td>67°</td>
<td>42°</td>
</tr>
<tr>
<td>June</td>
<td>58°</td>
<td>102°</td>
<td>76°</td>
<td>44°</td>
</tr>
<tr>
<td>July</td>
<td>67°</td>
<td>97°</td>
<td>82°</td>
<td>30°</td>
</tr>
<tr>
<td>Aug.</td>
<td>67°</td>
<td>99°</td>
<td>79°</td>
<td>32°</td>
</tr>
<tr>
<td>Sept.</td>
<td>48°</td>
<td>90°</td>
<td>71°</td>
<td>42°</td>
</tr>
<tr>
<td>Oct.</td>
<td>40°</td>
<td>86°</td>
<td>64°</td>
<td>46°</td>
</tr>
<tr>
<td>Nov.</td>
<td>26°</td>
<td>76°</td>
<td>48°</td>
<td>50°</td>
</tr>
<tr>
<td>Dec.</td>
<td>17°</td>
<td>57°</td>
<td>35°</td>
<td>40°</td>
</tr>
</tbody>
</table>

The highest point reached by the thermometer (102°) was on June 24, but the same day gave us a minimum of 72°. The second highest point reached was on Aug. 14 (99°), yet the minimum for that day was 76°.

The highest minimum (82°) occurred on July 7. The hottest week of the year was from July 2 to 8, the mean being 85°.

II. Rainfall. Inches.

<table>
<thead>
<tr>
<th>Month</th>
<th>Rainfall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>7 days giving a total of 0.58</td>
</tr>
<tr>
<td>Feb.</td>
<td>1°</td>
</tr>
<tr>
<td>Mar.</td>
<td>6°</td>
</tr>
<tr>
<td>April</td>
<td>5°</td>
</tr>
<tr>
<td>May</td>
<td>4°</td>
</tr>
<tr>
<td>June</td>
<td>4°</td>
</tr>
<tr>
<td>July</td>
<td>10°</td>
</tr>
<tr>
<td>Aug.</td>
<td>17°</td>
</tr>
<tr>
<td>Sept.</td>
<td>4°</td>
</tr>
<tr>
<td>Oct.</td>
<td>8°</td>
</tr>
<tr>
<td>Nov.</td>
<td>8°</td>
</tr>
<tr>
<td>Dec.</td>
<td>8°</td>
</tr>
</tbody>
</table>

From this table it will be seen that the falling of rain for the first half year, only amounted to 4.38 inches, and for the second half year as much as 28.15 inches.

The average fall was 0.40 in. per rainy day. The heaviest rainfall of the year — 3.18 in. — occurred on Aug. 22.

Snow fell as late as April 11. The first snow after the summer fell on Nov. 24, but the first frost was noticed on Nov. 11.

The heaviest snowfall of the year (equivalent to 1.06 in. of rain), occurring on Dec. 11, was quite exceptional.

III. Thunderstorms. Inches.

<table>
<thead>
<tr>
<th>Month</th>
<th>Thunderstorms</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 5</td>
<td>the accompanying Rainfall being 0.14</td>
</tr>
<tr>
<td>2°</td>
<td>14°</td>
</tr>
<tr>
<td>3°</td>
<td>13°</td>
</tr>
<tr>
<td>4°</td>
<td>14°</td>
</tr>
<tr>
<td>5°</td>
<td>29°</td>
</tr>
<tr>
<td>6°</td>
<td>10°</td>
</tr>
<tr>
<td>7°</td>
<td>11°</td>
</tr>
<tr>
<td>8°</td>
<td>14°</td>
</tr>
<tr>
<td>9°</td>
<td>16°</td>
</tr>
<tr>
<td>10°</td>
<td>18°</td>
</tr>
<tr>
<td>11°</td>
<td>20°</td>
</tr>
<tr>
<td>12°</td>
<td>10°</td>
</tr>
<tr>
<td>13°</td>
<td>3°</td>
</tr>
<tr>
<td>14°</td>
<td>20°</td>
</tr>
<tr>
<td>15°</td>
<td>27°</td>
</tr>
<tr>
<td>16°</td>
<td>28°</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10.90</td>
<td></td>
</tr>
</tbody>
</table>
The average fall was 0.68 in. per stormy day. The last storm was accompanied with very large hail-stones, many of the largest of them having a diameter of \( \frac{3}{4} \) inch.

HORACE A. RANDEL.

The death took place January 23rd of Dr. WILLIAM PRICE, the self-styled "Arch-druid of Wales." Dr. PRICE, who had attained the age of 92, was one of the mostsingular personalities in the Principality. He qualified as a medical practitioner as far back as 1821, and took an active part in the Chartist movement. On account of his extreme opinions, a warrant was issued for his arrest by the Government of the day, and a large reward was offered for his capture. He eluded his pursuers disguised as a woman, and succeeded in escaping to France. Landing at Havre, he proceeded thence to Paris, where he was introduced to the reigning monarch. After his return from exile PRICE became notorious for his litigious propensities, and squandered a large fortune in frivolous actions at law. In recent years, the occurrence which brought him most prominently into public notice was the cremating of his infant son on the summit of a hill on the Caerlaw fields. At the ensuing assizes at Cardiff he was indicted for unlawfully cremating the body of the child. The case was tried, and in the end Dr. PRICE was acquitted. He then entered an action against the police for false imprisonment, and recovered a farthing damages, and afterwards disturbed his neighbours' tranquillity by cremating his dead oxen. He is survived by two young children, one of whom, the boy, bears the name of Jesus Christ. Dr. PRICE attracted considerable attention by his quaint costume. On his head he wore a whole fox skin, the head, ears, and tail included. His trousers were of a light green colour lined with scarlet at the bottom of the legs and scalloped at the ends. His vest was scarlet, with golden buttons, and he wore a light cloak.

Dr. PRICE left strict injunctions that his body was to be cremated.

We take the following extract from the Celestial Empire for those who are interested in such matters. The figures apply to the war footing establishment of the countries mentioned:

<table>
<thead>
<tr>
<th>Country</th>
<th>Troops</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>4,350,000</td>
</tr>
<tr>
<td>Russia</td>
<td>4,000,000</td>
</tr>
<tr>
<td>Germany</td>
<td>5,000,000</td>
</tr>
<tr>
<td>Austria and Hungary</td>
<td>1,900,000</td>
</tr>
<tr>
<td>Italy</td>
<td>2,236,000</td>
</tr>
<tr>
<td>(Triple Alliance)</td>
<td>9,136,000</td>
</tr>
</tbody>
</table>

1. There are two Chinese girls and three Chinese young men studying medicine in the University of Michigan. The girls have taken the names of Mary Stone and Ada Kahn. Missionary Review. (Contributed by Dr. Whitney 'at home'.)

2. The Hawaiian Islands have 15,300 Chinese, 20,000 Japanese and 12,000 Portuguese.

3. The great utility of medical missions in Africa and India, as well as in China, is frequently referred to. The last Decennial Missionary Conference in Bombay reaffirmed the need of more medical missions in India.

4. In India there are 97 European and Eurasian medical missionaries and 168 native Christians caring for the sick, and 166 hospitals and dispensaries. This branch of missionary toil will doubtless develop as Christians realize how beneficent and mighty a helper medical work is for the evangelization of the people.—Harvest Field—Ibid.

5. The Church Missionary Society has 20 medical missions—some with branch hospitals and dispensaries, 6 are in China, 5 each in India and Africa, and 1 each in Palestine, Persia, and British Columbia (one not named.)—Bombay Guardian.
6. Evangelism in the Turkish Empire has founded hospitals and orphanages, and has done more than anything else to bring in an enlightened medical practice, and drive old systems to the wall and make them a laughing-stock. —Rev. C. C. Tracy. —Ibid.

7. It is reported, from the Medical Review, that not a single case of small-pox occurred in the British army in 1890. This is a strong argument in favour of vaccination and re-vaccination of which China is one of the most needy countries in the world. —Ibid.

8. Vitality of the typhoid bacillus, as condensed from experiments reported by Karlinski, 1891: 1. The typhoid bacillus lives only three months when buried in the earth. 2. The typical bacillus mixed with excrement does not live as long as in pure cultures, owing to the action of microbes native to excreta. 3. Water added to earth diminishes the vitality of microbes. 4. The typical bacillus just beneath the surface resists the action of other microbes more energetically that at a greater depth. 5. The vitality of the bacillus is lessened on the surface of the ground owing to the influence of rain and sunshine. 6. There is great elevation of temperature during the putrefaction of organs from typhoid fever cadavers, the bacillus being found more than three months. —Ibid.

ARRIVALS.

At Shanghai, on 26th November, Dr. Patterson for English Baptist Mission.

At Shanghai, 10th December, Dr. Gillison (returned); on the same date, Dr. Bessie Harris, equally for the London Mission, Hankow; and Dr. Walton for Chungking.

At Hongkong, on 6th February, Dr. and Mrs. W. Murray Cairns for the English Presbyterian Mission, Formosa.

At Shanghai, on 26th February, Miss A. Larson, M.D. for Presbyterian Mission, Shantung.

At Shanghai, Miss R. Gifford, M.D., for Canadian Methodist Mission, Chungking.

At Shanghai, March 13th, A. G. Parrott, M.R.C.S. (Eng.), L.R.C.P. (Lon.) wife and two sons (returning); on the same date, Miss Ruth Farwig, M.D. for Singan Fu, Shensi.

BIRTHS.

On 31st October 1892, the wife of F. W. Marshall, L.R.C.P. and S.E., Laoling, Shantung, of a daughter.

On 14th November, the wife of Dr. Stevenson, Ch'entu, of twin daughters.

On 24th January 1893, the wife of Dr. Canright, of a son.

On 27th January, the wife of Dr. Boone, of a daughter.

MARRIAGE.


DEPARTURES.

From Rajaburee, Siam, January, Dr. Jas. B. Thomson for the United States.

From Shanghai, 11th February, Miss Sudden of Wesleyan Mission, Hankow, for England.
Dr. C|jc $Mrical Pissionarg ^ssflriatrnw nf China in %umxt& toiilj tbj tastim of the same, ...

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 30th</td>
<td>To Balance</td>
<td>$</td>
</tr>
<tr>
<td>1893</td>
<td>Receipts</td>
<td>321</td>
</tr>
<tr>
<td>Feb. 15th</td>
<td></td>
<td>242</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug. 1st</td>
<td>By Photo-lithographs, Blocks, etc.</td>
<td></td>
</tr>
<tr>
<td>1893</td>
<td>re Journal...</td>
<td></td>
</tr>
<tr>
<td>Feb. 15th</td>
<td>Postage, ‘Press’</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Office</td>
<td>4.79</td>
</tr>
<tr>
<td></td>
<td>Stationery</td>
<td>3.55</td>
</tr>
<tr>
<td></td>
<td>Sundries</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>Wrappers and Wrapping</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Presby. Miss. Press a/c. for printing and reprints Nos.</td>
<td>236</td>
</tr>
<tr>
<td></td>
<td>3 and 4, Vol. 6</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Balance H. &amp; S. Bank as per Pass Book submitted</td>
<td>277</td>
</tr>
</tbody>
</table>

Credit Balance $277.84.

Compared with the Accounts and found correct.

S. E. SMALLEY,
St. John's College, Shanghai.

ALEXANDER LYALL,
President Medical Missionary Association.

<table>
<thead>
<tr>
<th>1893</th>
<th>ASSETS.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb. 15th</td>
<td>To Balance in Bank</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>Subscriptions and Advertisements owing</td>
<td>772</td>
</tr>
<tr>
<td></td>
<td>Association dues owing</td>
<td>320</td>
</tr>
</tbody>
</table>

Total Assets ... $1,369.84