Volume XXII. SEPTEMBER, 1908 Number 5.

The China Medical Journal.

博醫會報

PUBLISHED BY THE

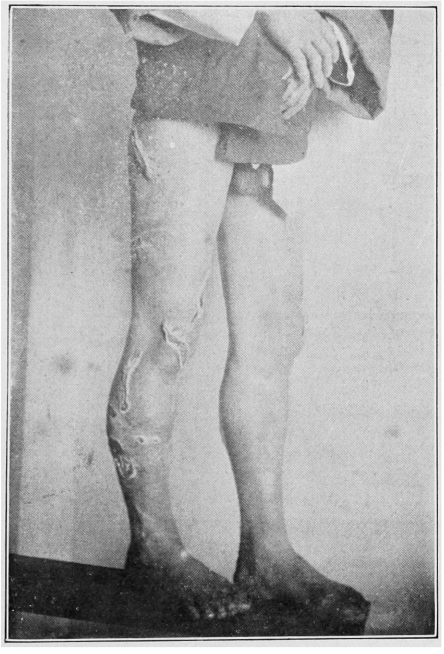
MEDICAL MISSIONARY ASSOCIATION OF CHINA.

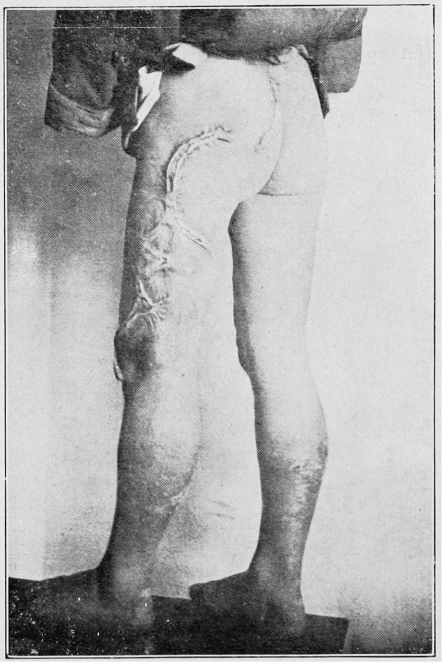
Business Office, 18 Peking Road, Shanghai.

Editorial Office, 4 B Minghong Road, Shanghai.

Secretary and Treasurer, 2 Shantung Road, Shanghai.

Published Bi-monthly. $4.00 ($2.00 gold, 8 shillings) per year.





A CASE OF CHRONIC SKIN DISEASE.

See Page 311.

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Original Communications.

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CHRONIC INTUSSUSCEPTION.

WITH NOTES ON SEVEN CASES.

By JAMES L. MAXWELL, M.D., Tainan, Formosa.

In a former issue of the CHINA MEDICAL JOURNAL (November, 1907), I described three cases of this disease. Since that time I have operated on two further cases and am able to give notes of two cases more as yet unpublished. For the notes and permission to publish these latter two I have to thank Dr. W. H. Jefferys, of Shanghai, and Dr. D. Landsborough, of Chianhoa, Formosa.

The seven cases given in brief are as follows :—

1. Tsan Cheng, male, aged 28, admitted Tainan hospital 6th June, 1906, stating that he was suffering from dysentery. Symptoms dysenteric with colicky pains in right hypochondrium ; no tumor felt. Operation—incision in right linea semilunaris. Large intussusception discovered. Almost the whole of it irreducible. Excision of whole mass. End to end union with Murphy's button. Death from shock a few hours later.

2. Under care of Dr. Landsborough. Chinese girl, aged 12. Symptoms about two months, much emaciation. Sausage-shaped lump felt in position of transverse colon. Paroxysmal pains along course of ascending and transverse colon ; during the attacks of pain the swelling became more tense. Laparotomy—intussusception reducible with difficulty, leaving a lump—probably tuberculous—in the cæcum. Excision of cæcum. Implantation of ileum in colon with Murphy's button, leaving the open end of the colon in the wound. Death from peritonitis on fourth day.

3. Li Tang-tek, male, aged 56, admitted to Tainan hospital 12th November, 1906, complaining of dysenteric symptoms. *One month's history.*—No tumor to be felt, but a diagnosis of the case was made from the very marked attacks of colicky pain running along course of ascending and transverse colon. *Operation*—Incision along right semilunar line. Intussusception reduced as far as possible and a lateral anastomosis of the large and small bowel performed with a Murphy's button. Death from exhaustion on the fourth day.

4. Kho Lan-tit, male, aged 19, admitted to Tainan hospital on 9th March, 1907, stating that he was suffering from dysentery. History dated from February 8th when he was struck in the abdomen. Sausage-shaped tumor in position of transverse colon. Very severe paroxysmal pain along position of ascending and transverse colon. *Operation.*—Lateral anastomosis, after reducing the tumor as far as possible between large and small bowel by suture guarded by omental graft. Bowels opened by enema on fifth day. Convalescence uneventful.

5. Kho Chhat, male, aged 39, admitted to Tainan hospital on 5th November, 1907, complaining of dysenteric symptoms and abdominal pain. Four months history of pain and passage of bloody mucus. Patient was an emaciated looking man without cough or other signs of tubercle. On examination a sausage-shaped mass was seen in position of transverse colon. Colicky attacks of pain commencing at the position of the cæcum and running up the course of the ascending colon and along the transverse colon. During the attacks of pain the tumor became larger and harder. *Operation.*—Laparotomy revealing an intussusception which was reduced without great difficulty, but left a mass in the cæcum, which was covered on the outside by what appeared to be miliary tubercles. Lateral anastomosis by suture of bowel on either side of cæcum, guarded by omental graft. Bowels opened by castor oil on the third day. Convalescence uneventful.

6. Unfortunately the notes of this case have been mislaid, and I can only give general details. Chinese boy, aged about 13, admitted to Tainan hospital in December, 1907, complaining of obstruction of the bowels with dysenteric symptoms. There appears to have been chronic obstruction for some months, but symptoms of a more acute nature had been present for two weeks. These consisted of almost complete obstruction relieved about every four or five days by the passage of flatus with blood and mucus after rectal injections. A tumor could be felt in position of transverse colon and severe attacks of colicky pain were felt along the position of ascending and transverse colon. *Operation.*—Laparotomy. Intussusception reduced with great

difficulty, leaving a mass in the cæcum, which was covered on the outside by what appeared to be miliary tubercles. Lateral anastomosis by suture of bowel on either side of cæcum guarded by an omental graft. Convalescence was rather protracted but otherwise uneventful.

7. Under the care of Dr. W. H. Jefferys. St. Luke's Hospital, Shanghai. Male, aged 42. Four years ago tried to stop opium, two weeks later had pain in right abdomen with swelling and fever. The pain radiated to penis; small mucous stools. Swelling and rigidity since that time, also frequent attacks of pain but not so severe as at first. A Chinese doctor stuck needles into the swelling every other day for a long time. On admission a swelling could be felt, but owing to the rigidity of the abdominal muscles its shape could not be determined. The case was sent in as one of appendicitis and was operated on as such; the appendix was found brittle and perforated and was removed. A fæcal fistula formed which persisted, soon doing all the work while there was no action through the rectum. A further operation was then performed, at which it was discovered that an intussusception of the ileum into the colon existed, about eight inches in length and absolutely irreducible. A lateral anastomosis of the small and large bowel was therefore performed with a Murphy's button. The button appeared on the tenth day and was removed from the rectum. The man, who was terribly cachectic, then improved rapidly and the fistula is gradually closing, though an operation to hasten this did not prove successful.

I shall close this paper with a few remarks about the diagnosis, pathology and treatment of this condition.

DIAGNOSIS.—The cardinal symptoms of intussusception are said to be:—Tumor, pain, obstruction and the passage of bloody mucus per anum. *Tumor.*—A swelling was palpable in five out of the seven cases. It was diagnostic in four. In the seventh case, though present, it gave no assistance in determining the nature of the case owing to the rigidity of the abdominal walls. In case No. 1, after repeated examination, no tumor could be felt, and this is still more striking in case No. 3, when I was able from other signs to make a diagnosis of the condition before operating, despite the absence of a swelling. The presence of a tumor must not therefore be too strongly relied on for the diagnosis of this condition, though when easily felt the outline of the swelling is very typical. *Pain.*—I am coming to rely more and more on the nature of the pain in diagnosing these cases. Pain has been a very marked symptom in all severe cases. In six of these the pain has been absolutely

typical and I have no note of the nature of the pain in case No. 7. In cases 1 to 6 the pain was of a paroxysmal character, and if asked to point out the position of the pain during a spasm the patient would run his hand from the right iliac fossa up the course of the ascending colon and then across the abdomen along the position of the transverse colon. I incline to lay great stress on the nature of the pain in coming to a diagnosis. *Obstruction* is not a sign on which any great weight can be laid. In case No. 1 the abdomen was markedly retracted, and in no case was there any very noticeable distension of the abdomen, even though in one case, No. 6, partial obstruction was complained of. *Passage of bloody mucus.*—Chronic dysentery is so common out here that it is very difficult to estimate this symptom at its right value. In countries where dysentery is rare it might be very valuable. In my first case this symptom with the presence in the stools of amœba coli actually led me astray.

PATHOLOGY.—The commonest form of intussusception is that belonging to the ileo-colic variety. All seven of the cases here reported, were of this nature. The cause of intussusception, speaking generally, is very doubtful, though in infants it is commonly associated with chronic enteritis. There seems no reason to suppose that such was the cause in any of the cases here mentioned. Of case 3 we have no clue to the cause, but in referring to my fuller notes of the patient's history I find that there was no prodromal stage of diarrhœa. Cases 1, 2, 5, 6, 7 showed the presence of a tumor or thickening in the cæcum. The history of case 4 is remarkable, as the pathological condition seems to have followed directly on a blow in the right iliac fossa, followed a little later by hæmorrhage from the bowel. In this case it is at least probable that the cæcum was damaged and that a hæmatoma may have formed in its wall. It must be quite evident that if the lumen of the cæcum is greatly narrowed the pressure from above would tend greatly to facilitate the formation of an intussusception at a point in the bowel already prone to this pathological condition. If we are right in thus accounting for this condition it is plain that any form of narrowing of the gut at this particalar spot will tend to the production of intussusception. We are, however, inclined particularly to blame the tubercle bacillus as being the most probable cause of such tumors. In cases 5 and 6, after reduction, the peritoneal surface of the mass in the gut appeared to be covered by miliary tubercles, a condition confirmed by Dr. Landsborough, who assisted me in these two cases and by another medical man who was present in case 5.

In case 2 Dr. Landsborough, who operated, believed the lump to be tuberculous. In case 1 I examined a portion of the excised

cæcum microscopically and the thickening appeared to me to be of that nature, though the tubercles were not quite typical.

We have therefore a considerable amount of evidence in four out of the seven cases in favour of the swelling being due to a local tuberculosis; and it must be further remembered that the cæcum is a spot in the bowel rather prone to the attack of the tubercle bacillus.

TREATMENT.—That operative treatment is essential is self-evident, and only two forms of such treatment need be discussed—excision and lateral anastomosis. Excision appears to be the treatment recommended by the ordinary text-books and works on surgery—at least by all that I have been able to refer to. All the books acknowledge that the mortality of this form of operation in these cases is very high. Two of the seven cases here reported were operated on by excision, and both cases died.

We cannot ourselves understand why no reference seems to be made in text-books to lateral anastomosis as the treatment for this condition. We here record five cases of operation by this method with only one death. That death was on the case of an old man with little or no recuperative power, and we cannot but believe that he too might have recovered but for the total abence of nursing facilities in our hospital. The operation is simple, speedy, and unattended by shock, because there need be no great exposure of the abdominal contents. I prefer the operation by simple suture with an omental graft as described in my article in the November, 1907, issue of the JOURNAL. One objection may be raised to this form of treatment, viz., that the diseased mass—possibly tuberculous—is left in situ. Time must show whether this is really a serious objection or not. I believe that it will not prove to be so. Tuberculous disease, when given rest, has a very marked tendency towards spontaneous recovery. The cæcum is, after this operation, placed in a condition of absolute rest, and I believe that no further trouble will occur even though a tuberculous mass be left behind in it.

TRAUMATIC DIFFUSED ANEURYSM.

By CECIL J. DAVENPORT, F.R.C.S., Shanghai.

Patient, aged 23, admitted into Shantung Road Hospital on 2nd December, 1907.

History.—Began by aching in left knee three months ago after a wrench in walking. Swelling behind the knee gradually increasing with increasing pain, and some fever followed. The swelling broke of itself some two or three weeks ago on the inner side of popliteal

space. Needled by a native doctor a week previously. Only blood came away.

Condition.—A thin, sallow, anæmic man, addicted to opium. Left foot and leg much swollen and softly œdematous, not blue nor cold, no ankle pulse.

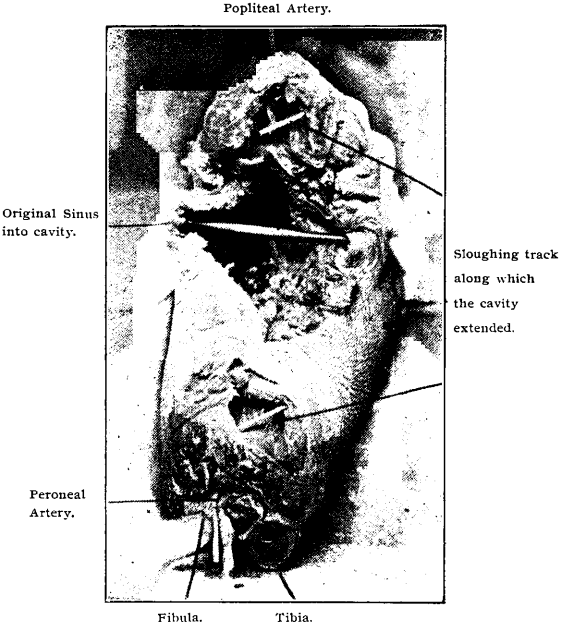
The left knee semi-plexed. Large elastic swelling occupying the popliteal space. Fluctuation obtainable. From the sinus on the inner side fœtid decomposing blood coming away. Probe entered sinus directly to the back of the joint some three or four inches from surface—thick, dark, foul, bloody discharge coming away. Temperature 99.4°. Pulse 128, feeble.

Patient was fed up and watched for a few days. On one occasion the temperature ran up to 102.6°. Pulse ranged from 100 to 128. Meanwhile the tension of the tumor increased, its fœtid condition continued, the sinus opening enlarged and free discharge of clots and dark, smelling blood came away.

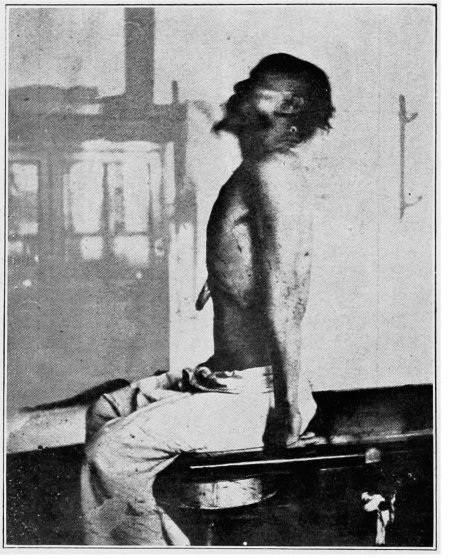
December 8th.—Thigh amputated in the upper third. But even here the posterior incision was not free of the disease. As the photograph shows, the disorganized and suppurating clot had traveled up and down in the muscular planes from below the middle of the calf to as high as the upper third of the thigh. The muscles adjoining were infiltrated and looked very unhealthy. The upper part of the track, which could not be removed, was swabbed with pure carbolic after scraping away as much of the diseased tissue, as was possible. The patient survived the operation eight days, and then went home to die. Sloughing occurred in the stump, though he had no rise of temperature. Hiccough set in, and the disease readily overcame what little power of resistance he possessed.

The specimen.—A large cavity containing two handsfull of blood clot filled the popliteal space; the clot on the deeper aspect being somewhat organised. The knee joint was opened (we had thought it was free) and the popliteal surface of the femur somewhat eroded.

No blood vessel was traced as being open to the cavity. The main vessels appeared pushed to the outer side of the cavity and obliterated. As stated above the cavity had extended along the fascial planes between the muscles of the thigh and calf, containing septic breaking down clot and having sloughy, infiltrated walls; the infiltration extending into the surrounding muscles, almost giving the appearance of a new growth.



DIFFUSE POPLITEAL ANEURYSM.



Punctured Abdominal Wound Closed by Mesentery.

Any treatment other than amputation would have been futile, and only amputation through the hip joint would have been free of the disease. This would probably have killed him by shock.

The photograph shows the large ragged cavity with the original sinus-opening to the left. A horizontal match props open the extension of the cavity upwards and downwards along the fascial planes. The perpendicular matches are in the large arteries.

PUNCTURED ABDOMINAL WOUND CLOSED BY MESENTRY.

By W. E. Plummer, M.R.C.S., L.R.C.P., Wenchow.

The patient was a man aged 56.

History.—Ten days previously he was stabbed in the abdomen, after which the sausage-like swelling shown in the illustration gradually formed.

On admission the man's general condition was apparently normal. The wound from which the mass protruded was two inches below the ensiform cartilage and one inch to the left side. The swelling was covered with granulation tissue and it was solid and free from pain even when handled.

The abdomen was pliable and the patient quite comfortable.

Treatment.—The base of the protrusion was ligatured and two or three days later the swelling was cut off.

In an interesting paper on "Tubercular Troubles in the Abdomen" (which I read some time since and am now unable to find) the writer said he had often found the mesentry wrapped round a focus of infection shutting it off from the rest of the abdominal cavity; he also gave examples of other causes of inflammation in which the mesentry had found its way to the diseased area as if having an innate power of knowing where its services were wanted. We are familiar with the way in which this membrane will fill a hernial cavity and how the surgeon will use it to wrap round and strengthen his internal anastomoses; this case is another instance of its protecting power.

SOME POISONING CASES.

By J. PRESTON MAXWELL, M.B., F.R.C.S., Engchun.

I. *Arsenic.*—A China woman, aged 25, had a serious quarrel with her mother-in-law. It was a feast day and she had just partaken of a huge meal of pork, rice, and vegetables. About an hour afterwards she swallowed approximately half an ounce of crude arsenic, used in the fields for killing worms. Three hours after, having confessed what she had done, the case came under my care. She was intensely collapsed, with a small feeble pulse and semi-comatose. No vomiting or purging had occurred. She was treated with the stomach tube, and the whole of the stomach contents removed. Strychnine was given hypodermically and ferric oxide left on the stomach. Under this treatment with active stimulation, she slowly became better and complained a little of stomach ache. Next day she was well and no ill consequences followed.

There is no doubt that the huge meal she had taken saved her, and the arsenic having been swallowed with water in a solid form also contributed to this end.

II. *Carbolic Acid.*—A European medical man, aged 38, who suffered from phthisis, and had also tubercular ulceration of the large bowel, was being treated by daily inunction of guiacol and olive oil.

On the day in question he had already been rubbed in with one and a half drachms of guiacol. To relieve the bowel symptoms an enema of two pints of hot water, containing two drachms of pure carbolic acid, was administered. He had previously had enemata of this nature without any ill results.

Two minutes after receiving the enema he suddenly sat up, told his wife to fetch the doctor, and fell back insensible. Ten minutes after he was still quite unconscious with movements of the eyes, pupils contracted, face pale and skin moist. The pulse was poor, but not very rapid.

External warmth was employed, and he gradually recovered, passing through a stage of delirium and then a stage of confusion with hallucinations. After about two hours he was himself again, but very much shaken by the experience. The enema was returned immediately after its administration. There is little doubt that in this case the fact that guiacol was being rubbed in daily assisted in producing the poisonous effects, and the fact that the enema was returned at once assisted in limiting the action of the drug. It is difficult to say what constitutes

poisoning by carbolic acid. The writer's practice at the present time is, in cases of plague, to give twenty minims of the pure acid diluted with three ounces of fresh rice water every two hours till the urine becomes dark on standing. The dose is suspended till the urine clears, and then repeated every four hours till the case is out of danger. Even with these huge doses none of the serious symptoms of carbolic acid poisoning have been observed.

III. *Cannabis Indica.*—The same patient referred to in the paragraph which deals with carbolic acid on another occasion took thirty minims of B. P. tinctura cannabis indica.

Shortly afterwards he sent for help.

He was lying on the bed with loss of sensation as far as the upper part of the thighs, rendering walking almost impossible. The fingers and hands were also slightly affected. He was excited but quite rational and complained of the feeling of weight in the affected limbs. The heart's action was but little affected, the pulse rate increased. Hot coffee was administered, and in an hour or so the symptoms passed slowly away.

IV. *Cocaine.*—A woman, aged 45, was prepared for cataract operation by the instilling into the conjunctival sac of a solution of cocaine 10 per cent. Perhaps four to five drops of this solution was used. She complained of a little dryness at the back of the throat, but the operation (simple extraction) went off without a hitch.

Half an hour after she was seized with violent headache and intense vomiting, which passed off after about three hours. The eye did well, and there was no prolapse of the iris. Eserine had been instilled after the extraction.

Ten days later the other eye was operated on for the same affection. This time the cocaine was reduced to a couple of drops and the eserine omitted.

Vomiting and headache again supervened, and in this eye a slight prolapse of the iris took place.

There was no doubt that the cocaine was the cause of the vomiting and headache.

In another case, a Chinese girl of 16, a quarter of a grain was injected for the purpose of producing local anæsthesia. Shortly after she became pale and collapsed, with dilated pupils and a feeling of being thoroughly ill. With the aid of stimulants these symptoms passed away in about an hour. She never became actually unconscious.

V. *Atropine.*—A young Chinaman, aged 28, came into hospital for old iritis with synechiæ, and a single drop of a 2 per cent. solution of atropine was placed in each conjunctival sac.

It appears that after this first dose he was noticed to be behaving curiously, but the other patients did not speak of it, and by next day he was himself again.

The following afternoon, at about 5 p.m., a couple of drops were placed in each eye. At 7 p.m. I was leaving the hospital when I heard a cry and the noise of a fall.

Going round, this man was found lying in the sand under one of the bridges connecting the hospital blocks. He could give no account of himself, but had been seen to come out of the ward, take off his shoes, fling them over, and then jump over the gangway railing after them.

How he escaped with only a bruise or two is difficult to say. He was semi-delirious, not violent but very restless. The pulse was 120, and there was a slight scarlatina-like rash on chest and face.

By morning the acute symptoms had passed off, but he was still dazed, and had no knowledge whatever of what had occurred. No treatment was employed, save that of watching him and seeing that he came to no further harm.

VI. *Pearl Ash.*—One case of this poisoning has come under the writer's notice. The victim was a young Chinese girl, aged 18, who swallowed a large quantity in order to commit suicide. She was seen by me on the fifth day after the occurrence, and presented a vivid picture of extreme agony.

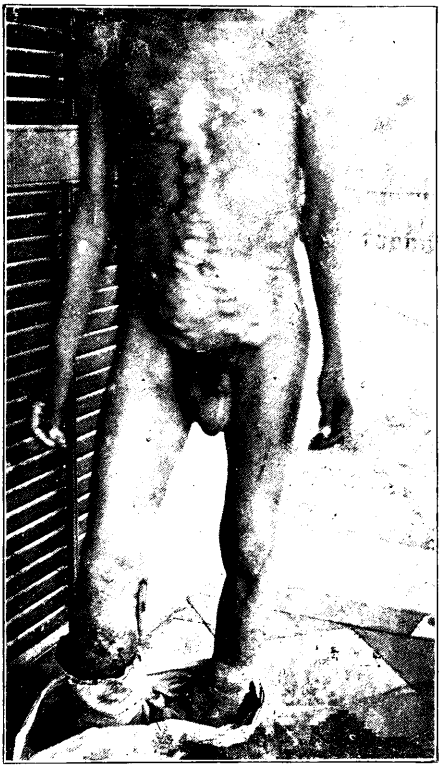
With her knees drawn up almost to her chin, complaining of intense pain in the abdomen, and vomiting incessantly, unable to keep anything on the stomach, the surface cold and clammy, and the pulse almost imperceptible, the case was hopeless, and she died shortly after being seen.

A CASE OF VARICOSE VEINS OF ABDOMEN.

By F. J. Tooker, M.D., Hwaiyuen.

The following case is interesting for two reasons: first, because of the marked degree of dilatation of the abdominal veins; and second, the obscurity of causation of the same.

The patient was a male forty years of age, fairly well nourished. He gave a history of progressive weakness and inability to carry heavy loads. The enlarged veins had existed over the abdomen for about



VARICOSE VEINS OF THE ABDOMEN.

fifteen years. He was able to walk only a few *li* without fatigue; in fact, it tired him to stand for the few minutes required to take his photograph.

The patient was seen but once, and physical examination was not so complete as one would like. No increase in size of liver or spleen was demonstrable, nor could any abdominal tumor be made out. The superficial veins of the abdomen were enormously enlarged and tortuous. Between the pubes and umbilicus they were in places as large as a man's finger. The veins were also decidedly varicosed over the right thigh and leg; the latter being the site of an extensive ulceration.

If mediastinal or intra-pulmonary growths existed as the cause, due to their pressure on the inferior vena-cava, they were not sufficiently prominent to be found on a rapid examination. However, to quote F. T. Roberts: "One of the most important pathological effects of chronic mediastinitis is that it often leads to compression of certain mediastinal structures, or to other physical interference with them. It is most likely to involve the large vessels, especially the veins. In several instances the superior vena-cava has been implicated and sometimes occluded. Many years ago a remarkable case came under my observation, with all the symptoms of complete closure of this vessel, in which the necropsy revealed no more than a limited mediastinal fibrous thickening surrounding the vein. Other intra-thoracic veins may be implicated singly. . . . Thrombosis may add to the difficulty in the vessels and help to obstruct them."

Portal thrombosis is also a possible cause, which, however, is very rare without its other symptoms.

CASE OF RENAL CALCULUS REMOVED BY LEFT LUMBAR ROUTE.

By R. T. Booth, M.B., B.Ch., D.T.M. and H., Hankow.

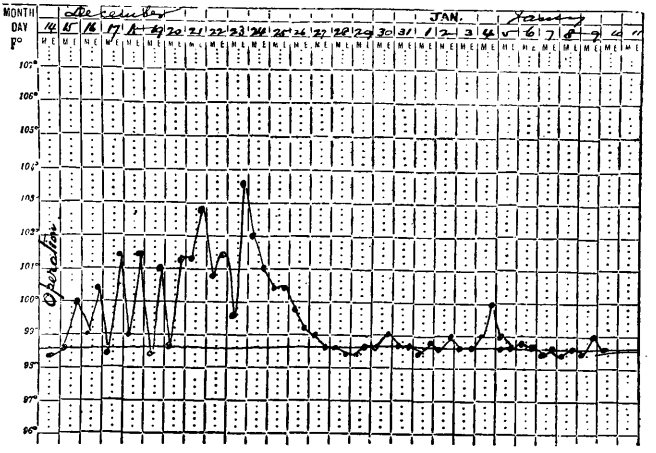
Patient, a missionary belonging to an English Society, had been in China for 15½ years. Two furloughs had been spent in England.

He came into my hands in the autumn of last year with a history of lumbago, for which he had been treated off and on for about three years. No suspicion of any deep cause of the lumbago had ever been suggested to him, and in all probability had not an attack of renal colic supervened, the treatment of the lumbago would have continued along the same lines. One morning in September a severe attack of typical renal colic came on, with pain commencing in the region of the

left kidney, passing down the line of the left ureter and affecting the left testicle. An injection of morphia gave him ease after a time. A second attack supervened some days later. Shortly after this a trip to Shanghai had to be made, and on his retum home he was completely overhauled and the urine microscopically examined. Pus cells and some few red blood corpuscles were found in the centrifugated specimen, but it was not until some weeks of treatment had elapsed that uric acid in large quantities was found. At that time the patient developed an attack of quinsy, which was very severe and needed surgical treatment of the affected tonsil. During the convalescence from this a third attack of renal colic came on.

For some time the patient was put on a modified 'Haig' diet and treated with alkalis with good result as far as the amount of uric acid excreted was concerned. An examination of the amount of urea excreted, however, showed that only about half the proper quantity was being eliminated. The amount of urine passed daily varied greatly; one day 40 ozs. and the next day 80-90 ozs., and on the day the large quantity was excreted some 30-40 ozs. would be passed in the space of an hour or an hour and a half. Some indefinite swelling and dulness in the left lumbar region, combined with the variation in the quantity of urine passed, pointed to a hydronephrotic condition; in all probability due to stone in the kidney.

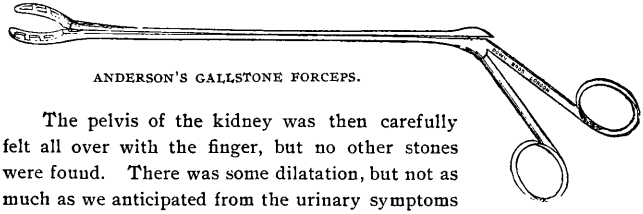
The patient's general condition was anything but good, and at times headache and other symptoms pointed to uræmic poisoning. In consultation with Dr. Aird and Dr. Cundall, operation was advised, and the whole position and risks carefully explained. Consent having been obtained I operated on Saturday morning, December 14th; Dr. Cundall giving chloroform and Dr. Aird, of Hankow, and Dr. Morley, of Tehngan, assisting. The lumbar route was chosen, and the incision from a point ½ in. below the 12th rib and 2½ inches from the spine downward and slightly forward until near the crest of ilium was made; here the incision was ultimately prolonged almost directly forward. There was comparatively little room between the 12th rib and iliac crest, as the patient was very long-chested, which condition also materially interfered in bringing the kidney into the wound in the course of the operation. Skin, muscles, etc., were divided in order until the fatty layer was reached and then the fingers were used to clear the space in order to reach the kidney. It was found very difficult to reach it owing to the high position it occupied. With careful exploration it was at last located and the perirenal fat was cleared and the kidney laid bare, but with difficulty drawn down to the wound. Having at length brought



the kidney into the wound, it was kept in position by Dr. Aird, who passed his hand in front and then kept it steady while I palpated it. Careful palpation gave us no positive information, at which I was disappointed, but not surprised. I had experimented the day before on a pig's kidney, into which I had introduced a small stone the size of a pea, and found it almost impossible to tell the location from palpation. Henry Morris relates a case where it was impossible to feel the stone in a kidney he had excised, even when it was laid on the table and pressure exerted, although the stone was there as demonstrated on slicing the kidney.

Having found nothing by palpation I then proceeded to needling, and for this purpose used an ordinary lady's hat pin, on which I had made a mark beyond which I would not insert it, viz., 2 inches. Passing the needle in from the convex border, commencing below and pointing it toward the pelvis, nothing was felt on the 1st and 2nd punctures. On passing it in the third time from about the junction of middle and lower third of the border, still directed obliquely towards the pelvis, it was felt to scrape on a stone, a feeling quite characteristic, and under the circumstances decidedly pleasurable. In experimenting on the pig's kidney the previous day I had realised how difficult it was to hit a stone even when you knew it was there and also knew in what position it lay. Leaving the needle in position in contact with the stone, a long tenotome knife was passed in alongside the needle until the stone was

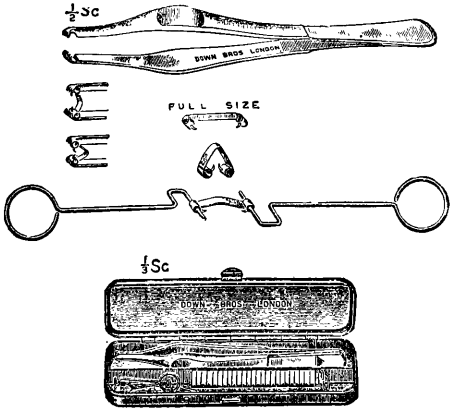
reached ; the needle was then withdrawn and the incision enlarged sufficiently to admit my little finger ; the tenotome still being in contact with the stone. Having felt the stone with the finger the tenotome was also withdrawn. Then dilating the wound with the finger sufficiently to pass in a small pair of lithotomy forceps an effort was made to remove the stone. However the stone lay in one of the upper calices of the kidney and the forceps was too straight to grasp it, so a gall-stone forceps was used, and the stone being easily grasped therewith was withdrawn.



ANDERSON'S GALLSTONE FORCEPS.

The pelvis of the kidney was then carefully felt all over with the finger, but no other stones were found. There was some dilatation, but not as much as we anticipated from the urinary symptoms mentioned above. During this period of the operation there was practically no hæmorrhage, as Dr. Aird, still with his hand supporting the kidney in the wound, easily controlled the renal vessels.

Gauze strips were then passed into the kidney wound and removed and replaced by others which were left in. On releasing the renal vessel no hæmorrhage occurring the kidney was replaced ; the strips of gauze being left sufficiently long to come out of the upper end of the wound. A large drainage tube was also left in, reaching to the back of the kidney and emerging alongside the gauze. The muscles were then



DR. MICHEL'S ASEPTIC METAL SUTURE CLIPS.

sutured with a continuous suture of chromic gut and the skin edge brought together with Michel's serefines, or clips; two or three silk-worm gut sutures being put in to support them. These clips were used especially on account of the rapidity with which they can be used, and as the patient was in a bad way every moment saved was an immense gain. The anæsthetist, Dr. Cundall, had all his work cut out to keep the patient alive, as he took chloroform badly, and at times entirely ceased breathing. Then the entire wound, with the exception of the upper part where drainage tube and gauze protruded, was completely closed.

A large dressing of gauze-cotton wool was then applied and a many-tailed bandage fixed over all and the patient put back to bed.

Superficial dressings required changing every twelve hours for the first week or ten days and after that once a day. In thirty-six hours after operation chloroform was given and the gauze removed from the kidney, which was again repacked. Thirty-six hours later this packing was removed, and as there was no sign of hæmorrhage, no further packing was inserted within the kidney itself. Gauze strips as well as drainage tube were left in leading down to the kidney in order to enable the urine to escape directly into the dressings. On the third day a slight attack of colic came on, due evidently to passing a clot down the ureter. With that exception, the pain consequent on operation having subsided, the patient has been entirely free from renal pain; the testicular pain also completely passed away with the removal of the stone.

The sinus in the side took longer to completely close than such sinuses usually do when they heal completely. The 3rd of February was the last day on which urine came from the sinus, which is now completely healed.

Some urethral and bladder symptoms have given him annoyance during convalescence, but on washing out the bladder with boric acid lotion these symptoms improved.

It is open to question whether it would not have been better to have completely closed the kidney wound and not to have employed drainage. In the hands of a more experienced surgeon such a course would have in all probability been adopted, but under the circumstances it was felt advisable to follow the classic method and drain.

In closing I desire to express my thanks to Dr. Cundall for the efficient manner in which he administered the anæsthetic and made it possible to complete the operation so satisfactorily. Also to Dr. Aird and Dr. Morley for their efficient help in the operation itself. The stone removed was roughly triangular in shape, composed of uric acid oxalates, about the size of a man's thumb nail.

ETHER. OPEN METHOD.

By H. G. Barrie, M.D., Changsha.

I recently spent several weeks in study at the Mayo Clinic, Rochester, Minn., and among the many points of interest, the simple method employed by these eminent surgeons in administering their anæsthetics will amply repay the telling, for it is admirably suited to our routine practice in China.

PREPARATION OF PATIENT.

He enters the hospital the day before the operation, and that evening receives a tub-bath and two ounces castor oil in a small quantity of beer or malt extract, if an abdominal case.

Next morning food and fluids are withheld, and the patient walks into the operating-room and getting upon the table has his wrists tied loosely together with a strip of gauze. This is not to control struggling, but to prevent the arms from falling over the edge of the table and injuring the musculo-spiral nerve, which results in paralysis occasionally.

While the anæsthetic is being given the preparation of the patient proceeds. This in the estimation of the Mayo Bros. is distinctly valuable in diverting the attention of the patient from the ether, and it is said less is required.

The necessary position is at once assumed, whether Trendelenburg or otherwise. The field of operation is scrubbed with warm water and jumbo soap*, using a pad of gauze rather than a brush, which may injure the skin.

This washing is followed by a solution of bichloride, one in two thousand, after which a gauze sponge, wetted with Harrington's solution,† is left on the skin for at least 30 seconds, at the end of which time it in turn is washed off with 70 per cent. alchohol and the area protected by sterile towels. The patient is ready for operative procedures.

ANÆSTHETIC.

This is ether given by the drop method. The anæsthetist prepares an original can of ether as follows: After cutting the seal out of an ordinary tin of ether, a cork is inserted niched with two longitudinal grooves, one of which is shallower than the other. The small one serves as an air hole.

* Jumbo soap is a soft, very alkaline soap, containing pumice stone, and manufactured by Graham Bros., Chicago.

† Harrington's solution is severely germicidal, and it does not form insoluble substances with albuminous bodies. Its formula is: Bichloride mercury 3.200; hydrochloric acid .240; distilled water 1200.; alcohol 2560.

In the large one a strip of absorbent cotton is laid, and armed in this way the cork is inserted in the container. The cotton wick protrudes about an inch from the can and serves as a dropper. By clipping it bluntly, the flow of ether is retarded, and for a more rapid drop it may be pointed. A 4-ounce size is most serviceable, but it is well to prepare two cans, a 4-oz. and an 8-oz. The larger serves to anæsthetize the patient and the smaller is sufficient to continue the narcosis when once established. Add to these an ordinary Esmarch inhaler covered with two layers of stockinet, and the apparatus is complete.

To protect the eyes a gauze sponge moistened with water is laid over them, or two rounded discs of rubber tissue may be pressed over them with the warm hand. Should ether get into the eye, several drops of ol. ricini, instilled, will prevent conjunctivitis.

The inhaler now in place, the ether is dropped upon it from the larger tin carefully as though chloroform were used. The face soon becomes flushed, and then it is time to retard evaporation by folding a towel or strip of gauze round the inhaler, leaving only a small area of the dome uncovered to receive the ether which is now given much faster.

The whole procedure should require only from three to five minutes, and as soon as narcosis is established the large tin is laid aside and the small one used. As more ether is required than chloroform a fairly rapid drop is necessary to continue narcosis.

Do not permit your patient to talk, as this tends to excitement. The anæsthetist may address remarks to him, however, which may be most valuable, as his sub-conscious self is peculiarly susceptible to pleasant and tactful suggestions. Be perfectly natural and sympathetic with the patient from the time he enters the operating room, and endeavor to win his aid and confidence in producing a comfortable narcosis.

To breathe naturally is the object aimed at, and to ask him to "blow it away," or "breathe deeply," is poor policy, tending to produce a sense of suffocation, and struggle is sure to follow. The color of the skin, quality of pulse, regular and deep breathing, and the relaxed lower jaw give the picture of a safe and surgical anæsthesia.

It is quite unnecessary and unscientific to test the corneal reflexes, as nothing can be learned from the cornea that cannot be better learned by the other signs. The rate of a pulse is of no great value. The oxygen-tank, tongue forceps, and hypodermic are seldom employed.

The early appearance of symptoms is detected and prevented by permitting a plentiful supply of fresh air rather than endeavoring to

treat symptoms by the above agencies after they have arisen. When the tongue presses upon the glottis, it is drawn forward and to one side by the fingers armed with gauze rather than employing the tongue forceps or ligature. Artificial respiration is almost unheard of, and after ten years' trial this "Open Method" has become the method of choice.

Such preliminaries as nitrous oxide gas, or sopolamine and morphia are considered unnecessary, and the latter even harmful. When we are reminded that in 20,000 administrations no deaths have resulted from this method in their hands, its value need not be argued. During the year 1907, 4,607 general anæsthesias were given, and out of this number only four were done with chloroform and 28 with chloroform and ether. Cases of alcoholics and acute peritonitis require them at times to deviate from their general practice in the choice of an anæsthetic.

It is interesting to note that the anæsthetic is entirely in the hands of nurses at the Mayo clinic, and, in a nut-shell, the reason is they do not aspire to become either surgeon or assistant-surgeon, but give their undivided attention to the administration.

The essential charms of the method are simplicity of apparatus and technique, absence of fussiness on the part of the anæsthetist, and absence of anxiety on the part of the surgeon.

THE USE OF NATIVE DRUGS.*

By WILLIAM WILSON, M.D., Hsutingfu.

The paper will not be strictly limited to the subject of native drugs, but will embrace the cognate theme of native materials and appliances and the way in which these may be turned to useful account in various medical, surgical and pharmaceutical operations.

The whole subject will necessarily be regarded very differently by various members of the medical missionary body, and this difference of view will be almost entirely dependent on the geographical location of the individual doctor. To those situated near the coast the subject will appeal very little, while to the ever increasing number of doctors in the far interior the subject is one of real practical interest, and this specially in the case of doctors not only far in the interior but also far away from water communication and whose medical supplies have to be carried by cart or mules, at great expense and serious risk, ten and even twenty days' journey after having already been carried

* Conference Paper, 1907.

hundreds of miles or even a thousand miles by water up rivers where rapids and wrecks are only too common occurrences.

For some reasons I think it may be more convenient if I transpose the order of the two sections of my subject and take first: A brief account of some methods and appliances I have found of very great advantage in the prosecution of my work during the twenty-four years I have been in China.

CONCENTRATION OF NATIVE SPIRIT.

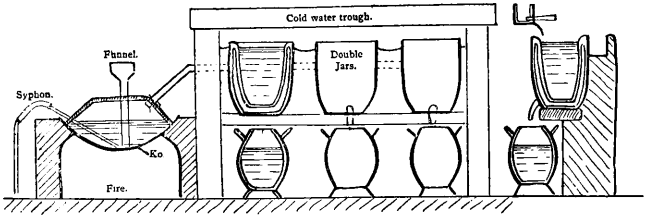
There are, as we shall see, in China, a large number of drugs belonging to the various Western pharmacopœias, many of which are just as good as those obtained from home, and the employment of these is a very great convenience and often a not inconsiderable economy, but when all this is admitted the advantages thus gained, when all put together, are surpassed by the benefits derived from the manufacture of our own tinctures, liniments, spirits, etc.; in many cases from the vegetable drugs obtained locally and in others from drugs ordered from home.

Probably most medical missionaries in China thus prepare their own tinctures, using the rectified spirit from Shanghai or Hongkong, and for many of those stationed near the coast or in easy water communication with the coast probably no other plan is necessary.

Let us, however, think of doctors situated far in the interior provinces where land and water transit alike are full of risk, and where the doctor has always before him the uncertainty as to whether his spirit from the coast will ever reach him or only the empty tins or casks in which it started its journey. This is no imaginary picture, but a record of my personal experience before necessity led me to commence the plan of concentrating native spirit. This plan has rendered me, for most of my time in China, independent in the matter of rectified spirit.

To avoid the neccessity of a lengthened description of apparatus I have made a few diagrams, which will, I believe, render the matter clear. In these diagrams I have represented two methods of spirit concentration. The one I employed for many years in Hanchong and the other I always employ here.

When the materials for constructing the latter apparatus are obtainable locally, it is in many respects the easiest to work, so I will describe it first.



Front Elevation—partly shown in Section. Cross Section.

The apparatus consists of a boiler and a condenser. The boiler is simply a large native cooking "ko" (鍋), say 30 inches in diameter and capable of holding ten gallons of spirit. It is covered by an earthenware cover (鍋蓋), and through a hole in the top by means of a funnel the charge of spirit is poured in. At one side is a pipe which conveys the spirit vapour to the second part of the apparatus, namely the condenser.

The condenser is a marvel of construction and efficiency. They are to be obtained throughout Sïch'wan, and I hear they are made too in Kansuh, so probably they are known all over China. This condenser is known as a 夾鍋 or double jar, twenty inches high and eighteen inches in diameter, and consists of an outer and an inner jar, in which the upper edges are joined together before the baking.

A hole in one side of the outer jar admits the spirit vapour into the annular space between the two jars. The inner jar is filled with cold water and thus the outer surface of the inner jar presents a very extended condensing surface for the spirit vapour, which condensing runs down to the bottom of the outer jar and passes out by a small nozzle at the bottom. The price of such a jar here, of the size described, is only 400 cash.

I have found it best to have three such jars arranged in a row and connected together as in the accompanying diagram by tin tubes; the whole securely built up with stone or brick and lime. A water trough is so arranged that by the withdrawal of one or other plug cold water can be quickly run into the jars. As soon as the spirit in the "ko" boils the vapour passes into the first jar and the condensed concentrated spirit is soon running out in a good stream. After say twenty minutes the water in the inner jar has become too warm to effectively condense the vapour and it has to be scooped out into the second trough, whereby it runs away, and a new charge of cold water runs in.

As soon as the water in the first jar becomes hot and then no longer capable of condensing the spirit vapour the latter simply passes on to the second jar, where it condenses, and should the water in both jars be allowed to become hot the vapour would pass on to the third jar, but this rarely occurs, as a regular alternate changing of the water in the first two jars always supplies sufficient condensing area in either one or other of the jars.

Our custom is to measure out a ten-gallon charge of the weak spirit and go on with the distillation till five gallons have come over, then syphon off the remainder, which is practically only water and put in a second charge of ten gallons.

In this way five charges of ten gallons each, or fifty gallons in all, can easily be manipulated during a morning; the whole process is worked by a dispensary boy, the sequence of whose duties are as follows:—

1. Light the fire.
2. Measure out ten gallons of weak spirit.
3. Charge it into the apparatus.
4. Fill up the cold water trough,
5. And from it fill up all the jars.
6. Receive the spirit as it comes over.
7. Change the water when it becomes hot.
8. Measure out a fresh charge of spirit in readiness.
9. When one-half has come over
10. Partially draw the fire.
11. Syphon off the residual water.
12. Recharge with ten gallons more spirit.

The joint between the "ko" and the "ko kai" is best made with native paper made into a pulp with water.

If the syphon is found troublesome or the syphoning too slow a method, it is often quite as convenient to lift off the "ko kai" and pour the new charge in directly, after scooping out the residual water.

The weak native spirit with which we start has a specific gravity of 945, i.e. 45 per cent. alcohol, and the first distillation results in a spirit of varying strength; that coming over first being strong and then gradually deteriorating as the process proceeds, but the average strength of the distillate when one-half has come over is 885, specific gravity, that is, a spirit a very great deal stronger than proof spirit (920), being almost exactly midway between proof spirit and rectified spirit.

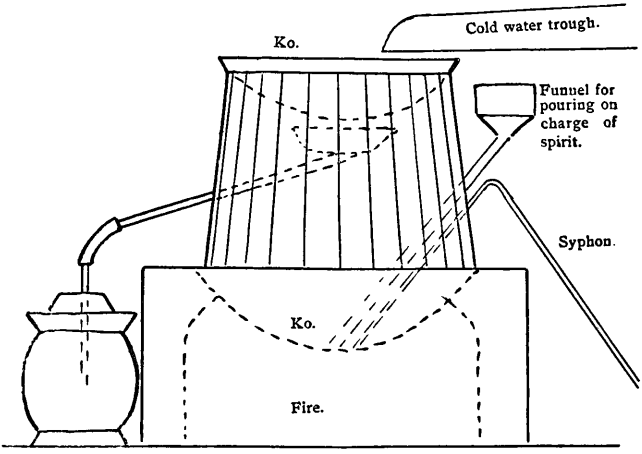
If this first distillate be again passed through the still and that which comes over be divided into five successive portions their strength will vary from proof spirit to 854, specific gravity; that is, to a spirit only 20 per cent. weaker than rectified spirit.

By a third distillation rectified spirit is obtained.

We do not now, however, as a rule go beyond the first distillation, for so very few tinctures require rectified spirit. So for these we obtain a small amount from the coast, and for all the other strengths we use native spirit either as it comes from the shop or as concentrated by us.

The five qualities of spirit specified in the present British Pharmacopœa are thus obtained :—

20 per cent.	Sp. Gr.	976	Native weak spirit and water.
45 ,,	,, ,,	943	Native weak spirit.
60 ,,	,, ,,	913	1st distillation and water.
70 ,,	,, ,,	890	1st distillation.
90 ,,	,, ,,	834	Rectified spirit from the coast.



If in some localities these double jars cannot be obtained then a very efficient apparatus can be made as in Diagram No. 2. Here the "ko" for boiling the spirit is the same as already described. Into this is fitted a tsen tsi (甑子), like a barrel without top or bottom. On the top of this rests a second "ko" full of cold water. Under the upper ko is suspended by three wires from the walls of the "tsen tsi" a tin washhand basin with a hole in the bottom leading into a tin tube soldered to the basin and which projects through a hole in the "tsen tsi" to the outside where the spirit is collected. The rationale of the apparatus is obvious—the spirit boils and its vapour as it rises impinges on the cold under surface of the ko and is condensed and runs down into the basin, whence it escapes to the outside and is collected.

In this apparatus the successive charges may either be poured into the ko by a funnel, and the residue syphoned off; or the upper "ko" may be removed, the residue scooped out, the new charge put in and the ko replaced. This latter method requires two men, while the other method, with the double jars, can be easily worked by one man.

The price we here pay for the weak spirit is about sixty cents a catty, and its specific gravity is 943 and proportion of alcohol 45 per cent.

PREPARATION OF SPIRITS OF NITROUS ETHER.

I remember the disappointment experienced on opening a case of drugs which had just completed its long tedious journey into the interior to find a large bottle of spirits of nitrous ether absolutely empty. Our previous stock was already exhausted and I was a thousand miles from Shanghai and at least 400 miles from any place whence our stock could be replenished. Necessity is the mother of invention, and it was a moment of no small delight when a day or two later, with the crudest possible native appliances, we were able to make our own nitrous ether.

A common native earthenware jug, such as could be bought any where for twenty or thirty cash, was obtained, its mouth closed with a cork through which passed a bent glass tube connected with one of the double jars already described. Into this jug the ingredients were placed — copper, iron, spirits, nitric and sulphuric acid in proper quantities, and the whole placed in a cooking "ko" full of water, constituting a water bath.

The fire was lit and when the water approached the boiling point the spirit of nitrous ether came over freely, and condensing in the double jar ran out in a good stream, and before an hour had elapsed we had a stock sufficient to last us many months.

On this our first experiment we placed a thermometer in the jar, but finding the requisite temperature of F. 175° in the jar was obtained coincident with the water in the ko reaching the boiling point, we in future discarded the thermometer as being unnecessary.

CALCIC PENTASULPHIDE—ITS PREPARATION AND GREAT VALUE.

What a comfort to have such a high sounding name to figure at the head of a paragraph which so soon will have to descend into such a humble region as the consideration of the treatment of acarus scabiei.

I suppose all doctors come to China with the firm conviction, inherited from hospital experience, that for this interesting disease the one essential is unguentum sulphuris, compounded of sulphur and lard,

and each doctor begins with making a supply of this ointment and soon finds the demand so great that his outlay in lard becomes a yearly increasing expenditure.

For twenty years I have never used ung. sulphuris, and this certainly not because I was living in a region where scabies was less in evidence than elsewhere.

There were many Mohammedans among my patients, who naturally objected to the lard, and happily in Ringer's Therapeutics I found a more excellent way.

Our custom now is to put ten gallons of water into the cooking ko, ten pounds of sulphur and ten of lime, boil and stir well for twenty minutes, then withdraw the fire, allow the sediment to settle, syphon or pour off the supernatant fluid and preserve from the air in well closed jars. The beautiful clear orange colour of the fluid predisposes patients to believe in its efficacy and it is far more efficacious than the lard preparation, as stands to reason from the sulphur being actually in solution and thus capable of entering where sulphur in the solid state, even though finely divided, could not enter.

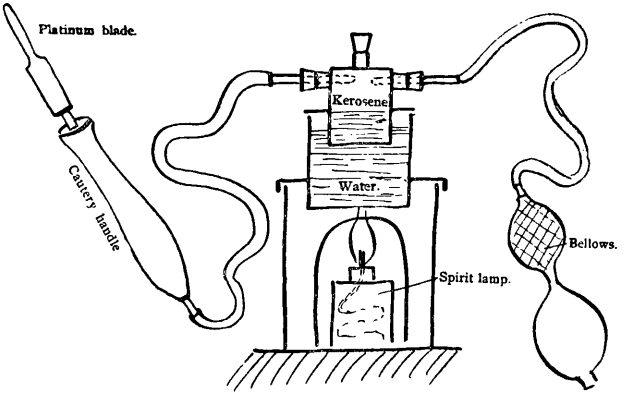
It is vastly cheaper to make, as water is cheaper than lard.
It is a much more cleanly preparation to use.
It is more efficacious.
It is no offence to the Mohammedan.

As a local application I have used it for many years in preference to any other remedy in diphtheritic patches in the throat. It is an unstable compound and so becomes decomposed on exposure to the air, but in well-closed vessels it keeps indefinitely. Acted on by an acid it yields sulphurretted hydrogen, and its beneficial action locally is due to the bactericidal action of this gas.

A KEROSENE PACQUELIN CAUTERY.

Some years ago I tried all the foreign and native drug stores in the foreign settlement at Shanghai in the hope of procuring some benzoline for my pacquelin cautery. At last, when I had almost given up hope, I obtained some, but the difficulty I had experienced led me to try whether some other oil could not be used instead, which was more easily procurable.

The result was that I found kerosene oil, now everywhere obtainable in China, could be used as a substitute for benzoline. Benzoline, besides being an inflammable oil, is highly volatile, and on this its efficacy depends. Kerosine, on the other hand, is very slightly volatile, but if we raise its temperature we of course increase its volatility artificially.



The diagram accompanying this paper explains our apparatus. A small closed tin containing some kerosene oil is fitted with the inlet and outlet pipes as in the benzoline container of the pacquelin.

This tin vessel is suspended in a slightly larger tin containing water, which is itself suspended over a spirit lamp. As soon as the water approaches the boiling point the temperature of the kerosene is such that it is as volatile as benzoline at the normal temperature, and in this way I was able to employ it in the pacquelin cautery with success that left nothing to be desired.

HUMAN BELLOWS VERSUS INDIA-RUBBER BELLOWS.

I can imagine some one saying: "It is not the benzoline that troubles me, but the way India-rubber perishes in China, so that my cautery fails me through the India-rubber bellows becoming hard and cracked and losing its elasticity and in other ways getting out of order."

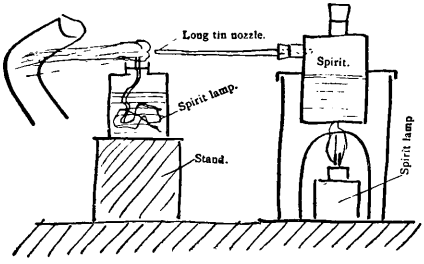
I hardly dare to suggest such a very humble expedient, but as it renders a person independent of the India-rubber bellows of his cautery it is worth mentioning that each of your assistants possesses a very efficient bellows which does not get out of order. It is a very easy thing to work the pacquelin cautery if you substitute your assistants' lungs and cheeks respectively for the two portions of the India-rubber bellows and allow him to blow a steady blast of air through the benzoline or kerosene chamber. We don't need to be reminded that the air thus blown in never reaches the part under operation, but comes out of the cautery handle three or four inches above the working point

and directed away from it, and were it otherwise it would be of no consequence, as the air blown in has been sterilized by its contact with the interior of the red hot platinum knife.

I have had made this morning by a tinsmith a very simple arrangement which might be called a "water bellows," by which a blast of air of any required pressure can be obtained and used at will either in the case of a throat spray, local anæsthetic ether spray, or pacquelin cautery, thus rendering us independent of these troublesome India-rubber accessories of such apparatus.

SPIRIT BLOW PIPE.

In preparing apparatus for chemical experiments how continually we require to bend a piece of glass tubing. Up to a certain size of glass tubing this is easily effected by the heat of our ordinary spirit lamp flame, but for larger sizes the heat so obtained is inadequate.



The accompanying diagram is a representation of the apparatus we use, made by a tinsmith in a couple of hours.

A small closed vessel containing spirit is suspended over a spirit lamp. The vessel is provided with a tin tube tapering to a fine nozzle (it was made by beating the tin round a large needle), from which the spirit vapour issues, and passing through the flame of a second spirit lamp, produces a long hot, powerful flame, in which quite a large glass tube can be easily heated to the requisite temperature for bending.

PLASTER OF PARIS.

I wonder whether others have had the disappointment I have experienced when compelled to fall back upon native plaster of paris through the foreign plaster having deteriorated through time or become exhausted before a fresh consignment had arrived.

After many trials with native gypsum I found that the secret of success lies in the proper roasting of the gypsum. If roasted beyond about 270° Fahr. it won't set properly when mixed with water, and the cast or mould thus made is lacking in firmness, and thus quite unfit for

mechanical dentistry. If insufficiently roasted a like result is obtained. I tried heating it in the oven of a foreign cooking stove, carefully noting the temperature by the thermometer, the bulb of which was in the tray of gypsum.

If the gypsum is heated in lumps success is impossible, for while the outer part may be overheated the inside of the lump may be underheated.

I have found the only way is to crush the gypsum first into powder, place it in an iron pot over the fire, keep it constantly stirred, so that all may be uniformly heated and remove from the fire as soon as the thermometer registers 270. At about this temperature it has all the appearance of boiling through the escape of contained air causing the whole mass of powder to be in a state of ebullition.

ABSORBENT WOOL.

As for many years I did not know how wool was rendered absorbent, it may be others are in the same condition. Happily the process is the simplest imaginable. Boil the native cotton wool in a large ko full of water, to which you have added say half an ounce of carbonate of soda. Then take the wool out, spread it on a mat to dry, and when dry have it beaten out in the ordinary Chinese way by the "t'an mien hwa tih". Wool thus prepared has wonderful absorbing powers.

NATIVE DRUGS.

There are scores of valuable drugs of the Western pharmacopœas which can be obtained almost anywhere in China and relied on as perfectly genuine if you take the precaution of buying them in their original condition and not pulverized, in which latter condition it is impossible to tell whether or not they are free from adulteration.

Some of the drugs, though obtainable in China, are better purchased at home, especially when they are only used in small quantities, such as Aconite root, and, like aconite, are of a poisonous character and existing as several varieties of species difficult to identify.

The following list embraces most of those drugs we are continually using:—

Camphor	Gentian	Alum
Capsicum	Sulphur	Borax
Cinnamon	Liquorice	Ferri Sulph.
Cardamom	Catechu	Plumbi exidum
Nutmeg	Opium	Plumb. carb.,
Cloves	Nux Vomica	etc., etc.
Galanga	Rhubarb	

Several of our most largely used stock pills are composed solely of native drugs, such as anti-opium pills, iron tonic pills, digestion pills, diarrhœa pills. For cough pills and purgative pills we depend partly on foreign ingredients.

The pills made by us of purely native materials we sell at prices ranging from 5d. to less than 2d. a gross and probably the actual cost of them is less than half of these figures. Hence a very great saving over using foreign pills, of which probably 9d. a gross is the cheapest.

Should any of the facts narrated in this paper prove of service to any doctors working in remote and inaccessible regions, the object of the writer will be fully attained, and should any be desirous of further information as to the actual construction of any apparatus mentioned here the writer will be glad to reply to any communication on the subject.

Before closing this paper I desire to draw special attention to a book which during the last twenty-four years has been the greatest possible help to me in this special department of native drugs and their uses. I refer to Dr. Porter Smith's book entitled Chinese Materia Medica.

I accidentally came across a copy before coming to China in 1882, but I believe even at that time it was out of print. Certainly for very many years it has not been obtainable, so probably there are very few medical missionaries in China who possess or have even seen a copy.

I was consequently delighted about a year ago to receive a letter from the Presbyterian Mission Press asking for a loan of my copy with the purpose of issuing a new edition. If it is out by the time of the Conference, I have no hesitation in strongly recommending every medical missionary present to secure a copy at once.

[NOTE.—The Materia Medica is now in press, being thoroughly revised and brought up-to-date, including standard romanization, by Dr. G. A. Stuart.—ED.]

A CASE OF CHRONIC SKIN DISEASE.

By W. E. PLUMMER, M.D., Wenchow.

The patient was a healthy looking, well nourished man, forty-one years of age.

History.—The ulcers began when he was sixteen years old—that is, twenty-five years ago. They first appeared on the buttocks and have been active ever since, healing in one place while spreading in another.

His wife is well and has never had similar trouble. Five years ago a daughter was born, who died two months later; there have been no other children.

On Admission.—The disease is limited to the buttocks, thighs and legs; elsewhere the skin is healthy. The ulcers are mostly linear in shape with raised edges or rather the whole site of the ulcer is raised and the skin around is puckered as if drawn in by the contraction of connective tissue; some of these ulcers are continuous with linear scars, showing the former site of ulceration. In front of the knee the sore has healed, in the centre and on the buttocks the raised edges of the skin have almost met and effected healing. The granulations are glazed. On the back of the calf are ordinary looking ulcers without the raised puckered edges.

Treatment.—Potassium iodid and mercurial ointment were first given a trial, but as no improvement was observed the ulcers were scraped under chloroform. Under the soft granulations was a firm fibrous tissue, such as is met with in most cases of tubercular skin disease.

After operation healing commenced, but the patient left at the end of ten days, so the ultimate result cannot be stated.

Remarks.—I have not seen a case like this before, nor can I find a description in "Mracek's Diseases of the Skin" which in any way tallies with the appearance of this patient.

The way in which the granulations were scraped away, leaving a firm base of fibrous tissue, suggested a tubercular process in which there had been great resistance on the part of the body, resulting in connective tissue proliferation, but the man's robust appearance made it difficult to understand how the tubercle bacillus could be the cause of his trouble.

In Consulation.

YOKOHAMA, June 28th, 1908.

DEAR DOCTOR: I am writing just a note in regard to that peculiar face case. I am sorry that I did not get the full particulars written down—as I saw it during the hurry of leaving, being called to my attention by the head assistant. The man was between 45 and 50 years of age. The trouble had existed three or four years. It had started with a sensation of irritation and itching, and this is the only thing complained of at the present time.

The condition is strictly limited to one-half of the face and head, and is worse, as the picture shows, near the medium line. The hair in a streak half way back on the scalp is lost, probably from scratching as the skin is raw. The condition does not extend below the lower lip, nor higher than the apex of the head.

It extends into the right nasal cavity, and as can be seen from the photo the ala of the nose is scratched away. The eye is destroyed and shrunken.

In spite of the destruction produced by the scratching he continues to scratch. What is it? Why limited to the side of the medium line and not extending into the chin? There were some things in my hurry I omitted to ascertain; for example, sensation for heat and cold and the extent of the anæsthesia, though my remembrance is that it was co-extensive with the itching and the destructive lesions and did not extend to the side of the forehead.

The other side of the face was normal in every way, especially was there no numbness, nor loss of hair or eyebrows.

I failed to obtain any history of other diseases, as syphilis, leprosy or malaria. I am sorry that I cannot from memory give more accurate data.

Allow me to express my appreciation of the increasing interest of the last few issues of the JOURNAL.

Yours sincerely,

JAS. BUTCHART.

LUCHOWFU.

KASHING, June 23rd, 1908.

DEAR DOCTOR: Thanks for your letter. I have had four or five cases of Schistosomum Jap. infection. I tried at random feeding three of them on copper sulphate about gr. $\frac{1}{8}$ t. i. d., and also quinine

A PECULIAR FACE CASE.

bisulphate gr. x t. i. d. for fever which I took to be malarial and not due to the Schist. Jap. All have improved *slightly*. Whether it is a mere coincidence or not I am not prepared to say. One who had deep jaundice has entirely gotten over that feature of his disease, and his temperature has been normal three or four days. I suppose my diagnosis of the ova is correct, as I can find no other picture resembling these ova except of Schist. Jap. They are a little larger than the *Asc. lumb.* eggs and the sharp end of the brute, inside the egg, has a somewhat radiated appearance.

One or two of these cases have also been associated with another guest that we see here fairly frequently. We see the "hobnailed" eggs so often that we get tired of looking at them. Three specimens from the ward all had them. My bill for santonin is getting formidable.

I have another patient that I have diagnosed as an ectopic and am trying to persuade her to let me operate, but she has not yet consented. I told her she would "swell up and burst" if she didn't.

The funny part of it is that I curetted her twice for persistent hemorrhage following abortion. If she really has an ectopic (and I think there is very little doubt of it) she must have originally had a twin pregnancy—one intra- and the other extra-uterine. The uterus seems smooth and clean inside now, and still she keeps on bleeding. She has a good deal of pain, and I can feel a mass as large as a small orange to the left of the uterus.

re Schist. Jap.—I am aware that Manson warns against killing the brute inside the patient, as he considers it more dangerous to harbor a dead one than a live one, but I believe I would rather be a cemetery than an aquarium.

Very sincerely,

W. H. VENABLE.

ST. LUKE'S HOSPITAL,
CHEMULPO, KOREA, July 12th.

DEAR DOCTOR:

I have been meaning to write to you for ages and send you some slides on which I need an opinion, but as usual it has been put off.

The slides are all prepared by rubbing the upper side of a cover slip with a match dipped in the fæces, and if they are at all solid the match is rubbed in them with a drop of water and then rubbed on the slip. This makes a nice thin film and is not calculated to hurt any ova, and there is no general pressure. It also allows the specimen

to be examined wet, and if anything worth keeping is found the cover slip is simply laid on one side to dry and I know what is there ; it seems a better plan than examining it film down as is usually done. Then for a permanent specimen I just pass it, when dry, through a flame and mount in Balsam, but this part of the process in not good. I know that drying in the air does not harm them, for I have at times wetted again one that has been dried but not put through the flame and it is as good as new.

We are hoping to go off on furlough soon, to be in Shanghai September 9th to 11th.

Our branch has been doing some good work, or rather the Seoul part of it, and I hope we shall have a good annual meeting just before we leave for home.

I saw the other day that betanaphthol, gr. 15, two doses at intervals of an hour preceded and followed as usual by aperients is good for ankylosoma, and trying it in two cases have in each also got out tric. dis., which Manson says cannot be regularly obtained. I will report more on this when I have done it more, but you might like to try it too, or to pass it on.

Yours truly,

HUGH F. WEIR.

LUKE THE PHYSICIAN.—Professor Adolph Harnack, of the University of Berlin, who is known as one of the most distinguished of living critical historians of the period at the beginning of the modern era, has occupied himself not a little with various points of medical history. He is considered an authority on such matters of philology as throw light on the details of the history of Greek and Roman medicine. His historical writing has been taken up much more, however, with investigation of Christian origins than with medical matters. It happens, however, that his last book (*Luke the Physician*, translated by J. R. Wilkinson, M.A., New York : G. P. Putnam's Sons, 1907) is one that unites both these subjects, and competent critics have declared it to be one of the most interesting contributions to history of recent times. While in recent years some doubt has been expressed as to the authorship of the writings formerly attributed to Luke, and even more doubt as to the tradition that their author was a physician, Professor Harnack has declared his conviction of the truth of both of these points and gives incontrovertible arguments for them. These arguments are drawn chiefly from the words and expressions which are used in the original version of the writings attributed to Luke. Careful investigation of the vocabulary and style of the author show that the tradition as to his being a physician is true beyond all doubt. The language of these writings betrays inevitably the tongue and the mind of one familiar with the Greek medicine of the time. Attention has frequently been directed to this before, but never with so rich a wealth of illustration and erudition as on this occasion. As has been well said, the argument from philology has never received such skillful treatment as is given it by Harnack. It seems probable, then, that physicians who are interested in this earlier history, especially from its medical aspects, may still continue to cherish the old tradition, according to which one of their number was in that olden time an active factor in the introduction of the ideas of the fraternity of the human race into the world which took place some 1900 years ago.—From the *Journal of the American Medical Association*, November 30, 1907.

Reports of Customs Surgeons.

REPORT ON THE HEALTH OF TENGYUEH FOR THE TWO YEARS ENDING 31st MARCH, 1908.

By Dr. RAM LALL SIRCAR.

1. *Geographical Position.*—Tengyueh is situated on the left bank of the upper Taiping river, which is locally called Tieh Shui Ho 跌水河, on account of its sudden fall about 90 feet below. It is about 5,365 ft. above the sea level, and is placed on the 25.2° N. latitude and 98.30° E. longitude.

2. *Geological Features.*—It is said that the town is built on or about the dry bed of an old lake. The soil of the town proper is composed mostly of dark clay, mixed with gravels, and heavy rocks are discovered here and there when an attempt is made to sink a well. The people dig out every year enormous quantities of peat from the paddy fields on the east of the city, which they use as fire wood.

3. *Sanitary Condition.*—

(a). *Drainage.*—Natural drains are very efficient, but the condition of the artificial drains in the town remains unaltered. No attempt is made to clean them. Had it not been for the need of the gardeners for manure, their condition would have been many times worse than we see it now.

(b). *Latrines.*—There are private latrines in almost every house, but there is no public latrine in the town to speak of, except perhaps a wretched one near the Southern gate. The gardeners carry night soil in open buckets through the crowded streets and store them in open tanks in their gardens, some of which are just close to dwelling houses and main roads. When these tanks are stirred up and their contents are thrown to the garden it causes a great nuisance to the people and adversely affects their health.

(c). *Personal Hygiene.*—The Chinese people of this place seldom bathe, their only cleanliness being to wash the face and hands every morning, in consequence of which a majority of the people suffer from itch, eczema, ringworm, etc. Their long finger nails harbour the germs of many contagious diseases.

(d). *Buildings.*—There has been a marked improvement in this respect during these two years. Besides the new Custom House, quarters for the Commissioner, the assistant, and the outdoor staff, as well as the examination shed, have been built; new barracks have been provided for the soldiers in much improved style, and various old yamêns have been rebuilt and repaired during this time by the local authorities.

4. Meteorolgical.—

Months.	Thermometer.				Total monthly rainfall in inches.	
	Average maximum temperature.		Average minimum temperature.			
	1906-07.	1907-08.	1906-07.	1907-08.	1906-07.	1907-08.
April	71.0	64.0	54.0	48.0	3.42	8.72
May	78.0	71.0	59.0	56.0	3.01	5.73
June	81.0	77.0	63.0	68.0	9.15	5.27
July...	76.0	71.0	66.0	66.0	11.35	13.80
August	75.0	73.0	65.0	66.0	7.00	12.80
September... ...	79.0	76.0	65.0	64.0	6.28	7.30
October	73.0	74.0	56.0	59.0	3.12	7.00
November... ...	69.0	66.0	47.0	46.0	0.53	,,
December... ...	65.0	58.0	38.0	44.0	,,	4.65
January	61.0	61.0	39.0	35.0	2.00	1.28
February	63.0	64.0	44.0	37.0	1.05	0.25
March	67.0	74.0	45.0	42.0	2.00	0.40

The heaviest rainfall for any one day in 1906-07 is 2.27 inches in July, and in 1907-08 is 2.70 inches in August.

The hottest day in 1906-07 was on the 28th May, 1906; the maximum temperature being 90°, and in 1907-08 was on the 23rd May, 1907, when the maximum heat recorded was 81°. The coldest day in 1906-07 was the 26th January, 1907, the minimum temperature recorded being 32°, and in 1907-08 the lowest heat recorded was, on the 20th January, 1908, 29°.

There was a heavy fall of snow for about two hours on the midday of the 29th January, 1908. The hills and fields looked like vast sheets of white paper.

The prevailing wind is S. W. throughout the year, but more southerly during the summer months.

5. General Health.—The general health of the foreigners in this port was fairly good in 1906-07 and indifferent in 1907-08; and that of the Chinese population was greatly disturbed by an epidemic of smallpox which broke out in the town and its surrounding villages during the end of December, 1907, and lasted for over three months.

6. *Classification of Diseases Treated.*

DISEASES.	1906–07.	1907–08.
Small-pox ...	1	...
Dysentery ...	24	8
Malarial fevers ...	126	117
Venereal diseases :—		
Syphilis ...	36	51
Gonorrhœa ...	22	19
Debility and anæmia ...	22	18
Leprosy ...	2	1
Tubercular diseases (of lungs) ...	11	5
Diseases of the nervous system ...	53	31
,, ,, eye ...	132	133
,, ,, lungs ...	33	33
Other diseases of respiratory system...	36	54
Diseases of the circulatory system ...	7	6
Diarrhœa ...	29	17
Dyspepsia ...	69	51
Diseases of liver ...	11	7
Other diseases of the digestive system ...	114	100
Diseases of the generative system ...	24	38
,, ,, urinary system ...	25	9
,, ,, connective tissue ...	38	33
,, ,, skin ...	176	111
Goitre ...	13	8
Ulcer ...	122	114
Poison ...	2	1
Jujunis ...	48	29
Other miscellaneous diseases ...	98	95
Midwifery cases ...	7	9
Total ...	1,281	1,098

The most prevalent diseases treated were malarial fevers, diseases of the eye, diseases of the digestive system, diseases of the skin, and ulcers. Though there was a severe epidemic of small-pox in the town, as already mentioned, only a single case came under any treatment.

It appears to me that venereal diseases are slowly getting prevalent among certain classes of the people. The local people believe, and rightly, that venereal diseases are not indigenous; they have been imported from Burma.

7. *The table given will show at a glance the number of the different sexes of the patients treated during the two years under review.*

Year.	Male.	Female.	Children.	Total.
1906–1907	867	302	112	1,281
1907–1908	795	234	69	1,098

There was no death among the foreigners during these two years.

8. Epidemics.—I have never seen a single case of cholera or heard of it during my five years' service in this port. Similarly I have never heard of a single case of bubonic plague occurring in this part of the Yünnan province, though plague is sometimes prevalent in severe epidemic form in the city of Yungchang, a comparatively large town, about 300 *li* from this place. The popular belief is that the disease can never cross the Salwun river on account of the influence of some unknown deity presiding over that part of the country.

Vaccination is getting gradually popular among the people, and there are many quacks at present who are doing a good business in the profession of vaccination. During the last two years I have been able to vaccinate over 100 children each year, with excellent results. But compared with the enormous number of the population the number of children vaccinated each year was very much smaller than those inoculated. The majority of the people still have firm faith in the old practice of "Ch'ui Hwa" 吹花, or blowing the powdered scabs of small-pox up the nostrils of the children. I have already mentioned in my first report in 1903 the evil effects of this practice. This method of inoculation is followed by an attack of small-pox within a week's time, and the severity of the attack depends on the doses blown up, as well as the virulency of the poison in the scabs used. Not a few of the unfortunate children succumb every year as a result of this malpractice; many have disfigured faces, some get partially or completely blind, and several such cases of blindness as the sequel of "Ch'ui Hwa," came under my treatment.

I have mentioned above that there was a severe epidemic of small-pox in this port and its neighbouring villages. I am told that there was a great mortality both among children and adults from this disease. Among the children attacked, some were unprotected, some inoculated, and some vaccinated by Chinese vaccinators. I am glad to note that not a single case, out of the number vaccinated by us during the last five years, has been touched by the epidemic. The Chinese vaccinators, on account of the scantiness of the supply of their lymph, which they receive from Burma, collect scales from the vesicles of successful vaccination cases and store them carefully. They prepare a kind of paste by mixing the powdered scales with human milk immediately before they use it for vaccination. Now vaccination carried on with this paste, does not give the desired result; it only produces some papular elevations in most cases, which may be called modified cases of vaccination.

Hence their so-called successful cases are sometimes seriously affected by the epidemic of small-pox.

The local authorities have advanced a step by establishing a vaccination depôt here, with a view to giving free vaccination among the people. A Chinese doctor of some reputation has been appointed on a monthly salary to carry out the work, and I am told that he has been able to vaccinate over five hundred cases during the last season. But I learn with regret, from various sources, that his work has been very unpopular among the people on account of many children having suffered from blood poisoning after vaccination, and some children were severely attacked with small-pox after his so called "successful" vaccination. One woman brought to me a child who had lost one eye and the other was to be shortly blind. This child was also suffering from pyæmic abscesses, which I lanced. She told me that she had another boy at home who had gone entirely blind. Both these boys were successfully vaccinated at the government depôt and they both were attacked with small-pox about fifteen days after vaccination.

From these two cases, and other three cases of blood poisoning after vaccination, which came under my treatment I gather that either the lymph or scales, whatever it may have been, must have been infected with septic matter, or the lancet must have been dirty. These and other similar cases have brought discredit on vaccination and have prejudiced the minds of the people.

9. *Surgical Operations.*—The following surgical operations were performed during each year under report:—

Name of Operation.	1906–07.	1907–08.
Extraction of tooth	10	18
Evacuation of abscess	11	14
Phimosis, circumcision and incision of prepuce	2	2
Incision of gum boil	1	2
Operation on colic sinuses	1	...
Operation on hare lip	2	1
Tapping of ascitis	1	...
Removal of necrosed bones by incision	2	1
Reduction of dislocation of shoulder joint	1	...
,, ,, ,, ,, elbow joint	...	2
Opening of deep sinuses by incision	...	1
Operation on the eye lid for entropion	2	2
,, ,, ,, ,, ball for peterygium	...	2
Removal of adherent placenta by hand	...	2
Delivery of child by forceps	7	6
,, ,, ,, after amputation of arm from the shoulder joint	...	1
Excision of fatty tumours	1	2
Total	41	56

NOTES ON OPERATIONS.

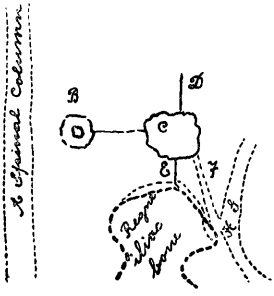
Colic Sinus or Fæcal Fistula.—From the surgical point of view, this case being an important one, I should like to give here a short account of it, which I believe will be interesting to professional readers.

A young woman of about twenty was attacked with a very severe pain in her right lumbar region, attended with fairly high fever. I was called to attend on her, and I did what I could do to relieve her. From the dullness of the area, pain on pressure, redness and slight swelling, I thought she was going to have a deep lumbar abscess. After a few days' attendance I was informed by her relatives that she was quite well and no more attendance by me was required.

Exactly one year after that I was again called to treat a small ulcer on her loin. I found her as bad as I saw her a year ago. On examining the ulcer I found a small opening in the centre of it, and on probing through it I discovered a deep sinus communicating with the abdominal cavity. She was unable to walk properly and had constant pain in her right lumbar region. On pressure of her abdomen, over the painful area, it gave a profuse discharge of fetid pus, which relieved the tension for a while.

I proposed an operation, and after a good deal of hesitation her relatives agreed to it. I put her under chloroform and opened the sinus at a certain distance marked "C" in the diagram. Being single-handed I dared not proceed further in exploring the abdominal cavity, because it is dangerous to entrust an ignorant lay person with chloroform. After a month's treatment the condition of the sinus was not much improved, and I proposed a second operation, which was done with better courage and greater care.

I give a rough diagram below showing the number of sinuses and their course and the point where the fistula had communicated with the intestine :—



A. Spinal column.
B. Outlet of the fistula.
C. A cavity or reservoir of pus.
D. A second sinus upward.
E. A third sinus downward.
F. The fourth sinus communicating with the bowels.
H. Showing the point of communication where part of the intestine was found adherent to the inner surface of the iliac bone.

I have noted above that during my first operation I opened the sinus from B to C. This time I discovered two more sinuses marked D and E, which were opened by free incisions. I then proceeded inward and downward, having my left index finger as a guide through the channel. The calibre of the fistula was too narrow to allow my finger passing through it, so I had to enlarge it by cautious incision. My finger arrived at the inner surface of the iliac bone, where I felt two or three growths as big as peas, which were removed by the finger. And then pushing my finger inward and downward gently I felt that it had reached the gut through an opening. I then hurriedly withdrew my finger, irrigated the wound and dressed quickly.

Before I left her house I gave distinct instructions that she should be confined to bed and that she must live on liquid diet. Next morning I saw her sitting on a chair; she complained that she passed a good deal of wind through the wound, and in the dressings I noticed some fæcal matter. Third day I discovered a few crushed Indian corns in the dressings, mixed with fæcal matter. On being questioned about her diet she denied having taken any solid food. But on pressure from all sides she admitted that she took some Indian corn the day before. One day I found some small seeds of a kind of fruit that resembles the fig. The Chinese patients, as a rule, never believe in living on light or liquid diet; they believe that liquid food makes a patient weaker.

For two weeks the fæcal matter was noticed in the dressings and then the opening in the gut appeared to be closed. She never complained after that of passing wind through the opening. The sinuses B, D and E were entirely healed, and the pus tank C was also healed from all sides, except towards the fistula, F, which had a very small opening on the surface. I tried hard for two months to get that opening closed by all sorts of available remedies, but without success. Both the patient and myself were disgusted, and she stopped putting any medicines on it and depended upon nature. It is a curious fact that nature did its work, and she was quite well after six months without any treatment. She is now in very good health.

MIDWIFERY OPERATIONS.

There were seven midwifery cases attended during the year 1906-1907, six of which were primipara and one was multipara. In five out of the six primipara cases living children were delivered by forceps, and both the mother and babies were doing well. In one case a dead child was delivered. The seventh case, a woman of about thirty-five years old, died immediately after delivery, due to failure of heart.

During the year 1907-1908 nine cases of midwifery were attended. The two cases of adherent placenta shown in the list were primipara, and they had their placentæ adhering for many hours after the children were born. In each case the placenta was separated from the uterus by hand ; the patient doing well. Out of the remaining seven cases six cases had head presentations, and all were delivered by forceps. In one case only a dead child was born. The seventh case was a multipara, who had arm presentation. Before my arrival it appeared to me that somebody who attended on the woman, must have pulled the hand of the child with the idea of helping towards a speedy delivery. But it made the case worse. The arm advanced to such an extent that it was impossible for me to put it back. As soon as I put it back it slipped down immediately. After about two hours' unsuccessful effort to turn the child's head downward I decided to amputate the arm, as the child appeared to be dead. So the patient was put under chloroform and the arm of the child was separated from the shoulder joint, and it was then an easy matter to effect delivery. The trunk and the legs were pushed up and the head was brought down in proper position. After this I introduced forceps and brought the head without any difficulty. I had great anxiety about the patient's health, as she had a good deal of laceration, as well as exhaustion, but happily she recovered entirely, and now she enjoys excellent health.

In this connection I wish to speak a few words about my experience in midwifery cases in this part of China. During five years' practice here I have never met a country midwife in any house who knows anything about it. The woman under labour is entirely left to nature, and nobody helps her in affairs concerning delivery. The mother of the woman is generally the person who attends her sympathetically ; it is supposed to be her sole duty to attend her in such a time of trouble. Her mother-in-law and sisters-in-law, etc., do not even touch her as a rule. In many instances I have seen them peeping through the windows and doors.

MISCELLANEOUS NOTES.

Three cases of leprosy were treated during these two years : one being a young woman of about twenty-two years, who had lost some fingers and whose feet were ulcerated. She does not believe in internal medicine and always takes medicine for external application. The results of the other two cases were not known.

Three cases of poisoning shown in the list were cases of opium poisoning, of whom one died and two recovered.

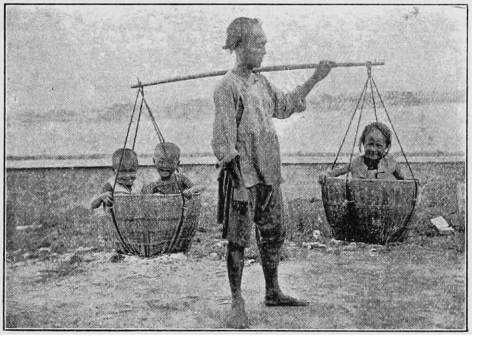
The China Medical Journal.

VOL. XXII. SEPTEMBER, 1908. No. 5.

The yearly subscription to the China Medical Missionary Association is $4 Mex., payable in January of each year. This includes the JOURNAL and postage on the same, whether local or foreign.

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

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



AN AMBULANCE FOR THREE.

Editorials.

THE SPREAD OF TYPHOID FEVER BY PEDICULI.

An important article on this subject has recently appeared in the *Medical Weekly* of Munich. The author argued that as typhoid bacilli occur in the blood and especially in the rose spots, they should be present in cutaneous parasites infecting such patients. In 1901 Tsujitana isolated the plague bacillus from a flea caught on a man suffering from plague, and later Herzog confirmed his observations. The writer of the above mentioned article placed fleas and lice found on typhoid patients and their nurses in sterilised test-tubes, exposed them for a few minutes to one in 1000 solution of perchloride of mercury, washed them thoroughly with sterilised water and pounded them in a sterilised

mortar. The pounded parasites were then injected subcutaneously into white mice and inoculated on various culture media. Typhoid bacilli were obtained from cultures and from organs of the inoculated mice. Six pediculi corporis from the clothes of a typhoid patient were treated as described. A mouse inoculated hypodermically with an emulsion of their bodies on May 31st, died on June the 3rd. Typhoid bacilli were isolated from its organs and blood. Nutrient media inoculated with from one to six pediculi capitis from the same patient all showed colonies of typhoid bacilli which were also present on the inner surface of the test-tube which had been used for the collection of the pediculi. Similar results were repeatedly obtained. But in two cases fleas found on nurses of typhoid patients were examined bacteriologically, and showed no typhoid bacilli.

The writer claims that 75 per cent. of the pediculi corporis et vestimenti infecting typhoid patients contain virulent typhoid bacilli. The failure to obtain the specific organism in the fleas found on the nurses was possibly accidental. If more material had been obtainable the results might have been positive. In any case the experiments suggest that parasites may play a considerable part in the spread of infectious disease.

TRANSMISSION OF RELAPSING FEVER BY MEANS OF LICE.

In the *B. M. J.* of December 14th Capt F. P. Mackie, I.M.S., brings forward evidence in proof of the above. He investigated an outbreak of relapsing fever which occurred in the Nasik Mission Settlement among the children. The boys and girls lived under similar conditions. Twenty-five out of 170 boys were attacked and sent away, and of the 145 who remained, 137 were attacked, nearly all in a month. On the other hand, out of 114 girls about 15 contracted the disease, and among these it spread slowly, so that the outbreak lasted three months. Of the first 15 girls attacked everyone seemed to have contracted the disease in the boys' ward, where she had acted as nurse. Similarly nearly every casual visitor who spent any time in the boys' ward contracted the disease. This dangerous infectivity was strikingly absent from the girls' ward. There the

attendants did not contract the fever, and even when the infection seemed to get hold of the building itself the cases occurred at long intervals, and the disease spread with difficulty. The most notable point in which the boys differed from the girls was that they were infested with body lice, from which the girls were almost free. A large percentage of the lice taken from the infected ward contained living and multiplying spirilla. The stomach of the louse was the chief seat of the multiplication, and this was carried on in face of active digestion and after the disappearance of all other cellular elements. Other organs became secondarily affected. The secretion expressed from the mouth of the infected lice contained numbers of living spirilla, and they also existed in greater or lesser numbers in the upper alimentary tract. The ovary was frequently affected, but spirilla were not found in the deposited ova. With the increase of the epidemic among the girls body lice became more in evidence. With the subsidence of the epidemic among the boys the number of infected lice diminished.

Many epidemiological facts points to this mode of transmission. Relapsing fever has always been associated with poverty-stricken, overcrowded, and half-starved communities. Under such conditions *lousiness* prevails at its worst. Relapsing fever is a "personal" and not a "place" disease, and infection spreads from person to person very rapidly after only a few days exposure, and mere contiguity without contact is not sufficient to carry on the infection.

[It is interesting to note that the louse is not merely credited with carrying the spirillum of relapsing fever, but some few years ago Daniels, of the London School of Tropical Medicine, suggested that in all probability the poison of beri beri was carried by lice.—EDITOR C. M. JOURNAL.]

PATENT MEDICINES AGAIN.

A certain wholesale drug firm hereabouts, recently cruising over the living ocean of Chinese life, bumped into a torpedo labeled "W. H. VENABLE, KASHING," and received a fearful jolt. Dr. Venable has put into our hands a most interesting correspondence between the above firm and himself, which was developed by the attempt on the part of the drug firm to make a paste brush of Dr. Venable for pasting all over the city of Kashing the advertise-

ments of an anti-opium remedy, put up in proprietary form with a proprietary name and for strictly proprietary purposes. The firm also tried to secure Dr. Venable's services in the matter of starting an agency in Kashing for the sale of this sure cure. The correspondence makes most delightful reading. The cheek of the firm, and the sublime grasp of the situation by Dr. Venable, are opposing forces of a very strenuous variety. We understand that a determined attempt has been made by this firm to secure like services and play a similar species of fool with not a few other medical missionaries, and that some of the brethren have allowed the cap to be fitted. We should like to make a great variety of remarks on the subject, but must confine ourselves to the following few.

It is legal and quite within the legal rights of the firm to put upon the market a proprietary remedy for the opium habit. It is also legal, but not ethical, for a medical missionary to help cram it down the throat of Chinese victims. We do not ourselves believe that there is known at the present time on the earth any drug or combination of drugs that may be depended upon to cure even a very limited number of opium habitués. As Dr. Venable says :—

"Will you allow me to say that I have very little faith in proprietary remedies, and least of all in cures for the opium habit. I am not in the habit of using or recommending proprietary remedies, and am especially opposed to remedies that claim to cure the opium habit, as I do not believe that any such specific exists. For this reason I will be obliged to decline to have anything to do with advertising the remedy. Moreover, I think you will do yourself harm with your medical missionary patrons if you continue to push the sale of this medicine."

And again, in a later letter :—

"I simply repeat that a doctor who habitually gives medicines that he does not know the composition of, is not faithful to his high calling; and if there are any such among the missionary body, so much the worse for the missionary body.

"However, the chief point in my letter was in regard to the using of a so-called remedy for the opium habit. If you will excuse my saying so, the very fact that you seem actually to believe that your remedy will cure the opium habit shows that you have not the slightest conception of how strong a hold the habit has upon those who indulge in it. A certain number of mild cases can be cured by almost any of

the ordinary remedies used for this purpose, but the more difficult cases require study of the individual case by a doctor, a tactful combination of bodily restraint and moral persuasion, and every resource that the doctor has at his command. The treatment has to be varied to suit the symptoms of the individual and cannot be accomplished by the patient taking drugs at his own home—even 'the most approved prescriptions of the most prominent physicians of all the world'."

We have brought this matter to the notice of the Association in order that you may be warned of the use that over-interested business people are trying to make of your exceptional positions, and to remind you that according to the standards of all scientific medical bodies, the use of secret formulæ is considered unethical and immoral, and particularly is this so of remedies which claim to do the impossible.

A CORRECTION.

Dr. Maxwell, chairman of the Research Committee, desires us to add to the report published in our July issue that, on review of the subject, Dr. Whyte finds Necator americanus among his "Duodenale" cases. The moral of this is that we should all take pains to differentiate the two worms in order that their relative distribution may be correctly noted. Up to the present time Dr. Maxwell's own station in Formosa, though wallowing in Ankylostomiasis, has not yet satisfied him of the presence of Necator americanus in Formosa.

DELAYED PAPERS.

It has probably "dwindled" upon the mentality of the Association that the JOURNAL has not been hard up for material during the last twelve months, and that the publication of excellent papers has been delayed in consequence. We would emphasize that this is altogether a healthy state of affairs. In order to arrange our issues with symmetry and harmony, as well as to be assured of full issues, it is essential that the Editors' supply should be comparatively ample all the time. We therefore desire to express our delight in the present condition of affairs and rather than have our contributors discouraged, beg them to continue their literary

support with increasing regularity and interest. The fact that a paper is delayed in publication never signifies that it will not appear later on in its own fitting place. Occasionally a particular paper, as, for example, a committee's report, demands instant publication. And please remember the long interval between issues. We have also lately heard of an excellent paper, with photographs, that was lost in the Chinese mail. Fortunately a copy of the same has been obtained. If you do not receive a postcard acknowledging any particular contribution within a reasonable time, please invariably dig us up on the subject.

ASSOCIATION NOTES.

BRANCHES OF THE C. M. M. A.

Central China Branch:—Dr. J. G. Cormack. Hankow, Secretary.
Kuling Branch:— Dr. W. A. Tatchell, Hankow, Secretary.
Manchurian Branch:— Dr. W. Phillips. Newchwang, Secretary.
Korean Branch:— Dr. H. H. Weir, Chemulpo, Korea, Secretary.
Shanghai Branch:— Dr. A. W. Tucker, St. Luke's Hospital, Secretary.

NEW MEMBERS OF THE C. M. M. A.

Joined through the China Medical Journal.

C. HEMAN BARLOW, M.D., N. W. Univ. Med. Sch., Chicago, A. B. M. U., Huchow.
LENA HATFIELD, A.B., M.D., C.P. and S., Chicago, M. E. Mission, Foochow.
OSCAR F. HILLS, M.D., Univ. Penn., Am. Pres., Chefoo.
LI BI CU, M.D., Phila. Woman's M. C., M. E., Ngucheng, via Foochow.

Joined through the Korean Branch:—

J. W. REED, M.D., Meth. Epis. South, Song Do, Korea.

Joined through the Manchurian Branch:—

MRS. STOBIE, L.R.C.P. and S., Ashiho.
D. T. MUIR, M.B., T'ieling.
J. MCKILLOP YOUNG, L.R.C.P. and S., Ashiho.
MRS. MCKILLOP YOUNG, M.B., Ashiho.
ELIZABETH BEATTY (1907), L.R.C.P. and S., Kuangning.

The E. A. Hackett Medical College Students, Three of the Teachers and Dr. Mary H. Fulton. Canton, China, 1907.

Book Reviews.

Tropical Medicine by Thomas W. Jackson, M.D., Lecturer on Tropical Medicine, Jefferson Medical College, Philadelphia. Lately Captain and Assistant Surgeon, U. S. Volunteers. P. Blakiston's Son & Co, Philadelphia.

The fact that Dr. Jackson has not written his book with special reference to conditions in China does not detract from its value to us as observers of tropical disease. Rather, the fact of newly-organized tropical medicine societies in one country or of journals of tropical medicine in another, serves to remind us that our work will not be done as it used to be, quite apart from the interest and knowledge of scientific medical men in other countries.

The very first section in the book, that on general hygiene, commends itself because of simplicity and applicability to our conditions here. I note with pleasure the support given to linen as a suitable material for undergarments. The section on Measures of Protection against Infection should be learned by heart by everyone.

That the plan of Dr. Jackson is to provide a reliable guide for the laboratory worker as well as for the clinician is evident from the fact that the last part of each chapter contains a section on the laboratory methods of detection and identification, wherever the disease is one in which laboratory study is apt to reveal anything. If any one feels himself to be rusty on the nature of one or another tropical disease, he is cordially referred to the words on etiology to be found in successive chapters, e.g., on Beri-beri and Dysentery. The chapter on Tropical Dysentery is alone worth the cost of the book, and will repay one for careful study. Those who spend much time with the microscope will find food for thought and suggestive points in the laboratory study of the species described in Part II on Animal Parasitic Diseases. While Manson's book on Tropical Diseases still remains indispensable, I should be inclined to put the present volume very close to it as a practical manual that ought to be owned by every medical man in China. The book, as well as others reviewed below, may be ordered through the JOURNAL.

Introduction to Infectious and Parasitic Diseases by Millard Langfeld, A.B., M.B., Professor of Bacteriology and Clinical Medicine, John A. Creighton Medical College, Omaha; Bacteriologist, the Omaha City Board of Health. P. Blakiston's Son & Co., Philadelphia.

This book was primarily written for nurses, but the author was induced to enlarge its scope somewhat in the thought that "if in place of the conventional (seriatim) text-book consideration of infectious and parasitic diseases the fundamental principles which govern all were substituted, knowledge of wider utility would be acquired, and with less effort, because much unimportant detail could be avoided." The reviewer's first thought on approaching a book written with this motive was that it would be hardly the sort of a book we should need in China. On looking it over, however, it has been forcibly suggesting itself to me as very possibly the sort of a book that Chinese students of medicine would be greatly helped by using. If medical students could use such a book as an introduction to a fuller study of medicine, they would be far surer of fundamentals and would find themselves understanding very much more clearly than otherwise, the reasons for principles of hygiene, of asepsis, of care in handling the sick, etc. To medical men no chapter in the book will be of greater importance than the one headed "Avenues of Exit of Infectious Agents and Parasites from the Body". Referring, for instance, to typhoid fever, the author speaks of it as a common disease in which germs make their exit in at least five ways, with a possibility of six, going on to say what we often are inclined to forget, i.e., "Whenever, in the course of an infectious

disease, complications arise in which there is a purulent or other discharge to the exterior, these discharges should be regarded as fresh avenues of exit for the specific micro-organism." There follows, on pages 155 to 165, an important enumeration of the diseases which find exit for their specific germ from one or another avenue in the body. The portals of entry for disease are also well described. It seems likely that this book will fulfil a real need, whether students are taught in English or in Chinese. It ought to be translated.

Medical Diagnosis, a Manual for Students and Practitioners, by Charles Lyman Greens, M.D., Professor of the Theory and Practice of Medicine in the University of Minnesota.

In a recent article on Ideas and Ideals in Medicine, Dr. S. J. Meltzer, head of the Department of physiology and pharmacology of the Rockefeller Institute for Medical Research, New York, has these wise words. . . . "To get the habit of thinking in the practice of medicine is, to my mind, the best means for obtaining a practical end, and if you get the habit the process will be no effort; it would not consume too much of your time, and it will never paralyze your activity; you will know what you may and ought to know of each case, and you will also become aware of the natural limits of your knowledge in each particular instance; all of which is a great aid in deciding on and guiding your activity. You will further know what you can do and have to do, and you will do it quickly, and you will also be clear as to what you ought not to do . . . Habitual thinking is a great aid to proper action and not a hindrance to it. Disease is not like a piece of goods put in a box with a label on it which you need only to read in order to be able to deliver the goods. If you look at it closer, you will find that every disease you have to deal with is a piece of research, and every treatment is an experiment" (*Jour. of the A. M. A.*, 1908, May 16, page 1,582). While any mere manual of medicine is apt to be a temptation to the busy medical man, it may be just the thing he wants by his side in the hospital or dispensary, to be supplemented by fuller reading at home. The book before us is a splendid illustration of what a *handy small* reference book ought to be. It is especially to be commended for chapters like those on "The Outward Signs of Disease" and on "The Analysis of Certain Common Symptoms". Two such chapters are very refreshing, and they only serve to emphasize the words of Dr. Meltzer quoted above, to the effect that we need to give more thought to the cases that pass before us and to regard them as real subjects for investigation. In the chapter on Disease of the Thoracic Viscera, there are many up-to-date suggestions for observation in diagnosis. The book is heartily commended for either the busy medical man, or for the student. It is published by P. Blakiston's Son & Co.

EXTRACTS FROM THE HEALTH OFFICER'S REPORT.

SHANGHAI, 1907.

ARTHUR STANLEY, M.D., B.S., Lond. D. P. H.

The past year was marked by increased mortality from small-pox, cholera, scarlet fever, tuberculosis, and diarrhœal diseases, all of which are preventable. If preventable, it will be asked : why not prevented?

As regards small-pox the means of prevention—vaccination—is in everyone's hands. Shanghai possesses the advantage of having vaccine as a staple product of the Municipal Laboratory, and those who cannot afford to pay doctor's fees may be vaccinated free of charge at the Health Office. Foreigners can scarcely plead ignorance of the advantages of vaccination, while it is satisfactory to be able to record that the Chinese are beginning to appreciate the benefits of vaccination. It is more than likely that within twenty-five years Shanghai will be a well vaccinated city and cases of small-pox, now so numerous and fatal (28 foreign deaths and 863 Chinese deaths during 1907), will be as rare as in the large towns of England.

As regards cholera, typhoid fever, and diarrhœal diseases, prevention is largely a matter of sterile food—an affair chiefly of the kitchen and one second to none in importance for the Shanghai resident, the preventable diseases especially prevalent in Shanghai being mostly caused by infected food. It is necessary for the public to appreciate the fact that most bowel troubles are caused by infected food—food soiled by disease germs. Food, perfectly sound in appearance, is as likely to be infected as food obviously bad. It is necessary, therefore, prior to consumption to sterilise food liable to infection. The word "sterilise" is used in its broadest technical sense—to render free from disease germs. This may be accomplished by cooking, by boiling of milk, by filtering water through a Berkefeld filter, or by using food, such as canned goods and bottled beverages of good reputation, which are practically sterile when purchased. Fresh fruit can be sufficiently sterilised, without spoiling the flavour, by immersion for a few seconds in boiling water.

The prevention of scarlet fever is perhaps more a public matter than any of the others, requiring early notification, isolation and disinfection for its effectual prevention, such as is impossible under present conditions in Shanghai.

The prevention of tuberculosis, again, is largely a personal matter, dependent on the care with which the victim of consumption keeps himself from infecting others with the bacillus from the lungs by spitting and coughing. There is no doubt that the sanatorium treatment is not only of frequent benefit to the patient but of still greater to the public, and especially to the members of the patient's own household. The chief indirect cause of the great mortality from tuberculosis in Shanghai is overcrowding, everywhere admitted to be the worst of all unhealthy conditions and one that cannot be counterbalanced by other sanitary measures.

The application of individual sanitary measures, in Shanghai as elsewhere, is largely a matter of education. Sanitary science requires to be intelligently popularised. Many people think that if they could only know the name of the right stuff they might save the expense of having a doctor. Except in a few instances, it is more than probable there is no right stuff this side of the veil, curative treatment being mostly a matter of application of the principles of hygiene or of the knife of the surgeon. The diffusion of sanitary knowledge, especially among the Chinese, being an important preventive measure, a new method was tried during the cholera outbreak and has been continued since with success. Fuglemen were employed to recite the Cholera Prevention Notice in the Shanghai

colloquial throghout the settlement to crowds collected by a bell. The idea was suggested by the crowds attracted by the professional story-tellers in the teashops. Since the cessation of cholera a fugleman has recited notices dealing with the prevention of tuberculosis, vaccination and general sanitary measures as occasion arose.

Although Shanghai has so far been free from plague there is nothing in the physical conditions of the place which guarantees permanent immunity. Plague appears able to become endemic under every variety of condition and circumstance. If plague ever became epidemic it is more than likely that it would remain for many years. All the conditions favourable are present—overcrowding, inability to detect the first cases and even to compulsorily isolate them if detected. Plague does not easily spread direct from man to man, but rats have been proved to be the chief means of dissemination, leading to continuance and recrudescence of epidemics. Rats are abundant in Shanghai and a comfortable home is provided for them below the ground floor of nearly every Chinese house in the settlement. Attempts have been made to destroy rats in many places infected or threatened with plague, and large sums of money have been expended without satisfactory result. There is no known effectual method of exterminating rats on a large scale. The only sensible method in this town is to do away with the hollow space below the ground floor of Chinese houses. If this measure were adopted, and it is quite easy of adoption, it is estimated that rats would be diminished by at least 90 per cent., which would make a material difference when plague comes. And it may be noted that an epidemic of plague would result not only in a great sacrifice of life but in diminished trade of the port.

The opium question is one that has an important bearing on public health in Shanghai. In Europe alcoholism is the greatest obstacle to sanitary reform, and the death-rate is more increased by this and its consequent misery in the course of one year than in ten by all the infectious diseases. Drunkenness is practically non-existent in China. Opium-smoking is perhaps the equivalent in China of alcoholism, the sedative effect of opium being more in keeping with the oriental character than the temporary mental and physical excitement produced by alcohol. But in comparison with alcohol the evil wrought by opium is trivial. While alcohol causes disease of most of the organs of the body and is one of the common causes of insanity, opium scarcely produces any changes that can be recognised post mortem.

Cholera broke out during the summer in Li Hongkew, one of the many insanitary places which border on the settlement. These grossly insanitary places, just beyond the boundary, are a standing menace to public health and show the necessity for an extension of the settlement for the purpose of sanitary safety. A clear interval of at least a mile should be left between the thickly populated parts of the settlement and the boundary. For the preservation of public health it is advisable to include by a wide sweep of the boundary line those most insanitary places beyond the back of Hongkew. A line from the most northern bend of the Soochow Creek to where the Yangtsepoo Creek joins the present boundary, to include the Hongkew Recreation Ground, is essential for sanitary safety.

PUBLIC HEALTH MEASURES NEEDED.

A new Land Regulation dealing with Public Health measures generally.
A Residence for Municipal Nurses.
A Sanatorium for Chinese Consumptives.
Completion of the Municipal Hospital for Infectious Diseases.
A Vaccination League among the Chinese.

VITAL STATISTICS.

The Foreign Population of the Settlement North of the Yangkingpang, including the outside roads and Pootung, at the last census taken on October 14, 1905, was 11,497, and consisted of 5,728 men, 3,270 women and 2,499 children. The

foreign shipping population, which numbered 2,510 was not included. The foreign population for the middle of 1907 is calculated at 13,700. The census of the foreign population taken at each quinquennial period since 1870 shows the following expansion: 1,666. 1,673, 2,197, 3,673, 3,821, 4,684, 6,774, 11,497.

The Native Population on October 14, 1905, was 452,716, and consisted of 212,517 men, 118,432 women and 121,767 children. The Chinese population for the middle of 1907 is calculated at 510,000. The census of the Chinese population taken at each quinquennial period since 1870 shows roughly the following expansions: 75,000, 96,0000, 108,000. 126,000, 168,000, 241,000, 345,000, 452,000.

Death-rate among the Resident Foreign Population.—During the year 1907 the total corrected number of deaths registered among foreigners, including non-Chinese Asiatics, was 328; of this number 245 occurred among the resident population.

Six months spent continuously in Shanghai is taken to constitute residence as in former reports. As the non-resident population is a variable and indeterminate factor, the deaths in this category are eliminated in the calculation of the death-rate. The death rate per thousand per annum, therefore, calculated from 245 deaths occurring amongst the resident foreign population of 13,700, is 17.9, as against 12 1 in 1906. This death-rate is hardly comparable with that of previous years, 73 deaths among Japanese being reported, as against 13 in the previous year. This has been due to the kind co-operation of the Consul-General for Japan, who now furnishes returns of all deaths occurring in Shanghai among Japanese subjects. The deaths of 92 children (persons under 15) have been registered, as against 37 last year; of the deaths among adults, 107 were men and 46 women; of children, 47 were boys and 45 girls. The mean age at death among the adult resident population was 39.9.

Small-pox, the most obviously preventable of all diseases, still kills in that section of the foreign community which neglects vaccination.

There was a sharp outbreak of cholera in August and September.

Typhoid fever shows a decrease on last year's figures.

The reduction in the mortality from diphtheria may be accounted for by the early and more general treatment by antitoxin, which is now produced in the Municipal Laboratory.

Scarlet fever, which killed so many in 1902, appears likely to linger among the community.

Tuberculosis heads the list of fatal diseases both among foreigners and natives and calls attention to the overcrowding which is so apparent in the settlement.

Alcohol—that comfortable poison—has been responsible for the death of eleven foreigners during the year.

Lobar pneumonia, which five years ago assumed almost epidemic proportions, caused four deaths.

Dysentery and malaria continue of mild type.

Plague has been kept at bay.

There were three suicides among foreign residents during the year.

Among the non-resident population the chief causes of death were typhoid fever, tuberculosis, and drowning.

Death-rate among the Native Population.—10,217 deaths amongst the Chinese have been reported, compared with 5,689, 6,443 and 10,801 in the three previous years.

The death-rate per thousand per annum is 20.00. There were 863 deaths from small-pox and 960 from tuberculosis, as against 29 and 1,000 respectively last year; 655 deaths were caused by cholera. Of the deaths, 6,073 were male and 4,144 female. The deaths of 3,999 children (persons under 15) have been registered; of these, 2,059 were boys and 1,940 girls.

Reports of Local Branches.

KOREA M. M. A., CENTRAL DISTRICT.

The seventh meeting was held at Dr. Scranton's office on June 12th, at 2.30. Dr. Hirst in the chair.

Present:—Members: Drs. Avison, Cutler, Ernsberger, Hirst, Reid, Reed, Scranton, Weir. Visitors: Drs. H. Y. Kim and Esther K. Park. Trained Nurses: Misses Burpee, Morrison and Shields.

The minutes of the sixth meeting were read in part and agreed to and ordered to be completed.

Members of the K. M. M. A. at long distances from Seoul having asked for copies of the minutes in order to be kept in touch with the proceedings of the central district meetings, therefore Dr. J. W. Reed was appointed to present a plan for publishing the minutes.

The next meeting was arranged for the same time and place on July 14th; the chair to be taken by Dr. J. W. Reed.

A paper was read by Dr. Avison on the subject of Hypnotism.

Notes taken during the reading of the paper:—

There is a subconscious self or subjective mind. Events are ineffacibly fixed in the mind, though they may be temporally forgotten. The subjective mind has better reasoning power than the objective, as is shown by what is called intuition, and deduces correctly from the premises presented to it, but does not consider the truth of the premises. Normally the objective mind gets impressions through the senses and corrects the false results arrived at by the subjective mind when reasoning from false premises. The objective mind exercises the will and thus controls the subjective, which can act by itself when instructed by the objective. The various organs of the body act thus. Different characteristics and dispositions of persons are probably due to varying activities of these two minds. Perversion of either may lead to insanity. The present thought causes the immediate action.

In the hypnotic state the objective mind is at rest and the subjective mind accepts and acts on any premises presented to it, being without control.

How to obtain the hypnotic state. It can generally be done by anyone for themselves and is rarely induced by anyone else. There is much unconscious autohypnotism in ordinary life. It always depends mostly on the patient and the operator merely helps the natural process and arranges conditions favourable for the patient to act in. Skill consists in knowing how to arrange. Probably every one can be hypnotised if the right conditions can be found.

The possibility of being hypnotised does not depend on the intellectual capacity of the patient. Probably every one can operate and all do so at times unconsciously. Methods are most varied and almost anyone will do for routine.

Some people can only be got as far as to be soothed; all have a limit which they will not pass due to their previous impressions and any attempt to pass it generally wakes them.

Waking is generally quite easy; the patient is said to wake before long if left alone. The after-condition depends on the suggestions made during hypnosis.

Functional conditions can be thus cured and organic disease sometimes.

Dr. Avison then gave a demonstration on Dr. Kim, and a free discussion followed, bringing out the above points more clearly.

The meeting asked Dr. Avison to convey greetings to Dr. Ludlow, our honorary member.

Adjourned with prayer by Dr. Avison.

Note.—Subject for next meeting (July 14th) was decided at the May meeting: "Instruction in Midwifery," by Dr. Emma Ernsberger.

HANKOW BRANCH, C. M. M. A.

On May 27th, this Association held its 140th meeting.

Besides the doctors, nurses and those who share in any way the work of the hospital were invited to be present at this "Open Meeting".

Dr. MacWillie presided; reports were given on the cases shown at last meeting and two new cases were shown. One of very special interest was the case of a woman where a mole on the arm had within the past year grown enormously so that the arm down to below elbow and all the shoulder and left breast were covered with deeply pigmented skin, the tissues had swollen or grown till the mass measured 31 inches around the axilla. There was a distinct increase of temperature in tumour mass and pain along the line of ulnar nerve. The consistency of the tumour was firm and at one place the skin showed a tendency to break down.

The woman's general appearance was against the tumour being very malignant; she said herself that she noticed an increase in growth from day to day.

Two opinions were given as to the nature of the growth: one that the tumour was a melanotic sarcoma, the other that it was an angieoma.

The line of pigmentation was sharp and well defined.

The second case shown was one of a recurrent fungating growth at the outer side of right knee. Operation had been attempted twice and a good cicatrization obtained after each operation, but later recrudesence had taken place, in the shape of a fungating tumour, the size of a walnut.

The young man look somewhat anæmic.

Hereditary syphilis was suggested as the cause, but a number present thought the lesion to be one of recurrent sarcoma. Under the circumstances K. I. was to be prescribed for some time and the case reported on later.

After these cases had been discussed Dr. Huntley read a paper on "The Missionary Side of Our Work." It was a paper of much interest and will probably appear in the JOURNAL.

Many helpful suggestions were given in the discussion that followed as to the method of carrying on evangelistic work in our hospitals, such as the use of lantern pictures, or otherwise to tell the story of Christ's life.

Several emphasized the need of evangelists to follow up the patients who have shown interest, by visiting their homes.

Not *plans* but *carrying out* of plans was laid stress on. Others felt that the *one great need* was to so embue our assistants with the spirit of Christ that the "atmosphere" of the hospital would be a witness to the power of Christ; to this end it was urged that more time be given to teaching and praying with our helpers.

All agreed there was a danger in our efforts to attain medical efficiency we might easily become spiritually negligent.

Several emphasized the need of the preaching in our ward services following a *definite* plan, so that each month an outline of Christ's life and teaching might be given. Topics taken at random would not likely leave a clear impression on the patient's mind as to what Christianity is.

One doctor deprecated using miracles as texts to preach from, as the patients were apt to draw comparisons between Christ's healing with *a word* such diseases as blindness, and the ordinary doctor helplessness before such cases.

All felt the discussion had been a most profitable one, and the suggestions offered will probably lead to some more efficient work in coming days.

No meetings will be held during the next three months, but we shall hope to resume again in October. Meantime the larger meetings at Kuling will serve to keep us up to our best efforts to make medical missionary service the glory of the Church.

J. G. CORMACK, Sec'y.

MANCHURIAN BRANCH OF C. M. M. A.

The Branch held four meetings during the annual conference of the Scotch and Irish Missions at Newchwang, May 26th to June 9th, 1908. Owing to press of other gatherings it was found necessary to meet at 8 a.m., though with committee and Council meetings running up to midnight, this was not always easy.

The first meeting, Dr. J. A. Greig, Kirin, in the chair, was routine, being largely occupied with the reports and discussion on the scheme for training hospital assistants. It was reported that 28 hospital dispensers from all over the province had attended a six weeks' course of lectures at Mukden on elementary chemistry, physiology and anatomy. It was also reported that examinations were held at the end of the course, and the lists were presented.

Dr. Greig, Kirin, presented a report on the purchase of drugs and supplies. He had obtained quotations from a number of leading firms, which showed very considerable differences of price, and made it plain that it would be very advantageous to combine for the sake of discounts promised. The members agreed to do this, subject to the approval of their Boards.

At the second meeting, Miss E. L. Starmer, M.B., Mukden, read a paper on Nursing in our Manchurian Hospitals. Up to the present no foreign trained nurses have had any plan in Manchuria, and the discussion which followed showed that some members were doubtful of the advisibility of their introduction, chiefly on grounds of Chinese social customs.

Eventually, however, the Branch approved of the general principle of having European nurses to act as lady superintendents, who shall not at present be expected to render any personal services in men's wards.

The third meeting was mainly occupied with a paper from Dr. R. J. Gordon, K'wanch'êngtzŭ, on Hospital "Heating," and one from Dr. W. Phillips, Newchwang, on "Some Cases of 麻木."

At the last meeting, on June 6th, after arranging various items of business, the members heard and discussed a paper by Dr. J. A. Greig, Kirin, on "The Treatment of Tubercular Glands"—an ever present problem to most of us, and which led to very free expression of opinion, ranging in practise from the member who advises his patients to go to the country to the member who operates on every suitable case.

Isolated as most of us are for the greater part of the year, these, the first clinical meetings which this Branch has been able to arrange, were generally felt to be most beneficial and enjoyable, and we hope to get up a similar series for next year.

WALTER PHILLIPS, M.B.,
Secretary.

Correspondence.

SHANGHAI, July 14th, 1908.

DEAR DOCTOR: In the June No. of *Knowledge and Scientific News* I find the accompanying article; thinking you may not have seen it I pass it on to you. I wonder if this is the thing of which we have heard lately as a cure for opium smoking; if so, it appears to be as bad a remedy as morphia.

Sincerely yours,

J. E. CARDWELL.

AN OPIUM SUBSTITUTE.

The Malay Drug—not merely useless but worse.

The leaves of an indigenous tree, Poko biak (Mitragyna speciosa, Korth), are stated in the *Journal of Federated Malay States Museums* to be used in Malaya as a substitute for opium. It is a medium sized tree with large leaves and balls of greenish white flowers. It is widely distributed in Perak, and occurs in the jungle and is also planted by the natives in and around villages.

The drug is prepared in two distinct ways. In the first the leaves are dried in the sun until they become crisp, when they are reduced to powder by rubbing between the hands; the ribs and veins are removed and the powder stored for use. The dose is about 136 grains. The powder is mixed with cold water and the whole drunk, or an infusion is made with hot water and is taken like tea. It is usual to take it twice a day before meals.

In the second method of preparation the leaves are dried in the sun and then boiled in water to form an infusion. This is strained and the clear filtrate evaporated to a syrup. In this condition it can be kept for a long time. The syrup is mixed with hot water before taking. The dose is 5.83 grains. Some people just put it on the tongue and wash it down with a drink of water.

The extract is also smoked, after being intimately mixed with the finely shreded leaves of the Palas palm (Licuala paludosa). The mixture forms a sticky, fibrous brown mass.

It is a much worse form of drug habit than opium smoking; the effects on its habitual devotees being far more deleterious.

The use of the leaves has previously been erroneously described in this country as a remedy for the opium habit.

EDITOR OF JOURNAL:

Our Chinese Graduates.

SIR: It seems to me that your editorial note on the question of Chinese membership in the Association is on the right line. But I fear that I fail to understand one point. I presume that the graduates you refer to in the note have a *right* to practise medicine *in America*, and that their degrees are granted by one of the RECOGNIZED American universities. That being so of course they are eligible for membership. [Yes.—ED.]

As to the graduates of the Peking and other recognized *bonâ fide* schools, it seems to me that if the Chinese government definitely recognizes such by appointing government assessors and they are true medical missionaries, not merely in the employ of a medical missionary, they should be admitted.

Undoubtedly a register of such schools should be kept. Is there any British university in China? I think not. But does not your

concluding sentence rather clash with the main purport of the letter? If a man or woman obtains national (governmental) recognition and takes his degree at one of the recognized schools of medicine, we have nothing to do with the question of where he took his course.

I am, yours faithfully,

J. PRESTON MAXWELL.

YUNG CHUN, June 9th.

EDITORS OF MEDICAL JOURNAL.

The Right and the Left Hand of Rev. Foster.

DEAR SIRS: I have just taken up by chance a copy of the MEDICAL JOURNAL for May, and I received something like an electric shock on reading (p. 210) the announcement that the new and beautiful little chapel of the Hiao-kan Leper Asylum was *my* gift! It may be that the greater part of the fund for building it came through me as a chanuel, but the contributors were not few, and the sums each gave were not small; by far the largest contribution, however, was sent from England by some one who was never in China. Any contribution I made was only a fraction of that in amount. Please make this personal explanation in the next issue of the JOURNAL for me. My friend, Dr. Fowler, by his skill and thoroughness as an architect and builder, made the building what it is and that at a comparatively small cost.

Yours faithfully,

ARNOLD FOSTER.

L. M. S., SHANGHAI, June 23rd.

Take Note and write a Check.

The time for publishing the Annual Report of the National Anti-Opium League in China is drawing near, and so many important edicts, proclamations, leaders and items of news on the subject of opium and its suppression have appeared in the papers during the last few months that we want to add them as an appendix to the Annual Report, print many copies and distribute them widely, not only in China but also in England and America. Funds for this purpose are urgently needed.

W. H. PARK,

Treasurer.

SOOCHOW, June 15th, 1908.

Personal Record.

BIRTH.

AT Siang-yang-fu, Hupeh, 26th May, 1908, to Dr. and Mrs. JOHN SJOQUIST, S. A. M. C., a son.

DEATHS.

AT Kuling, 17th August, LEONARD CLAYTON, youngest son of Dr. and Mrs. John MacWillie, A. C. M., Wuchang.

AT Ichang, — August, GEORGE F. STOOKE, L.R.C.P., Ch. of Scotland Mission, of cholera.

ARRIVAL.

AT Kiungchow, Hainan, about 10th August, H. M. MCCANDLISS, M.D. (returning).

Medical Publication Committee.

PUBLICATIONS.

Medical Lexicon. An English-Chinese Medical Terminology. Compiled for the Terminology Committee by Dr. Cousland.

Price bound in paper boards	$1.60
,, ,, ,, cloth	2.00
Interleaved 50 cents extra.	
Cheap edition for Students. Price bound in paper	0.90

Physiology, Halliburton's, (Kirkes) (abbreviated). Translated by Dr. Cousland. (Murray, London.) Third Edition, 1908.

Price bound in paper boards	1.50
,, ,, ,, cloth	2.00

Obstetrics, Evans-Ashton. Revised and translated by Dr. Niles.

This is to take the place of Kerr's Obstetrics, which will now be withdrawn. Some chapters are from that work (being translated from Ashton's Essentials of Obstetrics), but the larger part is a new translation of Evans' Obstetrics.

Price bound in paper boards	1.70
,, ,, ,, cloth	2.20
,, ,, ,, stiff paper, 2 vols.	1.80

Bacteriology, Archinard's. Translated by Dr. Venable. (Microscopy and Bacteriology. Archinard. Lea, Phil.)

Price bound in paper boards	1.30
,, ,, ,, cloth	1.70

Kerr's Practice of Medicine. Revised by Dr. Niles.

Vol. I is now ready, and the complete book, 4 vols., should be published in the autumn. It should be obtained from the China Baptist Publication Society, Canton.

Price, per set, probably	2.00

Therapeutics, Hare's. Translated by Dr. Ingram. (Hobart Amory Hare. Lea, Philadelphia.)

2 Vols. Price bound in paper	3.00

This can also be obtained from the Kuang Hsüeh Hui shop, Têng Shih K'ou street, Peking.

Eye Diseases. Translated by Dr. Neal. Fourth Edition, 1907.

Price bound in thick paper	0.75
,, ,, ,, boards	1.40

Skin Diseases. Translated by Dr. Neal. Third Edition, 1907.

Price bound in thick paper	0.50
,, ,, ,, boards	1.00

Gynecology, Penrose's. Translated by Dr. Fulton. (C. B. Penrose, Philadelphia.)

2 Vols. Price bound in thick paper	2.00

Dr. Penrose's Gynecology and this translation can be ordered from the China Baptist Publication Society, Canton.

Manual of Nursing. Compiled by the C. C. M. M. A. Price 0.25

Gray's Anatomy, translated by Dr. Whitney, is the only text-book on that subject. 935 Pp. 370 Ill. Brown paper, in 3 vols., $3.00; white, 1 vol., half leather $5.00, limp cloth $4.00; glossary separate at 50 cents.

For sale at the Presbyterian Mission Press.