MEDICAL NOTES FOR NON-MEDICAL READERS.

No. V. Diarrhoea and other Bowel Complaints.*

By S. R. Hodge, M.R.C.S., L.R.C.P. (Lon.)

Tropical Dysentery (δυσ δύναμις and ευπεποιημένον an intestine) is quite a distinct thing from a diarrhœa, however protracted, and also, both in its origin and effect, unlike the sporadic cases of dysentery, dependent upon defective sanitation and overcrowding, which are occasionally met with at home. It is universally admitted that the dysentery we meet with in the tropics is connected with the malarial poison which always accompanies a wet and undrained sub-soil; and wherever, as in some places, the drainage and cultivation of marshlands has been undertaken, malaria has disappeared and dysentery along with it. Dysentery differs from diarrhœa in that there is inflammatory ulceration of the large bowel; it is characterised by frequent and urgent calls to stool (due to the irritation of the inflamed bowel), by much straining and burning pain (due to the passage of the discharges over the ulcers), and the matter passed consists mostly, or entirely, of mucus and blood, derived from the ulcers in the bowel. When therefore you know that a person is frequently going to stool and is passing merely a little mucus, or mucus and blood, and that there is pain and straining you know that it is not a case of diarrhœa but of dysentery. "Dysentery may accompany or follow an attack of malarial fever" but not unfrequently there may be no distinct attack of fever, simply a little rise of temperature traceable to the inflammation present

* It has been pointed out to me by a medical friend that the term "Gregory Powder" is not so well known as I had imagined, it is the popular name, in England, for the Compound Powder of Rhubarb.
in the bowel. In the latter case the dysentery is "generally due to the prolonged effect of the malarial poison upon the liver, producing stagnation and slowing of its circulation, leading to impairment of all the functions of the intestinal canal and following the absorption of poisonous products into the blood." Multiple abscesses of the liver are a not uncommon sequela of chronic dysentery, due to absorption of septic material from the inflamed bowel. Whilst malaria is the underlying cause of tropical dysentery, there are many circumstances which are the determining factor in the attack. Such are—bad drinking water, unwholesome and indigestible food, impure air leading to improper aeration of the blood, sudden vicissitudes of temperature, and exposure to damp and cold which, by suddenly checking the action of the skin, leads to congestion of the liver. We are thus led to see the importance of some of the prophylactic measures mentioned in my first papers, viz., proper food, proper drinks, suitable clothing and good hygienic surroundings. It is very important to recognise the early stage of dysentery as, if taken early, in the first 12 or 15 hours, and suitably treated it can in the great majority of cases be speedily stopped. Therefore, my friend, do not get into a panic on the first symptoms of dysentery, for a clear and cool head may mean saving of a valuable life. 'Knowledge is power,' and the knowledge that this terrible disease is perfectly under your control, in most cases, will help to give you confidence. The onset of an attack of dysentery is by no means always characteristic, and more frequently than not, commences as a diarrhoea, preceded by after days of a general feeling of out of sorts. The diarrhoea gets more urgent and speedily takes on the characteristic symptoms named. At this early stage a dose of castor oil (a half to one ounce for an adult) will often arrest it and stop all mischief. If, however, it is not so checked other symptoms will develope. The calls to stool will become more frequent and urgent; the pain and scalding will be more distressing and the feeling that there is something to get rid off in the bowel, leading to terrible straining, will increase in intensity. All this time the matter passed from the bowel will be very scanty and consist entirely of mucus and blood, or, later, of pus and blood mixed with sloughs, the dejecta having a very sickly odour. The patient becomes weaker and weaker, the abdomen becomes tender and swollen, there may be difficulty or complete inability to pass water, the face will be anxious and dusky, tongue foul or unnaturally bright, and frequently there will be sickness and some thirst. These symptoms may either get worse and end in death, or gradually pass into a chronic condition which may last for an indefinite time. In the former eventuality the final act is often ushered in by a deceptive period of calm and apparent improvement. The diarrhoea ceases, the pain abates and the patient is quiet and appears comfortable—and hopeful friends think he is getting better; but it is the quiet of exhaustion and the painlessness of lessened
sensibility and is, in fact, a sign of the approaching end. Signs that the worst
of the disease is past are:—the pulse gets slower and stronger, the countenance
becomes less anxious, the tongue begins to clean, there is less gripping pain in
the abdomen and less straining with the motions, whilst the latter begin to
show signs of feculence. Fortunately we have in ipecacuanha a remedy which
is at once safe and effective—it acts like a charm in dysentery. Under its in-
fluence the inflammation of the bowel speedily subsides, the pain and straining
at stool disappear, and in place of blood and mucus being passed the motions
consist of pultaceous brown feculent looking matter which are so charac-
teristic in appearance as to be known, amongst the profession, as ipecac-
uanha stools.

There is a proper way to take ipecacuanha and the details of the
procedure must be carefully observed. Go to bed. Abstain from all food
or drink for one or two hours before taking the medicine, and for the same
period after taking it. Put a mustard poultice or hot turpentine stipes
on the abdomen. Next take twenty to thirty drops of laudanum, or, if
you have not that by you, of chlorodyne. Half an hour afterwards take 30
grains of powdered ipecacuanha, or 30 drops of the fluid extract of ipecac-
uanha of the strength of 1 grain to 1 minim. The powdered ipecacuanha may be
taken in gelatine capsules, or in wafer paper, or it may be suspended in half
a wineglassful of water, to which may be added either two or three drops of
chloroform, or from twenty to thirty drops of chloric ether.* Then lie
perfectly still on your back or if you must lie on your side lie on the left rather
than right and if you can get a friend to read something interesting to occupy
your mind all the better. As a rule the stomach, so prepared, will not reject
the dose or will generally retain it for two or more hours, by which time
sufficient has been absorbed to do its work. The best time to take the
ipecac, is the last thing at night and the first thing on waking in the morning.
This time has two advantages (1) it leaves the day free for the administration
of nourishment, which is very important and (2) the evening dose, if you can
quickly get to sleep, will seldom be rejected, whilst the long rest to the stomach
at night makes it less irritable and so gives the morning dose a good chance
of being retained. If, despite these precautions, the ipecacuanha is quickly
vomited, then wait for 2 hours and try again, reducing the dose by one-half.
Persevere, reducing to one-fourth if necessary. But, as a rule, if ipecacuanha
cannot be retained it is a sign of some complication, very probably connected
with the liver, and that the patient needs prompt medical skill. Should the
ipecacuanha be retained then the dose should be repeated in about 10

* Chloric ether is the old name for spiritus chloroformi, but it has a slightly stronger
preparation being 1 in 8 instead of 1 in 20. It matters little which is used as it is
simply to cover the taste of the ipecacuanha.
hours time, i.e., in the evening if the first dose was taken in the morning; the same precautions must be observed with each dose not neglecting counter-irritation to the abdomen. When taken in this way ipecacuanha is perfectly safe, I believe, and one need neither fear uncontrollable vomiting or intense depression. During the attack food should be limited to milk and barley water, or milk and soda water, or milk and lime water, peptonised milk or Benger's food, or cold chicken tea, arrowroot, Brand's essence of beef, etc. "The question of continuing the use of the remedy must be determined in each particular case by its effect on the general and local symptoms. If the calls to stool are reduced to 2 or 3 in the 24 hours, and losing their dysenteric appearance, have become feculent, and are voided without pain or straining; if the restlessness has been calmed and the patient obtains refreshing sleep, and the pulse resumes its normal frequency, or tends distinctly that way, the large doses should be stopped" (Maclean). About 5 grains of ipecacuanha may now be taken night and morning for two or three days, and then, if any looseness of the bowels persists, it may be met by 5 to 10 grains of Dover's Powder (compound powder of ipecacuanha) at bed time, or by 2 grains of ipecacuanha combined with 10 grains of bismuth night and morning, or by the same amount of ipecacuanha suspended in water to which 10 drops of chlorodyne have been added. The patient should maintain the recumbent position until every trace of abdominal irritation has subsided. This I have found the most difficult part of the treatment, for as soon as the urgent symptoms have passed and the patient begins to feel himself better, he attaches little importance to a slight looseness of the bowels, and all eager to redeem the time lost insists on returning to his ordinary work. There will be equal difficulty in persuading the convalescent to be careful with his diet. But "return to the ordinary diet must be exceedingly gradual, and the sufferer must be most careful in this respect for some weeks after apparent recovery. Relapses are frequent and often fatal, when this caution is neglected. The ulcers, not entirely healed up may, by any indiscretion, be again irritated into destructive action, to the reproduction of all the acute symptoms, and to the disappointment and danger of the patient." It may be taken as a safe rule that a persistent looseness of the bowels (I have known an average of 5 or 6 motions a day for months) after an attack of dysentery means unhealed ulcers in the colon and calls for the exercise of great caution. Potatoes and other vegetables, salt, pepper, and all spices, must be avoided until the digestive system gets normal and the bowel irritation passes off; an observance of the rules given for chronic diarrhea will be productive of great benefit. All stools passed in an attack of dysentery should be disinfected by carbolic acid or Joyes fluid and then buried, as there is a doubt whether the putrifying dejecta will not communicate it: experience in some of the old Indian barracks
tends to show that they will. An enema of starch and opium, laudanum thirty drops, 2 ounces of mucilage of starch, made by boiling 120 grains of starch in 10 ounces of water, will relieve the pain and straining if excessive. It is a good thing, if the dysentery is due to chill and the skin is hot and dry, to give the patient a hot bath at once, the bath being as hot as he can bear and given at the bedside; every precaution must be used to prevent chill afterward, the bed pan being used whenever the patient’s bowels are moved. Dysentery is a very serious complication of pregnancy, miscarriage being the result to be feared. Treatment must be commenced at once, on the earlier symptoms, by absolute rest and castor oil. Morning sickness may interfere with the administration of ipecac, but absolute rest will, generally, enable the drug to be retained later on in the day, especially if combined with 10 grains each of bicarbonate of soda and bismuth. Should malarial fever complicate the attack, then full doses of quinine must be given in between the doses of ipecacuanha. As I hear that there is a mischievous opinion getting abroad amongst some sections of the missionary community to the effect that no China fever ever requires larger doses of quinine than 3 grains (!!) I take this opportunity of saying that I scarcely know which is the more dangerous practice—to be always taking quinine for every ailment, real and imaginary, that flesh is heir to, or to play at taking it when it is really needed. Leave quinine alone except when clearly indicated, but when in presence of high malarial fever, remember that full doses of quinine means x—xv. grains repeated in two or three hours—and to give less than this is, generally speaking, trifling with a serious malady.

Chronic dysentery, in which the stools always contain more or less mucus and blood, and in which impaired nutrition unfailingly brings increasing weakness, calls for different treatment. Here change of climate, away from malaria, will do wonders and is imperatively needed. The voyage home should always be by sea and by as long a route as possible. But do not delay the change till the patient is at his last gasp, for a voyage under such circumstances is sheer cruelty. Until such time as the patient can embark, small doses by ipecacuanha (gr. ii) with bismuth and soda (of each gr. v) may be given three times a day, with 10 grains of Dover’s Powder (pulv. ipecac. co.) at night time to procure a good rest. Should an acute relapse take place it must be treated with full doses of ipecacuanha, as directed above, just as if it were a first attack of dysentery.

(To be continued.)
HOT AND MEDICINAL BATHS AND THE TREATMENT OF
LEPROSY IN JAPAN.

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The use of the hot bath is carried in Japan to an extent that it is carried, so far as I know, nowhere else in the world. Not only does every Japanese, of high or low degree, consider a hot bath once a day a necessity, but he enters the water at a temperature that is perfectly astonishing to one who is only accustomed to what is called "the hot bath" in Europe and America.

The baths are either private or public. Any family of the least pretension—in fact, all but the poorest—have a bath in or near the house. This is an enormous wooden tub, generally oval in plan, with a large copper tube passing vertically through the water near one end. In this tube charcoal is burned, and the water is thus heated. In the towns the baths are always in the houses; in the country they are often several yards away; and it is a sight, strange for the first time, to see the various members of a peasant's family trooping out, one at a time, in nature's garb, to take their turns at the evening bath.

The public baths are of the same nature as the private, but are generally square in shape, and are, of course, much larger. In these public baths it used to be the universal custom for men and women to bathe together, and the baths were commonly open to the street. Of late years, out of deference to foreign prejudice, the baths in the towns have been closed in, and there is always a division between the women's and the men's bath, although it is of the flimsiest nature. It is sometimes merely a bamboo laid across the bath at the surface of the water.* In the country, and specially at all places where there are medicinal baths, promiscuous bathing is still common. It is not, however, to be supposed that there is any indecency connected with this custom. In fact, the surprising thing, at first, to a stranger, is the complete want of knowledge "that they are naked" that the bathers display. Were one to show that he (or she) "knew that he was naked," it would be taken as a certain indication of a prurient mind.

* I have seen a case in which there were two entrances, over one of which "man's bath" was written in Chinese characters, over the other "woman's baths," thus fulfilling the letter of the law, but where there was no division whatever in the bath.
Besides the private and the public baths, there are what may be called semi-public baths at all hotels and tea-houses. These are almost always used by guests immediately after arriving at such houses.

The general time of taking the bath, except in the cases just mentioned, is after the work of the day is done, at which time the dress is changed also, but those who have leisure often bathe several times a day.

There has been much exaggeration as to the temperature at which the baths are used; yet if anyone tries to bathe at the temperature I am about to mention, he will find that they are high enough in all conscience. After carefully testing the temperature of many baths that Japanese were bathing in, I conclude that anything below 110° F. is considered too cold, anything above 120° F. unpleasantly hot, although I shall presently give cases where baths are used at temperatures considerably higher even than this. It may be said, roughly, that any temperature between the two limits mentioned is considered agreeable, although women and children seldom care for baths quite as hot as 120° F. In bathing, the bather, after laving himself with the hot water while sitting on the floor of the bath-room, and pouring it over his head, enters the bath and sits immersed in the water quite up to the neck for any length of time from two or three minutes to a quarter of an hour, according to his inclination and the temperature of the water.

Now, a word or two as to the effect on the health of the people of this custom of incessantly bathing in very hot water. When first Japan became open to the world, and the Japanese began to take the advice of Western folks on all manner of things, the Western physicians strongly condemned the practice for no other reason than that, inasmuch as it was so foreign to other ideas, it must be bad. A regulation was issued, that the public baths must not be heated above a certain comparatively low temperature, and there was consequently great discontent among the people.

This discontent gave rise to an investigation of the subject by physicians, both Japanese and foreign, with the result that, except in the case of those suffering from a weak heart, the custom was pronounced not only harmless, but beneficial. The high temperature thoroughly opens the pores of the skin, and, even without the use of soap, a healthy skin action and a cleanliness are secured that are not to be had by any amount of washing in cold water or by the taking of what we call "hot baths." The hotter the water the less is the chance of catching cold after the bath, while a really hot bath taken just when it is felt that a cold is coming on will generally stave it off. There can be no doubt that the general healthiness of the Japanese, living among sanitary surroundings in many ways very defective, is greatly due to their habit of frequently bathing in hot water.
Those who have never taken a really hot bath can have no idea of the refreshing effect that it has, say, after a tedious journey. Instead of the relaxing effect that the tepid bath which we call "hot" has, it is highly invigorating. Curiously enough while, in cold weather, it has the effect of preventing the cold from being felt for several hours after bathing, it has, after a few minutes, a cooling effect in very hot weather. I suppose this is to be accounted for by the fact that the skin is brought into healthy action. The effect of a really hot bath on the temperature of the body may be interesting to some. The following is the result of observations made on myself:

| Temperature of the air | 75° F. |
| Time in bath | 116° F. |
| Temperature of body before entering the bath | 98° F. |
| at the end of five minutes, while still in bath | 101.5° F. |
| one minute after leaving bath | 102.4° F. |
| two minutes after leaving bath | 102.4° F. |
| three minutes after leaving bath | 101.5° F. |
| at the end of ten minutes after leaving bath | 98.6° F. |

That is to say normal.

The temperatures were taken by a clinical thermometer held in the mouth.

The rise of temperature after leaving the bath is curious, but it had already been observed by Prof. E. Baelz.

It might be supposed that the habit of public bathing would lead to the communication of infectious diseases, the more especially as, in some of the public baths and the hotel and tea-house baths, the water is not changed as often as might be advisable. All that can be said is that investigation has so far failed to detect such communication of diseases, and that, if there is occasionally a solitary case, the evil is much more than counterbalanced by the general improvement in health that results from the cleanliness gained by general hot bathing which could not be indulged in by the poorer classes, were it not for the public baths.

In the olden days so essential was hot bathing considered to the health of the people, that there was no fixed charge for the use of the public baths. Those who could not afford to pay might use them for nothing, while there was a scale of charges, fixed by custom, for those who were able to pay a small sum. At the present time the charge for the use of public baths is one cent or one and a half (silver currency).

Japan is a volcanic country, and it may be said to be bubbling with hot springs from end to end. Some are so hot that the cooking in villages is done by placing the cooking utensils in the running streams. Some are only tepid, some are of pure water, others have strong medicinal qualities. All that are in position accessible by any possibility, and that are hot enough, are used by the Japanese for the supply of baths.
Of all the hot spring towns, Kusatsu has the greatest reputation. It is said that the springs have been in use for more than a thousand years, and the repute that they are held in, is indicated by the fact that there is an old proverb to the effect that "even Kusatsu cannot cure love"—a thing, by the way, that would not hold true in the case of foreigners, as some of the baths would speedily kill any lover that might try them for a cure, by the simple process of boiling him.

As a matter of fact, the baths are of the highest value in the treatment of syphilis, leprosy and nearly all cases of skin disease, whether syphilitic or not, and they act simply as a specific in certain cases of rheumatism and gout.

I spent a week at Kusatsu during the summer of 1891, and found the place so interesting that I think a short description of it may be well.

The town or village is at a height of a little less than 4,000 feet above the sea, and is surrounded with mountains rising to some 8,000 feet. Doubtless the magnificent air adds to the efficiency of the baths. Hot water rises out of the ground all about the district. The springs are of various temperatures, and are powerfully medicinal, although the chemical constituents are not the same in all. The most famous bath is the "Netsu-no-yu" (literally fever bath). The temperature of this at the source is nearly 160° F., but the water has, of course, to be cooled somewhat before it is used. In the Netsu-no-yu there are three baths of differing temperatures. The temperature of each varies a little, but I found that of the hottest to be, on one occasion when there were actually bathers in it, 128° F. More commonly it is 125° F.

I have no exact analysis of the water, but know that the chief active substances are free hydrochloric and sulphuric acids. The water contains these (principally hydrochloric acid) to the extent of one-quarter per cent. of the whole volume. Besides this, the water, as it issues from the ground, contains about three volumes of sulphureted hydrogen per thousand, and one part of arsenic sulphide in 1,000,000 parts.* Prof. E. Bealz, M.D., attributes the curative action of the hot water to the acids, the effect being analogous to blistering on a large scale. Prof. Divers attributes the efficiency in skin diseases partly at least to the arsenic. Whatever may be the truth of the matter, the fact is that the treatment, after ten days or a fortnight, results in blisters and sores of the skin about the scrotum, between the legs and under the arms, resulting in the characteristic "Kusatsu walk," the patients moving slowly along with the legs stretched wide apart and the arms held well away from the body. The pain of bathing after the body has got into this condition is intense, and the patients submit to a sort of semi-military drill under the command of a bathing master. This is a most curious sight to see.

* Prof. E. Divers, F. R. S., etc.
The Natsu-no-yu is a building measuring about forty-five by thirty-five feet, consisting of a wooden roof supported on wooden posts. The spaces between the posts are filled in with bamboo frames. There is a platform raised about a foot and a half above the ground level, immediately within the posts. It is about four feet wide, and immediately within it there is a gangway of about three feet wide on the ground level. Within this are the baths, sunk some three feet deep below the ground level. As already stated, there are baths at three different temperatures. It is only in the two hottest that the bathers have to submit to discipline.

About half an hour before bathing time a trumpet is sounded, and the bathers begin to arrive. They take their places around the bath and take turns in vigorously churning up the water with broad boards. This exposes the water to evaporation and cools it to the temperature mentioned above.

As the time for bathing approaches, the bathing-master, in a white dress, takes his place amongst the bathers. He gives a signal, and every bather takes a large wooden ladle with a short handle, bends down and begins to pour water over his head. This is to prevent the likelihood of congestion from the excessive heat of the bath. The pouring continues for five minutes. And then there is a second signal, at which all stop for a rest of three minutes. During this time, those who have been most affected by the treatment wrap thin cloth bandages around the parts most affected, as this reduces somewhat the torture of the parboiling process. At the end of the three minutes, the signal to enter the bath is given, and very slowly the bathers lower themselves, taking about thirty seconds before they are completely immersed. And now begins the most extraordinary part of the whole affair. It is a sort of a chant on the part of the bathing-master, with an answering chorus from the bathers, the whole thing intended to encourage them in bearing the pain. I found it very difficult to catch the words, but the following is something like what is said in Japanese. A very free translation is given in English:

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\begin{align*}
\text{Shitaku yō kereba sagarimasho.} & \quad \text{[If you are all ready enter the water.]} \\
\text{Sam pun kan.} & \quad \text{[There are three minutes.]} \\
\text{Kai-sei no ni fun.} & \quad \text{[There are only two minutes more.]} \\
\text{Chokkuri no shimbo.} & \quad \text{[Persevere a little longer.]} \\
\text{Kai-sei no ippun.} & \quad \text{[There is only one minute more.]} \\
\text{Shimbo ga kan jin da yo.} & \quad \text{[Persevere only a very little longer.]} \\
\text{Shi dzuka oagannasai.} & \quad \text{[Get out of the water slowly.]}
\end{align*}
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To each of these sentences, chanted in a strange manner, the hundred or so of bathers answer from the bath with a sound that is between a shout and a wailing cry, and that can be heard all over the town. The order to get out of the bath is obeyed, but there is no slowness about the movement. Each
The Moxa in Leprosy.
bather leaps and scrambles from the bath with an agility that shows how hard he has found it to bear. Nearly a hundred enter the bath at once, sitting just as closely as they can, and the bathing goes on for more than an hour, five times a day.

The usual course is about a month, and, after it is over, the bathers generally proceed to another hot spring village where the waters have the effect of very quickly healing the skin.

**THE TREATMENT OF LEPROSY AT KUSATSU.**

There are many lepers in Japan, and, although they have never been treated as outcasts bound to crowd together in certain places, as in other countries, they have for long voluntarily congregated at certain places where the treatment is supposed to cure them or to alleviate their sufferings. As a consequence there is a leper quarter at Kusatsu. I have it on the high authority of Prof. Bealz, M.D., that the Kusatsu treatment of leprosy actually results in a cure in some cases, if the disease be taken at an early stage. So far as I know, Kusatsu is the only place where there are authentic cases of cure of leprosy.

The ordinary Kusatsu bathing treatment might be described as heroic, but what is to be said of that for leprosy?

In Webster’s Dictionary the word “moxa” will be found defined as “A woolly, soft substance prepared from the young leaves of *Artemisia Chinensis*, and plants of other species, and burned on the skin to produce an ulcer.”

So far as I know, “moxa” is the only Japanese word that has been incorporated in the English language—by the way, Webster professes his ignorance of the origin of it.* It is more strictly “mogusa,” the “u” practically silent.

In the treatment for leprosy at Kusatsu the bathing is persevered in for one hundred days—although not in water quite so hot as that of the Netsuno-yu—and on every one of these hundred days 1,000 moxa are applied to the skin, all affected parts being cauterized over and over again! It is truly doubtful whether the cure is not worse than the disease.

The moxa is applied by a tolerably handsome middle-aged woman. She was a leper some fifteen years ago, but was entirely cured by the treatment. It is only on looking closely into her face that one can see that her skin is covered with innumerable minute pits, the result of the 100,000 moxa!

* In the latest edition of the Dictionary the derivation of the word is given. Six admirably executed photolithographs add much to the interest of Professor Burton’s paper.—Ed.
OBSERVATIONS ON OPIUM.

By V. P. Suvoong, M.D., B.D.

The Emperor Tao Kwong, the grandfather of the present Emperor, was known to be an opium smoker, yet many poor fellows paid the last penalty of life for the very same vice of which he himself was guilty. The Imperial Edict was strict and searching and no favouritism was shown to any person of whatever rank or degree. His aversion to the drug may be considered deep and genuine, and if he had only practised it in his own person by example instead of by precept, it would have made him a greater patriot in the estimation of the people. Even as it was, he is still considered as the only Emperor who took serious steps to stamp out opium smoking in China. In his days it was dangerous to indulge in it, and those who had contracted a habit for it found it difficult to gratify their craving, for there were spies all over the land, induced by large rewards to discover and bring to punishment those who had a weakness for the seductive pipe. Those villainous spies would get on the tops of houses in the dead of night to scent out their victims and many a high mandarin and rich merchant was ferreted out from his most concealed apartments to be executed like common malefactors. In the train of these cruelties followed innumerable cases of blackmail and forcible entrances into houses of the innocent with their attendant evils. But opium smoking flourished nevertheless. For vice, according to Pope, is a monster that we at first abhor, then endure and at last embrace.

The origin, history and statistics of opium are foreign to my purpose here. I will only relate what has come within my personal knowledge or experience in regard to this subject.

None will deny that an immense number of the Chinese are addicted to opium smoking. Even in the vast crowd of the Metropolitan officers in Peking there are few who are not such. When they went there for office they took their opium apparatus along with them, just as the ordinary Chinamen would not part with their brass "water pipes" as they go abroad. Some of the Chinese officers prefer their own preparing of the drug in a copper heating pan and an earthen oven and they entrust that important function to an experienced servant specially devoted to that purpose in their travelling or being abroad, and no doubt there are many such in Peking now. Others who either cannot afford that luxury or not being particular of the mode of preparation, order the ready made article from the many shops and dens that are to be found everywhere even in the small villages of the empire. The home made variety is purer, as the shop made kind is always more or less
adulterated with some inert foreign matters as brown sugar, powdered licorice, &c. Great smokers are as particular about what they smoke as high livers are about the vintage of their champagne. Since the opium smoking officers in Peking are so particular, it is reasonable to suppose that when they go into the provinces to assume their posts of duty and authority that they will devote no little time to this luxury. And indeed they do. When the celebrated Peng Yu-ling was admiral of the Yangtze, he memorialized the Throne against a certain Viceroy for laziness through opium smoking and the latter had to retire from the public service. But now the great Peng is dead and the Emperor finding himself in need of a man of prestige, called out the opium smoker from retirement and he again became and still is the Viceroy of the same provinces which he had ruled before. This is a typical case of a high mandarin in which opium may interfere with public duty.

Many Shanghai residents will recollect a former magistrate here by the name of Muh. He has been dead several years, so that I can do him no harm (or vice versa) in mentioning him here. He has been to my house and I have visited his family. He was an opium smoker, and of his three sons, the eldest one spent most of his time in the Foochow Road houses of entertainment and became an opium smoker there. Finally he bought a concubine from there. As the old man had to foot the bill, he did not like it much and made the matter hot for the young man, who, then, foolish lad, committed suicide by swallowing an overdose of raw opium. The second was no better, though I believe he has not yet committed suicide! The third son was by a concubine. He was then only ten years of age, and poor thing, he was totally blind—the eye-balls were not yet shrunked at the time, but the cornea were perfectly opaque and occasionally he tried to produce subjective light by himself rubbing the eyes as such patients generally do. Muh dearly loved the blind lad who in return was very affectionate. Once there was a family disagreement which filled the mother of this lad with great grief. She had no other child besides that blind boy. She hugged him closer to her bosom and he asked, "Mother, why do you weep?" She said, "I am thinking what will become of you when I am dead." The child sobbed out, "I want to die with you." The mother then took some opium from her husband's divan and gave it to the child, who without hesitation put it in his mouth and swallowed it; and she quietly took a dose herself. When the father came in, the first thing he saw was the mother and child locked in each other's arms, cold and stone dead. Then the old man began to curse the day that he first took to opium. This catastrophe occurred only a couple of months or so after his eldest son's trouble.

When the magistrate's term of office was completed he was promoted to the post of Tai Chong Chow also in this province. While there fresh
trouble persecuted him, and in the weariness of life he himself took a full
dose of that very same drug which in times past had given him pleasure with-
out pain and was now to terminate his life by a painless death, the latter
office it having had already done to three members of his family and that but
comparatively recently.

Some superstitious Chinese recollecting various questionable acts in his
past official career, infer that the ghosts of those whom he caused to be
executed had found him and were wreaking vengeance on him. But is it not
reasonable to suppose that if he were not an opium smoker many circum-
stances in his family and life would have had an altered aspect?

It may safely be said that nine-tenths of the Yamen runners and staffs
are opium smokers; their sins and wickednesses are well known to God and
man; and, with opium added, they form a class of men that are a standing
disgrace to the country in which they live, and a dishonour to the human
form they wear. As to soldiers it is quite notorious that the regulars at the
commencement of the Taiping Rebellion were so demoralized and emasculated
by opium that it was lucky that they had strength enough left in them to run
away with! The Manchu troops, whose sires by dint of strength and daring
gained the vast empire for the present dynasty were now adepts with the
opium pipe rather than with their ancient bow and arrow. They were
now in the habit of selling their spare ration of rice for opium. During the
stirring times of the rebellion a Manchu army was never heard of. And were
it not for the genius of Tseng Kwo-fan in raising bands of Hunan braves,
and subsequently Col. Gordon and his Ever Victorious Army, opium might
have been said to be the ruin of the nation in more senses than one.
Even now the burden of propping up the present dynasty rests on the hardy
and frugal farmers drawn from the provinces of Hunan and Ngan-huai.

I will now mention an instance or two among my personal friends where
opium interfered with the progress of treatment in diseases. I do so in a
measure to answer those who gravely state in public prints that the con-
tinuous use of opium is beneficial to the human system as was done by a British
Consul at Chefoo in the Pall Mall Gazette in 1881 and a certain Dr. Lawrie
in India more recently.

I had a brother who was an opium smoker and I wish the above
gentlemen had opium smoking brothers too, just to convince them of the
error of their conclusions. Recollect also that a Chinese opium smoker is
not a literary Thomas DeQuincy! Yet my brother was not an atrociously-
wicked man; he was like the average opium smokers in most respects,
shiftless, lazy and relying on others to pay their bills! I assisted him to
break off his habit twice successfully and helped him to get some employment.
When he was on his legs again, unfortunately those legs carried him to hi-
old haunts and dens again also. At last he contracted a disease and
dysentery set in and carried him off. Now it is well known among the
Chinese that when an opium smoker has dysentery it is incurable and
they call it "opium leaking." It is also remarkable that dysentery is the
most common form of complaint to which these poor fellows at last succumb.
Among my opium smoking friends one indeed died of a cancerous growth of
the testes and one of grief: but with these two exceptions to my certain
knowledge those who have died, succumbed to dysentery.

Mr. Hsü the collaborator of Dr. Fryer in the Kiangnan Arsenal was
certainly the most scientific man China has yet produced. He was an opium
smoker on a large scale. His shrivelled appearance might be due to old age.
He had great faith in foreign medicines, especially after I had given him an
injection of morphia which instantly stopped an intense pain and profuse
perspiration brought on by eating crabs too freely on a night previous.
When he had facial erysipelas he cheerfully bore the inconvenient application
of nitrate of silver. But when at last he was attacked with dysentery I was
no more called in; and on hearing of his death, I asked his son what was the
cause. The answer was:—It was a case of "opium leaking."

One of the former managers of the Arsenal by the name of Pau was also
addicted to this vice. He was an able man in every other respect and holding
the Taotai's rank, besides being brother to the then Governor of Kweichow he
had an excellent prospect of high promotion in his official career. But he
was however hurried on to his last long home by an attack of dysentery.

These cases came under my own notice and without mentioning more, or
quoting the testimony of others they are sufficient to show that an opium
habit so enervates the system that the latter cannot stand against the attack
of the fell disease. The patients themselves have an instinctive idea that it is
so. Towards the last they refuse everything in the shape of food and
medicine and it is a piteous sight to see them bid a final farewell to the pipe
also, which had hitherto acted as a charm and talisman in all their bodily
ailments of a slight nature, but now fails of its efficacy. Its virtue has
departed; it proves itself a broken reed in the great crisis of man.

As to opium cures and refuges there must be a great deal of fallacy in
the reports of successes. Trace a patient in his subsequent life after his dis-
charge from a Refuge or his reported cure, and you will find probably that he
has taken to the pipe again. The usual atmosphere of life and the character
of old friends generally prove fatal to his sound resolution formed under
favorable circumstances. Some of those who had been so called "cured" often
return to the vice on the sly for evident reasons. During one of my visits to
the present Mixed Court Magistrate, in came the highest official of the locality.
The latter is in the prime of manhood and in the perfection of health: he is
not an opium smoker and never known to be such. Yet on that occasion
while the subject of conversation was on opium, a small parcel of that powdered
drug was brought in and to my surprise he in a familiar manner tested its
quality by putting some on the bowl of the brass water pipe and smoked it
and seemed to enjoy it and he tested several pipes in succession! The inevit-
able inference from this is that many a man may never be generally known to
be an opium smoker, yet on the quiet he may be. Many years ago I was among
the invited to a regular "spread" in a large restaurant on the Foochow Road
by no less a host than the deservedly prosperous Y. Ching-chong of Shanghai.
The inner division of the dining hall was entirely furnished with divans,
pipes, lamps and other paraphernalia of luxurious opium smoking and the
relays of guests that went over there and indulged in the ecstatic fumes filled
my heart with surprise and regret. I said to myself, What a fool you are for
supposing this man and that fellow to be down on opium; see how they are
puffing away like those steam launches which greet people as they come out for
a stroll on the Bund! Oh, how I wished our old manager Li would stalk in
and glare on them and how quickly they would leave their bed and walk! I
afterwards asked one of Ching Chong's men how is it they introduced opium
there? "Well" said he "you are a novice surely; a feast now-a-days is not
complete without it." Alas! alas! Did the Emperor Tao Kwong ever imagine
that a day would arrive in China when opium would be the sine qua non of a
convivial gathering? Is it to be wondered at then that cures are so tardily
effectected while the curse is so petted, courted and rendered fashionable and
elegant? And yet for all that, there is always a universal sentiment abroad
that opium is an evil. No smoker ever recommends it to his own son. The
subsequent calamities of the vice are too numerous to mention—indeed it is not
necessary to do so, as they are but too well known. The benefits from opium
smoking are absolutely nil. It is true, it affords a certain amount of relief
from pain and in many the habit began by taking it for "pain in the
stomach" recommended by Chinese doctors or sympathetic friends. But it is
a remedy more dangerous than dynamite, for it insidiously kills by slow
degrees a far greater number; its temporary relief is purchased at a fearful
price. It is true it gives strength for a time to the ricksha coolie, but the
poor fellow would give anything to be completely free from its thraldom. The
Malays chew betel-nuts, the negroes eat kola nuts, the Austro-Hungarian
couriers and the Croats have convenient pieces of arsenic stowed away on the
quiet in the vacant spaces of their mouth and when they begin to feel fatigued
they tighten their belt a little and turn over the quid in the mouth and then
go on their journey again. These stimulants are by no means to be compared
with opium which alone has such wide reaching devastating effects. The
evil consequences of drunkenness from alcohol are appalling; those of opium
are most so—in the superlative degree. That opium is a prophylactic against fevers requires proofs which are not forthcoming. It is also maintained that it "slows" the physiological actions of the intestines; but that it does so ought to be regarded as an evil and not a benefit to the human system especially in China, where the people are largely vegetarians and consequently they make up quantity for quality in their food. In other words the intestines are more loaded in China than in largely meat-eating countries and to say that the large quantity of effete matters ought to drag their "slow" length along is bordering on absurd.

One thing seems certain, that everything being equal an opium smoker is always worsted in the struggle of ordinary life, and in the contention against diseases he is nowhere. He has a mill-stone hanging on his neck.

The Chinese recognizing the evils of opium have proceeded to discover remedies to wean the people from it. Liu Tse-hsü the Commissioner of Canton that brought on the war of 1842 by his zeal against opium, has a recipe which is still compounded and dispensed in all the native drug stores in the empire. There are numerous other recipes in vogue, but they principally consist of some bitter roots or other which have no value aside from the tonic quality of their bitter principles. In recent years morphia has been largely used by unscrupulous people as an anti-opium medicine. This has been justly condemned by the last Missionary Conference held in Shanghai.

I remember seeing at one of Prof. Alonzo Clark's clinics in the College of Physicians and Surgeons in New York, a man from Australia who was addicted to the morphia habit. He used a hypodermic syringe for it. He was stripped stark-naked to afford an impressive sight to us students. Well, he was a pitiable looking object indeed! From the neck even to the sole of his feet his body was completely peppered over with little spots like mosquito bites; they were marks of his hypodermic needle. They not only showed his perseverance but dexterity also in the application, as his back and nates were as liberally visited as his chest and thighs. He had too much of a good thing evidently, so he came and asked relief. And yet these people out here make up elegant looking anti-opium pills with morphia! The opium dealers have at least honesty, as they do not call opium by any deceptive names.

The native recipes being mostly made of licorice and gentian proved inefficacious for the end in view. Latterly Sheng Taotai of Tientsin, before he was promoted to the north, discovered a certain root which he used in his Opium Refuge in Shanghai and according to his report was unfailingly with those really desirous of being cured. But none are so popular as these precious pills that come out from the foreign drug stores which happily hit on morphia! They form a convenient adjunct to opium smoking to one who is
travelling or on a ceremonial visit where smoking apparatus cannot be lagged about or where it is desirous to satisfy the craving without observation, just like those ministers who are dear lovers of the weed, while in the pulpit, would occasionally wipe their mouth and slip in a small medium of the navy plug! Does any one imagine that the good parson is trying to cure himself of tobacco? I trow not!

Are there then any reliable methods and remedies for the cure of opium smoking, the greatest curse that can ever afflict mankind this side of the grave? Yes:—they are resolution in the patient, bromide of potassium and nux vomica. I remember Prof. Hammond at one of the clinics in the Belle Vue Hospital, New York, mentioning that brom. pot. might be gradually increased to the truly heroic doses of over 200 grs. in cases of epilepsy. The Professor is one of the greatest authorities in the world in his favorite department of science—Nervous Diseases. The opium habit is an artificial nervous disease and is without doubt amenable to a similar treatment. Belladonna and opium being antagonistic in the effects on the pupils, I once assisted in recovering an opium poison case by the hypodermic injection of atropine. The same may be said of stramonium and hyoscyamus. The bromides and bitters however will probably long continue to be the chief weapons of the honest workers against the evil. But the greatest reliance is on the resolution of the patients, which is always the most difficult to obtain. I once had a patient, wife of a store-keeper, who was and is an inveterate opium smoker. She was suffering from "slowing" of the physiological action of the intestines which the Chefoo British Consul of '81 above mentioned, considered as a benefit opium conferred on the Chinese! I at once formed the diagnosis of impacted faeces. She had latterly intense pain and no sleep and her Chinese doctors all shook their heads and said good bye to her with the injunction not to invite them any more. When I arrived on the scene, a large coffin was being built, the funeral clothes having all been ready. That very night however her pain was gone and sleep came—by a dose of chloral; and for the next few days following she did nothing but industriously defecate, proper remedial measures having being adopted.

She was agreeably surprised at the prospect of another lease of life being held out to her and I assured her that that lease might be a long one if she would only remove the cause of her complaint. She willingly and resolutely agreed to my proposal which was to cut the daily allowance of opium by small but inflexible degrees. At last it was all cut away! Then I demanded of her the keeping of her opium smoking apparatus promising to return them at such time as I should see fit, on the principle of locking up bat and ball on Sunday! She was quite agreeable to this also. But after ten days or so, she sent me word asking for her trappings threatening that if I did not return
them, she would immediately go and buy a new set! I sent them back feeling sad, that for want of perseverance a patient should return to a vice of which she had already been cured.

The most difficult factor in the hope of a cure is a stout resolution; and unfortunately opium smokers are naturally people of no resolution. The evil is indeed a calamity that deserves the active sympathy of right minded men the world over.

**ERYSIPelas.—TRAUMATIC AND IDIOPATHIC.**

By Robert Coltman, Jr., M.D.

In my paper written for the Conference, on the "Fevers of China," under the head of erysipelas, I made the statement "erysipelas is very rare in China." Dr. John C. Thomson in the June number of the Journal says: "Erysipelas is seldom met in South China, being in some ports quite unknown, and it is also infrequent in the North, though there in warm winters it occasionally tends to become epidemic." I do not know how far north the doctor alludes to but that it becomes epidemic in Peking I can testify. During a residence of seven years in the province of Shantung I saw very few cases, five patients only presenting themselves for treatment and all being secondary to traumatism, mostly punctured wounds. Since coming to Peking last November I have seen several cases and have heard of many others. A year ago last May Dr. Atterbury had as an in-patient in the An Ting hospital a man with facial erysipelas of idiopathic origin, while he was in the hospital Dr. G. Y. Taylor operated on a tumour of the parotid gland in another patient who was kept in a separate ward and allowed to have no communication with the erysipelas case. This man however developed erysipelas within 36 hours, face and head swelled enormously, his fever ran high, with general constitutional disturbance and death three and a half days after the operation. Dr. Taylor says there are more or less cases of idiopathic erysipelas every year, but he has not observed that they have any reference to the seasons. Early this spring I saw in consultation with Dr. Taylor a man aged 37 with erysipelas of the face and neck. This patient had a carbuncle behind the left ear which the doctor had thoroughly curetted seven days previously. There was no other case of erysipelas in the wards nor any coming to the dispensary at the time this developed. Curiously enough the wound remained free from the disease throughout its progress, and it made its first appearance on the bridge of the nose and extended from there over the face and scalp, the right ear being badly swollen, while the left ear behind which the carbuncle was situated was but slightly affected. The patient's temperature rose to 104.5 and for several days he was very ill, but under large doses of Tinct. Ferri
Chlor: and Quinæ Sulph: he recovered in about ten days. His carbuncle steadily healed all the time his head was invaded by the erysipelas and seemed to be in no way retarded by this intercurrent affection. This could not be called a traumatic erysipelas. Dr. Taylor spoke of this case to Dr. Dudgeon who remarked that at that time he had several cases of erysipelas coming to his dispensary. Drs. Curtiss and Pritchard also reported to me that they were treating cases of the disease. A month since a man of 23 came to our dispensary for a wound of the palmar surface of the right hand caused by falling from a cart. The wound was very superficial but involved most of the palm. It was washed and dressed with dry boracic acid. On the second day erysipelas set in and the hand became covered with watery blebs, high fever lasting for a day or two followed and then gradual recovery. The arm was well painted with iodine above the wrist and the disease never extended above it. As to the limiting effect of iodine applied locally I cannot speak confidently. I have seen cases where the disease seemed to be limited to where it first appeared by a good application of Tinct. Iodine about its circumference, but that it is not infallible I have had a recent proof. While the foregoing case was coming daily to the dispensary I operated for fistula in ano on a strong man of magnificent physique whom I admitted to the wards. This patient disobeyed instructions and the second day after operation left his kennel, and sat in the gateway conversing with the erysipelas case. The next morning his wound became erysipelatous, his testicles, limbs, and chest, became covered with a rose rash and his general condition alarming. After several days treatment the rash was gradually fading and his condition seemed much improved when suddenly without any warning intense congestion of both lungs set in and in spite of all done to relieve him, he died with great dyspnoea conscious to the last. While this man was ill a woman aged 26, presented herself at the dispensary for idiopathic erysipelas of the face, which responded rapidly to treatment. Dr. Taylor reports having treated three cases of idiopathic erysipelas this spring, and has at present a case of traumatic origin under treatment as an out-patient. This man, age 36, has a carbuncle of the back and the erysipelas which originated there has spread under the axilla and on to the front of the chest in spite of liberal painting of iodine around the circumference of inflammation as at first seen. In view of the numerous cases herein mentioned, I feel that the disease is not as rare as I supposed when I wrote the article several years ago, although it is probably the case that there is more of it here in the North than in the South. I remember a well known professor at home once remarking that erysipelas, diptheria, and dysentery were often mysteriously present in a locality at the same time. It has been so in this region the past few months to a marked extent. What is the reason for it?
RADICAL CURE OF HERNIA.

We beg to acknowledge our indebtedness to Mr. W. H. Harsant, for the following most interesting article, which we have reproduced from the June No. of The Bristol Medico-Chirurgical Journal:

Operations for the radical cure of hernia have now become so frequent that in some of the large hospitals it is said that an operating day seldom passes without one or more of these being on the programme. Nothing very new has been introduced in the principles of operating since Bassini described* his method of lifting the spermatic cord out of the inguinal canal, and making a new track for it at a higher level; but various improvements have been suggested in the details of operating, chiefly in the direction of making the operation more thorough and radical, while there is also a general consensus of opinion that drainage should be as far as possible dispensed with. Among recent papers, the following are perhaps the most important:

Dr. G. R. Fowler, of Brooklyn, in a paper read before the New York Surgical Society,† points out that the most conservative of advanced surgeons now agree that a hernia which cannot be retained easily, painlessly, and with certainty, by means of a truss, should be operated upon, with a view of bringing about a radical cure. Those less conservative assert that a hernia which increases in size rapidly, thus requiring frequent changes of size and shape, as well as amount of pressure exercised by a truss, should be subjected to the operation for radical cure. Also that the operation of herniotomy should always include an attempt at radical cure. It would certainly be an anomaly at the present day to witness an operation for the relief of strangulated hernia, in which the surgeon failed to make the attempt, at least, to give the patient the benefit of whatever means were at hand to prevent the recurrence of the accident.

The slight additional time occupied and traumatism inflicted can have no weight when placed in the balance with the incalculable benefit to be derived from radical cure. Under these circumstances the prognosis of the operation for radical cure becomes the prognosis of the herniotomy for necessity, and nothing more.

The prognosis as regards ultimate cure of the hernia depends upon many considerations, such as age of the patient, size of the openings,

nature of the operative procedure, and after-treatment of the patient. The
best statistics give for under twenty-five years of age, fully 62 per cent.
of permanent cures; in those above this age, 42 per cent. The method
of operating adopted by Dr. Fowler is as follows: The sac is first opened
and carefully explored, to ascertain that no adherent bowel or omentum
occupies its canal. The neck of the sac is then tied, either by simply
encircling it, or by a line of through-and-through stitches, in cobble-stitch
fashion, chromicised gut being the material made use of in either case. The
sac is then cut away beyond the ligature, and the stump allowed to fall
within the internal ring. The next point is such a disposition of the
spermatic cord as will permit of complete obliteration of the inguinal canal
and closure of the ring. For this purpose he employs Bassini's method, modified
by Postempski. This consists essentially in displacing the cord in a direction
toward the median line, lifting it for this purpose from the canal after
completely freeing it, and attaching it by loose loops of buried catgut
suture to the abdominal wall beneath the skin. In order to still further
counteract any tendency of new protrusion occurring and following the
cord, he forces the cord at a point where it emerges from the ring well
up into a slit made for the purpose in the upper margin of the latter,
fixing it by a loose loop of catgut. The canal is then closed by "a crossed
suture." The material employed is crin de Florence, or silk-worm gut,
which is threaded at both ends upon large and full-curved Hagedorn
needles. These are passed from behind forward, one through each edge
of the divided lowermost layer. The latter consists essentially of conjoined
tendon upon the inner margin, and Poupart's ligament upon the outer.
The needles, after emerging each from its respective side, are reversed as
regards position, that which passed through Poupart's ligament being
now carried to the inner side and passed through the skin, again from behind
forwards, while that which included the inner margin of the lowermost layer
is passed through the skin at the outer margin in the same manner. By
tying the sutures over the skin the incision is completely closed. The
sutures are placed about three-eighths of an inch apart, and a sufficient
number are employed to completely close the wound, no drainage being
employed. The sutures are left in place for three weeks, and then removed
by cutting upon one side of the knot and drawing them out. The patient
thus operated upon is never permitted to sit up in bed for the first six
weeks following the operation. No truss is subsequently worn.

Dr. Henry O. Marcy, of Boston, has collected statistics* showing the
result of operations for the radical cure of hernia. In all he has collated

* New York Medical Journal. February 4th, 1893,
Radical Cure of Hernia. 183

3,000 cases, and the proportion of deaths was less than 1 per cent. Among them are:

- Bassini ... 262 operations ... 1 death.
- Championnière 254 " ... 2 deaths.
- Schede ... 165 " ... 2 "
- Banks ... 106 " ... 0 "
- Park ... 115 " ... 0 " 85 cured.
- Marcy ... 115 " ... 0 " 4 relapses.

He considers the essentials of the operation to be:

1. Strict aseptic conditions.
2. A free dissection, in order to lay bare the internal ring, permit of the enucleation of the peritoneal sac, and the separation and elevation of the cord out of the wound.
3. The separation of the sac to its very base before removal. The sac should always be opened, and then tension should be made upon it, and sutures applied in the line of the long diameter of the internal ring; it should then be resected near its base.
4. Having freed the cord to its point of entrance within the abdominal cavity, and lifted it to one side, a row of continuous tendon sutures is inserted from below upwards until the internal ring is closed upon the cord at its exit from the abdominal cavity. The external structures are then united in the same manner with a deep double layer of tendon sutures, joining the divided muscular wall of the abdomen, and bringing into close apposition Poupart's ligament and the conjoined tendon until the external ring is reconstructed. The structures external to the muscles are approximated by one or more layers of single continuous sutures taken by means of a Hagedorn needle introduced from side to side, and in a similar manner the skin is closed with a continuous buried tendon suture. The entire operation is conducted under the irrigation of a weak sublimate solution, and the parts are afterwards dusted with iodoform before sealing with collodion. No drainage tubes are used.

The following methods of performing the radical cure of femoral hernia are quoted by Salzer*:

- Billroth sews the middle third of Poupart's ligament to the deep fascia, or unites it to the middle septum of the femoral sheath, using a triple silk suture. Czerny uses catgut; Schede, catgut, silk, or silver wire; the latter he has used since 1887, and finds it more certain, and also that it may remain in situ without harmful results. He had one relapse in four cases which he had under observation, the relapse occurring after five years. Lauenstein united the falciform process and Gimbernat's ligament after folding the sac in the manner employed by Macewen in inguinal hernia. Bergen fixes the ligated stump of the hernial sac above

Poupart's ligament, and sutures the ligament to the aponeurosis of the pectineal muscle, producing a direct union. He advises that the thigh be flexed upon the pelvis during healing.

The author believes that in all these methods, where tension is employed by means of sutures, the resulting scar-tissue is of doubtful utility, as has been shown in the relapse in Schede's case after five years, and advocates the following method, which he has employed successfully: A curved incision is made in the pectineal fascia beneath the femoral vessels, extending from near the crista pectinea to Gimbernat's ligament; a flap is dissected up, its base proximal and joining Gimbernat's ligament; the free or distal border he unites by silk sutures, without tension, to the middle third of Poupart's ligament. Thus is formed a strong fibrous septum, which he deems a practical and certain method for the radical cure of these herniae. His researches on the cadaver have shown that the pectineal fascia varies in thickness, and his observations lead him to believe that it is thickened in persons who have worn a truss, and in general is thicker in adults.

Rhus Poisoning.

By Percy Mathews, M.D.

Mr. Arthur W. Pritchard writing in the British-Medico Chirurgical Journal gives an account of a severe case of poisoning by Rhus Venenata, a case I would imagine possibly without precedent in the annals of English medical literature, and one, seeing to the prevalence of Rhus poisoning in the East necessarily of interest to the profession in China. The following is a condensed history of the case in question: "Mr. X., aged 25, a curate, having his study overshadowed by a fine specimen of the tree growing in the vicarage gardens, was persuaded to cut it down. Hearing that a gardener, three years before, had suffered from blood-poisoning after cutting off a limb from the same tree, he started on the work with a certain degree of misgiving. He procured the help of the same gardener who had experienced evil effects before. After the first afternoon's work the gardener fell ill, next day suffering from an attack of erysipelas which kept him ill for a week. Mr. X. worked at the tree a short time every day for a week, at the end of which time the tree came down. He noticed that the sap, which was very profuse, made his hands black, and he subsequently wore gloves. On October 23rd some of the juice touched his face, and he wiped it off with his gloved hand. On October
On the 5th of November, when I saw him, he was lying in bed with the whole of his face, throat, and neck a mass of black scabs, some of which were partly loosened by the copious purulent exudation underneath them; he was unable to see on account of the stiffness of his closed lids, and unable to masticate from the same condition of his cheeks. He could protrude the tip of his tongue, which was moist; he could swallow, and he could speak. On raising the lids, pus poured from his eyes; the conjunctivæ were swollen, but the cornea bright and the sight good. The forearms and hands, the front and inside of the thighs, and the lower part of the abdomen were in somewhat the same condition as his face, covered with large crusts surrounded by a pink rash; but the crusts were not so black as on his face. The genitals were much swollen. The effluvium emitted by the patient was foul and peculiar. He was thirsty; but his mind was very clear. He was very querulous, complaining most of the itching of his eyes, or the burning of his skin; but was able to sleep.

This was the day after his worst day. During the next week he slowly improved, the crusts softened and came off—those on his face last—and the conjunctivitís lessened. He was able to sit up on the 9th, and, except for the painful complication of a whitlow, he made an uninterruptedly good recovery. By the 16th he was convalescent: his eyes had ceased to discharge, he was able to read and to walk, his face and arms were peeling, and there was no pitting; the moustache had to be shaved off, as it was impossible to free it from scabs; and a fortnight later he went away for a change.

The treatment throughout the case was tonic and antiseptic. The patient, fortunately, could digest well right through his illness, and he was kept up by sustaining nutriment, stimulants, and large doses of tincture of perchloride of iron. Strong aperients had to be given when necessary; and the local applications consisted of eucalyptol, iodoform and oil, and poultices to the scabs. The eyes were treated with boracic acid lotion."
Judging from a personal experience of the effects produced by the poison sumach of China and Japan (Rhus Vernicifera*) we can but agree with Mr. Pritchard, that the case here briefly recorded must have been an exceptional one, when we recall the severity of the symptoms and the virulence of the poison. The worst case of Rhus poisoning which has come under my notice was that of a foreign lady, a blonde, who sent for me complaining of a swollen face and a general sense of burning pain. But having myself recently arrived in the country, suspicions of an erysipelatous nature prompted treatment and it was only on the third day I ascertained that I had to deal with a case of "Lacquer Poisoning" evidently occasioned by some recently purchased and re-varnished ornaments which were scattered around her sitting room. At this time the lips were much swollen, the cheeks enlarged and highly inflamed, eyes closed by their puffy lids, and all trace of the natural features completely lost (temperature 104°, pulse 126°). The glands of the neck and axillae were swollen and painful, tongue thickly furred, the body, hands and feet in a condition of intense irritation and she was suffering 'agony and torture.' The treatment mainly consisted of the tincture of perchloride of iron and wine throughout—locally, carbolic acid 1 part, linseed oil and lime water 50 parts and in addition a 10 per cent. solution of carbolic acid applied to the more irritating patches.

Alternating hot and cold water gave as much relief as anything, full doses of sulphonal at night were without effect, plenty of concentrated nourishing food was insisted upon throughout, and which was well borne. At the end of the third week I somewhat unwillingly permitted my patient, well wrapt up, to take a drive in a closed carriage, which however resulted in a relapse, and still further confinement of ten days, the irritation and swelling returning but to a modified extent only. A reason apart from the pleasure of republishing Mr. Pritchard's most interesting case is that I am desirous of obtaining the views, regarding treatment, of those who have had a more extended experience in the east of this complaint, one not infrequently met with, and symptomatically so near akin to erysipelas; one certainly of an highly inflammatory nature, and strikingly displaying all the phenomena of inflammation, pain, heat, redness, swelling.

It has been interesting to note upon several occasions within the past five years, how marked an idiosyncrasy some few appear to have for this tsihic

* H. T. W. writing in the Journal (No. 1, Vol. iv., page 4) tells us that the Rhus Vernicifera of the Fukien province grows as a bush about as large as the common sumach (Rhus Glabra) in New England, U. S. and which it also resembles in respect to leaf and stalk, but has not the sumach cone.

The poison depends upon a volatile acid in the varnish called tsihic acid, from the Chinese name of the varnish tsuh. In Japan Mr. Romyn Hitchcock calls it urushic acid, from the Japanese native name Urushi, and gives its chemical formula as (C₁₄ H₂₈ O₅).—(Ed.)
acid poisoning, how readily susceptible some are to the specific action of the virus, whilst others are totally unaffected by it.

One last word in connection with this so-called 'Lacquer Poisoning' borne of an experience I once had not, and based upon an apparently authoritative statement, that it merely runs its course of some 10 days and is trifling. It is not trifling, not only are the symptoms alarming, the sufferings intense, but worse still, the treatment is helplessly inefficient.

MEDICO-EVANGELISTIC ITINERANCY.

BY F. C. ROBERTS, M.B., C.M., TIENTSIN.

If the medical missionary of the present day possessed the gift of miraculous healing there could surely be no form of work more closely resembling that of our Lord's when on earth, and none more attractive in character than that of Medico-Evangelistic Itinerancy.

To be able, however, to journey from village to village and town to town bringing instantaneous healing to multitudes of the sick and suffering in the name of the Lord is a gift which not even "Faith-Healers" claim to possess.

Upon first thought the absence of this gift seems to be delaying the advancement of Christ's Kingdom: for had we only this power in the present day together with the mighty converting power of the Holy Spirit would not hundreds and thousands be converted where now there are only ones and twos? The experience of the Apostle Paul at Melita seems to answer this question in the negative. Though he was a man full of the Holy Ghost, and though the Holy Spirit had already come to this sinful world to convince men of their sinfulness, and although the gift of healing was present in full power, yet we read of no instantaneous conversions nor of any crying out: "What must I do to be saved"? The only visible results recorded being that the natives honoured the Apostle, and his party, with many honours and provided them with provisions for the voyage to Puteoli.

May it not be that the absence of this special gift of healing in our time is the result, not of lack of faith on the part of the Church, as some maintain, but of the will of God, who gives or withholds with unerring wisdom and always for the ultimate good of all.

It follows that medical itinerancy cannot now form as prominent an accompaniment of evangelization as it did in our Lord's life on earth: for, though there may be many simple maladies, surgical and medical, very amenable to treatment, still the majority of the cases seen on such a journey will be chronic, needing prolonged treatment in a hospital in order to effect a cure. Indeed the universal opinion of those in the work seems to be that the
value and efficiency of their work is in direct proportion to the presence or absence of a hospital.

But should itinerancy have any place in modern medical mission work? We believe it should and that the reports of journeys made by medical missionaries in China and elsewhere more than proves the value of such work.

During the spring of this year I spent a month among the villages of S. Chihli and returned to Tientsin convinced that though there is no form of work more trying to one's physical strength: for you are often busy from morning to evening with two or three meetings a day and crowds of patients, yet one is more rewarded by the thought that one's efforts have helped to remove prejudice and hatred and to bring relief to many weary sufferers.

Concerning the medical cases seen I was struck by the extreme prevalence of acid dyspepsia. In some villages 25% of all the cases were of this nature. Many of them had suffered for years. "Eye" cases were equally numerous, especially entropion and trachoma, for the former we operated several times. The battery proved invaluable, as chronic rheumatism and sciatica were very prevalent.

What impressed us most was the fact that wherever the medical missionary went, no matter how small the village or how short his stay, there would be many patients seeking his help. One asked oneself, Can it be that there is more sickness among the Chinese peasantry than among the English? The explanation was not far to seek. In many of the villages there was no doctor or druggist's shop and so the patient had no means of obtaining help. It followed that in some centres we were called upon to treat cases of surgical and medical maladies which had been accumulating for 20-30 years.

Never did I feel the need of China for more medical missionaries so much as during those days when the sufferings of patients exhausted by long years of pain and disease pressed upon me, and I saw only too clearly how different all might have been, had the Church of God in Christian lands only been more earnest in former years, in sending forth men and women to heal the sick and preach the Gospel in the towns and villages of China.

My general plan of campaign on this journey was to reside in those villages where we had converts and a chapel. The advantage is very apparent. By so doing we found an open door wherever we went and received not a little help from the Christians in preparing for our visit and informing others of our approach. In the twelve centres thus visited the patients came to us from a radius of ten miles around each centre.

Lastly, but of primary importance, we will refer to the reflex spiritual benefit which is likely to accrue from occasionally leaving our central city
work in order to itinerate in the country. Is not our faith in the power of the Cross strengthened? and are not our hearts stirred up by the signs of the progress of the Saviour's Kingdom in our midst?

We hear much about "Rice Christians" and about the failure of Christian missions from unfriendly critics. Would that some of them could have seen what I saw in one brief month among those quiet hamlets of Southern Chihli: for I venture to say from personal observation that in them there are many Christians whose zeal, liberality, love for prayer and genuine interest in spiritual things, put to shame hundreds if not thousands of those who would feel insulted if they were called by any other name than "Christian," yet whose only claim to the title consists in mere outward conformity to certain religious customs.

SAMWAY'S TOURNIQUET CLIP.

(Anchor Pattern).—Down Bros., London.—This most useful contrivance consists of a piece of rubber tubing, furnished with a steel clip shaped like an anchor at one end. It can be applied in the easiest possible manner by first passing the stretched rubber once or twice round the limb, and then beneath one of the anchor flukes, over the shank, and back beneath the other fluke.

Soft rubber tubing is now universally acknowledged to make the best tourniquet, and the anchor clip seems to make a simple and effectual fastening.
We are called to record the demise of our venerable friend Dr. Macgowan. It took place on the 20th July after a few days illness, and in the 79th year of his age. He was long and well known in China, and highly esteemed by a large circle of friends. His death, so sudden and unexpected, in the very midst of his usually active life, and in the prospect of still further useful service, has left a wide gap, which it is painful on the part of many to realize. However he had arrived at a good old age, and we can only take a cursory view of the man, his manner of life, his Christian character, and the work he has done in his day and generation.

Necessarily the details to hand are few, and we know no one who could furnish particulars of many things in the past history of our friend, yet these may not be required to supply the general outline we contemplate, or add to the high estimate we have formed of the subject of our sketch.

Dr. Macgowan was born in Fall River, Mass., and came to Ningpo as a medical missionary in connection with the Baptist Missionary Union in the year 1843. This was at the first opening of the country, and though we have no account before us of his services in these early days, we may be assured he was eminently useful, like others in the same capacity, ministering to the wants of the sick and diseased in the neighbourhood. The valuable Chinese Repository doubtless contains particulars of his work, and information of various kinds from his pen, which he was always so ready to furnish, but we need not refer to this at present.

On his return to the United States, in the time of the civil war, he served as a surgeon in the northern armies, and made himself much respected in Washington. He came back to China in 1865, and took up his quarters in Shanghai. He began medical practice among the shipping, which was found to be a difficult and precarious thing for a man of his age, but he persevered in it as long as he possibly could. He had married a most excellent and accomplished lady, who was an English governess in Calcutta, and was a
great comfort and help to him in his missionary life, and subsequently. They had two children, but one died very young, while the other is the wife of Sir Chaloner Alabaster now in England. About the year 1878 Mrs. Macgowan died in Shanghai, which was a life long sorrow to our departed friend. It rendered him all the more unfit to carry on his work here single-handed and alone. Happily Sir Robert Hart provided a situation for him in the Customs service at Wènchow, which was a benefaction of very great value for a number of years.

While our friend was thus engaged he had leisure, as he had talent, disposition and learning, to prosecute a variety of studies, both in Chinese and English. He was exceedingly given to this kind of thing, ever inquiring into folklore and scientific themes, familiar and out of the way, and never failing to communicate the result of his researches to public papers at home and abroad. The records of different societies, especially the Royal Asiatic Society of this place, abound with articles of his contribution, and the North China Daily News and the Shanghai Mercury* were favoured in no small respect in this way.

During the last year, when freed from his official work, he undertook a journey to Japan and the Loo-choo Islands. There he came in contact with the high authorities, and while adding to his information on various subjects, he had the opportunity of giving them important advice on education and civil government. On returning to Shanghai, he prepared at once to go North, as he had done previously to Manchuria and Siberia, where he was engaged on some interesting investigations. On his last journey he regaled his friends of the Oriental Society of Peking with the result of his inquiries in Japan on several points of ancient history between the two countries.

On the 15th of July he came back to Shanghai, and called the same afternoon on the writer with a long paper he had composed on the Geary Exclusion Act. He was deeply concerned about this matter, and his object was to get his paper translated into Chinese, for publication in the native newspapers here in the first place, after which he intended to proceed to Washington to present it to the President of the United States. He was promised letters by Li Hung-chang to the Chinese Minister in the States, with whom he could negotiate the subject. When he had carried this matter through, his purpose was to proceed to England, and spend the remainder of his days in the family of his beloved daughter. The hand of Divine Providence, however, was upon him, and after a few days' illness, he died it appears from sheer exhaustion, and was buried in the beautiful cemetery of our foreign settlement, in the presence of a large number of friends and acquaintances.

* Dr. Macgowan was an occasional writer for our Journal and but shortly before his death promised us a series of articles for it.—Ed.
A word or two in regard to the Christian life and character of the deceased. Though long separated from missionary work, in so far as actual engagement in it was concerned, there was no cessation of his interest in it, or in the maintenance of his religious profession. He was in this respect faithful to the end, and it was pleasant to observe this at his advanced period of life, and in the midst of other things that he was following out. The writer can testify to incidents of this kind that are gratifying to think of, and which led him and others all the more to esteem and respect him. As to his general manner and appearance, he was rather small in stature, and his long white beard made him look most venerable, while at the same time he was most genial and youthful in his intercourse with friends, his remarks often sparkling with witticisms of an amusing and interesting kind. He was well informed in current events and discoveries, and ever ready for conversation about them, yet underlying the whole, there was a supreme interest on his part in the power and progress of Christian truth. Attached to his own line of things as a Baptist, there was no narrowness of mind in relation to other views and parties, and withal we cherish his memory and lament his loss, while the blessed hope remains that all is well, and having served the Master in his life on earth, he has entered on a gracious reward above.

WM. MUIRHEAD.


Dr. Choksy is to be congratulated upon the excellent number of his Review which has just reached us. The opening article is from the pen of Dr. H. Nanavatty of the Bombay Medical Service and is exhaustively and carefully worked out in the light of our knowledge of to-day. It must be a distinct source of gratification to Dr. Nanavatty to realize that he has independently arrived at the same conclusions at which the Leprosy Commissioners have arrived after a prolonged enquiry from arguments derived from the examination of the whole question in all its possible bearings. For from a comparative study of well illustrated and analogous facts Dr. Nanavatty deems that the contagiousness of leprosy has been greatly exaggerated and so also the influence of heredity, and he is of opinion that there is no reason why leprosy should not originate de novo when the constitution and the surroundings favour it. With regard to the rationale of treatment he very pertinently remarks: "The bacillus hunt is neither a profitable task nor a rational remedial measure. If the breeding operations be stopped or modified i.e. if the soil be made non-suitable, as the germ theorists would like to say, the particular type, bred from the ordinary units, will cease to exist."
"And this is what clinical experience teaches in the successful treatment of phthisis, by the constitutional means of improving the blood and tissues, and of wounds, by simple cleanliness and by drainage, which really means the removal of the soil or food and surroundings on and in which the microorganisms grow and thrive, and assume particular importance, by showing the stuff on which they are bred and of which they are made. As distinct and individualized types, do they indeed bring into being, or are they not rather brought into being by what feeds them and lifts them out as particular units from the general mass of organisms? The dog, with a wounded paw, is not in mortal dread of his microscopic enemies. He licks them clean by simply licking his wound clean, and getting rid of the dead putrescent matter in the wound, which breeds these germs. He will have no bacillus hunt. Is it rational, then, to be squirting poisons against, and firing shots at, the bacillus in the system, and let alone the soil that brings them into being? The soil remaining the same, they will be produced as fast as they are destroyed. Often the bacillus requires stronger poison than his hosts, the patients, and thus the hosts themselves get despatched, long before the bacillus, their guest, is reached, and the designs on the bacillus prove abortive. The bacillus lepræ should be let alone, and the remedy sought in another direction—on the analogy of the treatment of syphilis and phthisis. The remedy should be of such a nature as will counteract, as does Constitutional treatment, assisted by lime, cod liver oil and arsenic in phthisis, and mercury and iodide in syphilis, the degenerative changes in the blood which induce the leprous nerve and connective tissue degenerations. Resorcin and Icthyol do not seem to possess such specific properties, and they cannot, therefore, rightly claim the curative properties assigned to them."

Leprosy is again the subject of the next paper, being an abstract (continued from a former number) specially prepared for the Review of the Report of the Leprosy Commission in India. The first section of this abstract treats of Hereditary Transmission and Predisposition, and after due consideration of all the evidence obtained by means of an examination of over two thousand cases the Commissioners have come to the conclusion "that leprosy in India cannot be considered an hereditary disease, and they would venture to say that the evidence which exists is hardly sufficient to establish an inherited specific predisposition to the disease by the offspring of leprous parents to any appreciable degree. Several pages are devoted to statistics the following summary of which will suffice for our purpose:—

"It may fairly be concluded that marriages among lepers, and with lepers, do not increase the risk of a diffusion of leprosy by means of the offspring, and that this to a great extent is due to the relative sterility of lepers, whether males or females."
The Commissioners state that they have come to the conclusion, that there is no evidence that leprosy in India is transmitted through heredity from parent to child, their reasons being:—

1. No authentic congenital case has ever been put on record, nor was one seen in this country.

2. True family histories of leprosy could be obtained in only 5 or 6 per cent. of the cases.

3. Many instances occurred of children being affected while their parents remain perfectly healthy.

4. The percentage of children, the result of leper marriages, who become lepers, is too small to warrant the belief in the hereditary transmission of the disease.

5. The facts obtained from the Orphanage at the Almora Asylum disprove the existence of a specific hereditary predisposition.

6. Only 5 or 6 per cent. of the children born after the manifestation of the disease in the parents become subsequently affected.

7. The histories of the brothers and sisters of leper patients with a true or false hereditary taint seem to show that little importance can be attached to inheritance as an agent in the perpetuation of the disease.

With regard to the contagiousness of leprosy the Commissioners have from their observations come to the following conclusion: That though they consider leprosy an infective disease, caused by a specific bacillus, and moreover also a contagious disease, they are of opinion that there is not sufficient evidence that leprosy is maintained or diffused by contagion; indeed, under the ordinary human surroundings, the amount of contagion which exists is so small that it may be disregarded, and no legislation is called for on the lines, either of segregation, or of interdiction of marriages with lepers."

After exhaustive enquiry they state that clinical evidence for India is strongly against a measurable contagiousness of leprosy, and all that has been said of tuberculosis may be applied equally to leprosy. The following extract must for the present close our review of this most interesting paper:—

"Of 1,691 healthy people living with 719 lepers, 95, or about 5 per cent., were affected with the disease; but diagnosis was doubtful in 17 cases.

Of 381 married couples living together, one of each couple being a leper, 25 subsequently became affected, or 6.5 per cent. Deducting 6 cases from these, the ratio stands at 4.9 per cent.

In 222 couples, of which one individual became a leper and continued to live with the other for a period of less than five years, only 5 became tainted or 2.2 per cent.
Of 69 asylum officials, only 3 were affected with leprosy. Of these, one had the disease before he entered the service, and a second case is doubtful, so that actually only one out of 69 had become tainted, or 1.5 per cent.

Of 35 healthy persons living in intimate contact with lepers in the asylum from a period varying from 28 years to 1 year, and all personally examined by the Commission, not one was affected.

OFFICIAL NOTICE.

The following have been duly elected members of the Association, viz., Miss M. A. Gifford, Miss Lucy Gaynor, and Mr. W. R. Faries.

The following amendment to Article VII of By-Laws has been carried:

"The yearly subscription to the Association shall be Three Dollars in advance and shall include the Journal of the Association. All payments are to be made to the Publishers of the Journal."

SYDNEY R. HODGE, M.R.C.S., L.R.C.P.,
Hon. Sec.
NOTICES OF BOOKS.


In 1754 a distinguished clergyman and physician of Leicester, England, purchased for his son Dr. John Green, then a youth of nineteen, a residence in Worcester, Massachusetts, who there and then commenced the practice of his profession, in which he attained distinction. He was grandfather of the subject of this biography, who was born October 10th, 1822, and who discharged the duties of a medical missionary twenty-two years among the Tamils in Jaffna, Ceylon, and when his health failed he spent eleven years at his ancestral home, Green Hill, Worcester, in the work of translation, compilation and composition of a vast amount of information relative to medicine, surgery and collateral sciences up to date for the use of Tamil physicians, whose instructor he remained until he entered on his rest May 23rd, 1884 in his sixty-first year.

The volume before us, which pious, fraternal and sisterly affection presents as a tribute to his memory consists mainly of letters that he had addressed to them, to his children and friends which disclose a gentle nature, a refined cultivated mind and an inflexibility of purpose in the prosecution of the medical missionary enterprise.

He was a graduate of the College of Physicians and Surgeons of New York, taking his degree in 1845; two years later, when twenty-four years of age he entered the service of the American Board of Foreign Missions as a medical missionary to the Tamils. Before commencing the study of medicine he was deeply interested in foreign missions; and he took employment under the Rev. Dr. Vaughan, Secretary of the Protestant Episcopal Board of Missions. Not long after entering on the practice of his profession he asked himself, "Why, is it not better for me to go where I can be very useful, as well in my profession as otherwise, at once —go to a land of darkness and heal the bodies and enlighten the minds of some error-bound people; and he came to the resolution to do the work of a missionary either personally or by proxy.

A few days after his arrival at Jaffna he was called to prescribe for a Tamil and Sanscrit Pundit, whose condition was considered hopeless; the patient was found suffering from an abdominal abscess, which Dr. Green opened and healed to the astonishment of the peninsula of Jaffna. "In addition to his services as a physician and surgeon he applied to every patient the spiritual remedy for the cure of the soul," employing necessarily at first an interpreter, but in a short time he became a fluent speaker.

In the first year he had treated two thousand five hundred and fifty-four, about a third being surgical cases, removal of a left upper jaw and cheek bones for a cancerous fungus in the antrum filling the whole mouth and nostril, several cataracts, minor amputations, fractures, a strangulated hernia and several cases of difficult labor. By the beginning of the third year he found himself tolerably proficient in the written language, a language so difficult, it is said, "that a man may be a diligent scholar in Tamil for fifty years, and yet meet with works in that language which he cannot read." A vast amount of labor has been expended in polishing the language, Tamils having naturally acute minds, fond of metaphysics and knowing no true science upon which to expand their powers, they have lavished
thought and ingenuity on their vernacular tongue.

He had no sooner gained a good command of the written language than he felt a strong desire to provide a medical literature for the Tamils. He saw the necessity of medical science in the vernacular, in order to their deliverance from the barbarous notions and practices which had been the heritage of successive generations and ages. There were similar if not greater difficulties in putting science into their language than there had been in putting the Gospel into it. Commencing with a medical vocabulary he published in Tamil during his career nearly four thousand pages octavo.

Not content with discharging the duties as Superintendent of the Jaffna Friend-in-need Society's Hospital and daily attendance at the American Mission Dispensary and his medico-literary toil, he organized a medical school, carrying his pupils through a regular course of study, graduating with diplomas, which not merely certified their qualifications but made them sought for by the English stations in the country; his graduates as physicians numbered no less than seventy, all whom he imbued as far as possible with his own moral and religious principles, that they also might do their work as they saw him trying to do his.

"Medical education in Ceylon" wrote Dr. GREEN, the Colonial Surgeon (a Tamil) at Colombo "is deeply indebted to you. You have loosened the foundations of quackery, and I trust it may please God to bless us also in our efforts to place the medical practice among the natives of this island on a more rational and scientific basis. Your Tamil works on medicine will remain a memorial of you after you are gone, and you will not soon be forgotten. We as natives of this island are much indebted to the American Mission for their efforts in the cause of Christianity, civilization and science." The Governor called attention to the "good service which he (and Dr. SCudder) were rendering to humanity and enlightenment by the education of native medical students and to the translation of medical works into the vernacular of the country;" towards which labors the government made liberal grants.

After eleven years' service failing health compelled him to visit his early home; on the way he embraced the opportunity to enlarge his knowledge by visiting Paris, London, Oxford, Edinburgh, Dublin and other places. Dr. COLDSTREAM of the Edinburgh Medical Missionary Society was particularly cordial in his greeting.

Just before his return to Ceylon Dr. GREEN was married; his second period of labor was eminently fruitful. His attention was called by the Government to the need that existed for a work in Tamil on Medical Jurisprudence. "Our Judges in Criminal Courts know nothing whatever about legal medicine and justice is often frustrated through such ignorance. The Dewan suggests the preparation of a simple treatise on the subject, suited to the capacity of men who had not received a medical education." That work Dr. GREEN also supplied. Anatomy, chemistry, natural philosophy, physiology, materia medica, practice of medicine, surgery, obstetrics, diseases of children, diseases of women, pharmacy and botany were the other subjects of his medico-literary toil— to which should be added a Tamil-English Medical Dictionary, also he published religious tracts in English. When on a second visit home for health it was found unadvisable for him to return to Ceylon he reluctantly submitted to necessity and spent the balance of his years in the work of translating and revising medical works in Tamil. His writings are in India and Ceylon recognized as standard authorities.

"His intellectual powers were unimpaired and unobscured to the end, his assurance and anticipation of the world to come were such as to make the prospect of a possible continuance here, even for a few
months a disappointment. Though not yet an old man he knew his work was done. He would be the last to characterize it as perfect, but it seems as well-rounded and finished as possible with his limitations." His perseverance and zeal may be best seen in the number and character of his graduates, who are at this moment doing immense good in various parts of Ceylon and India. "His anxiety to win souls to Christ was not inferior to any missionary. He was indeed a successful preacher of Christianity."

Very touching are the expressions of reverence entertained for him by his pupils many of whom occupy posts of great responsibility. Dr. Ethemayakam writes: "Dr. Green was an earnest Christian worker; he used to speak of Christ to all and every one. "The Gooroo Doctor"—the missionary doctor—is a household word among all people. He is an undisputed authority on medicine and surgery among the Tamils. He shall be our illustrious 'Agastier' in future in all Tamil lands; his translation of Western medical works into the Tamil language will secure him this distinction." Another, Dr. Kanakadattinam, Government Health Officer, writes: "We learned more from copying his life than from the lessons that he taught us. He had the tact of making patients laugh even when the tears were flowing from the pain of operations." Another Tamil physician, a former pupil, says: "His free intercourse with the masses of the people enabled him to acquire a thorough knowledge of the colloquial language. So far as I have known he rarely allowed an opportunity to slip without telling a word or two about the great Physician. When he visited the sick in their houses he generally squatted by the bed side of the patient according to Oriental custom, and by his funny words and cheerful looks generally made even the worst of his patients to smile." Much more of the same purport might be given if space allowed, which with extracts from his loving letters would serve further to endear the memory of Dr. Green, to all our readers."

D. J. Macgowan.


That this magnificent work is the rightful heir to the pre-eminent favour which for more than half a century has been given to the great work of Noah Webster and its successive revised editions is incontestable.

We are told that, apart from a large number of interested scholars, upwards of one hundred paid editors have been engaged upon it for the past ten years and a sum of three hundred thousand dollars been expended in carrying on its various departments.

As a small indication of the exhaustive research involved in the more than revision of this remarkable work, we may note that for the first time—we have found the derivation of the work Moza.

It is distinctly our honest conviction that this Dictionary of the English Language is perfection, in as far as human skill, endeavour and intelligence can attain it.

[\*Little could we realize that we were to publish the last of the many writings of this good kindly old man. Among his last acts must have been the correcting of the proofs for this review, which only reached the publishers the day following his death. —Ed.]
HAO-MENG-FONG HOSPITAL, KINGPO.
April, 1892—March, 1893.

This report,—in the absence of the medical officer,—is written by the Rev. Hoare and Moule; and though brief, and of necessity relating rather to the missionary, than the medical aspect of the work, is nevertheless encouraging.

We note that 211 patients,—of whom 39 were opium-smokers,—were treated in the wards of the hospital. The out-patients during the year numbered 4,505. The patients who attend the dispensary, hear the Gospel daily, “but,” the Report says, “It is with the in-patients who stay with us for some time, that we see most fruit, and it is constantly our privilege to send patients away, with letters of commendation to some member of our own, or of some other mission. Other patients have to be followed up, into some hitherto unworked locality by catechists, or Bible women, as the case may be; and we hope that in this way new doors may be opened for the Gospel.”

Certain it is that this following up is a most important part of medical work, for most patients get at least a friendly impression of the foreigner and his work, which leaves him open to further influences for good, if he is not lost sight of.

Two instances are mentioned in which the medical work has borne good fruit, one in connection with the dispensary work, the other with that of the hospital. A man from Cū-kyi coming for medicine, heard the Gospel; and this has led to him and his family becoming applicants for baptism. The other instance is more remarkable, as showing how patients who had learned something of God’s truth in the hospital, carried it to, and published it in their homes in a distant district, where a Church grew up which now numbers some 330 members.

The writers of the Report conclude “We would take this opportunity of again expressing our gratitude to Dr. Daly, for the unremitting zeal, skill and kindness, which he has shown in starting this work for us, and in carrying it on without remuneration for eight years.”

We trust our brethren of the C. M. S. will soon again have a congenial medical colleague.

MEDICAL MISSION WORK OF C. I. M., CHEFOO.
April, 1892—March, 1893.

During the year under review, 163 patients have passed through the hospital, while over 9,000 out-patients, (attendances,) have been treated in the dispensary. The operations requiring chloroform were 99.

The spiritual results are referred to with caution, for it is admitted that “the average Chinaman is an unfathomable depth” which conclusion is fully endorsed by most missionaries of experience, and yet it is recorded, “several in-patients have professed faith in Christ, but as they all live from two or ten days’ journey from here, we have no means of knowing whether or not, they remain true to their profession after leaving us.” These should be followed up if possible, but it is clear that a busy physician cannot do it, and this Dr. Douth waits evidently feels, for he says, “Without such visitation, it is impossible to find out the results of one’s work. To be ever sowing, and never reaping, casting nets into the sea, never dragging them to the shore, is very unsatisfactory work; and this is what much of the medical work in China amounts to, through lack of laborers.”
Several instances of fruit gathered are referred to at length under the head of 'reminiscences.' They recall the work of years gone by, and they are full of interest and encouragement. Some of these men were known to the writer; they were indeed good men and true.

The Report concludes by recounting the conversion of an opium-smoker, who had smoked the baneful drug so long that he was reduced to a "mere anatomy," and was dubbed by his friends an opium-ghost. He became "chang-d into a robust well formed man, and the sallow wrinkled face of the opium-smoker was completely transformed, under the healthy influence of a good appetite, and a peaceful mind. Encouraging accounts still come from those who know him, of his progress in the Christian life. He is now the unpaid leader of a little Christian Church in Wen-chow, Cheh-kiang.

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THE CANADIAN PRESBYTERIAN MISSION, NORTH HONAN.

Report for 1892.

Our Canadian friends in Honan send us a very interesting and well-written Report. Theirs is a young mission, and a new work. They have two stations with medical work at each.

At Ch'u-wang, Dr. McClure reports 1,718 dispensary patients (visits) treated in about ten months, which is but a small advance in numbers, upon the eight months' work of 1891. The in-patients however numbered 96, of whom 74 were opium-smokers. "Of 1,103 dispensary new patients, 106 or nearly 10% were cases of ague, which was very prevalent on account of the heavy floods. One patient from 250 miles away was brought to the hospital through the advertisement on a tract which had found its way to his distant home."

At Hsin-chou the missionaries have, during the year, passed through their baptism of trouble; and we rejoice with them that they come through so well. Our God is a very present help.

The Report says: "On one anxious day, for five hours, the members of the station stood out on the street at the door, facing and controlling the rabble, and were cheered not a little by assistance from friendly neighbours. The street chapel has been opened regularly for over 300 days, and the attendance and order have been a source of great encouragement. . . . . At the beginning of a large fair, the roof was torn off the best building in the compound, by a gang of roughs who had been well-plied with wine by the gentry; but at that same time, the chapel was packed to the door without intermission, and not the slightest sign given of any knowledge of what was transpiring next door. Nor was the preaching, or medical work, for a moment interrupted by that occurrence."

In the month of June the first fruits of the mission were received into the Church in the persons of Messrs. Chou, father and son.

At Hsin-chou the attendances at the dispensary amounted to 4,677, tripling the number seen in 1891. The in-patients numbered 77, of whom 24 were opium-smokers.

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PONASANG MISSIONARY HOSPITAL,
A. B. C. F. M., FOOCHOW,
21st Annual Report.

This is a record of earnest busy work, 14,658 visits were made to the dispensary during the year ending March 31st, 1893. Of these, 5,041 were new cases.

The in-patients numbered 420, one-seventh of which were syphilitic cases, in one or other stage. The operations,—including 367 teeth extracted,—amounted to 753.

During the twenty-one years, the total number of cases treated reached 170,078, while the number of operations performed during the same time amounted to 10,671.
In the summer time, the hospital was crowded. "Many times all the beds were full, patients who could not be given beds, sleeping on the floor, until vacancies occurred."

With regard to leprosy, which seems to be common enough in Fuhkien, Dr. KINNEAR writes: "In Foochow, no age seems entirely exempt from the disease, several cases of little boys of ten and twelve years of age, and even younger, having been seen. The impression left upon our minds by the work of the year, is that this disease must be more common, than is usually supposed. In the cases seen here, a majority show the anaesthetic red patches first on the legs, another large proportion upon the arms, few upon the face, and very seldom first upon the body."

The reasons given, why the Chinese wish to be operated upon for hare-lip are amusing, but none the less true.

The account of the extraction of tooth-worms shows the present condition of the dental art in China.

The most sad case of the year is, we think, that of a young man,—who though an opium-smoker, a thief, and a disgrace to his family,—was inhumanly treated by his father, who waiting until he was asleep, rubbed a handful of quicklime over his son's face, and into his eyes, destroying his sight and cruelly disfiguring his face. And the laws and customs of China allow that to pass without reproof.

Oh for more Gospel-leaven, by healing and by teaching, with God's blessing resting upon both.

H. A. R.
CORRESPONDENCE.

WILLIAMS' HOSPITAL.

PANG CHUANG, SHANTUNG.

To the Editor of

"The Medical Missionary Journal."

DEAR DR. MATHEWS.

Having seen the establishment of our Medical Missionary Society and Journal during the period of my service in China, and rejoicing as I do in the fellowship thus made available to us, another bond seems to me to be desirable and easily attained.

If our Association could become a part of the International Red Cross Society, would not a new tie be added to our local brotherhood, and a world-wide connection be made also.

It is claimed that forty nations are now pledged to respect the insignia of this great Society, to hold all its material and stores and all its followers neutral in war, and free to come and go as their duties require.

I do not know whether or not China is reckoned among those forty nations, but if not the influence of all medical mission hospitals under the Red Cross would doubtless go far to bring this great country into fellowship with sister nations under the Geneva Treaty.

In case of war here in China, foreign or domestic, our medical missionaries would doubtless gladly act as surgeons, if their duty seemed to call them to the field, and no doubt any missionary society would readily release its missionaries for such service even if regular mission work were not interrupted by the war.

In such case the Red Cross Society would assume the natural and effective direction of such individuals. China we know full well has no surgical service for army or navy, and those of us who have watched the course of her most enlightened statesman H. E. the Viceroy Li Hung-chang for a dozen years or so in relation to this department, have had our lively hopes chastened by experience, until we view with very moderate anticipation even the large foundations which are being laid on the Taku Road next to the Viceroy's hospital.

The great buildings that stand empty and useless on the other end of the Bund are mournful evidence of how little performance may come from great promise, and the great burdens that are laid by the imperial government on this faithful servant, in the multifarious offices he is expected to fill, are more than enough to overtax a younger and a stronger man. We may reasonably expect therefore that the imperious requirements of foreign relations, of railways, telegraphs, etc., etc., will continue to crowd into the background their less obvious necessity.

If therefore in Western lands where surgical service is so highly organized there is call for the Red Cross Society, how much more here.

But there are other reasons than the anticipation of a possible state of war to move us to some such step as this. The Society of the Red Cross although in its inception designed to mitigate the horrors of war, may legitimately enlarge its scope to include service in other great calamities. In the United States of America, while affiliated in international relations with the Red Cross Societies of all countries, it yet holds itself ready for all great emergencies, and has done valuable service in such disasters as the Johnstown flood, etc.

The recent gift of a tract of valuable land by Dr. JOSEPH GARDNER of Bedford
Indiana, gives the society a place in which to prepare and accumulate its stores and materials, to be in readiness for any emergency, and a domain inviolable in time of invasion.

We Americans hope that our country may never again be the theatre of war, and hence it seems the practical thing to unite the functions of providing relief for all untoward public calamities in one great eleemosynary society.

Our members are probably aware that an international convention is called this summer in Vienna by Dr. Prix, its Mayor and Prof. Bilroth, to establish an international society of Good Samaritans; the motto of this society will be, "But a certain Samaritan as he journeyed came where he was and when he saw him he had compassion on him."

Its object will be to provide help for any people overtaken by great calamity such as earthquakes, floods or cholera epidemics, discharging in peace duties similar to those discharged by the Red Cross in war. And in the event of war its members are to be at the disposal of the Red Cross Society.

There may be necessity for these two societies in Europe where the peace of nations is liable to be disturbed any day. But in America the situation is more hopeful and the natural argument in favor of simplicity and economy have urged to the one organization.

The same arguments become pertinent to the question here in China also.

In case the idea strikes our members favorably, with which society should we become affiliated? or should it be with both?

It seems to me that as our mission hospitals are already as perfect exemplifications of the Good Samaritan idea as can well be found anywhere, the one grand symbol of the Red Cross over every hospital and on the arm of every surgeon and assistant would be enough to testify to the common service which we gladly render.

"For His Sake, and in His Name."

Will the readers of the Journal be pleased to discuss the matter in its columns as they may view it, that we may have all the light possible preparatory to future action if that should be deemed desirable.

Fraternally yours,
A. P. Peck.

[We are assured that the principle involved in the affiliating of the Medical Missionary Association of China with that of the International Red Cross Society will be very generally and heartily endorsed. But the question here submitted to us is not one to appeal to our sympathies only, but one we may hope will have a thoroughly practical outcome. A difficulty however presents itself and one although begotten of almost exceptional conditions, is nevertheless still one to be anticipated. It is this, will their Society, and their flag, the emblem of one common humanity, however much approved and officially protected, be respected by the Chinese themselves? The question truly seems a shameless one, yet it is very relevant in the light of to-day. If in time of peace foreign property is ruthlessly destroyed and innocent lives sacrificed to unheard of barbarity, how then can we realize that this people in time of war would become amenable to international civilized usages? However, apart from the consideration of what we hold to be so essential a weakness in the practical working of the schemes as applied to China, still there is much as Dr. Peck has pointed out to be urged in favour of affiliating the two Societies, the material goal is a common one and the danger indicated will be slowly but surely eliminated by the natural process of time.—Ed.]

Pang Chuang,
July, 1893.

Dear Dr. Mathews,

Allow me to add a word to Dr. Peck’s valuable suggestions in regard to the medi-
The China Medical Missionary Journal.

cal fraternity in China affiliating with the Red Cross Society. Aside from the helpfulness and bonds of sympathy which might unite us with many thousands of fellow philanthropists in many lands, there is to be added the thought of the possible protection which might ensue to the mission centres in China, in case of trouble. The International Society throws the agis of its protection over all military hospitals. Were our seventy or one hundred medical centres in China to become allied with the Red Cross movement, we should be in a position to seek of the Chinese Government more than a common protection not merely in case of war, but also in case of any riotous disturbance. With its frequent spasms of sagacity and good sense, the Chinese Government could be impressed alike with the wisdom and humanity of granting to all Red Cross centres practical immunity from the disturbing elements which still hover as heat lightning along the horizons of our spheres of influence. Dr. Peck's suggestion is so hopeful of permanent advantage that I hope very much the discussion he suggests may be followed by an effort at organization and union with the international Red Cross Society.

Sincerely yours,

H. D. PORTER.

DEAR DR. MATHEWS,

I am in full sympathy with the objects of the Red Cross Society, and should be glad to see it established in China. But should this country ever be invaded by a foreign army, that innate hatred of all Europeans of which the natives have given so many proofs lately would certainly lead them to consider every white man an enemy, and no badge would protect him from the savagery of Chinese soldiers if at any time they were victorious. If the Chinese could themselves be induced to form a society having the same objects as the Red Cross organization, that would be advisable, but where will you find fifty men sufficiently unselfish to undertake such a task? Such efforts are essentially Christian in character, and altogether foreign to Chinese ideas. However, I shall be glad to see the proposal fully discussed in our Journal.

Fraternally yours,

A. W. DOUTHWAITE.

PEKING,

July 25th, 1893.

MY DEAR DR. MATHEWS,

I do not know under what circumstances the communications of Messrs. Dzau, Zung, Tsing and Yea were published in our last number of the Journal. "Circumstances alter cases" and it may be that if I understood all about it, I would see the fitness of publishing four letters from gentlemen discussing a political measure, in a Journal devoted to medical missionary interests. While I greatly regret the "Geary Exclusion Bill," as do all our American missionaries, I for one prefer to have discussions of political questions appear in the daily papers. These gentlemen in question must have been badly treated by Americans to become such bitter accusers.

Yours fraternally,

ROBERT COLTMAN, JR.

[We must frankly admit that it never occurred to us that the publication of an examination essay by four Chinese lads and facetiously described as a 'Symposium' would be seriously construed into the publishing of a political contribution. We were simply amused at so ingenuous a production in the light of all that which has happened in China, and deemed that others would equally be amused and perchance instructed. However as to not touching upon the 'Geary Act' in our Journal pages—we must join issue with our friend Dr. Coltam—for not only has it been discussed over and over again in papers of all classes and denominations, but seeing to the fact how deeply we, who
are resident in China are interested, it is with distinct propriety that we refer to it in the Medical Missionary Journal of China.—Ed.]

25 Lime Street,
London, E.C., June 8th, 1893.
The Editor of
"The China Medical Missionary Journal,"
Shanghai.

Dear Sir,

We beg to hand you herewith samples of Analgen (Dr. Vis) which we are now introducing to the profession in the country. The pamphlets enclosed will give you full information concerning the remedy with numerous reports of medical men who have tested it in Germany.

The manufacturers Messrs. Dahl & Co. of Barmen are fully convinced by the results of the experiments already made that Analgen will fill a want that has been felt for some time, and have instructed us to supply free samples to all hospitals and medical men willing to test it.

Yours truly,
Thomas Christy & Co.

[In acknowledging the samples referred to above, we would explain that the pamphlets accompanying the preparation in question state that Analgen is the analogue of Phenacetine and Antifebrine, but has a marked therapeutic and physiological action of its own. We are not in a position yet to add our testimony to the many advocating the claims of this "powerful anti-neuralgical preparation" but shall hope to have occasion for so doing later on.—Ed.]

New Orleans,
June 20th, 1893.

Dear Sir,

Desiring to present an article on the subject of "Complications of Tonsillotomy" at the next annual meeting of the Louisiana State Medical Society, I would request your readers to favor me with answers to the following questions:

1. Number of cases of Hypertrophy of faucial tonsils operated upon.

2. Complications occurring during these operations, stating nature of complications and number of cases affected.

3. Method of operating in the cases in which these complications developed.

In publishing these cases, I shall omit the name of the physician who reported them if desired.

I shall mail a reprint of the article, which I shall present at the meeting, to those physicians who send me a report of their cases as above. Letters should be addressed to W. Scheppegrell, M.D., care of Eye, Ear, Nose and Throat Hospital, New Orleans, La.

Very respectfully,

W. Scheppegrell, M.D.

[We would commend Dr. Scheppegrell's request to the courteous consideration of the Association.—Ed.]
SIR JOSEPH Lester in an address on the Antiseptic Management of Wounds, delivered at King's College Hospital in the London Post Graduate Course, says: (we quote from, British Medical Journal, February 18th, 1893). "An external antiseptic dressing to be ideally perfect, should have four essential qualities. It should contain some thoroughly trustworthy ingredient; it should have that substance so stored up that it cannot be dissipated to a dangerous degree before the dressing is changed; it should be entirely unirritating; and it should be capable of freely absorbing any blood and serum that may ooze from the wound."

With regard to the most satisfactory antiseptic ingredient after much experimentalization, Sir Joseph speaks most highly of the double Cyanide of Mercury and Zinc (concluded by Professor Dunstan to have the following formula: \( \text{Zn} \text{Cy}_2 \text{Hg Cy}_2 \); it is a double salt of very peculiar construction). "Cyanide of Mercury, while it has powerful antiseptic properties, is very soluble and highly irritating; but the combination of Cyanide of Zinc with it has the same sort of effect, but in a much higher degree as the albumen of the sero-sublimate gauze has upon the bichloride. The combination with Zinc keeps the Cyanide of Mercury from being dissolved away, and also prevents it from irritating. It is, so to speak, chained down by the Cyanide of Zinc with which it is combined. The double salt is very little soluble in blood serum, requiring between two and three thousand parts to dissolve it; and thus a small quantity of it will last a long time in spite of a free flow of discharge through it. It thus fulfils the condition of persistent storage. It is at the same time practically unirritating; wounds heal under its immediate contact without the necessity for a protective layer interposed. Then, as to the essential question of its antiseptic virtues. Small as is the quantity which serum dissolves, it proves amply sufficient to prevent bacteric development. Thus in one experiment some serum of horse’s blood containing \( \frac{1}{5000} \) part of the salt remained clear and odourless for more than a fortnight at the temperature of the body in spite of inoculation with putrid material, and even \( \frac{1}{10000} \) part prevented all growth for ten days. "——". The double Cyanide of Mercury and Zinc, while admirable as an exhibitor, is very feeble as a germicide; so that we can have no security that materials charged with it may not contain living organisms. Hence if gauze charged with the double Cyanide when applied dry to a wound, the time might come when, if the discharge were free, the salt, in spite of its slight solubility, might be all washed out of the deepest parts of the dressing; and as soon as this should be the case, living microbes contained in it would be free to develop towards the wound. In order to guard against this risk, we treat the gauze before using it with a reliable germicide. That which we now use for the purpose is the 1 to 20 solution of Carholic Acid which, besides being thoroughly effective, has the further advantage that it soon flies off from the dressing and leaves nothing in contact with the wound but the unirritating double Cyanide and cotton fabric." Another valuable suggestion Sir Joseph gives us with regard to the preventing of the powder dusting out of the gauze on the slightest touch and irritating the nostrils and that is the introduction of the hydrochlorate of Mauveine, more commonly known as purified Rosalane. "For
charging gauze it is diffused with pestle and mortar in 1 to 20 solution of Carbolic Acid in the proportion of about 30 grs. to a pint." It must be noted that Rosalane—not only serves for the purpose of fixation—but owing to its colour ensures a uniform diffusion of the salt throughout the mass.

And lastly we quote with regard to the technique of thianitiseptic dressing. "I have here a 6-yd. piece of unprepared absorbent gauze folded lengthwise in eight layers. I soak this thoroughly with 1 to 20 Carbolic lotion, and dust some of the powder roughly over one surface with a pepper-box. I then roll it together, and kneading it for a minute or two with the fingers. . . . If you have no absorbent gauze at your disposal, linen rags, which are excellent in absorbing quality, may be quite well charged in a similar manner. This old towel which has been so prepared if folded a few times would make a perfectly satisfactory dressing." We ascertain later on that the dyed Cyanide is now supplied by Messrs. Morson, Southampton Row, London, its cost is 20 shillings and the estimated cost per charge per dressing 1yd.

The Universal Medical Journal for the month of February contains an article by Dr. T. B. MATTISON entitled "The MATTISON Method in Morphinism." The following extracts will, we believe, be of interest to the profession in China.

Dr. MATTISON in the first instance recounts the different methods of treatment now advocated and which are sufficiently well known, and then speaking of his own, says:

The method we commend is a mean between two extremes, avoiding the painful ordeal of abrupt disusing and the tiresome delay of prolonged decrease, and is based on the power of certain remedial resources to subdue abnormal reflex action, and secures largely two cardinal objects,—minimum duration of treatment and maximum freedom from pain. It consists in producing a certain degree of nervous sedation, and consequent control of reflex irritation, by means of the bromides, though we refer specifically to the bromide of sodium, having used that exclusively in cases under our care. This is merely a new application of a well-established principle, for the power of the bromides to subdue abnormal reflex irritability is so constant that it may be looked upon as an almost certain sequel of such medication. Dr. Edward H. Clarke, in his valuable treatise on the bromides, says: "Diminished reflex sensibility, however different physiologists may explain the fact, is one of the most frequent phenomena of bromidal medication that has been clinically observed, and is, therapeutically, one of the most important;" and the evidence of other observers—Gubek, Gottman, Laborde, Voison, Damourette, Eulenberg, Claude Bernard, Brown-Séquard, and Echeverria—is to the same effect.

In speaking of the bromide of sodium, let it be understood that we refer entirely to the influence of the continued dose, by which we mean giving it twice in the twenty-four hours, at regular intervals, so as to keep the blood constantly charged with the drug. The value of the various bromides depends on their proportion of bromine. Bromide of potassium contains 66 per cent., sodium 73, and lithium 92 per cent. We should therefore, expect a more powerful influence from the last drug, and, according to Weir Mitchell, it has a more rapid and intense effect. The sodium, however, answers every purpose, and has several points in its favor over other bromides,—is pleasanter to the taste, more acceptable to the stomach, causes little cutaneous irritation, and much less muscular prostration.

"Either of the bromides in powder or strong solution is somewhat irritant, sometimes causing emesis, and in any event delaying absorption. A practical point, then, is that it be given largely diluted. Dr.
Clarke says: "There should be at least a drachm of water to each grain of the salt." We give each dose of the sodium with 6 or 8 ounces of cold or carbonated water, and have never known it to disagree.

To secure the requisite degree of sedation within a limited time, it is essential that the bromide be given in full doses. Failure from its use, in any neurosis, is often due, we think, to a non-observance of this point. Our initial dose of the sodium is 30 grains, twice daily, at twelve hours' intervals, increasing the amount 20 grains each day,—i.e., 40, 50, 60 grains,—and continuing it, in proper cases, eight days, reaching a maximum dose of 100 grains twice in twenty-four hours. During this time of bromidal medication the usual opiate is gradually lessened, so that from the eighth to the tenth day it is entirely abandoned. A decrease of one-fourth or one-third the usual daily quantity is often made at the outset, experience having proved that habitués are almost always using an amount in excess of their actual need, and this reduction causes little or no discomfort. Later, the opiate withdrawal is more or less rapid, according to the increasing sedation, the object being to meet and overcome the rising nervous disturbance by the growing effect of the sedative; in other words, maximum sedation at time of maximum irritation."

"Exceptions to this may occur. Some patients are so weak and anemic on coming that a previous tonic course is deemed judicious; the usual opiate is continued for a time, and, meanwhile, by full food, tonics, and other measures, effort is made to improve the impaired condition,—and with success, for we have seen patients gain markedly in strength and weight during this roborant régime. Sometimes a patient, before placing himself under our care, has reduced his daily taking to the lowest amount consistent with his comfort. If so, the initial larger seduction is not made, but the decrease is gradual throughout. Again, in some cases no reduction is made for two or three days, when the bromide effect is secured in part, and the decrease is then begun. And with all patients this rule governs: Each case is a law unto itself, and the length and amount of the bromide-giving and consequent rate of opiate decrease is determined entirely by individual peculiarity, as shown both before and during treatment."

"Having secured the desired sedation and reached the last day of opiate using, it is our practice to give, at or before bed-time of that day, a full dose of morphine. This dose is one-third the former entire daily amount. This secures a sound, all-night sleep, from which the patient wakes much refreshed and often quite surprised at his good condition. On the next night this opiate is repeated, using two-thirds of the previous dose, and again the following night, giving one-third the first night's supply. With each of these opiate doses the maximum bromide dose is given.

Thereafter, what reflex symptoms present are met, mainly, by codeine. The proper use of this drug is a great advance in the treatment of this disease. As a rule, it is not needed before the eleventh day. Exceptionally, a dose or two may be required in the latter part of the ninth or tenth. When its active use is begun, it is given in doses of 1 to 3 grains every 2 to 4 hours, by mouth or subcutaneously, and this continued, gradually decreasing the dose or increasing the interval, till no longer required.

Pure codeine is not suited for subdormic use. It dissolves in acid, and may be given by mouth." When there is painless unrest or much depression of mind or body "hot baths (105 to 112 degrees), ten to twenty minutes, repeated as required, often act like magic; so, too, the Turkish bath. Warm baths are worthless."

Diet is not restricted unless the stomach or bowel condition demands. We have again and again seen patients recover who
did not vomit once, or who had only two or three alvine movements daily. The excessive vomiting mentioned by Levinstein and Obersteiner—abrupt disease—we have never noted. The former thought the collapse, which we have never seen, in several of his cases was due to vomiting and purging. Most likely the largest factor in causing it was the exhausting mental and physical suffering which his monstrous method entails. If the stomach rebels, entire rest for a time, or milk and lime-water, ale and beef, malted milk, or bovine, in small amount may act well. If not—sinapisms, ether, faradism, or chloroform, alcohol, ice are of value. All failing, a full opiate hypodermatically will promptly suffice.

Twenty-four hours after the opiate quitting, patients are directed to bed, and kept there two to four days, for we are convinced that rest is an aid of great value. Erlenmeyer says: "The best remedy is rest in bed. The importance of quiet, rest in bed, and warmth in promoting restoration during the abstinence struggle cannot be overestimated. I order every patient to bed at the start, and can state with confidence that those who submit to this till I allow a change will get along more easily and satisfactorily during the treatment than others who do not obey, but who insist on moving about or having the run of the premises."

Having thus crossed the opiate Rubicon, treatment pertains mainly to the debility and insomnia. For the former, coca leads the list. Of the fluid extract, give 2 to 4 drachms, or cocaine* 1 to 3 grains, with other tonics, three or four times daily,

*It may be recalled that Obersteiner says that cocaine should never be used hypodermically in the treatment of the morphine habit, the formula which he gives should never exceed one-fifth of this.

R. Coccyti muris ......... 0.5 Acid salicylat ............ 0.1 Aq. destillat ............ 100.0.

—(Ed.)

decreasing as need lessens. As a rule, its use is ended in a fortnight. To remove the mental and physical depression, the minor neuralgias and the desire for stimulants, sometimes noted, nothing equals it, and full doses of tincture of capsicum often add to its value.

The paper is a very lengthy one—there is much of interest apart for the pharmacopeia of drugs suggested. As significant of Dr. Mattison's school and the Levinstein's method which has advocates in the East, he thus strongly expresses himself:

"As between the method we commend and the Levinstein's plan, comparison is odious. In this day of advanced therapeutics it is wrong—more, it is cruel—to compel these patients to run the gauntlet of such suffering. Bartholow says, "Having had one experience of this kind, I shall not be induced to repeat it; if for no other, for strictly humanitarian reasons, since the mental and physical sufferings are truly horrible."

The claim that this barbarous treatment is the "only safe one" is false. More than one death has been charged against it, while the unrecorded life loss none can know. And the number who come perilously near to dying is not small. Of twenty-two cases thus treated by Levinstein, seven were in imminent danger of death, and only saved by the prompt injection of morphia. Obersteiner cites similar cases: tells of violent vomiting, repeated eighty times in twenty-four hours; of "such intense prostration that the patient was thought dead;" and admits it "the cause of very great suffering, or even jeopardizing life."

The claim that this inhuman treatment is the "only one to secure the patient against relapse" is false. Most of Levinstein's and Obersteiner's patients had return of their disease, "notwithstanding the unwarrantable tortures to which they were subjected." Dr. Jennings truly says: "Dreadful as are the tortures inflicted, they
do not, as a matter of fact, afford any safeguard against relapse."

Men high in the profession may advice such treatment, but we feel bound to say that it is the "cruelty of ignorance" or a heartless disregard of suffering, either of which is without excuse. Modern medicine has much to aid in treating this disease, and the medical man who is not abreast the times along this line had best consign such cases to other care. The ignorance or in-humanity of any physician who would counsel and compel the torture of such practice, save under conditions peculiar and beyond control, merits his being made defendant in a suit for malpractice.

We care not who advocates it, and speak strongly, but advisedly for the reason that our experience proves, beyond question, that the opium slave can be brought out of his bondage without such suffering as this treatment entails.

Marked advance has been made in the treatment of this disease. The method we present is the outcome of more than twenty years' study and experience. It has been proven humane and successful, and it promises, in many cases, a prompt, positive, and permanent cure."

The following remarks in substance were made by Dr. J. M. Fort, an oriental traveller:—By looking at a map of the countries invaded by cholera epidemics it will be seen that Arabia, Persia, Belochistan and India all border on the Arabian Sea and possess a great similarity in climate, topography, character of soil, and it may be reasonably supposed that the water of all this section is strongly impregnated with lime, since the soil of even very many of its valleys is intermixed to a large degree with lime and many of its mountains and hills are composed of limestone. The wilderness of Judea in Palestine consists of lime hills, so thoroughly destitute of verdure that in the distance they appear and glisten in the sun as though they were covered with snow.

It has been observed that the Moham-median pilgrims on their return from the great national shrine at Mecca, would die by the hundreds, many of them by the wayside and scatter the germs of this disease far and wide over those oriental countries.

The number of Mohammedans making this pilgrimage, range from 60,000 to 100,000 annually.

The ritual of service enjoined upon them entering the sacred precincts of the temple, embraces among other things drinking water from the Zem Zem or Hager's well.

The English Consul stationed at one time at Jeddo procured several bottles of this water by bribing one of the pilgrims—it being death to any other man than a follower of the Prophet to enter its sacred precincts. This water was forwarded to Professor Simon, the great London sanitarian, who administered it to various animals, such as rabbits, rats, cats, etc., all of which died, evincing the pathognomic symptoms of Asiatic cholera.—Dietetic and Hygienic Gazette.

It is now a settled question that there is no such thing as spontaneous generation, hence it follows that these disease producing germs are created entities and that they have been furnished media and environments, suitable, not only for the maintenance of life, but also for their reproduction and propagation. Lime may be one of the essential ingredients of this media.

BLACK EYE.

There is nothing to compare with a tincture or a strong infusion of capsicum annuum, mixed with an equal bulk of mucilage or gum arabic, and with the addition of a few drops of glycerine. This should be painted all over the bruised surface with a camel's hair pencil, and allowed to dry on, a second or third coating being applied as soon as the first is dry. If done as soon as the injury is inflicted the treatment will invariably prevent the
blackening of the abused tissue. The same remedy has no equal in rheumatic, sore or stiff neck.—Medical Times.

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THE CHILD'S CRY AS AN AID TO DIAGNOSIS.

The cry of children, according to Dr. HILL (Denver Medical Times), in pneumonia and capillary bronchitis, is moderate and peevish and muffled, as if a door were shut between child and hearer. The cry of croup is hoarse, brassy, and metallic, with a crowing inspiration. That of cerebral disease, particularly hydrocephalus, is short, sharp, shrill, and solitary. Marasmus and tubercular peritonitis are manifested by moaning and wailing. Obstinate, passionate, and long-continued crying tells of sarcome, thirst, hunger, original meanness, or the pricking of a pin. The pleuritic is louder and shriller than the pneumonic, and is evoked by moving the child or on coughing. The cry of intestinal ailments is often accompanied by wriggling and writhing before defecation. Exhaustion is manifested with a whine. Crying only, or just after coughing, indicates pain caused by the act. The return or inspiratory part of the cry grows weaker toward the fatal end of all diseases, and the absence of crying during disease is often of graver import than its presence, showing complete exhaustion and loss of power.

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A FEVER ENUNCIATOR.

The Paris correspondent of the Lancet describes an electrical system, recently invented, to be used in a hospital ward in much the same way as an automatic fire-alarm system in a mill. Each patient is to have in his axilla an apparatus connected with an electric enunciator, which rings an alarm if the temperature rises above a certain point.

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CONSTIPATION IN CHILDREN.

In the Union Médicale for May 9th we find the following formula, attributed to J. SIMON: Two parts each of tincture of cascarilla, tincture of rhubarb, tincture of cinnamon, tincture of calumba, and tincture of gentian; one part of tincture of nux vomica. From ten to twenty drops are to be given twice a day, according to the age.

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Seborrhoeal Eczema of the lips and regions about the mouth is treated by DUBRUL with this ointment:

- Vaseline .................. 40 grammes.
- Oxide of zinc .................. 8"
- Washed sulphur .................. 4"
- Salicylic acid .................. 1 gramme.

—Medical Record, N. Y.

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Coryza is relieved with the following snuff, of which COUPARD says to take a pinch of five or six times a day:

- Cocaine hydrochloric ........... 0.15 centig.
- Menthol .................. 0.25"
- Ac. boric .................. 2.00 gram.
- Finely powdered coffee ..... 0.50 centig.

—Ibid.

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THE TREATMENT OF WHOOPING-COUGH.

To diminish the frequency and intensity of the paroxysms, Dr. MARFAN (Médecine Moderne, March 11, 1893; Lyon Médical, May 14, 1893) recommends a solution of three parts of antipyrine in a hundred of distilled water and twenty-five of syrup of orange flowers. To a child four years old a dessertspoonful of this solution may be given three times a day, with the meals. For the purpose of securing a certain degree of antiseptic action on the air passages he advises fumigation of the room with a mixture of ten parts each of oil of thyme, oil of eucalyptus, and oil of turpentine, two hundred and fifty of rectified spirit, and seven hundred and fifty of water. This, he thinks, tends to prevent secondary infection.

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(373) HEALING UNDER A MOIST BLOOD CLOT IN ACCIDENTAL WOUNDS.

JOHNSON, of Baltimore, draws attention, (Annals of Surgery, Vol. xvii, No. 3, March 1893) to the great value of the blood clot, as described by SCHEDÉ, in the cure of
accident cases. Aseptic results after traumatism rightly out-hone similar results after wounds of the surgeon's own making. Indeed, in those last, one has little fear of suppuration; it is only in lacerations and punctures made by other than clean hands and a clean knife that one anticipates infection. Johnson gives cases illustrating the safety and simplicity of this method. He usually cleanses the neighbourhood of the wound, which is allowed to fill with blood, and then iodoform and an antiseptic dressing are applied. Any excessive haemorrhage is controlled by pressure. Instead of directing our attention to perfection in dressing, let us remember that Nature provides us with a beautiful example of conservation in the blood clot. This method, which does not appear to be fully realised by surgeons, may safely be relied on by the country doctor, and is to be commended for its simplicity, and as obviating the nimia diligentia chirurgica, or meddlesome interference.

THE TREATMENT OF CHOLERA WITH ATROPINE.

At a recent meeting of the Royal Medical and Chirurgical Society of London Dr. Lauder Brunton stated that in 1873 he had called attention to the close resemblance between the symptoms of cholera and those of muscarine poisoning; and, as the latter could be relieved by the subcutaneous injection of atropine, had suggested that good results might be hoped for in cholera from administering atropine. He had not had an opportunity of acting on his theory until last year, when the atropine had proved very useful in treating two cases of cholera. It seems singular that one so well informed as Dr. Brunton should apparently be unaware that this suggestion had been made and successfully carried out years before he made it. We need not refer to the facts that Viardin in 1832 (Gazette Médicale de Paris, 1832, p. 810) and Chalvet in 1859 (Gazette des Hôpitaux, 1859, p. 473) successfully employed belladonna in the treatment of cholera. But in 1866 the late Dr. John T. Hodgson, of St. Louis, published an article (St. Louis Medical and Surgical Journal, 1866, p. 497) advocating the administration of atropine to relieve the collapse of cholera, and for years afterward in his lectures he referred to the usefulness of this drug. In the cholera epidemic of 1873 a number of American physicians employed atropine in treating cholera.

THE TREATMENT OF BURNS.

Von Bardeleben states that no specific for the relief of pain of burns has as yet been discovered. The author's present method of treatment is as follows:—

After carefully cleaning the burned area, it is irrigated either with a three per cent. carbolic solution or a thirty per cent. salicylic acid solution. Sublimate lotions are avoided because of the great pain they produce. After all the blebs are opened the entire surface is covered with powdered bismuth; over this cotton is applied. This absorbs any discharge and fully protects the burned surface from the air. The cotton may be sprinkled with a powder composed of equal parts of bismuth and starch.

The dressing may be allowed to remain from one to three weeks, according to the case. In cases of burns about the face it is only necessary to cover the burned parts with the powder, the bandage being omitted because of the discomfort it occasions.

Under this treatment the author has seen children recover where two-thirds of the body were involved. Von Bardeleben thinks that bismuth probably exerts some influence in preventing intestinal complications, as in one hundred cases treated in this manner only two had blood in their stools. In using the bismuth there is no danger of intoxication from absorption, even in cases where it is extensively applied. By the antiseptic treatment
secretion is greatly diminished.—Albany Med. Annals.

CIRCUMCISION IN INFANTS.

Tarnier (Journ. des Sages Femmes, March 16th, 1893) cautions surgeons against using carbolicised lotions for dressing the glans after circumcision. Infants bear carbolic acid badly. Lucas-Championniere has known death to follow the application of carbolicised compresses to the nates of a child, where there was no wound or soreness of the skin. On the other hand, infants bear mercury well. Hence a weak Van Swieten's fluid (sublimate, 20 centigrammes with 3 grammes of alcohol to the litre of water) makes an excellent dressing after circumcision.

EXTERNAL HEMORRHOIDS.

Anæsthetize the skin and mucous membrane with cocaine, applied on cotton. Pass a finger into the rectum, and inject six times half a syringeful of cocaine solution, 2 per cent., between the mucosa and the cellular tissue around the rectum, avoiding the veins. When complete anæsthesia has been produced, introduce a speculum and dilate the sphincter.—Recuia.

With regard to high temperature we extract the following from The Medical World of Philadelphia:

At a meeting of the French Association for the Advancement of Science, held September, 1891, M. Mauriel, of Toulouse, read a paper in which he voiced the general belief regarding the effects of high temperatures, so-called. He stated that an animal cannot survive its leucocytes. That a temperature of 111.5° to 113° F. destroys our leucocytes in a few minutes; that in a temperature of 109.2° to 111.5° F., they do not live an hour, and in a temperature of 107.5° to 109.2° F., they may live for three hours, retaining their activity, but gradually lose it, and finally die. He further states that a patient never survives a temperature of 107.5° F. This has been the opinion held by the profession generally.

A compilation of cases of recovery from hyperpyrexia appears in the Journal of the American Medical Association, tabulated by Edward F. Wells, M.D., of Chicago. We there find twenty-two cases recovering from a temperature of 107°; twelve ranging from 109.2° to 107.8°; twelve from 108; ten from 108.1° to 108.8°; seven from 109°; seven from 109.2° to 109.8°; four with 110°; one, 110.5°; seven, 111°; one, 111.6°; three, 112°; one, 112.8°; three, 113°; one, 113.8°; two, 115°; three, 116°; one, 117°; one, 120.8°; one, 125°; one, 125.5°; one, 128°, and one 133°.

Still more remarkable comes the report of Dr. Heler Jones, in the Memphis Medical Journal, regarding a case of recovery, where the temperature ran at times up to 157° F., resulting in bursting the thermometer. This was vouched for by some twelve physicians who were present. The doctor naively asks, "Is it really the high temperature that proves fatal, or is the heart but a secondary factor?" We have given the matter much consideration and are distinctly of opinion that the bursting of the thermometer was the cause of death on this occasion.—Ed.]

ANTIDOTES FOR POISONS.

In cases where the other articles to be used as antidotes are not in the house, give two tablespoonfuls ground mustard in a pint of warm water. Also give large draughts of warm milk or water mixed with oil, butter, or lard. If possible, give as follows:—

Poison. Antidote.

For Bed-bug poison, give milk or white of eggs, large quantities.

Blue vitriol, Sulphate of zinc, Vermilion,

Lead water, Sugar of lead, Red precipitate,

Saltpetre, Sulphate of zinc,

Sugar of lead, Sulphate of zinc,

Mustard, Sulphate of zinc,
For Fowler's solution, White precipitate, Arsenic, Give prompt emetic of mustard and salt, tablespoonful of each; follow with sweet oil, butter, or milk.

For Antimonial wine, Tartar emetic, Drink warm water to encourage vomiting. If vomiting does not stop, give a grain of opium in water.

For Oil of vitriol, Aquafortis, Bicarbonate potassae, Muriatic acid, Oxalic acid, Magnesia or soap dissolved in water, every two minutes.

For Caustic soda, Caustic potash, Volatile alkali, Drink freely of water with vinegar or lemon-juice in it.

For Carabolic acid, Give flour and water or glutinous drinks.

For Chloral hydrate, Chloroform, Pour cold water over the head and face, with artificial respiration, galvanic battery.

For Carbonate of soda, Copperas, Cobalt, Prompt emetics; soap or mucilaginous drinks. Strong coffee, followed by ground mustard or grease in warm water to produce vomiting. Keep in motion.

For Laudanum, Morphinæ, Opium, Give common salt in water.

For Nitrate of silver, Sulphate, Carbonate, Cobalt, Emetic of mustard or sulphate of zinc, aided by warm water.

—Medical Brief.

THE HYGIENE OF THE TEETH.

All caries of the teeth begins from the outside, no such thing as internal caries having ever been demonstrated; hence if the surfaces could be kept absolutely clean, no decay could take place, however poor the texture of the teeth. This is of course impossible, but much in this direction can be attained by attention to hygienic rules. Parents often ask their dentists and medical attendants: "When ought teeth to be cleaned?" The answer assuredly is: "As soon as there are teeth." A very small tooth-brush charged with some precipitated chalk flavored with an aromatic drug to make it pleasant, is perhaps the best means.—The Lancet.

OFFICIAL OR OFFICIAL.

Dr. A. H. Dobson defines the distinction between these two terms, in a communication to The Lancet, as follows: The terms "official" and "official" are so frequently used as synonymous by authors of works on materia medica and kindred subjects that it may be well to point out that there is a wide difference between the words. "Official" (officium, an office) means issued or sanctioned by authority; "official" (officina, a shop) means kept in a shop. Blue pill is official; liver pills are official.

TESTS OF DEATH.

With regard to the above and the "diaphanous test" Dr. Edwin Howard and Sir Benjamin Richardson have compiled the following list. It is certainly instructive and may at any time be useful to a medical man:

(1) Heart sounds and motion entirely absent, together with all pulse movement.
(2) Respiratory sounds and movements entirely absent. (3) Temperature of the body taken from the mouth the same as that of the surrounding air in the room, 62° F. (4) A bright needle plunged into the body of the biceps muscle (Cloquet's needle test) and left there shows on withdrawal no sign of oxidation. (5) Intermittent shocks of electricity at different tensions passed by needles into various muscles and groups of muscle give no indication whatever of irritability. (6) The fillet-test applied to the veins of the arm (Richardson's test) causes no filling of veins on the distal side of the fillet. (7) The opening of a vein to ascertain whether the blood has undergone
coagulation shows that the blood was still fluid. (8) The subcutaneous injection of ammonia (Monte Verdi's test) causes the dirty brown stain indicative of dissolution. (9) On making careful movements of the joints of the extremities, of the lower jaw and of the occipito-frontalis rigor mortis is found in several parts.

Thus of these nine tests eight distinctly declared that death was absolute; the exception, the fluidity of the blood, being a phenomenon quite compatible with blood prefer-naturally fluid and at a low temperature, even though death had occurred.

There now remained the diaphanos test (10), which was carried out by the aid of a powerful reflector lamp, the scarlet line of light between the fingers was as distinct as it was in living hands subjected to the same experiment.

**SALOL IN CHOLERA.**

GIRODE (Sem. Med.,) raises the question of the propriety of given Salol in a disease in which the mechanism of digestion is so disordered as it is in Cholera. The following extract is taken from the British Medical Journal:—"On post-mortem examination (less than three hours after death) two lumps were felt at the most dependent part of the stomach about the middle of the greater curvature. On opening the viscus the lumps were found to be caused by masses of salol. The fragments of the substance were agglutinated together and heaped into a flattened concavo-convex mass; each of the lumps lay in a small pouch accurately moulded to it. At the corresponding points the stomach wall was thinned and congested. On microscopic examination the mucous membrane in the pouches in which the masses of salol had lain showed epithelial necrosis, which contrasted markedly with the relatively healthy condition of the other parts of the viscus."

We are well aware that Salol is strongly advocated by many here in the East, and that the warning given does not neces-
We take the following extracts from the Hongkong Daily Press of the 5th September with regard to the opening ceremony of the Nethersole Hospital which is to serve as an adjunct to the well-known Alice Memorial Hospital. We quote:—When Sir William and Lady Robinson entered the airy ward in which the speeches were made there was a very representative gathering. The proceedings passed off most successfully and pleasantly. Much admiration was expressed at the size and arrangement of the building, the comforts and conveniences provided, and the general scheme of construction. The roomy entrance and the main staircase were decorated with a profusion of pot plants, and on the left a small apartment had been converted into a refreshment room, in which at the conclusion of the function the visitors were invited to take tea.

Then Dr. Chalmers proceeded to describe in an eloquent speech the noble benefactions of which the gold medal had been the recipient—in all totalling $100,000. "And this is not all. What a noble work those men of the medical staff are doing gratuitously! Croakers say it is all for the sake of the practice—to keep their hand in. I wish they would try to keep their hand in some way of well-doing, and put a bridle on their tongue. It is good to be always doing the work of our Divine Master—that is the ideal—but it is better to be doing His work sometimes and in some directions than not to be doing it at all—not even where the stimulus of self-interest might come in to aid self-sacrifice. Some people are so afraid of getting the gold medal that they would not rescue a drowning man. It is only necessary to read the annual reports or to look at the Alice Memorial Hospital any day when the work of healing is going on to get a conception of the vast amount of good that is done; apart, if you like, from the religious teaching, the best of which is truly an application of the object lessons of the consulting room, and the dispensary, the operation room and the wards. Taking the annual expenditure as shown in the reports and comparing it with the total number of cases, of suffering relieved, disease cured or life saved, it will be seen that the cost is on an average about a dollar a head. Why, you could hardly get a dose of medicine at the Dispensary for less. Our bright hope, then, is that in the good times coming the two hospitals will be even better supported than the one has been, and that God will continue to bless the whole colony more and more in all good things. The London Missionary Society and the medical staff are pledged to carry on the work in this place on the same lines as in the Alice Memorial Hospital. The Finance Committee have approved of the extension. And now and henceforth by common consent the "Alice" and "Nethersole" are to be combined in one."

His Excellency Sir William Robinson in announcing the opening of the Hospital for the reception of patients regretted the absence of Dr. Ho Kai the founder of that noble institution the Alice Memorial Hospital, and referred to the absolute certainty of the greatest possible benefit that would be conferred on the many thousands of sad and suffering poor who inhabit the thickly populated town—he then spoke of the fact that owing to the poverty of the colony there had been a considerable falling off in foreign contributions. "But there is a bright side to this picture, for you will perceive that the Chinese have risen to the occasion—all honour to them for their liberality."
"Dr. J. Cantlie then proposed a hearty vote of thanks to Sir William and Lady Robinson for their presence, and in the course of his remarks paid an eloquent tribute to the energy and ability of Dr. J. C. Thomson, who, he said, was more than any other man directly responsible for the new hospital which had just been opened. He suggested that if they could not place a bust of Dr. Thomson in the entrance hall they ought to erect a little slab recording the active part he had taken in establishing the new institution."

These remarks having been met with very hearty applause, concluded the proceedings.

We beg to acknowledge the receipt of a communication from the College of Physicians of Philadelphia with regard to the William F. Jenks Memorial Prize—the title of the Essay, which by the way has to be in by the 1st Jan., 1894, is 'Infant Mortality during Labor, and its Prevention.' We will forward any further explanations if required.

Dr. H. T. Whitney writing from Oberlin tells us that he hopes to return to China in the autumn—many will warmly welcome him. He has kindly forwarded us the following series of Resolutions which were adopted at the Meeting of the International Missionary Union:

On Chinese Exclusion.

Whereas, The United States for over fifty years has maintained treaty-relations with China, guaranteeing protection to American citizens in China, establishing full toleration from the Chinese Government for the Christian Religion, and regulating American commercial relations with the people of that country.

And Whereas, Both the Scott Bill of 1888 and the Geary Bill of 1892 have glaringly violated the different treaties of 1842, 1860, 1868, and 1850, first by forbidding Chinese laborers visiting their native land to return to this, contrary to the express stipulations of the treaty of 1880, and secondly by enacting a variety of restrictions and penalties for the Chinese already residing within the territory of the United States, contrary to the treaty of 1880, which expressly states that all Chinese in the United States shall be subject to the same favours, privileges, exemptions and immunities accorded to the most favoured nation.

Therefore Resolved, 1. That this Union desires to place on record its strong protestation to the policy of breaking a national contract, and also to the unjust and unfriendly features in the laws now in force regarding Chinese immigration, and especially concerning those Chinese who are already residents in the United States.

Resolved, 2. That this Union would most respectfully petition the Executive and Legislature of the nation to repeal the present law, and enact such a new law as will either harmonize with the treaties made in the past with China, or, if desirable, with a new treaty agreed upon and duly ratified by both Governments.

And Resolved, 3. That a Standing Committee of two be appointed to represent this Union in endeavoring to secure in every possible way such legislative action as will be alike creditable to the Christian character of our nation, respectful to China, and beneficial to all American interests in that land.

We note that during the session Drs. Whitney and Merritt spoke on medical missions "and all listened as they spoke with enthusiasm of their experiences of medical work among the Chinese."

Dr. Brown-Sequard has made 20,000 injections with his sperm fluid during the last three years, and he claims that the result has been invariably successful. He considers the system unapproachable for the treatment of weakness and debility. — N. Y. Medical Times.
With regard to Jewish wit and humour the following is an example of repartee. At a festive banquet, representatives of the Protestant, Catholic and Jewish clergy had been invited, and were engaged in pleasant converse. The Rabbi faithful to the dietary precepts of his religion, partook of only a few of the dishes. An appetising joint of roast pork was set on the table. The Catholic priest turned to his neighbour and asked, "When will the time come that I may have the privilege of serving you with a slice of this delicious meat?"

"When I have the gratification of assisting at your Reverence's wedding," the Rabbi instantly rejoined, with a courteous bow.

'Our own correspondent' to the N.-C. Daily News writes:

Dr. Mackenzie's Memorial, as it ought to be called, is now rapidly approaching completion. As you know, the distinguished surgeon had the complete confidence of the Viceroy, who yearly entrusted him with a large sum for medical purposes; with his Excellency's knowledge and approval the doctor set about forming the nucleus of a building fund. At his death this amounted to two or three thousand taels, and the inheritance of it became the source of a more or less amicable discussion between the Chinese and the London Mission. Very sensibly it was referred to arbitration with the result that the Chinese got most, if not all, of the fund. The present building, a large two-storied edifice near the Taku Road, is the result; it adjoins the Hospital and is meant to be a well equipped Medical School for Chinese Students. Dr. Irwin will be the responsible chief of the establishment; we understand that Sir Andrew Clarke has nominated a physician to come out and act as the presiding genius loci. The financial standing of the school is not yet so assured as to enable them to specialize, so that this gentleman will have to be as multiple an official as Pooh-bah himself. He will have to teach all or most of anatomy, physiology, chemistry, materia medica, medicine, surgery, obstetrics, pathology, histology, forensic medicine, and the Lord knows what else.

Apropos of the broad-minded Bedford clergyman who reads the religious weeklies and has come to the conclusion that "the Bible is the only publication that he can peruse without risk of being tricked into reading some patent medicine advertisement" it is with a feeling, we regret to say almost akin to relief that we understand H. H. Warner of 'Safe Cure' notoriety has made an assignment.

A NEW TEST-TUBE.

The illustration which we give here exhibits a new form of test-tube which has been designed by Mr. Hoare, a student in Guy's Hospital. The bulb is an effective means of preventing boiling over in many chemical operations, and when the lower part of the tube is only partly filled the tube can be placed on a bench without spilling the contents. In use we expect that the tube will develop other advantages according to the notions of each operator, but meanwhile it is likely to be a tube which medical men will take to.—Chemist and Druggist, Feb. 25, 1893.

SIMPLE STEAM BATH.

In an Edinburgh professional journal a simple and ingenious contrivance is mentioned to admit of the continuous inhalation of steam fumes by patients suffering from diphtheria. This is nothing more than the fixing of an open umbrella to the bed, or suspending it from the ceiling, and throwing over this a large sheet, which, falling in a tent about the patient, will surround him with the atmosphere of steam. The steam is supplied by a pipe connection with
a kettle or other boiling contrivance that passes beneath the tent. The suggestion is so admirable and feasible, that we are sure it will be welcomed by many physicians who are sometimes at a loss, in the absence of especially devised contrivances, to know how to effect with simple means the end desired in such cases.

GERMANY VERY BACKWARD.

The largely signed petition, praying "That the study of medicine at German universities be thrown open to women, and that women duly qualified be allowed to practise the medical profession," was contemptuously dismissed in the German Reichstag. That the petition would be rejected was a foregone conclusion. But it might have been expected that the question—which is everywhere acknowledged to be a burning one—would have been seriously discussed. It seems, however, that this was thought quite unnecessary by the opponents. The arguments against the petition were of the familiar, well-worn description, more suitable to a provincial debating club than to the Parliament of the German Empire. "Women should keep house, and not meddle with science. Women who study are objectionable." This was the gist of the opponents' speeches; the discussion did not rise above this level, and the petition was quietly thrown out.

SELF-SUPPORTING HOSPITALS.

Dr. Wentun, of China, states that at the Missionary Hospital at Fatshan, South China, between 2,000 and 3,000 patients have been under medical treatment during the past year. At Shiu-kwan, Dr. Macdonald has had some 2,000 under his medical care. Both hospitals are self-supporting, the fees at the former amounting to $2,500. The other Wesleyan Medical Missions are at Hankow, Wuchang and Teh-ngan.

PANG-CHUANG.

DEAR DR. MATHEWS.

Sept., 1893.

Perhaps the funny man on your staff will appreciate the following squib. One of our good neighbors Dr. ——, could not find what Lucca oil was. He wrote us that he had diligently compared all the big books to the number of ten and could find no reference whatever to the drug. However he did surmise that it must be Ol Oliva. I sent him an advertisement from Harper's Weekly with the following:—

Sigma,

Ctel R. Oleum Luccae.

There once was a man in Cathay
Who had lost his medical way,
In ten books quite profound,
He almost was drowned,
This studious man of Cathay.

How sad, cried he, is my luck, ah;
Will nobody come to my succor?
While I sweat in my toil,
In search for the oil,
The far famed strange oil called o'Lucca.

But his woes at last found an end
For he sent in despair to a friend,
Who wrote him a chit,
With wisdom all writ,
In a style that would make you unbend.

Lay aside your fear and dismay,
Renew your bright spirits, I pray;
The oil which you seek
Was anciently Greek,
But we buy it from fair Italia.*

Its odor is sweet to the smell,
When old it is as rancid as "Fel"
In a clean carbolate
Which the microbes disrate
It will solace your wounds very well.

After such an effort you will scarcely expect much medical news.

I am,

Yours with regard,

HENRY D. PORTER.†

* Psaon. Italya.
† We forebear comment; we asked an article from one, heretofore our friend, we are completely broken up.—(Ed.)
A few genial lines from Dr. Greig have just reached us from Kirin. He does not think that "medical missions are yet taking their proper place in either the Churches or the medical profession, but such Journals as ours cannot fail to help the cause very materially." So many of us have sympathized with Dr. Greig in the past that it is with much pleasure we now hear of his welfare, and earnestly wish him God speed in the future (the, notes accompanying the letter we must for the nonce hold over). Then, Dr. Neal writing from home gives us the welcome news of his return. "I have much enjoyed being in America but am keen to get back to work."

Another letter dated September 19th. "On board the Tungchow," regrets our not meeting in Shanghai. He tells us, "We take with us to Chinan-fu, Dr. Sarah A. Pondexter who will be my colleague in medical work there and will have charge of the Woman's Hospital which we hope to build in the spring." Our hearty welcome to Dr. Pondexter. September 20th from Tientsin brings us one of Dr. Robert's many little pleasant 'chits.' We quote: It is reported that Mr. Chou your assistant is coming north to the Viceroy's hospital to take Dr. Mai's place who goes south for the winter invalided. I shall be glad to meet him and hope he will look me up. A lecturer from St. John's College, Loudon (name unknown) is coming out to start the medical school under the Viceroy.

The Mr. Chou referred to studied medicine in the States and was for some years one of the teachers in St. John's College, Shanghái. We congratulate Mr. Chou upon his appointment, and the authorities of the institution to which he has been appointed.

From Amoy date of August 14th we are so pleased to hear better news of Mrs. Fairmy. The doctor tells us "that the inland folk come down here for a month's rest and re-invigoration."

For the last three years advantage has been taken of such a gathering of missionaries, both medical and clerical, by holding a series of conferences for mutual help and edification. This time there will be three such meetings; and the subject for the first is, "The Kind of Workman we should be."

"It may, perhaps, interest you to know that, after many disappointments, we have at last succeeded in securing a site for a new and much needed decent hospital in Chiauchin; and we hope to begin building in October. I shall not feel quite comfortable, however, until the foundation stone is laid down, or indeed the roof on; for in China site and building disappointments are of almost universal experience."

Dr. Coltman writes us from the Capital, July 25th, as cheerily as of yore. With work that is congenial and with colleagues who are colleagues in every sense of the word—we congratulate him right heartily—the only regret and one in which many will share, is, that "Pritchard has to retire."

It is with surprise we note that some of our special correspondents are alluded to as if in perfect health, when we ourselves have known how thoroughly incapacitated they have been for a long time past.

ICHANG.

All is quiet at Ichang and foreign buildings growing apace. The Catholic monastery is finished; and godowns, offices, and quarters are being erected for the Customs' staff. One figure is missing; that of the late Dr. Pirie, of the Scotch Mission, who was doing such good work here among the Chinese. His genial kindness and frank open manner and good nature made him beloved alike by all the Chinese and foreigners that were brought into contact with him; and if ever there was a man
fitted for the double duty of administering
physic to body and soul, surely this was
he. His death cast a gloom over the whole
place. It is with much regret we note the
foregoing in the North-China Daily News.
It was but so little while since Dr.
Pirie was chatting to us of all his hopes and
aims, of his then looked for happiness in
meeting a bride who was to be so associated
with him in his work. We heartily symp-
thize with her in her great and sudden
bereavement.

The Anti-vaccinator is again to the fore
in England and somewhat more persistently
than usual. As an humbly biased in-
dividual we hold that vaccination is a
method of preserving and defending a body
which the Almighty has given to our keep-
ing to put into action, and there our belief
ends. The following extract which we take
from a home paper is relevant as affording
striking testimony to the efficacy of vacci-
nation. Dr. Marson who was at the head
of the London Small-pox Hospital for fifty-
one years, states that no nurse or attendant
was ever attacked! "Every one was vac-
cinated, or re-vaccinated before he entered
on his labores; and we may be quite sure
that the work was thoroughly done before
passing muster under the eye of this expert.
As an encouragement to the doubting, we
reproduce a table published some years ago
based upon an examination of 5,000 cases,
giving the results of Dr. Marson's observa-
tions extending over twenty years."

Classification of Patients affected
with Small-pox

<table>
<thead>
<tr>
<th></th>
<th>No. of deaths</th>
<th>per cent. in each class respectively.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unvaccinated</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>2. Stated to have been vaccinated, but having no cicatrix</td>
<td>23.57</td>
<td></td>
</tr>
<tr>
<td>3. Vaccinated —</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Having one vaccine cicatrix</td>
<td>7.73</td>
<td></td>
</tr>
<tr>
<td>(b) Having two vaccine cicatrices</td>
<td>4.70</td>
<td></td>
</tr>
<tr>
<td>(c) Having three vaccine cicatrices</td>
<td>1.95</td>
<td></td>
</tr>
</tbody>
</table>

(d) Having four or more vaccine cicatrices .......... 0.55
(az) Having well marked cicatrices .................. 2.52
(bb) Having badly marked cicatrices ................ 8.82
4. Having previously had small-pox 19

This table was made for the years be-
tween 1835 and 1855, but later experience
only confirms the above; for an analysis of
11,724 cases treated in the hospitals of the
Asylum Boards between 1870 and 1880
shows that the mortality among those who
had "good marks" was 4.1 per cent.; in
those who had "indifferent marks" it was
11 per cent. If it is asked, What are
"good" marks? the reply is that in Eng-
land the standard is "four characteristic
 cicatrices."

The St. John's Echo. September, 1893. Price
one dollar. The Presbyterian Mission
Press, Shanghai.

The editorial of this pleasant little College
paper first making grateful and appreciative
mention of its late management then proceeds
to map out the aims and objects of the
future. We quote: It shall be our earnest
endeavour to go on developing the work of St.
John's until it becomes a College in the true
sense of the word. Over the portals of the
library of one of the oldest universities
in America one can decipher the Hebrew
words "urim and thummim," light and
truth. Surely no nobler motto could be
found for a seat of learning, and we can
have no loftier aim than to make St. John's
College a beacon of light and truth in China.

We shall endeavour to give our students
a broad, liberal and Christian education.
We shall go on teaching the English lan-
guage and literature as thoroughly as we
can, and we believe that it will conduce
to the broadening of the mental horizon
of our students. We shall teach the sciences,
not only because they have a utilitarian
value but because the truths of science
come as all truth does from God, and the
studying of these truths must aid in the advancement of mankind.

Our education shall be a Christian one; our students shall be taught that the formation of character is more important even than the development of mind, and that the religion of Christ has produced the highest form of character the world has yet seen.

We shall try to make others as enthusiastic as we are ourselves and shall contend for the position that educational work must lie at the foundation of the missionary effort in China if it is to be successful. The impetus to the renaissance in Europe came largely from the schools, and we are firmly convinced that in China such will be the case also. The St. John's Echo will play an important part in all we are striving after, for it will serve more and more as the chronicle of the life and growth of St. John's College, and will help to keep up the interest of those whom we believe to be our sincere well wishers.

We hope before many months to see a new college rising on the site of the present building in every way better fitted for the work it has to accomplish. Money enough has been secured to put up a strong and substantial edifice, architecturally pleasing to the eye.

'The Notes of the Seasons and College Items' which follow on is as interesting and quaint as usual—yet another old college lad, CHAR NEW-CHING has obtained the first degree (siu-tsai) at the recent examination at Zak-mung. FOH KUNG-ZAU expatiates on the Postal System of China and hopes the time will soon come "when our government will establish a postal system of its own"—a wish we cordially endorse seeing to all the postal vagaries to the fore now in China. ZUNG TSZ-WOO continuing 'Complaints and Suggestions' naively remarks in connection with some admitted abuses in which the Sikh police are occasionally involved, "It would be a great happiness if such things should never happen." 'Chinese Fishery' by TSAU TSUNG-KIUNG is as well written and expressed as the foregoing and gives us some interesting information regarding the apparent domesticating and rearing of fish. 'Chinese Food' is an anonymous production of evidently a more junior correspondent. We are informed that "among the fleshes the pork is the most common one." KIA YU-TSE gives some 'Notes on Kaiding' describing that city in a more complimentary strain than we fear we should, had we to write thereon. TSING KONG-WOO's 'Romantic Dream' is the last composition in this little paper which is distinctly improving. We have every sympathy with the views expressed in the editorial programme, and we wish them and their exponents an ever-abiding success.

It is with peculiar pleasure that mention is made of the conferring of the degree of LL.D. upon our veteran medical missionary, DR. JOHN G. KERR, of Canton, China. No degree was ever more worthily bestowed, or, we have reason to know, more unexpectedly received, than in the present case. It is well that Wooster, the leading Presbyterian University of Ohio, should thus honor one whom God has highly honored, by an unusually long life of great usefulness, and whom the people of China, and those in China both delight to honor.

As it has been well earned, may it be well worn, ere it is laid aside to give place to that highest honor, the "Well Done," of the Great Physician Himself.

"AN EXTRAORDINARY TURNING."

DR. MACKAY writes from Formosa, an island on the coast of China, that there has been an extraordinary turning from idols on the part of the people of Kelevan. Nearly five hundred idolaters cleared their houses of idols in his presence, and gave him a temple, built for idols, as a place of worship.—Christian Herald.
THE FIRST LEPER HOSPITAL AT HANG-CHOW

This hospital is in charge of Dr. DUNCAN MAIN, Medical Missionary of the C. M. S., and he it was who planned the building and superintended its erection. Bishop Moule speaks of it as "a detached and airy building of one story, facing South, and consisting of six wards, each containing two beds; a chapel, dining-room, kitchen and other offices, all looking into a walled courtyard 70 feet by 20 feet." The present building is intended for men only, but already Dr. and Mrs. MAIN have found the need for a similar building for women and they have written to us begging of us to buy a small house at a cost of £50, which can be turned into a suitable place for women. We have sent out the £50, and it will probably take another £50 to put it into proper order.—Medical Missionary Record.

A farewell service was recently held in Sherbourne Street Methodist Church, Toronto, in connection with the departure of O. R. AVISON, M.D., as a medical missionary for Korea. Dr. AVISON is an official member in the Sherbourne Street Church, being a local preacher and an active worker in the congregation.

We beg to acknowledge with thanks the receipt of the following:


ARRIVALS.

At Shanghai, June 27th, the Rev. H. CLINTON COLLINS, M.D., of the American Protestant Episcopal Church, for Hankow.
At Shanghai, September 16th, Dr. H. M. HARE, of Canadian Methodist Mission, for Chentu, Sz-chuan.
At Shanghai, September 16th, Dr. ANNE WALTER and Dr. SARAH POINDEXTER, both of Northern Presbyterian Mission. Also Dr. J. B. NEAL, of the same mission, returning to Chinhai-fu.
At Shanghai, September 16th, Dr. K. HART, of the Southern Methodist Mission, for Soochow.
At Shanghai, September 18th, Dr. LUCY GARNER, of Women's Union Mission, U. S. A., for Shanghai.
At Shanghai, September 26th, Dr. W. H. VENABLE, of the Southern Presbyterian Mission, for Sin-tdzang.

BIRTHS.

At Wei-hien, on August 14th, the wife of Dr. W. R. FARIES, of a son.
At Shanghai, September 15th, the wife of Dr. E. WOODS, of a daughter.

MARRIAGES.

THURSDAY, July 20th, at Barton, Ontario, Canada, EGERTON H. HART, M.D., I. M. M. S., to Miss ROSE MUNN.

DEATH.

At Pakhoi, on June 18th, of dysentery, CHARLES STEWART BEAUCHAMP, the beloved only child of Dr. E. G. HORDER, C. M. S., Pakhoi.