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**TO**

**The China Medical Journal**

**Volume XXIX, 1915.**

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Graduates of the Nackett Medical College, Canton, 1914.

President. MARY H. FULTON, M.D.
TUBERCULIN IN TREATMENT.

CLAUDE M. LEE, M.D., Wusih.

It is with great diffidence that we undertake to write on the subject of tuberculin in treatment. Our use of the remedy has extended over about eight months, and the impression we have formed is that, in using tuberculin, we have gained a weapon of offence, whereas formerly we stood mostly on the defensive. Though still feeling our lack of experience in using tuberculin, we have found out that by carefully selecting our cases for its use we do no harm. Cases of tuberculosis which are far advanced are not suitable for this form of treatment and it is an injustice to the remedy to use it. The doctor who begins to use tuberculin should, if possible, select some of the forms of skin or glandular tuberculosis, where the reactions may be watched. By doing so, one learns the method of healing as far as it may be seen; learns not to dread a reaction; but, on the contrary, learns that reaction precedes the best efforts at healing.

The cases in which we have been most successful lately have all been treated with tuberculin. They comprise pulmonary tuberculosis, intestinal (one case), skin, and laryngeal. We shall give details of some of these cases later.

There are two methods of administering tuberculin. One, largely used in England, of giving the patient a definite amount of work to do, thus causing a certain focal reaction which stimulates healing. I shall refer to this method of treatment later. It is a method of using tuberculin, though the therapeutic agent is produced by the patient's own body. The reports from this method of treatment are about as good as those from tuberculin from outside sources; but to be successful it requires that the physician practically live with his patients.

The other method of using "the specific products of the tubercle bacillus," is the one of which we wish to speak.
Most of our information on the subject, when we were preparing to use tuberculin, came from Pottenger's recent book. He says, "Tuberculosis always heals by inflammation." and, "That there is a certain amount of focal stimulation necessary to cure. This focal stimulation is a very complex phenomenon. It is a specific inflammation—that is, an inflammation which is caused by the specific products of the tubercle bacillus administered either naturally by auto-inoculation or artificially; and inasmuch as tuberculin, when administered artificially, will produce this focal stimulation, it is of value in treatment."

In the natural method of curing tuberculosis by graduated exercises, small quantities of toxins are thrown out at regular intervals into the circulation. There is stimulation of the immunizing forces of the patient, the reaction being at times as marked as that produced by injections of tuberculin. Incidentally, I may mention here, that in order to intensify the action of a dose of tuberculin one has only to permit a patient to indulge in some unusual form of exercise, to stay up late at night, or to be subjected to any form of excitement and he reacts largely to a dose which under ordinary circumstances he would not feel, nor would he show any reaction on careful physical examination.

In Musser and Kelly's "Practical Treatment," page 415, Vol. II, the following is given: "Of all the suggested specifics, tuberculin and antitoxic serums appear to be the most promising possibilities, especially the former, tuberculin. Introduced many years ago by Koch, it at first produced disastrous results from the ignorance of its use, enormous doses being given, which practically poisoned the patients. Long experience, however, has taught us that it is not a specific in any true sense of the word, but employed in proper doses, and used in co-operation with the hygienic-dietetic treatment, it has aided the cure and made it more permanent. There exists a large amount of evidence extending over many years in favor of its therapeutic value." So much for authority, and this article by Otis, in Musser and Kelly, is authoritative. In the case of pulmonary tuberculosis reported below the specimen of sputum examined showed as many tubercle bacilli in each field as we have ever seen. To-day we can find none. Brown of Saranac says that the patients treated with tuberculin lose their bacilli in a greater percentage of cases than those not so treated, and that the tuberculin-treated show a smaller percentage of relapses. We are obliged to quote others as to the curative qualities of the remedy under consideration as our own experience is
too recent to warrant a single claim to cure. Yet in the series of cases of fairly early tuberculosis in which we have used tuberculin, we have only one case which is not apparently greatly benefited. In this case, treated as an out-patient, we have observed great improvement in the primary focus; but on discontinuing the injections for two weeks, for purposes of observation, we were able to find quite a large area lower in the lung which gave signs of infiltration. We have therefore reached the conclusion that our treatment has failed for want of rest. I have found no writer who does not think rest a most important part of the treatment, whether tuberculin is used or not. Tuberculin certainly will not take the place of standard measures of treatment; but it is an aid and a very powerful aid to cure.

With regard to the laboratory diagnosis of tuberculosis, we can heartily recommend the so-called "Autiformin" method of concentrating the sputum for examination. "Autiformin" is made as follows:—

"Take 908 grams of bleaching power and 3 liters of water, and to each 180 grams of the bleaching power add 65 grams of sodium carbonate. Mix thoroughly. Allow this to stand over night. Filter and test filtrate for chlorine (KI and hyposulphite). There should be about 5.4 per cent. of available chlorine. To this filtrate add 7.5 per cent. of sodium hydrate and filter. This last filtrate is the autiformin.

To simply concentrate for demonstrating tubercle bacilli, mix the sputum with that quantity of autiformin which trial shows is sufficient to liquify it. We may shake this mixture by hand or with a shaking machine hurry the fluidification. Ordinarily it takes only a few moments. When fluid, we may either dilute with water and centrifuge (getting rid of alkali which interferes with fixation of the sediment) or we may mix the fluid sputum with some oil such as ligroin or a mixture of petroleum ether and xylol (sp. gr. 0.72) and, having thoroughly shaken this last mixture, again centrifuge. In this case, we float the concentrated bacilli up and they are found in smears made from the layer between the two liquids. In this latter case, it may be necessary to use some albumin fixative with the concentrate, as fixation after the oil is rather difficult."

In our own use of this method, we have found that it is better to wash the sediment obtained by centrifuging several times in water. Otherwise the specimen is washed away in staining (lack of fixation).

In selecting cases of pulmonary tuberculosis for treatment, or in any form of the disease, it is well not to give it to those cases which

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*From Practical Bacteriology, Blood Work, and Animal Parasitology. Stitt.
show actual destruction of tissue, which has gone so far as to endanger the life of the patient. The reaction produced will most likely be fatal.

The essential nature of all tuberculins is the same. They vary chiefly in method of preparation and in the amount of extraneous material included from the culture medium on which the bacilli are grown. The active principle is the protein of the body of the tubercle bacillus, or its specific products. If any quantity of protein material from the culture medium is included in the tuberculin, there is at once introduced the question of how much a given reaction is due to the tuberculin proper and how much to the allergic reaction to the foreign protein. This, however, is a problem for the manufacturer and not for us, we have only to choose a reliable brand and stick to it. There is enough difference in composition to make a difference in behaviour, and we should stick to that kind which we have proved.

There are certain cases which do not improve with human tuberculin. These should be tried with bovine, and if there is still no improvement, the tuberculin should be stopped. It is stated that many of the tuberculous infections of man, especially those of the skin and glands, are of the bovine type, while as a rule, pulmonary and laryngeal lesions are of the human type. Koch considers "Infection from bovine sources as of very rare occurrence."

We have treated in all nearly twenty cases, not counting a few who have stayed too short a time for us to tell what effect the tuberculin would have. We have selected a few cases for report.

**Pulmonary Tuberculosis.**

Mrs. Zau Waung-z, twenty years of age. Married thirteen months, one child, born at 8½ months, large baby. Was not allowed to nurse mother on account of her condition.

*Family History.* Father died at 59. Chronic bronchitis. Had hemoptysis. Mother died at 57 of dysentery, was said by native doctors to have tuberculosis. Two brothers, alive.

*Personal History.* Three months before marriage was sick. Did not feel feverish. Did not lose weight. Had a good deal of gastralgia. Periods stopped two months before marriage. After marriage, became pregnant and lost weight steadily until baby was born. During pregnancy had cough, fever, no hemoptysis. Sweats came on about six months after marriage.

Examination of lungs on admission showed practical consolidation of upper lobe, of left lung. No cavity found. Sputum full of T. B. Went home in seven days.

Was re-admitted to hospital on August 17th, 1914. Condition of lungs about the same. Temp. 101.6° F. Weight 97½ lbs.

Examination of lungs, on discharge, December 5th, 1914, showed slight dullness upper lobe left lung. Note practically normal. Increased fremitus. A few rales. Temp. normal. Weight 114½ lbs.

*Pulmonary Tuberculosis.*

Waung Hyih-kong, twenty-two years of age, married, one child two months old. This patient is a pupil in the Provincial Normal School and we would emphasize that his surroundings have been much better than those that obtain in most Chinese homes.

*Family History.* Two brothers alive. One dead of tuberculosis. Father died at 36 years, of weakness, probably tuberculosis. Mother alive and well, fifty years old.

*Personal History.* First had an attack of hemoptysis one year ago. Small amount, did not feel badly at all and kept at work in school. Second attack in January 1914. Pure blood. "Two mouthfuls." About June had a mild attack of dysentery, was sick a week. Did not feel badly any more till about a week before admission to the hospital. Had cough, pain, in upper left sub-clavicular region, and sweats.

Admitted to hospital October 24th, 1914. Weight on admission, 102 lbs. Examination showed consolidation at apex left lung. Breath sounds and percussion suggest cavity just below clavicle. Sputum, negative. Did not use centrifuge. Tuberculin treatment in October.

December 5th. Examination, palpation, increased fremitus in front and behind to level of angle of scapula. Whispered sounds increased over same region. *Do not make out a cavity.*

Breath sounds not as clear as on right side. Many fine rales on inspiration, left side; none on right side. We include this case on account of the apparent disappearance of a small cavity in a little over five weeks. Weight to-day 108 lbs.

*Intestinal Tuberculosis.*

Nyien Vi-kiang, twenty-three years, married, one child alive and well.

*Family History.* Two brothers dead. One died of smallpox. One, cause not known. One brother and one sister living. Father living, 53 years old. Mother died in child-birth at 39 years of age.
Personal History. Had always been well till the autumn of 1913. Then began to have pain in abdomen. Also had fever, no sweats, no cough, no diarrhoea; but did not have good control of bowels, calls to stool were urgent. At this time pain was not very bad. Pain continued through autumn and winter till March, 1914. Then for three days had very acute, severe pain. First day, diarrhoea. Second day, vomiting. Third day, went to a Shanghai hospital. Was in hospital about a week before operation. Was operated on several times. Drainage.

Admitted to hospital June 25th, 1914. Weight on admission, 86 lbs. Temp. M. 99.4° F., E. 101.0° F. Very weak, scarcely able to walk. Unable to stand erect. Heart sounds clear, not irregular. Lungs, negative; sputum, negative. Abomen, rigid, both recti standing out. Five sinuses, leading down to tubercular foci. All but one of these had closed up before he left Shanghai, but had broken down afresh in his home. The sinuses were in the operative scars, and were all the way from the right lumbar region to the mid-line. The one in the mid-line discharged fecal matter. There was a very large, tender gland in right inguinal region, just above Poupart's ligament, and very deep.

This patient's weight has increased from 86 lbs. to 107 lbs. He is able to walk. All the sinuses are closed except one. The fecal fistula is closed. The enlarged gland can still be palpated; but is not tender. The most remarkable change is in the condition of the abdominal wall. There is a slight amount of rigidity in the region between the right ant. sup. spine of ilium and the last rib. This is also tender. This patient has been treated with tuberculin since August 15th. His first dose was 0.00001 mgm. His dose now is 0.33 mgm. His bowels give him no trouble now, though there was a tendency to diarrhoea on admission.

For about four weeks, we had under treatment a case of tubercular skin disease. In addition to the skin lesions, there was a large gland, adherent to the upper border of the thyroid cartilage. There were also laryngeal lesions. This patient was unable to speak above a whisper when admitted. The reactions to the tuberculin could be observed beautifully in this case. On discharge, all the ulcers on the skin were healed, the gland was small and freely moveable, the voice sounds were practically normal. This patient has since had a relapse; but I feel sure that, were we permitted to treat her, we could get a permanent cure.

To summarize: Tuberculin seems to hasten the progress towards cure of pulmonary, intestinal, laryngeal, and skin lesions.
In pulmonary tuberculosis, it causes the T. B. to disappear rapidly from the sputum.

It is without danger, if carefully used. It should be used in connection with proper diet and all the fresh air possible.

The chart appended shows our method of dosage, and the way it is recorded. The fluctuations of temperature shown are quite characteristic.
MOTOR TICS, WITH ILLUSTRATIVE CASE.

Andrew H. Woods, M.D., Neurological Department, Canton Hospital.

Motor tics are complex movements involving several or many muscles. They are such movements as one often makes with a definite purpose, for instance to relieve the pressure of an ill-fitting garment, to change the position of a cramped limb, or to free the lips or eye-lids when they feel dry or stick together (purposeful grimaces). They should be distinguished from tic douloureux which is a reflex convulsion of the face incited by neuralgia or neuritis of the fifth cranial nerves.

Muscular contractions presided over by single anterior-horn cells are simple. The axis-cylinder of one such cell extends into a muscle. When the cell discharges an impulse, the muscle contracts. Complex movements are, however, imposed upon the anterior-horn neurons by the higher cortical motor-cells. Running in the white and gray columns of the spinal cord are many association-fibres, connecting levels near at hand or widely separated, and always ready to form permanent connections between cells habitually used together. By this means anterior-horn neurons become connected with each other in such a way that an impulse from the presiding cortical cell will throw a complete mechanism into motion. Thus while a single spinal-cell has a single muscle under its control, a single cortical cell may have an entire co-ordinating group of spinal cells under its control. The spinal cell produces a contraction, the cortical cell produces a complex, purposeful act. If, therefore, the complex act is repeatedly performed upon the reception of a certain sensation, the cortical cell, long in the habit of issuing the order, finally issues it almost unconsciously upon the reception of the sensation. Once let the centripetal impulse get in, and off goes the whole series of co-ordinated muscular contractions. A broken tooth irritates your cheek, and your facial muscles draw the cheek away to relieve the pressure. Soon the facial retraction unconsciously follows to relieve the feeling of discomfort from the tooth.

Consideration of these facts offers an explanation of the difference between tics and choreic movements. These two are often confounded in diagnosis. In chorea the movements are irregular, non-descript, not co-ordinated in any purposeful sequence. Observing a choreic patient, you think of some irritant affecting a few or many cells or fibers at irregular points without any relationship with an existing mechanism, thus producing single contractions or unco-ordinated jerks. In motor tics the excitant comes in orthodox routes and affects the whole of a
Motor Tics, with Illustrative Case.

co-ordinated mechanism forcing it to go through its proper performance. The choreic irritant is a pin stuck into individual performers of the orchestra causing unmelodious jangling. The tic irritant sticks the leader and makes him call for a good air at an inappropriate time. The choreic twitches her face at you; the tic victim winks her eye, though with no ulterior design. Unfortunately the impulse may involve the centers presiding over the highest co-ordinated movements, such as phonation, producing anything from a grunt to a well articulated word—and perhaps the one word the patient would least desire to utter. It may be true that it affects even centers controlling emotions, thus producing such phenomena as the morbid fears and compulsions of the obsessed.

Of course, so long as the act is performed upon proper provocation and so as to produce the right result, it is normal. But when it continues to "go off" after the call for it has ceased, it becomes a tic. You have had your rough tooth fixed and no unpleasant sensation is being aroused by it, yet you continue every time you think of the tooth to draw back your cheek, and it gives you a feeling of satisfaction to do so. The psychic cells that used to get notice of the uncomfortable pressure keep on feeling the discomfort, and it keeps you restless until you draw back your cheek. Then you feel relieved. You have gotten a psychical equivalent of a process which used to be objectively real. You now have a motor tic.

Tics may be controlled by the will. The choreic twitches more vigorously when he thinks of his malady; at inopportune times he seems possessed to behave worst. The ticquer stops his movement long enough to decorously greet acquaintance, and on dress-parade he can cut out even several hours of the performance. Usually after having inhibited the movements for a time, he will fly into a debauch of indulgence as though tension had accumulated and had to be discharged. It reminds one of alcoholic or other habituation. The craving can be deferred, but the desire comes back with new force until an orgy is enjoyed. After that come disgust and new resolutions.

The following case, referred to me by Dr. Cadbury, is somewhat unusual as to the mechanism involved, but is a fair example of the disease in its general characteristics.

Present Illness: Chills and fever four months ago, continued for two months. Then present distressing muscular spasms set in. From a few to several hundred times a day, he has sudden, violent contractions of the abdominal wall and diaphragm.

Examination: Heart, lungs, and kidneys reported normal by Dr. Cadbury. Urine cloudy, no albumin or glucose; shows calcium oxalate crystals. Nervous system normal except as noted. Tendon jerks at elbow, knee, and ankle absent. Superficial reflexes present. Pupils and eye-movements normal. No anesthesia, pains, or ataxia. No hysterical stigmata. The convolution: As he lies, stands, or sits his expression suddenly becomes anxious, he breathes in short gasps, then bends head and neck forward, fixes his chest wall and contracts his abdominal muscles as in vomiting. The diaphragm contracts but gastric contents do not return. There are violent expiratory movements which end in grunts and final clicks as the glottis closes. These efforts sometimes cease after a series of ten or twelve; often they continue longer. Sometimes instead of clonic spasms a tonic contraction continues till the patient is exhausted. At such times he stands bent forward with chin thrust out, abdomen retracted and with the whole appearance that of a sea-sick man in an agony of retching. His abdominal muscles are markedly hypertrophied.

Patient thinks these convulsions prevent sleep. Yet he shows no signs of insufficient rest. Appetite and digestion are unimpaired. Gastrointestinal and respiratory functions get attended to in spite of the neighboring eruptions. There is no pain associated with the contractions.

Pathogenesis: For his malaria four months ago the patient was treated by a number of Chinese doctors of the old school who gave him "rigorous" treatment. He took all that each gave him. At the last, doses became nauseous and were given in bowlfuls. The last dose was particularly disgusting and large. After taking it, he felt a fullness in his stomach as if air had been imprisoned therein, and that organ began to struggle to expel its contents. He became violently alarmed and thought death impending. Then convulsive efforts set in of the description above set forth. These have continued ever since. In sleep and when his mind is diverted, they cease, but as soon as something suggests them to his mind, they at once set in. On waking at night he thinks of the trouble and the thought brings on contractions which keep him awake till he falls asleep from sheer exhaustion.

Treatment: Drugs are of no specific value. Hypnotism would be effective so long as the hypnotist was at hand, but would probably
weaken the patient's voluntary control, upon which permanent cure must depend. It is best to get such a sufferer away from friends, isolate him and give him simple, interesting work. He must have a thorough examination to establish the absence of tabes and other organic causes for the symptom. If after an impressive examination the doctor can convince the patient that life is not endangered, and that he can continue to live and work even though the spasms should continue, the fear, which is the worst element of the disease and at once the worst obstacle to its cure can be eliminated. Of course the original cause of the movements, if it persists, must be removed. Ill-fitting shoes and clothes, bad teeth, or whatever the irritant may have been, sometimes continue and cause the tic to involve a wider and wider area of the motor cord. An important resource is the "restraining gesture." The patient should be taught some appropriate movement which is so selected that it will prevent the usual muscular contractions. A movement of the mouth to the left cannot take place if the patient deliberately draws the mouth to the right the moment he feels the habitual left-sided movement beginning. Torticollis can be controlled by opposing pressure on the chin by a finger. After repeated interfering voluntary movements of this kind, even a gesture of the hand toward the chin will stop the tic. However managed, some method must be found that will inhibit the individual spasms. They must be fought individually: one prevented, then the next and the next, until a whole day has been kept free, then a second day, and so on patiently, perseveringly. The doctor's personality, his power to win the confidence of the patient, and his obvious desire to help the patient by effort of will to break the chain, are the determining factors. Tricks, boastful self-assurance, miraculous drugs, and hypnotism are inferior to simple earnestness and sensible, patient explanation and encouragement.
VESICAL CALCULUS.


Of the operations performed for this condition, I do not like the cutting for stone by the perineal route, as it is cutting in the dark; the crushing operation may be good in skilled hands, but we get too few cases to gain skill and confidence, therefore one feels driven to the suprapubic route.

My practice is as follows: The patient is kept in hospital a few days before operation on a mixture of urotropine and sodium bi-phosphate in gr. 10, and a saline diuretic mixture.

The skin is painted with 2 per cent. tr. iod. in 70 per cent. spirit before coming to the theatre, then immediately before the anaesthetic, then once before the skin incision. After operation the wound is painted before dressing, then on the second day, and finally after the stitches are removed on the tenth day.

Patient anaesthetised, bladder sounded, and washed out with warm boric lotion till it returns clear, usually about one pint. Distend bladder with boric lotion or air, preferably the latter, and tie a rubber ligature around the penis (this should be removed as soon as the finger locates the stone in bladder, otherwise the urethra may be damaged).

Median suprapubic incision, extending down to symphysis dividing linea alba and separating the pyramidalis muscle cut down to the tense bladder tumour. Using handle of knife and finger push up the peritoneum, a loop of thread is passed through the entire thickness of the muscle coat at about the middle of the presenting bladder and a little to one side of the middle line, this loop is inserted superiorly-inferiorly and is left in till the final suture is being passed to sew up the wound in the bladder. A similar suture is passed on the opposite side. The assistant holding one and the operator the other, a knife is plunged into the viscus and the hole covered by the finger which is inserted into the bladder and stone located. At this point if air has been used to distend no soiling of the operation area takes place. The wound can be enlarged if necessary but should not be enlarged too much downwards as then suturing is rendered more difficult. Stone removed by scoop without bruising edges of wound. Bleeding is trifling and can usually be controlled by the bladder suture.

The mucous membrane—whether alone or with a little of the sub-mucous coat matters not—is sutured with a continuous catgut suture, the muscular and cellular tissue coats in like manner, i.e., in all
two continuous sutures. On top of this we often put three Lembert sutures through muscular and cellular tissue coats only, thus burying the wound in bladder. Linea alba brought together by two catgut sutures, and skin closed. Kocher uses silk in suture of the bladder. One does not dare to presume to criticise such a surgeon but I would suggest that silk being very slowly absorbed would make a good focus for the deposit of "stony" material. He says "Catgut does not resist tension long enough, as the bladder fills and empties." I should say in reply to this statement that if a catheter is employed there is no tension on stitches, as the organ is not allowed to fill, and if a catheter is not used and the bladder get distended even silk will not prevent leakage.

A small drain of gauze is placed down to the bladder wall to provide drainage in case of leakage, this we usually leave in 48 hrs., but if all is dry and no oozing of blood or serum at the end of 24 hrs. it is then removed.

Immediate suture would naturally not be done if the urine be foul.

A rubber catheter is tied in all but children of 2 or 3 years in whom it is not necessary. Sometimes this causes irritation of urethra, in which case we may have to pass catheter once every 8 hrs. The catheter is removed daily, cleansed and replaced, being finally left out on the sixth or seventh day. A saline diuretic mixture is given. I do not care to give urotropine after operation as it sometimes causes bleeding from a cut mucous membrane.

Results: My first ten cases, those of a beginner in surgery, were all males, of ages 2, 4, 4, 5, 7, 10, 20, 25, 27, 36. Stones, uric acid, urates, and phosphates.

Eight cases healed by first intention, the wound being quite clean and healed by the tenth day. In one of these there was a slight leak on second and third days, but only trifling, caused by the catheter coming out at night (we have no night nurses on the men's wards), but this did not interfere with healing. Two cases broke down, and took over a mouth to heal. One was an early case in which the bladder was closed by interrupted and not continuous suture, and the man was fractious, tearing off all dressings and pulling out catheter during first 24 hrs. The second failure was a child of 10 in whom I did not use a catheter, as at the moment of needing I could not find one the right size. These two failures are thus due, I may fairly state, to preventable negligence on my part, and should not mar future results.
CASE OF EXTRA-UTERINE PREGNANCY.


Woman, age 42.

**Obstetric history:**

History of present illness as given by patient:

1913, March, no menstrual period.
April, pain left side abdomen with vaginal bleeding which soon ceased.
April to July in bed with abdominal pain.
August to October no pain, up and about.
November to December abdominal pain, child kicking about.

1914, January 4th-5th. Severe abdominal pain, labor pain which stopped on the 6th, but abdomen was sore for about three weeks. This pain was accompanied by vaginal bleeding which persisted irregularly till March 24th.
March 28th to April 4th abdominal pain, no vaginal bleeding.

On admission the abdomen was very prominent, looked like a transverse presentation with head in R.I.F., cervix very high up, and not dilated. We made the mistake of diagnosing a transverse presentation which would not come down, but the cervix was so high that one could not be sure of its condition. Made the second mistake of not believing the patient's history—she said she had been pregnant twelve months.

**Operation:** Started to do a Caesarean section, but found a full-term extra-uterine gestation, the child lying in the left side of abdomen with the uterus over in the R.I.F. Child removed from its bed with as much of the surrounding sac as could safely be taken away, then the margins of the sac were stitched to the abdominal opening and the cavity packed with two towels. The bowel was adherent all around the sac.

Patient ran a septic temperature from 97° to 103° F. for 37 days, after which the temperature remained normal and she made an uninterrupted recovery. Seen five months after operation the wound had quite healed, and her only discomfort was pain on menstruating.

The dates given by patient are manifestly wrong, but making allowance for this discrepancy one can read the progress of a left tubal gestation, rupture, quickening, spurious labour, and attempts at the resumption of menstruation. The abdominal pain which brought her to us may have been a slight attack of peritonitis as the sac was injected and a little angry looking.

Child weighed 7 pounds and was well formed.
A METHOD FOR CLOSURE OF ABDOMINAL INCISIONS.

A. I. LUDLOW, M.D., Severance Hospital, Seoul, Korea.

A number of methods have been advocated for the closure of abdominal incisions. All methods agree in certain points and while many of them are good under most conditions, very few prove satisfactory under all circumstances.

Each step of the following method has been used, no doubt, but so far as the writer is aware the whole combination is new.

It is given with the hope that it may prove as satisfactory to others as it has in his own experience.

The steps are as follows:

1st. The peritoneum is sutured with a continuous suture of plain catgut (No. 1).

2nd. Strong silkworm gut stay sutures are inserted through the skin, subcutaneous tissue, and muscle down to, but not including, the peritoneum. Usually three sutures are sufficient for the ordinary sized incision; one at either end and the other in the middle. These are left untied.

3rd. The muscle fascia is sutured with continuous chromic catgut (No. 2 or 3). This may be reinforced by two or three interrupted sutures of the same.

4th. The skin is closed with interrupted sutures of fine silkworm gut. The line of incision is painted with tr. benzoin co. and skin surface about with tr. iodine.

5th. A strip of gauze (a few layers) one inch in width and just a little longer than the incision is laid over the wound. This is held in place by the stay sutures of silkworm gut which are tied over it. Small amount of gauze and cotton dressings.

This method has the following advantages:

1. The wound (except for the stay sutures) contains only absorbable material and few knots.

2. It gives reinforcement against a possible rupture due to coughing or vomiting.

3. If infection should occur it permits the removal of some stitches without danger of opening the whole wound.

4. The gauze held in place by the stay sutures (a) prevents cutting of the skin by the stay sutures; (b) lessens the amount of dressings necessary for the protection of the wound; (c) protects the wound even though all the dressings should slip off.

This latter procedure may be used to advantage in almost every operation.
SURGERY OF THE SPLEEN, CASE REPORTS, COMMENTS ON SPLENECTOMY.

— Allen C. Hutcherson, M.D., Kashing.

Surgery of the spleen has within the last few years been expanding in its field application and usefulness and more and more interest is being manifested in this branch of surgery. It would seem to the writer that it would be well to add the following reports of cases coming within his experience during the past nine months to the literature of surgery of the spleen. They consist of one case of rupture of the spleen, two cases of abscess of the spleen, and two cases of splenectomy for splenomegaly. They will be described in order of appearance at the hospital.

Case I.—Male, age 30, farmer, admitted to Kashing Hospital on April 10th, 1914. Patient originally had some enlargement of the spleen, but nine weeks ago a mud wall fell on his back forcing his left knee up against his abdomen and chest, very forcibly. Six hours later, he felt some nausea and desire to move his bowels, but kept at his work for three or four more days until compelled to stop on account of pain in upper abdomen. He was not even then confined to his bed. A tumour gradually became perceptible in the splenic region and has grown steadily ever since, until the patient is now in great agony from feeling of extreme distention of abdomen.

Examination reveals a large mass in splenic area extending down to umbilicus, mass does not shift on turning from side to side, temperature normal, no malaria parasites found, hook worm ova present in stools. Diagnosis, from history and examination, rupture of the spleen.

Operation, April 11th, left rectus incision. Parietal peritoneum adherent to tumour. Incision into tumour with removal of twenty pounds of reddish serum and old blood clots. Surface of spleen rough and lacerated in places and manipulation caused fresh oozing. Spleen much enlarged. Unable to find any bleeding point which might have been the cause of original hemorrhage and, deeming it unwise to attempt removal of the spleen on account of adhesions and large size, the cavity was packed with gauze. Patient's temperature rose to 105 on night of operation but gradually fell to normal and the profuse drainage of blood-stained fluid of the first few days gradually diminished and then ceased altogether. Patient made a good recovery and was discharged well, five weeks after operation. This is probably to be classed as a cystic hematoma following rupture of spleen. It is impossible to say
whether the increasing distention was due to cystic secretion or to continued oozing from splenic surface but it was probably the former.

CASE II.—Male, age 25, farmer, admitted to Kashing Hospital on April 27th, 1914. Patient had dysentery at age of six but has been well and strong ever since. Has noticed that spleen was enlarged for the last three or four years but has had no fever until present illness. Present illness began ten weeks ago with slight fever and very slight cough, but he was able to get around and to eat his food. After a few days, he noticed a slight feeling of distention in region of spleen but not severe or painful. Four and a half weeks ago, he began to have pain and swelling in splenic area which finally forced him to go to bed, where he has remained ever since. Pain, swelling, and fever have increased steadily in severity up to present time. Great deal of sweating. On day before arrival at hospital, he began to have cough with the expectoration of slight amount of brownish looking sputum.

On examination, patient seen to be very ill, pale, anemic, but not particularly emaciated in appearance. Large, tense, fluctuating mass in left upper quadrant of abdomen extending down to umbilicus. Not very painful on pressure. Flatness extending as far back as midline and as high as eighth rib in posterior axillary line. Heart apex beat in fourth space, just inside nipple line. Heart and lungs otherwise normal. Patient expectorating a slightly tinged mucus, but small in amount. Aspiration in two places in ninth space near the angle of scapula failed to find pus. Temp. on admission 100 °F. Diagnosis, probable abscess of spleen.

Operation, April 28th, 1914, left rectus incision over prominent part of tumour. About a quart of pus with a corpse-like odor with large pieces of necrotic splenic tissue removed. Rubber tube and gauze drainage. Patient did nicely for three weeks, discharge lessened considerably and he felt very well, but then he began to run a temperature again, and tenderness showed that drainage was either insufficient or that there was involvement of another part of spleen. He refused a second operation and went home. Subsequent history unknown.

Etiology of the splenomegaly in this case is obscure. Patient had both hook worm and round worm eggs in stool but blood was negative for malaria. The cause of the abscess is equally obscure.

CASE III.—Woman, age 34, admitted to Kashing Hospital on July 1st, 1914. History of fever for several weeks with gradual development of tender mass in splenic area.
Examination. Patient brought into hospital in very ill condition, with high temperature and rapid, weak pulse. A large tender mass in splenic region extending almost to umbilicus. Another mass in pelvis which in hurried examination was diagnosed as secondary pelvic abscess. Diagnosis, splenic abscess.

Operation, July 2nd, left rectus incision. Large splenic abscess opened and drained. Through another incision below umbilicus in midline, a Cæsarean section was performed and a four and a half months fetus was extracted from the uterus.

The patient's progress after the operation was uneventful. The wound of Cæsarean section healed by primary union and the splenic abscess wound gradually cleaned up and patient was discharged on August 29th, well and happy.

Text books state that splenic abscesses are usually secondary to some other focus in the body but in neither of these cases could history be found pointing to any other part of body as the primary focus unless in the first case the history of cough and fever could be taken as evidence of pneumonia or empyema.

Case IV.—Male, age 37, field laborer. Patient admitted to Kashing Hospital on November 26th, 1914. Patient came into hospital requesting the removal of his enlarged spleen. Spleen began to enlarge seven years ago. He suffered from exacerbations of pain and feeling of fullness in splenic region, with fever for a few days during the attack only. These exacerbations always occur in the latter half of the year, coincident with work in the fields and improve during the winter and early spring. Except for moderate anemia and protuberance of abdomen in upper left quadrant, patient seems fairly well and strong. Spleen extends four inches below lower border of ribs. Liver not enlarged. Heart and lungs normal. No ascites or œdema of extremities. Examination of blood negative for malaria or kala-azar, both before operation and by examination of splenic blood and splenic pulp after operation. Hook worm ova in stools. No evidences of schistosomiasis in history or examination. Temperature on admission 100°, rose to 103° in evening. Quinine administered but temperature remained around 101° in the evening for five days and was 101° on the morning of operation. Patient said he did not regard himself as having fever during these days, and insisted that when he really had attacks he was incapacitated for work and therefore must have his spleen removed.

Operation December 1st, left rectus incision with extension of the cut to left along lower border of ribs. Quite a number of adhesions
present and hemorrhage rather profuse during the actual removal of
the organ. Pedicle ligated, blood sponged out, wound sewed up
tightly in layers, small gauze drain down to, but not within, the
peritoneal cavity. Patient suffered from distention of abdomen for two
days but this was relieved by repeated enemata. Some infection and
discharge from the muscular and skin layers, but no separation of
the wound at all and the resulting wound is apparently firm and strong.

Weight of spleen four pounds, four ounces. Patient says he feels
better already and was up and about on nineteenth day. Discharged
from hospital December 24th. The twenty-fifth day is too early to
make any statements as to his permanent benefit from the operation
but we hope to be able to report on his future history.

CASE V.—Male, age 39, farmer, admitted to hospital November
30th, 1914. History of attacks of fulness in region of spleen with
slight fever and gradual enlargement of the spleen for the last three or
four years. No history of dysentery or other illness. Examination
shows a well nourished man, apparently well and strong. Heart and
lungs normal, abdominal palpation reveals an enlarged spleen reaching
three inches below free border of ribs. No evidence of ascites or
œdema of extremities. Liver not felt below free border of ribs. Blood
examination negative for malaria or other parasites. Kala-azar not
found in examination of splenic tissue and blood after splenectomy.
Stools negative for hookworm ova, temperature normal. Patient insists
that his spleen is the cause of his trouble and that he must have it
taken out.

Operation, December 5th, left rectus incision with very short
extension to the left along border of ribs. Spleen dark purple color,
soft and friable, tore easily on manipulation. Hemorrhage pretty free
during removal but apparently controlled after spleen was removed.
Weight of spleen three pounds. Wound sponged out and abdomen
sutured. Two small drains inserted down to peritoneal surface.
Patient left table in condition of shock but later seemed to react some­what. He died, however, thirty-six hours after operation from what
the writer thought to be shock and distention of the intestines from
paretic intestinal obstruction. Post mortem showed that death was due
to hemorrhage. Whether the hemorrhage was secondary or from con­tinuous leakage from vessels in the adhesions, uncontrolled at the time
of the operation, the writer is unable to say. There had apparently
been no leakage from the large vessels of the pedicle. The pancreas
had not been wounded in the ligation of the pedicle of the spleen.
In commenting on these last two cases of splenectomy, the writer would like to say that he thinks there is a large field for the employment of splenectomy in China. The etiology of the splenomegalies with or without fever and with or without ascites is certainly most obscure at the present time and the indications for treatment by splenectomy are also still indefinite, but it is being demonstrated yearly that splenectomy is a valuable resource in Banti's disease and in splenomegalies secondary to syphilis. Lately there has been report of a case diagnosed Henoch's purpura with anemia and enlarged spleen markedly benefited by splenectomy, also a report by Wynter and Bland-Sutton of a case of hemolytic jaundice cured by splenectomy. In these cases which some one calls "chronic acholuric jaundice with anemia and splenomegaly," it is thought by some that the spleen is the primary cause of the diseased condition. It is beginning to be felt that the spleen may be the cause directly of many of these obscure anemias of the secondary type and certainly we have many of these in China.

In a discussion of this question in an editorial in the *Therapeutic Gazette* of September 1914, the editor says, "To the surgeon then, a progressive enlargement of the spleen, associated with asthenia and progressive anemia, when no definite cause can be assigned for this condition and when medical and hygienic treatment are unavailing, suggests operation, and it is satisfactory to observe that this suggestion is being taken with increased willingness by the general practitioner, as shown by the records of cases which appear in the Proceedings of the Royal Society of the Medicine, Volume vii, November 5th, 1914." Certainly all the splenomegalies with anemia which we meet in our work in China cannot be explained by kala-azar, malaria, hook worm, schistosomiasis, or syphilis and certainly not by Banti's disease. It would look as though there is some other form as yet unclassified and the condition of anemia and asthenia associated with these splenomegalies may be found in the near future to yield to splenectomy and to that only.
GASTRIC CARCINOMA.—A CASE REPORT.

ALFRED C. REED, M.D., Yale Hospital, Changsha.

The patient, a married Chinese woman of 33 years, was admitted to the medical service of the Yale Hospital on October 15th, 1914, and discharged unimproved on November 26th, 1914. Until a year previous to admission she had used opium. No significant family history was obtained. Menstruation began at 13 years of age. She was married at 17, and gave birth to six full-term living children. Five died, however, in the first few months from funiculitis. The sixth is living and well. Venereal history was denied and there was no evidence of venereal infection. Menses were commonly irregular and the patient was subject to profuse leucorrhea.

The patient first became aware of the illness for which she sought hospital relief, some five or six weeks before admission. At the time, she began to suffer with nausea after eating, often attended with vomiting. There was irregular and frequently recurring pain in the epigastrium, accompanied and succeeded by a sense of extreme fullness. Anorexia became quite marked and the patient was constipated. She believed a tumor was growing in the epigastrium.

Physical examination showed a woman rather above the medium height, who looked nearer 45 than 33. The complexion was sallow, slightly icteric, and the aspect was anxious. General nutrition and sub-cutaneous fat were fair. There was no emaciation but a well-marked cachexia. The pallor of the mucus membranes, the lack of emaciation, and the lemon-yellow tinge of the skin combined to give an appearance suggestive of progressive pernicious anemia. The teeth were in fair preservation, the tongue was heavily furred, no "Hunter’s tongue" and the fauces and pharynx were moderately congested. No suppurative foci were noted about the teeth, tonsils or nose. The eyes were normal.

The heart and lungs were normal. In the abdomen no masses were found nor were the spleen or liver enlarged. There was tenderness and dull pain in the epigastrium, radiating at times to the left shoulder and again to the umbilicus, and marked increase of muscular resistance. The legs were somewhat edematous over the shins. Reflexes were normal. The lymphatic glands were enlarged in both axillae, and in the left supra-clavicular space.
The temperature was normal with an occasional irregular rise to from 37.2 degrees to 38 degrees. The pulse ranged between 80 and 100, maintaining a higher level during attacks of pain. The respiration followed the pulse, lying between 22 and 28.

Clinical laboratory examinations gave the following results. Urine, at first contained a moderate degree of albumen with epithelial casts. Later an average report was as follows:—Amber, 1075, acid, no albumen or sugar, diazo and bile reactions negative, microscopic examination negative. Stool, normal. Few food remnants. No macroscopic, occult, or microscopic blood, and no parasites. Gastric contents, test meal at 9 a.m. consisted of one slice of bread and 300 c.c. of water. On passing the stomach tube at 10 a.m., the patient vomited 70 c.c. of clear green fluid. Through the tube was obtained 90 c.c. of whitish fluid containing a large amount of undigested bread. The total acidity was .008%. Hydrochloric acid was present in traces. Bile was abundant. There were no other findings.

Blood, average report. Red blood cells 3,300,000. Hemoglobin 50% Talquist. Color index .75. Red cells in stained smear were very pale and showed stippling and irregular staining, poikilocytosis, normoblasts, macro- and microcytes. White blood cells 7,000. Polymorphonuclears 48%, large lymphocytes 20%, small lymphocytes 10%, mono- and transitional 12%, basophiles 10%, eosinophiles none. No malarial or other parasites were found. The coagulation time was increased. A count of neutrophilic white cells was made according to the Arneth formula with the following average result as compared with the normal formula.

<table>
<thead>
<tr>
<th>Class 1</th>
<th>Class 2</th>
<th>Class 3</th>
<th>Class 4</th>
<th>Class 5</th>
<th>Arneth index</th>
</tr>
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<tbody>
<tr>
<td>Normal</td>
<td>... 5</td>
<td>35</td>
<td>.41</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>This case</td>
<td>35</td>
<td>22</td>
<td>.29</td>
<td>11</td>
<td>3</td>
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In the terms of the formula this is interpreted as a shift to the left. The formula will be discussed later.

Treatment was directed first toward relieving the renal irritation. To this end the patient was put on a diet of soft rice and milk in small feedings each three hours. A normal saline enema was given morning and night. Compound cathartic pills were given in sufficient number to secure free purgation, and thrice daily an alkaline mixture containing sodium citrate, sodium bicarbonate, and potassium acetate. When the edema was relieved and the urine normal, the regime was modified to the following: Soft rice and milk at three-hour intervals and in restricted amount.
Gastric Carcinoma.—A Case Report.

formed the diet, with the addition at each feeding of 5 c.c. of olive oil. Morning and night a nutrient enema was given consisting of the whites of two eggs and 10 c.c. of brandy in 50 c.c. of rice water. Epsom salts each morning kept the bowels open. At four-hour intervals, belladonna and camphorated tincture of opium were administered. Belladonna by virtue of its atropine content has a salutary influence on conditions where depression of gastric secretion and relief of intestinal spasm is desired. The pain was quickly relieved and the formula was later modified by the addition of cascara and the substitution of the plain tincture of opium. After three weeks, the opium prescription was stopped and thrice daily a mixture was used consisting of bismuth subnitrate and magnesiam oxide.

The clinical diagnosis was made of carcinoma of the lesser curvature of the stomach with probable involvement of the left lobe of the liver, and accompanied by a secondary anemia simulating pernicious progressive anemia. An operation was advised to include radical excision if found practicable, or a gastro-enterostomy. Immediate consent was not obtained to operate. The patient received much improvement temporarily from her hospital residence and left promising to return for operation when her symptoms recurred.

This case presented many puzzling features and the more striking of these merit a brief consideration. By exclusion and by limitation of the clinical picture to the major signs and symptoms, the diagnosis seemed to lie between a malignant tumor and pernicious anemia. Suggestive of malignancy were the local signs, the pain, the evidence of gastric dilatation and decreased motility, the moderate leucocytosis and low color index, the history and the adenopathy. Suggestive of pernicious anemia were the peculiar cachexia, the blood picture in part, the gastric findings indicative of achylia. The low color index is strongly against pernicious anemia and the other red cell findings are possible in a severe secondary anemia. It is fairly certain that there had been no coffee-ground vomiting, and no blood was vomited during her hospital residence. Again, no blood was found in the stool on repeated physical and chemical examination. This could be accounted on the supposition of a gastric lesion which had not yet ulcerated. It would also allow for the absence of distinctive carcinomatous findings in the gastric contents while still explaining the decreased acidity and motility. The location of the pain,
its radiation at times to the left shoulder, the slight icterus and the absence of right hepatic enlargement, would tend to incriminate the left lobe of the liver. Considering the relative locations of gastric involvement, together with such a hepatic lesion as is here indicated, the lesser curvature presents the most probable site. The age of 33, too, is well within the age of possibility.

In final decision against pernicious anemia the results obtained by applying the Arneth formula were of particular value. Briggs (Amer. Jour. Med. Sci., September 1914, 41) discusses this formula in its diagnostic significance for pernicious anemia. The absolute significance of the Arneth formula is not the point at issue but the question only—empirical, it is true—as to how the case here presented compares with other cases according to this standard. By the Arneth formula (Jena, 1904, Arneth), the neutrophiles are divided into five classes according to the number of separate lobes of their nuclei. Arneth gave the normal average as 5% in the first class, 35% in the second, 41% in the third, 17% in the fourth, and 2% in the fifth. The nuclear count is made on a series of 200 neutrophiles. Briggs used an index consisting of the sum of the first two and a half of the third classes. The original Arneth index was 40, the sum of the first two classes.*

Briggs reports 12 cases of progressive pernicious anemia, in 10 of which there was a decided increase of the normal number of lobes in the neutrophilic nuclei. In the terms of the Arneth formula this constitutes a shift to the right. Briggs controlled his results by eight cases of equally severe secondary anemia, not in the idiopathic pernicious category. Of these eight controls, seven showed either a normal count or a shift to the left. He goes on to say that a shift to the left has been found regularly in most infections and in many other pathological conditions.

The decided shift to the left, in the case here reported, was taken as strong evidence against pernicious anemia and consequently as strengthening the diagnosis of malignancy. Various minor points of interest have been mentioned but not discussed as their bearing and interpretation are self-evident.

**Foot-note:**—For discussion of the Arneth formula and its application see the following:


*He counts as single all nuclei connected by more than the finest thread. Nuclei evidently superimposed are counted separately. In any case of doubt, the cell is not classified.


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**Customs Surgeon's Report.**

**REPORT ON THE HEALTH OF TAINAN, FORMOSA, FOR 1913.**

J. L. MAXWELL, M.D.

The following report deals mainly with the in-patients treated in the Tainan Hospital of the English Presbyterian Mission. During 1913 these numbered 2,884, and the report concerns the experiences gained amongst them.

**Surgical Work.**—Our operation cases numbered 2,277, but, of course, the bulk of these are either eye cases or minor operations. Cases requiring anaesthetics numbered 792, and it must be remembered that a good deal of work requiring general anaesthesia at home is done without such here. The people stand pain better, and, I believe, actually feel it less.

For general anaesthesia we seldom use anything but chloroform. Chloroform of late years has been getting a bad reputation at home, and we feel serious doubts as to whether the subject is being fairly dealt with. In the two hospitals of our Mission in Formosa we have had some 10,000 chloroform administrations in the last twelve years. Among these there have been five deaths from the anaesthetic. All were deaths on the table and in cases where the respiration was very seriously impeded —cases in which anaesthesia was a risk whatever the actual anaesthetic used. We have never seen a case of delayed chloroform poisoning. I would appeal to the list of operations at the end of this report as being fairly typical of our work, and showing a reasonable proportion of long major operations. [List of operations is omitted.] I believe I am right in saying that the bad reputation of chloroform is comparatively recent
and rapidly growing. One has no right to say that present observers are more acute than those of the preceding generation, and the natural corollary is that delayed chloroform poisoning is much more frequent than formerly. On the other hand, the skill of anaesthetists at home is growing with time, whereas chloroform in our hospitals is given by untrained Chinese assistants. Is not a preliminary case made out for examining the subject not from the point of view of the action of chloroform, which must have been the same years ago as to-day, and at home as out here, but from the point of view of the other factors associated with the use of anaesthetics, which undoubtedly vary both as to time and place? I mean such matters as diet before and after administration, presence or absence of food in the alimentary canal, etc.

Only one operation on the upper part of the body calls for special comment. A man came in with an irremovable malignant tumour of the right parotid gland. He was suffering from very severe neuralgic pains and was very keen that something should be done. We attempted to do a simultaneous ligature of the external carotid arteries on both sides, to soften and reduce the growth and to relieve the pain. This is the second time I have attempted this operation, and in each case I have failed to tie the external carotid on the side of the growth, owing to involvement in the growth itself. In each case I have thus been compelled to tie the common carotid on the side of the growth, which, besides causing certain dangers, is not likely to be so satisfactory in cutting off the blood supply. In neither patient has there been any symptoms of brain anaemia, and in each the growth has softened and discharged much pus and the pain has been relieved. The operation has a certain very limited area of usefulness.

Another case of very great interest was a young woman who came with symmetrical growths in the pharynx. At first they looked, except for colour, like enlarged tonsils, but on more careful examination they appeared to grow out on both sides behind the tonsils; they were strawberry red, and seemed very finely lobulated. The glands in the neck rapidly enlarged, and one was removed under cocaine. Section proved the growth to be an endothelioma. Bone pains and tenderness of the ribs and long bones was much complained of.

Abdominal operations are the most interesting of our cases, and we get them fairly varied.

With the advent of Dr. Gushue-Taylor, we have indulged rather more largely in gastro-enterostomy operations for dilated stomach. Dilated stomach is common here, and many of the cases remain unrelieved, or at most but temporarily relieved, by medical treatment. A number of such
seem to have been cured by gastro-enterostomy, but we should like more
time to elapse before speaking confidently of these. One thing it has
taught me, viz., that cancer of the pylorus, though comparatively rare,
is less so than I had allowed. Why some of these cases seem to present
none of the book symptoms is a little difficult to say. I put it down
to the fact—and this has to be remembered out here in dealing with all
surgical bowel complaints—that the Chinese, when he gets one of these
diseases, starves. Not relatively but absolutely, food perhaps not
passing his lips for days, and at no time does he take liquid in any
quantity. Diseases attended with vomiting at home are consequently
masked out here, and pain is, for the same reason, often much less.

We referred to the relative frequency of chronic irreducible intus-
susception in those above the years of infancy in our last report. We
have had four more patients this year all successfully treated by lateral
anastomosis, excluding the intussuscepted portion. Most of these cases
arise from tuberculous disease of the cæcum, and we have wondered
sometimes if it was right to leave the diseased part behind for the sake
of a much less dangerous operation. We had a full and instructive
answer to this in one young man this year. One of the earlier cases I
operated on some eight years ago was a boy of 11 years. Since then
he has become a student at the government college. This summer he
came to do some vacation work in our hospital, and to enjoy the clinical
experience, so much fuller than the students get in the hospital
attached to their school. I was thus able to examine him thoroughly,
and see him in his daily work, and can vouch that the operation has
been in every way successful. Nothing abnormal can be felt in the
abdomen, and he works and eats like an ordinary man.

Accidents leading to abdominal injuries are few here, and these are
mainly due to goring by the water buffalo, an animal with large curved
horns growing horizontally from the head. The victim is knocked
down by the flat of the buffalo's head, and then, twisting his neck,
the animal gores him while lying on the ground. Three perforating
wounds of the abdomen from this cause were admitted to the hospital.
In two the wounds were comparatively small, one damaging the gut, the
other not. Both of these did excellently, but after prolonged suppuration
in the wound. The third was a ghastly case. The horn had entered the
middle of the outer side of the right chest, torn through the lung and
diaphragm, and out through the liver. The man had nearly bled to
death before arrival. The bleeding, mainly from the liver, was con-
trolled by deep sutures and plugging, but the patient died of shock a
few hours later.
A case of recurrent spindle-celled sarcoma of the abdominal wall was of interest. The woman had been operated on three years before and the disease had recurred. At the original operation the closing of the abdominal wound had been somewhat of a problem, but now it was evidently impossible to get any covering except a much stretched peritoneum and still more stretched skin. The difficulty was met by laying a large silver filagree of local manufacture on the peritoneum after suture, and drawing the skin together over this. A week's anxiety was caused by the necrosing of a small portion of overstretched skin, but happily the wound remained aseptic and the result was an excellently firm abdominal wall.

Supra-pubic lithotomy has taken on a new meaning for us with the advent of successful primary suture. Dr. Gushue-Taylor has given much attention to this, and by a double layer of continuous catgut sutures, the first approximating the cut edges, and the second, a Lembert suture, turning them in, has attained most satisfactory results. Seven cases were operated on and all healed without any leakage whatever. For safety's sake a gauze drain is inserted at the bottom of the wound, but happily this has so far proved an unnecessary precaution. The writer must confess still to a lingering love for lateral perineal lithotomy, a trivial operation in suitable cases, and by far the speediest surgical operation of any importance that we do.

Venereal disease is rampant, and the end of the penis, especially in cases of pre-existing phimosis, often so destroyed as to necessitate partial amputation of that organ.

The subject of syphilis needs more extensive handling than we can give in the pages of a short report. This especially so in the light of the discussion some months ago by members of the Royal Society of Medicine. It would be well if the president of that august body had learned more about syphilis among the Chinese before committing himself to an agreement with statements quoted at that discussion. We read that syphilis is a mild disease out here. I venture to maintain that a month's experience of work among the Chinese would convince anyone of the incorrectness of such an opinion. On the contrary, as we meet it here, syphilis is a commoner and much more severe disease than is now ordinarily met with in England. Phagedenic cases are relatively frequent; bone syphilis is very often met; the most horrible disfigurements of the face are not rare; our wards are seldom without a case of visceral syphilis; and cases of transverse myelitis are often brought to us. On the other hand, perhaps because of this, parasyphilis is quite a rare disease, though a few cases are seen from time to time.
The native treatment of syphilis is with mercury, and this leads to the interesting practical observation that mercury in excessive doses seems to give little relief in this disease. We are never a year without cases of ptyalism from excessive mercury ingestion or from vaporisation by mercury. I have seen some extremely septic mouths as a result, and in one instance have lost a patient from haemorrhage from the sloughing floor of the mouth. Yet in some of these cases I have seen a secondary eruption develop in these patients while under treatment for ptyalism induced by native mercurial pills.

One more reference to syphilis. The amount of acquired syphilis in children is simply appalling. I have in one day seen five children, a family of three and another of two, all suffering from acquired syphilis. The use of a single towel for the household, common chop-sticks and eating bowls, and the sleeping in one bed of diseased and healthy alike is enough to account for this. And again, the frequency with which syphilis is acquired by the men during the puerperium of their wives is a terrible comment on heathenism as we see it here. The husband soon communicates the disease to his wife when she is once about again, and thence to the sucking child, and, owing to the habit of indiscriminate sucking, to other infants as well.

The frequency of acquired syphilis in children is one reason why we welcome so much the addition of salvarsan to our anti-syphilitic remedies. It is not, of course, the complete cure that was at one time hoped for, but it does destroy the infective germs at the time when they are most likely to convey the infection to others. We therefore urge its use on all cases of secondary syphilis. In the past year we have treated seventy-one cases with salvarsan, all by muscular injection. Neo-salvarsan is a great improvement on the older drug for intra-muscular use. The pain of injection is less and the absorption much more rapid. We have had no trouble or anxiety with the use of the drug this year. Nor in nearly 200 cases of intra-muscular injection have we ever seen any septic infection. On the other hand, its careless use by native doctors here has brought us several cases of very severe sloughing of the tissues. Left alone these continue to discharge for very many months. Treatment by laying open the wound and scraping out all the necrosed tissues leads to speedy healing.

Medical Cases.—We referred in our last report to emetine hydrochloride and its use in dysentery. Another year's experience only serves to confirm its enormous value, and the very strict limitation to its usefulness. In its striking effect the only drug we can compare it to is quinine in ague. Take the following case as an example:
A girl, aged 18, was brought to hospital with a history of two weeks' dysentery. She was constantly passing small stools of mucus and blood with much pain and straining, her eyes were sunken, cheeks fallen in, and she appeared almost at death's door. The next day she received a hypodermic injection of ½ grain of emetine hydrochloride; that day she passed eight stools, the next day with another ¼ grain she passed four stools, the following day with a third injection she passed one stool, well formed and without blood or mucus. On admission she was put on milk only, but was now allowed soft rice twice a day. On the fourth day she received another injection; the bowels were not opened that day. Emetine was now dropped and the patient was allowed to go on full diet. No relapse occurred, but as a precautionary measure she received a fifth injection. She left the hospital on the ninth day perfectly cured.

It is unfortunately quite clear that the drug is useless in bacillary dysentery, and most unfortunately this is far the commonest type here.

It is not often that the physicians can steal cases from the surgeons; the reverse, indeed, has long been the case. Emetine, however, bids fair to oust the surgeon in great part from the treatment of tropical abscess of the liver. We recently treated the following case in hospital:—

A man, aged 43, was brought up by a Chinese doctor to me for abscess of the liver. The diagnosis was undoubted, the abscess pointing—though the skin was not yet reddened—below the right ribs in front. I said that before operating we would try the effect of emetine. He was taken into hospital, and received two injections a day of ¼ grain emetine hydrochloride. The temperature rapidly fell to normal and remained so. The patient felt better, the lump became smaller and much harder, and ceased to be painful even on firm palpation. After ten days the injections were reduced to one a day. Finally the patient was discharged after twenty-one days in hospital, apparently well. He is to come up for periodic inspection.

There seems to be a general idea at home that hysteria is a disease of advanced civilisation and Western "hustling" lands, and that Chinese, with what we call their absence of "nerves," should also be free from hysteria. This impression, if such there be, is quite a mistaken one. Hysteria is quite common, especially among women, except the very poorest. Women are to a very great extent confined to their houses, and are often quite ignorant of the world a hundred yards away. The manifestations of the disease are very much the same as at home, and quite as severe. We admitted this year a girl with spasm of the jaw. The mouth was so tightly closed as
to prevent the proper administration of nourishment. Only liquid foods were taken and these with difficulty. The only history we could get was that the condition came on quite suddenly about a month before admission. On examination no evident cause could be found, so the girl was placed under an anaesthetic, when the jaw opened with perfect ease, and showed a quite healthy condition of mouth. A large metal gag, opened somewhat, was left in, and as the effect of the anaesthetic passed off the spasm recurred and the jaw closed tightly on the gag. For two days the patient walked about with her mouth in this extraordinary position, then the spasm gradually relaxed, the gag came out, and in a few days the girl could open her mouth perfectly normally. Such extreme examples are uncommon, but the disease in milder forms is met with constantly.

**ITEMS OF INTEREST.**

Dr. P. B. Cousland, editor and secretary of the Publication Committee, returned to the East in November and will be present at the Conference in February.

It is gratifying to learn authoritatively that the restriction temporarily imposed by the British Government upon the exportation of emetine from England has been removed and that supplies are being sent to Shanghai as usual.

Dr. Victor G. Heiser, surgeon in the United States Public Health Service and Health Commissioner of the Philippine Islands, has returned to Manila after several months spent in the United States.

Forty-five thousand injections of antityphoid vaccin were required for the Canadian troops in camp at Valcartier. Out of this number, no cases of severe reaction nor infected arms were reported.

Pamphlets have been distributed among the Australian expeditionary force, giving simple rules for preserving the health while on field duty. Personal cleanliness, camp hygiene, the necessity for drinking only boiled water, means of preventing infectious diseases, and other similar topics are taken up. While it is not thought that this will entirely prevent outbreaks of diseases common to armies, it is believed that some benefit will be derived by the men.

An epidemic of cholera is reported from Manila, the first in twelve years. There were at the time of the report said to be one hundred cases with fifteen deaths, all among natives.
The following letter of appreciation from the Governor-General of Kwantung on the occasion of the Graduating Exercises of the Hackett Medical College is evidently more than a formal acknowledgement of an invitation and is worthy of record.

His Excellency, Tung Chih-kuang, Governor-General of Kwangtung, to Mr. Cheshire, American Consul-General, Canton, China.

CANTON, June 25th, 1914.

SIR:

Upon the receipt of your favor announcing that the closing ceremony of the Hackett Medical College would take place on the 15th instant and requesting me to be present on this occasion, I duly deputed a representative to be present to convey congratulations.

On the return of the said representative he informed me of the high attainment of the lady graduates on this occasion, which would indicate that the American system of teaching is a very good one and is highly appreciated.

This is a special reply,

With compliments,

(His Excellency's Card enclosed. Stamped.)

The Swiss government has declared a quarantine against Russia, Servia, Austria, and Galicia, on account of cholera.

Since commencing its work in Arkansas four years ago, the Rockefeller Hookworm Commission, with Dr. Charles W. Garrison as state director, has made 49,961 examinations at a cost of $60,000, and has found 10,000 cases of infection.

Health Notes, September, 1914: There is given herein a little story entitled "The Young Mother and the Fat Hog." A young woman of twenty-five, mother of three little girls, after a period of ill-health, became aware that she was suffering from tuberculosis. Being poor, she wrote the Board of Health, setting forth her condition and her desire to recover before the disease had progressed too far. They replied that they were powerless to aid her, but would care for her children in an orphan asylum after her death. So the little mother died and the children were taken to the orphan asylum.

A farmer one morning found one of his big, fat hogs suffering from cholera. A telegram to the Secretary of Agriculture brought a quick reply, and within a short time a government expert arrived at the farm equipped with the necessary material for treatment. The hog, of course, recovered.

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 it, whether local or foreign.

All changes of address, departures on and arrivals from furlough should be notified to Dr. J. A. Snell, Soochow, China. 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.

C. M. M. A. CONFERENCE, FEBRUARY 1915.

Preliminary List of Papers, Demonstrations, etc.

Dr. R. T. Leiper
Dr. W. H. Jefferys
Dr. Mabel Poulter
Dr. E. Margaret Phillips
Dr. W. S. Thacker
Dr. Richard Bolt
Dr. J. Preston Maxwell
Dr. A. Stanley
Dr. H. H. Weir
Dr. A. F. Cole
Dr. Neil Macleod
Dr. F. C. Yen
Dr. Duncan Whyte
Dr. James L. Maxwell
Dr. Eggers
Dr. Harold Balme
Dr. James L. Maxwell
Dr. O. T. Logan
Dr. Sidney Peill
Dr. W. W. Peter
Dr. E. H. Hume

Helminthological Remarks.
Mistakes We Have Made.
Obstetrical Experiences.
Treatment of Tuberculosis in China.
Osteomyelitis.
Sandflies of China and Their Relation to Three-day Fever.
Beri-beri in Province of Fukien.
How to Initiate Public Health Work in Chinese Cities with Some Practical Details.
A New Fever.
X-rays in a Mission Hospital.
Demonstration at General Hospital, Shanghai, Stereoscopic X-ray Negatives, etc.
Medical Education in China from a Chinese Standpoint.
Chemical Investigation of Alimentary Canal of Chinese.
Some Preliminary Remarks on the Surgical Treatment of Splenomegaly.
Research Work on Tropical Ulcer in China on Behalf of the C. M. M. A. Research Com.
Radical, Palliative, and Conservative Methods of Treatment of Tuberculous Glands.
The Choice of an Anesthetic for the Chinese (to open the discussion).
Five Years' Aseptic Surgery in an Inland Mission Hospital.
A Suggestion Towards the Effective Following-up of Enquirers in Country Districts.
Public Health Education. (Also the organizer of a special exhibit, Preventive Medicine.)
An Analytical Study of 150 Consecutive Heart Examinations. Demonstration of simplified Wassermann's Test.
Attention is called to the section on pathological exhibits, all communications regarding which will be received by Drs. Hume and Houghton; further, it will be noticed that Dr. W. W. Peter is in charge of the section on preventive medicine. He solicits your co-operation in the work of preparation for these exhibits.

Already enough material has been secured from various parts of the world where preventive medicine campaigns are being carried on on a large scale to make this feature of the Conference of wonderful interest to all.

The committee has already secured a large proportion of the papers and has had them printed so that the printed papers will be put into the hands of members attending the Conference, thus allowing time for discussion and for seeing the exhibits which will be a special feature. The meetings will be held in the Y.M.C.A. hall where the Conference will open with a social gathering on the evening of Monday, February 1st. The first regular session will be held on Tuesday morning, February 2nd.

Services on medical missions have been arranged at the various churches on the Sunday previous to the conference, January 31st, as follows:—The Cathedral: forenoon, Dean Walker; evening, Rev. J. C. Garritt, D.D. Union Church: forenoon, Rev. C. E. Darwent; evening, Dr. D. Duncan Main. Free Christian Church: forenoon, Dr. Harold Balme; evening, . . . .

A. F. Cole,
Chairman of Programme Committee.
Pathological Exhibit, Medical Conference.

2. Microscopic Specimens, Smears, or Sections.
3. Metazoal Parasites and Ova.
4. Demonstrations of Serum Tests: (a) Typhoid Reactions: (b) The Modified Wassermann Test.
5. Urinary Reactions.
6. Pathological Notes on Clinical Cases.
8. Modern Hospital Records.
9. Photographs and Sketches of Cases or Specimens likely to be of general interest.
10. The Relation of Nurses to Laboratory Work.

All members of the Medical Association who have unusual tumors, photographs of interesting cases, blood slides, flukes or other parasites, notify the undersigned without delay and arrange to have the material sent as early as possible to the care of Dr. Houghton. A great deal of good material has already been promised but this last call will serve to remind some of material that they have in their laboratories and had not thought of bringing. The specimen you bring may be of great value to many members. Be sure to bring any young human embryos that you may have secured in your obstetrical practice. These are going to prove a study of the utmost importance.

Henry S. Houghton,
Harvard Medical School, 7 Siccawei Road, Shanghai.

Edward H. Hume,
The Changsha Yale Hospital, Changsha, Hunan.

THE CONFERENCE OF 1915.

After a careful reading of the proposed programme of the Shanghai Conference as outlined above, little more need be said to convince anyone that we have the promise of the most successful Conference in our history. This is as remarkable as it is gratifying when we remember that only two years have elapsed since our last meeting and when we reflect on the effect that the great European war has necessarily exerted on all the mission societies in China.

Not only is a splendid list of papers provided for, but the exhibits on preventive medicine and sanitation will be intensely interesting and instructive. They will—we venture to say—open the eyes of most of us in a wonderful way to the possibilities of
The China Medical Journal.

this work in China. If you want to see something really fine come to the 1915 Conference in Shanghai. The Committees on Programme and Exhibits have, with the co-operation of volunteers, provided for us an excellent prospect; surely we can do no less than come and help with our attendance.

A word to the wise should be sufficient and to the really wise it is. We can not afford for the sake of our work or of ourselves to neglect so splendid an opportunity as will be afforded at this gathering. We won't find a minute wasted and will go back to our station with a vision of the possibilities of our work of which we had never dreamed. In other words each one of us will grow just one foot during the days of the Conference and this is no idle statement.

THE CLASSIFICATION OF SPLENOMEGALIES.

There is probably no subject so far from solution at the present time as that of splenomegaly in all its phases and associated conditions. Certainly in China, the subject is so complicated that he would be a bold man who would venture to classify the splenomegalies which we meet out here. The division into febrile and afebrile splenomegaly gives us little help, for it is certainly to be questioned whether all the febrile splenomegalies which Castellani and Chalmers describe as synonymous with kala-azar can be accredited to the Leishman body as their causal agent, and we can not think that all the afebrile splenomegalies can be credited to Banti's disease, hookworm, cirrhosis of the liver, and other known occasional causes of splenomegaly. As brought out by Dr. J. L. Maxwell (C.M.J., Sept. 1913) after eliminating *Schistosomum Jap.*, hookworm, syphilis, kala-azar, and Banti's disease there still seemed to remain a large residue of splenomegalies difficult to account for in origin or to classify.

We have just read an account by Sir William Osler (Proceedings of Royal Soc. of Med.) of a group of cases of syphilis of the liver in which the splenomegaly and anæmia were so dominant that splenic anæmia or Banti's disease was diagnosed. He goes on to say:-

From the tangled skein of splenic pathology we have been trying to unravel one definite thread, and it looks as if, at least, the attempt has been successful. There is now recognised a disease of splenic origin characterised by :-
Editorial.

(1) Progressive enlargement of the organ, lasting for many years, and not necessarily impairing the health.
(2) Anaemia of a secondary type, with leucopenia, which may come on acutely and recur at long intervals.
(3) A final stage, with cirrhosis of the liver, jaundice, and ascites.

That permanent cure follows the removal of the organ, even in long-standing cases and after the jaundice has supervened, points to the conclusion that the primary lesion is in the spleen itself.

It is a serious difficulty that a motley group of maladies is associated with big spleen and anaemia. From the form just described, which may be called Banti's disease, we have gradually separated off other conditions, such as splenomegaly with acholuric jaundice, splenomegaly of the Gaucher type, splenomegaly with primary pylethrombosis, and certain forms of tropical splenomegaly."

(Syphilis of the Liver with the Picture of Banti's Disease.)

He then describes the four cases which—though Banti's disease was diagnosed at first—later were shown to be syphilis of the liver.

Syphilis of the liver may explain a very few of the cases which puzzle us in China but we can not believe that many can be attributed to syphilis, for while we know that syphilis is rare in the farmer class in China as compared with the other classes of society yet these splenomegalies are almost confined to the sons of the soil. We are inclined to think that the last clause of the quotation from Dr. Osler covers our cases out here "and certain forms of tropical splenomegaly" but having said this we have made practically no further progress than we were before, for this division which Dr. Osler dismisses with a sentence contains another "motley" group awaiting future laborious differentiation.

We are glad that Dr. Maxwell has promised to give us a discussion on this difficult though interesting subject of splenomegaly at our Conference. It is to be sincerely hoped that the subject will provoke discussion that will help clear up in some measure this field of medicine as related to China.

EXECUTIVE COMMITTEE.

Minutes of meeting of the Executive Committee, held at Shanghai, December 16th, 1914, are: In the absence of Dr. Main, Dr. S. Cochran was elected to take the chair. The following members were present:—Drs. Cochran, Lincoln, Hutcheson, and Morris. Dr. Snell, the busi-
ness manager of the Journal, was present by invitation, to present a report on the condition of the Journal. The minutes of the last meeting were read and approved. Dr. Lincoln reported that arrangements were being made for the entertainment of the delegates to the Conference in February. Dr. Snell reported on the financial condition of the Journal, and that he was gradually getting things under way. A motion was carried that the accounts of the Journal from January 1st, 1913, to December 31st, 1914, should be audited.

There being no further business the meeting adjourned.

H. H. Morris, Secretary.

Book Reviews.


A thing of beauty is a joy for ever, and of what is this more true than a beautiful life? We ask why must this man go so early, but we know that the most beautiful and fragrant flowers fade most quickly. The flower dies but the fragrance lives on. Such was the life of Philip Rees. He labored in China only seven years, but these were seven years of beautiful testimony to the power of the Gospel, and the telling force of his life lives on in its inspiration to others. Dr. Tatchell has given us an intimate picture of the personal life of Philip Rees. He has shown us his early training, his influence at college, his life on the mission field, and throughout it all the sweetness of his character shows forth in all its beauty.

It is one thing to live constantly in the work, but it is another to work and live constantly in the spirit of Christ. We are impressed with the devotion of his life. A man of professional attainments of the highest order, yet inspired with the deepest evangelistic spirit.

He was a medical man, but also and always a missionary of the Gospel, and he never allowed the pressure of medical work to forbid him the privilege of testifying for his Master at every possible opportunity.

His life so full of promise was cut off at the age of thirty-six, but the Master has said,—except a grain of wheat die—and we must believe He knows.

We cannot but be grateful to his personal friend, Dr. Tatchell, for giving us the record of so beautiful a life.

A. C. H.
In this very interesting monograph, Prof. Schott sets forth the methods employed at Bad-Nauheim in the treatment of chronic heart diseases, and the rationale of the treatment. The value of the baths is supposed to depend on the amount of free carbon dioxide in the water, together with the temperature of the bath and the mechanical effect of the running water. In addition to the baths certain exercises are prescribed, and both the baths and exercises are watched very carefully as to their effect on the patient. This is done not merely by noting the symptoms, but also by observing the blood-pressure, pulse tracings, etc.

There are, of course, certain contra-indications to the treatment, but in special types of cases very good results are obtained, which seem to be much more lasting than the usual treatment with drugs. It must be remembered that the patients are subject to strict regulation of diet and mode of living for some little time, as the course of treatment requires several months in most cases.

Many of the suggestions seem to be of value for treatment of cardiac disease, even where it is impossible to attempt to carry out such a complicated and expensive course.

The illustrations showing the various exercises are a valuable addition to the book, as they show exactly how they are carried out.

H. H. M.

Educational Directory of China, 1914.

We acknowledge with much appreciation the receipt of the Educational Directory of China, 1914, published by the Manager of Educational Directory of China, 48 Kiangse Road, Shanghai. This is a very valuable book for all engaged in educational work in China. It contains besides the names and a short account of the men and women engaged in educational work in China, brief descriptions of some of the prominent educational institutions with the history of their inception and growth.

It is illustrated with several photographs of well known institutions in China. On the whole it is a valuable educational reference book for those desiring to keep in touch with teaching and teachers in China.

A. C. H.
The China Medical Journal.

DYSENTERIES: THEIR DIFFERENTIATION AND TREATMENT, a small book by Professor Leonard Rogers, deserves very careful study. The author has given special attention to the subject, and has from time to time advocated strongly the ipecacuanha treatment for the amoebic variety of the disease. Still more lately applying Vedder's experimental work on emetine, he has opened up a very great improvement in the therapeutics of the condition, and has done inestimable service in advancing strong clinical evidence of its efficacy. Protozoal diseases present special difficulties in treatment, and amoebic dysentery is no exception to this rule. The expectation that a few doses of emetine would always cure dysentery, if ever entertained, is now being proved by experience to be too sanguine; it would appear that a fairly prolonged course may be necessary, and that even then relapses may occur. We would strongly advise those who have had little experience of dysentery to read this book. It is very simply written, and gives a very good account of the subject, including not only the amoebic, but also the bacillary and other forms of the disease. The last chapter of the work is devoted to sprue.—British Medical Journal.

In Memoriam.—Dr. H. V. Wenham, U. M. C., Peking.

The news that Dr. Herbert V. Wenham of the Union Medical College, Peking, died on November 4th, from pneumonia, will be heard with deep regret by all the medical profession in China.

Dr. Wenham had had a strenuous summer's work in the organization of the new hospital associated with the U. M. C., and in the autumn he suffered a good deal from neuralgia. He ever worked up to the limit of his strength, so when the final serious illness overtook him, he had little reserve to fall back on. For several days before the end, considerable anxiety was felt for him, but as there were occasions of rallying strength, we were encouraged to hope for his ultimate recovery. These hopes, alas, were disappointed and the Union Medical College and Dr. Wenham's many friends are now mourning the loss of one of the most earnest and devoted men that ever gave his life for China.

Dr. Wenham came to China eight years ago, with the purpose of devoting himself to medical education in China, for which, by his early training and education, he was admirably adapted, being an M.B. of London and F.R.C.S. of England.

None who came in contact with him but felt the great charm of his unique personality, his purity of motive, his devotedness, sincerity, and abhorrence of sham or careless work, which were the outstanding features of his fine character.

All who knew him, both Chinese and foreigners alike, felt that in him was exemplified a true Christian gentleman. The loss sustained by the College by Dr. Wenham's death is almost beyond words. For the past seven years he has spent himself for this work, and much of
the success of the institution has been attained by his unwearied labours. To him, more than anyone else, we owe the beautiful new hospital in which he died, and the high standard of efficiency reached there since its opening was entirely due to his able organization as medical superintendent.

He was deeply interested in the welfare of China, and though he has not lived to see the fulfilment of his vision of the modern medical profession of this land being entirely guided by the high Christian motives of Western lands, still he has planted seeds which will bear fruit abundantly in coming years.

The anti-opium movement had in him a warm-hearted friend, and the support he gave the movement when he accompanied Gen. L. Chang to England to plead with England to free herself from complicity in the traffic, has helped greatly to forward this end.

Such men as Dr. Wenham are China's best friends, and it may be truly said of him that he gave his life for this land.

As a College we have suffered very heavily during the past three years. We have lost Drs. Gibb, Hall, and Wenham, all of them men of great gifts, men for whom we anticipated a great future, and their loss to the medical education movement in China seems irreparable. But our Great Leader knows best, and in confidence we look to Him that He will raise us up other men of like mind to Wenham of the U. M. C., Peking.

J. G. CORMACK.

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In Memoriam.—Dr. A. F. H. Zeiss.

On June 13th, 1914, Dr. A. F. H. Zeiss of the Rhenish Mission at Tungkun met his death by accidental drowning. Dr. Zeiss arrived in China in February, 1914. During his journey to China, he began to suffer from symptoms of gallstones. Finally in May he underwent an operation in Hongkong for gallstones and made a rapid and perfect recovery from the operation. One week after his return to his station, he was drowned while swimming in the river. Dr. Zeiss was a good swimmer, but it would seem that his death must have been due to apoplexy or embolus in the lungs. Our hospital has sustained a great loss in the death of this promising young physician and the writer has lost a colleague for whom he has prayed for six years that he might be sent out to help in the work. Only God knows why he and many another bright promising young worker must be taken at the very threshold of their life of service and usefulness.

G. EICH.
How Much Should Superintendents Know of the Different Hospital Departments?*

Miss K. S. Loader, Foochow.

Now that it is beginning to be the fashion in China for young Chinese women to come forward as candidates for the nursing profession, a fresh problem is entering into our medical mission policies; that of how to cope with the training of these would-be nurses and how to weed out the unsuitable from the many who come, sent perhaps by some well-meaning but quite "unmedical" fellow missionary, with the announcement that "she is no good at reading and would never make a teacher or a Bible-woman, but can do rough work, and would be just suitable for a nurse"!

Many come, however, who really have the makings of a good nurse in them, and their training must be adequately provided for and undertaken seriously if we want them to be efficient nurses, who will raise the standard to a high level and maintain it there. They must start at the beginning and go through the whole course, and have experience and training in all branches of general nursing and midwifery.

Our home hospitals are usually well staffed with Sisters and nurses all of whom have some share in educating the probationers in their various duties, but in China things are quite different, often one foreign nurse is the most a hospital can boast; as the work increases an assistant is welcomed, usually only after constant appeals to the Home Board and much patient waiting; while a third, except in most exceptional cases, is an unheard-of luxury.

Thus it comes about that the whole of the teaching, lecturing, and practical training has to be done by the foreign nurse in charge. The latter, accordingly, must be very well up in every branch of the work, a good disciplinarian, good at hospital economy, and tactful in managing those under her care, capable of inspiring confidence in her young probationers as well as in her patients. It is therefore exceedingly necessary that she should have a thorough knowledge of every department of the hospital, so that she will know how to direct affairs all through and to tell her probationers what to do. She must know how to keep the beginners occupied profitably and to see that the seniors do not neglect their duties and set a bad example by any slip-shod ways

* Read before the Nurses' Association for China, July 1914.
of doing their work. If the superintendent is to train probationers in all branches of her nursing departments, she must be able to teach anatomy, physiology, materia medica, elementary therapeutics, and the theory of nursing, besides being able to give practical training in preparing patients for operation and their after-care, also how to look after the operating room and attend to the daily routine in the wards. Where there are isolation wards with infectious cases taken, the superintendent must be on her guard to prevent any unauthorised passing to and fro between that part and any other part of the hospital. Where night-nurses are employed, their reports, like those of the day-nurses when going off duty, should be presented to the superintendent for her inspection, and all details of cases in the obstetric wards should be presented to her whether she were present at the time or not; it all helps to keep the nurses up to the mark and shows them that they have a responsibility towards their patients and towards their hospital.

Neither must the children's ward be forgotten in the daily visitation. There, indeed, it is very important to have a watchful eye, to make sure that the suffering little fretful ones are not treated impatiently, the quiet ones not neglected and the noisy troublesome ones given all the attention in order to "keep them quiet." The out-patient department will need oversight and the registers should be kept under the supervision of the superintendent.

Besides all this there are accounts to be taken. Expenses need to be kept down to a minimum so far as is possible in conjunction with efficiency. Nowhere more than in institutions is it so easy to have waste going on, and especially in hospitals, where the very nature of the work entails a continuous supply of food and fuel as well as of drugs and surgical requirements in the dispensary stores. It is necessary, therefore, that the superintendent should personally see the firewood weighed, know the oil that is given out for lighting, and control the buying-in of all rice and food used and provided by the institution for workers or patients according to the custom of each individual hospital.

With such scarcity of foreign nurses as we usually have to depend on in mission hospitals and nurses' training schools, it seems absolutely necessary that the superintendent should be able to teach her probationers all they need to learn to make them fully qualified nurses, and that she should be "au fait" with every department within the hospital compound and, in short, without seeming too interfering and suspicious she must have eyes and ears fully awake and alert to every thing that goes on, remembering that in all things "prevention is better than
cure,' and that the force of a good example often does more good than ten lectures. The nurses and probationers will be stimulated and inspired to do their best when they know that she who is in charge and is training them is able to do thoroughly herself all she is wanting them to do.

Lastly, but by no means least, let the superintendent always bear in mind to keep before her nurses the thought that they must not only care for the bodies of those who come to the hospital. Opportunities for preaching the Gospel while patients are in the wards are almost unrivalled and all the workers should be made to realise that it is not a separate department only to be worked by Bible-women and recognised teachers, but that they too must each share in sowing the seed and in teaching the patients. Here, too, the superintendent should give all the encouragement she can and show herself fully in sympathy by giving as much practical help as possible. Thus our hospitals and training schools will be centres from which health and life and light will go forth into many a home and village where otherwise none of these blessings would go, and our medical mission work will, under God, be a great success in the highest sense of all.

BRANCH MEETINGS OF N. A. C.

Branch meetings of the Nurses' Association were held during the summer both at Mokanshan and at Kuling.

The Mokanshan meeting was presided over by Miss Sparey. Reports of the July Conference at Shanghai were given by Miss Albaugh, Miss Harris, and Miss Corriher. The reports were followed by general discussion. An interesting contribution was the report that in one hospital a kind of milk, or soup, made from the bean curd, has been found to be a very acceptable and nourishing substitute for milk in liquid diet. It is said that this "milk" can be obtained at the regular bean curd shops. Further discussion was in regard to the large class of Chinese women, widows and older women, who wish to take a midwife's training without having previously taken the full nurse's course. Eight nurses were present at this meeting, three of whom were full members of the N. A. C.

At the meeting of nurses on Kuling, there were twenty-five present. Miss Hope-Bell, President of the Association, was in the chair. Miss Tomlinson reported the Shanghai Conference and Miss Booth lead a discussion of "The Prevention of Waste in Hospitals." Miss Booth offered many helpful suggestions in economy in various departments of the hospital, and started a lively general discussion.
Will members of the N. A. C. who have candidates ready for examination please send in names, etc., to the General Secretary before the end of February? Local examiners for practical work have to be arranged and we need to know centres which will need such examiners.

Regulations for candidates are on page 7 of the Association's form of Constitution. Examination if possible to be held in May, 1915.

A. CLARK, General Secretary, N. A. C.

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**Progress in Internal Medicine.**

**THERAPEUTICS OF SYphilis.**

McDonagh (British Medical Journal, 1914, October 10th, Page 616) gives an excellent reasoned summary of the present situation in regard to the therapy of syphilis. Mercury alone is not enough, nor does salvarsan alone prove to be sufficient. His suggestion as to their combination should be of great value. "It is only since the rule has been followed of giving as many injections of salvarsan as are necessary to produce a negative Wasserman reaction in the blood taken between the seventeenth and forty-eighth hours after the last injection, and to prescribe a year's treatment with mercury, that the fewest recurrences have been observed. . . . In the primary stage, provided sufficient injections of salvarsan are given to procure a negative Wasserman reaction in the blood withdrawn within the limits specified above, and that the treatment is further augmented by twenty-four intramuscular injections of mercury, given in three courses of eight weekly, within the twelve months, in the light of our present knowledge, a cure is possible. In the secondary stage a cure may possibly be obtained and it is wiser to continue the mercury another year. . . . It is universally agreed that the best way to give salvarsan is intravenously and it is my opinion that the requisite number of injections should follow upon one another at intervals of not longer than seven days. I usually prefer to give the injections every four days."

To sum up, "In the primary stage I give five injections of neo-salvarsan and mercury for a year. I prefer neo-salvarsan to salvarsan because, although injection for injection the former may not be quite so strong, it is less toxic, the injections can be given with safety every four days, and it can be administered to out-patients. For over two and a half years, giving more than 4,000 injections, I have treated practically every case as an out-patient and many of them have travelled home by train immediately afterwards, without a single bad effect. For the first dose I give Dose III, for the second, Dose III, for the third, Dose III, for the fourth, Dose IV, and for the fifth, Dose V, if it is to be the last injection. In secondary syphilis, I give nine injections and mercury for two years. Under these circumstances, I give Dose IV for the fifth injection, Dose V for the sixth, and either Dose V or Dose VI for the seventh, eighth, and ninth. Cases of recurrent syphilis, I treat individually. . . . If the patient is going
to marry, or if the recurrence has set in within two years of the infection, or if the previous treatment has been obviously inadequate, I treat the case as one of secondary syphilis. In the tertiary stage, I give sufficient treatment to cure the symptoms.

Congenital syphilis is, on the whole, best treated with mercury only. Cases of meningal syphilis are best treated with two intrathecal injections of salvarsanized serum, and then they should receive the same treatment as a case of secondary syphilis.


The author records a case of malaria of supposed congenital origin in an infant. The blood of an intensely anaemic baby, 7½ weeks old, was examined microscopically and a large number of tertian parasites were found. The haemoglobin percentage is stated to have been between 10 to 15 per cent. From subsequent enquiries it was found that the mother had suffered from fever whilst 5 months pregnant, so that the infection in this case appeared to have taken place by penetration of the plasmodia through the placenta. Under quinine, rapid improvement took place.—(Quoted abstract Tropical Disease Bulletin.)

INTRAMUSCULAR INJECTIONS OF QUININE.

SIR,—In a recent number of your Journal, Tropical Medicine and Hygiene, you had an article inveighing against the intramuscular injection of quinine, in which you ended up by saying that you hope that a method of administering the drug which never had anything to recommend it will be given up.

You quote authority, including that of Ross, but it would not be difficult to counter-quote other authorities with quite as wide a clinical experience; and though authority is naturally listened to, when it runs contrary to the clinical experience of many it is desirable that the whole argument should be thoroughly stated.

In this country intramuscular injections are given very frequently, and many of us would like to know the whole of the arguments that can be advanced against them.

We know Semple's work on tetanus, but many of us think that the danger is so remote as not to be worth considering; and if lives can be saved by intramuscular injection that cannot be saved otherwise I do not think that the infinitesimal risk will prevent men from giving quinine in this way. Tetanus may be caused after the intramuscular injection either by bacilli already in the system or by bacilli injected with the quinine; but it is of no use to mention that eleven cases occurred during the Madagascar campaign and that someone has collected another ten cases; we want to know the percentage of cases of tetanus to intramuscular injections. The tetanus bacillus has been found in catgut ligatures: this has not stopped the use of catgut, but it has produced more care in its sterilization.

It certainly would be very sad to have a case of tetanus following the use of an intramuscular injection; but, unless it can be shown that the
Tropical Diseases.

The intravenous is a method that can only be used by a qualified medical man; it cannot be used by dressers in estate hospitals miles away from a medical man; and, though this method may be the quickest way of getting a large quantity of quinine into the blood, it is probably the method by which elimination takes place the most quickly.

On some estates the coolies are so convinced of the superiority of the intramuscular method that, even though they cannot be persuaded to take the quinine by the mouth, they actually ask for the injections. Many Europeans, after getting tired of a long course of quinine by the mouth, ask for intramuscular injections and are benefited. It is not uncommon to hear the expression, "Quinine by the mouth is no good to me."

I do not think that either these coolies or these Europeans would ask for rectal or for intravenous injections.

Some of us feel that there may be something we do not know on the subject and would like enlightenment. At a recent meeting of our local medical society opinion was unanimously in favour of intramuscular injections—one speaking of thousands and another of about 15,000 intramuscular injections given by him or under his supervision—and we should be glad to hear of some stronger reasons than those given in your article, or in the letter by Sir Ronald Ross in the Lancet, before abandoning a method which seems to us not "never to have had anything to recommend it," but potent for good.

I am, yours faithfully,

J. TERTIUS CLARKE,
Health Officer, Perak South.

June 3rd, 1914.

TWO CASES OF SPRUE TREATED BY MOUTH STREPTOCOCCAL VACCINES AND EMETINE HYDROCHLORIDE HYPODERMICALLY.

CASE 1.—A Mohammedan woman, aged about 40, in October, 1905, had commenced passing a number of large light-coloured, loose, frothy stools, said to be as many as twenty daily, and accompanied by obstinate dyspepsia. She was then a stout woman weighing 14 st., but her weight soon became reduced to 10 st. During the following year the diarrhoea was less, with only about five stools daily, but she was never free from it. In November, 1908, there was a recurrence, with numerous loose stools, nausea, and flatulence. She stated that this condition had continued ever since, and that for nine years she had never been free from diarrhoea, although she had been treated by a number of medical men, both European and Indian, in Bombay and Calcutta. She lived in Bombay from June, 1911, to December, 1913, but was worse there than when in Calcutta. At that time she used occasionally to become giddy and even faint, having several times been found collapsed on the floor at night on her way back from the bathroom. During the eighteen months she was in Bombay her gums were ulcerated and they bled freely, and she was told by a dentist that this condition could not be cured until all her teeth had been removed, which she declined to allow.

Present Condition.—When first seen, on December 6th, 1913, she was passing about twelve large, loose, pale, sprue-like stools daily, accompanied by flatulent dyspepsia. I failed to find any amoebae in the stools. There was marked pyorrhœa alveolaris, so I made cultures, and obtained large numbers of streptococci, from which a vaccine was made.

Progress.—Half-grain doses of emetine hydrochloride were injected hypodermically every other day, and were soon increased to 1 gr. doses. After two or three injections, and before the vaccine had been commenced, the stools became much less frequent and of better consistency and colour. After eight injections the evacuations had become healthy and only one or two a day. In the meantime the streptococcal vaccine was begun, 50,000,000, soon increased to 100,000,000, being injected once a week. The discharge of pus from the gums rapidly decreased, and in a few weeks completely disappeared, and has remained absent for the last four months. No teeth were removed. Some superficial soreness and redness of the tongue subsequently appeared, from which a streptococcus was also cultivated. A vaccine made from this removed the unhealthy condition of the tongue within a few days.

On May 3rd last, except for slight redness of the tip of the tongue, she was quite well; almost five months since the diarrhoea ceased, after having been continuously present for nine years before the new treatment was commenced. She has no dyspeptic symptoms, and can digest all ordinary food. She is now free from the giddiness, faintness, and neuralgia which she used to suffer from, and her general health has greatly improved. She has not been weighed regularly, but has put on some flesh and has gained much in strength. The only trouble with her bowels is a slight tendency to constipation, necessitating an occasional dose of castor oil.

CASE 2.—A woman, aged about 40, had had very severe diarrhoea in Calcutta, in August, 1909. She had also been treated twice in England, twice in Hongkong, in Berlin,
as well as making two voyages to Japan. On December 17th, 1913, she was in a very emaciated and weak condition, and passing several large, pale, typical sprue stools daily. Emetine hydrochloride was given in ½ gr. doses two or three times a week, and later increased to 1 gr. doses. She slowly improved during the next three weeks, but on January 14th last she had a severe relapse with frequent copious stools. Her mouth had now become very painful, with numerous small shallow ulcers on the tongue and buccal mucous membrane, while the temperature rose every afternoon for about a week. She was very prostrated and too weak to stand or even sit up, while the pulse was fast and irregular. Cultures from the mouth ulcers showed in some tubes a pure growth of a streptococcus. I therefore made a vaccine from it and commenced with 50,000,000, increased later to 100,000,000, once a week. After the second dose of the vaccine both the mouth and the bowel symptoms rapidly improved. Towards the end of January she was put on a milk diet, beginning with 6 oz. and gradually increasing it to 120 oz. daily by the end of three weeks. The emetine injections were continued twice a week. The diarrhoea now stopped, the mouth lesions healed, the vaccine being continued once a week. Up to this time the patient was being carried from her bed to a couch for a few hours daily. She now rapidly improved, and on March 4th was able to be moved to Bangalore, a three days' railway journey, for the hot weather.

On March 20th, the patient reported that she had had no signs of diarrhoea since February 5th.

The mouth was quite well. She had gained just over a stone in weight in four weeks, before which she had become reduced to 6 st. 9 lb., or to under half her original weight. She was now able to walk a quarter of a mile and do everything for herself. She was continuing the vaccine once every eight days and the emetine injections once in ten days. On April 9th, she reported continued improvement. She could now digest eggs, semolina, and toast and butter. When I last heard from her, on April 28th, she remained free from all signs of sprue and continued to gain weight steadily.

The success attending the use of a vaccine made from the streptococci which were found present in practically pure culture in the mouth lesions is very significant, and opens up the interesting and suggestive question as to whether this class of organism may not be the cause of the disease, at least in some cases. The rapidity with which the disappearance of mouth ulcers under the influence of the vaccine was in the second case followed by cessation of the diarrhoea certainly suggests a causal relationship between the organism and the disease, and affords some hope of the new treatment proving to be of a specific nature and thus an important advance in dealing with this intractable and distressing disease. Even in cases where no mouth lesions are present there may still be a streptococcal infection of the digestive tract, and possibly cultures may be obtainable from the stools which might prove of service in the form of a vaccine.—Leonard Rogers in Jour. Trop. Med. and Hyg., July 1st, 1914.
THE USE OF CALCIUM LACTATE IN THE TREATMENT OF CERTAIN DERMATOSES.

Charles J. White, M.D., Boston, Assistant Professor of Dermatology in Harvard University.—About the time that Sir Almroth Wright first wrote about the opsonic treatment of disease, one of his pupils, Dr. Ross, of Toronto, gave a talk to the staff of the Massachusetts General Hospital on the use which Wright was making of calcium salts in the treatment of urticaria, purpura, and sick headache. Ross gave us the following prescription:

\[ R. \text{ Tr. capsic } ... \text{ Mviii.} \text{ Calci lactat } ... \text{ gr. clx.} \text{ Aq. chloroform } ... \text{ Oi.} \]

S. Two tablespoonfuls in water before meals.

From that time, perhaps seven years ago, until to-day I have tried this remedy in many and various skin diseases in a more or less desultory way, but about a year and half ago, believing that calcium had shown decided curative powers in certain instances, I decided to make a thorough therapeutic trial of the drug.

The foods rich in calcium have been chosen with some discrimination from the following table, for it did not seem wise to include in the dietary of this class of patients such questionable (anaphylactic articles as egg albumen, orange, cabbage and Swiss cheese.

<table>
<thead>
<tr>
<th>Grams of Calcium Oxide in Each Kilogram</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat ... 0.06</td>
</tr>
<tr>
<td>Potato ... 0.20</td>
</tr>
<tr>
<td>Egg albumen ... 0.20</td>
</tr>
<tr>
<td>White bread ... 0.30</td>
</tr>
<tr>
<td>Orange ... 0.60</td>
</tr>
<tr>
<td>Cabbage ... 0.60</td>
</tr>
<tr>
<td>Rice ... 0.78</td>
</tr>
<tr>
<td>Dates ... 0.80</td>
</tr>
</tbody>
</table>

External treatment has been prescribed in all cases, a factor which vitiated the scientific value of the whole work, but it must be borne in mind that most of these patients were referred to the writer by general practitioners who had been unsuccessful in the previous treatment of these individuals, and furthermore that these men and women were mostly wage-earners who deserved as speedy restoration to health as was possible. It must be remembered also that the work was necessarily hampered by the fact that all these patients were ambulants who obey or break laws as the spirit moves them, and who are prone to stop treatment, despite all previous admonitions, the moment the discomfort or the disfigurement of a disease abates.

Summary.

This, then, is the detailed record of the use of calcium lactate in certain allied (?) conditions of the skin. The success attending its use does not prove to be striking, assuredly, and yet the drug has proved of splendid efficiency in some of these cases—an efficiency far more patent to the observer than to the reader of these notes, perhaps. Most of these patients were severely affected and had passed through other hands before reaching me, so that this severity must be taken into account in judging the final results.

To sum up this investigation, it seems fair to state that calcium is certainly not a specific for any of the diseases in any sense of the word, but that it is a drug which may render distinct and most welcome service in any one of them, and a drug which should always be tried in obstinate examples of
urticaria, erythema multiforme, pernio, hyperhidrosis and possible purpura.—The Journal of Cutaneous Diseases.

SKIN DISEASES IN THE AMERICAN NEGRO.

Acne Vulgaris.—Acne is almost as common among negroes as among whites, this disease constituting 8.4 per cent. of all cases seen, or a total of 169. However, among the pure-blooded blacks there were but 38 cases, or a total of 5.3 per cent. Fox states that the disease is much less severe in the pure black, but the author feels that there is but little difference, for he has seen many very severe cases in the very dark. Nor does the trouble respond to treatment any more rapidly than in the whites.

Pediculosis capitis is very rare among negroes. The author’s statistics show but 3 cases as against 66 in whites. In going through the hospital wards, which contain the lowest types of humanity, it is very rare to find these parasites in the colored, but certainly not in the whites. The explanation that the mothers take especial care of the heads of their children does not seem to explain this racial immunity, for one would expect to find it in those who people the slums at least, and this is apparently not the case. The prevalence of tinea tonsurans among the colored children would also seem to indicate that colored mothers are not as careful as they might be. The other varieties of pediculosis are encountered with about equal frequency in the two races.

Psoriasis is certainly much less common in the negro, this series showing but 8 cases, and Fox’s series of 2,200 showing but 10 cases. The very acute psoriasis, resembling a seborrhœic dermatitis, must be very rare in negroes, none of the author’s friends having seen a case. Contrary to the statements of most authors, Chalmers tells me that he has seen well-developed instances of this dermatosis in native Africans. Two of the cases only were in mulattoes, the rest in full-blooded negroes. The disease seems to run the same course as in whites; two of the cases proved themselves to be absolutely intractable to treatment; one of them developed many new lesions while on a strict diet, and under X-ray exposures.

Conclusions.

1. Mulattoes suffer more severely from skin diseases than do full-blooded negroes.

2. The following diseases are more prevalent among negroes than among whites: dermatitis papillaris capillitii, keloids, dry seborrhœa, syphilis, tinea tonsurans, urtica, and vitiligo.

3. The following diseases are less prevalent among negroes: alopecia areata, cancer, dermatitis actinica, acute eczema, erythema multiforme, furuncles and boils, angiomata and naevi, pediculosis capitis, psoriasis, rosacea, sycosis vulgaris, tinea cruris and xanthelasma.


WHITE SPOT DISEASE.

White spot disease occurs mostly in females, especially in those of a neurotic temperament (according to Petges, in those with a tuberculous taint). It may occur in childhood or in early and late adult life. Most of the recorded cases were in the third and fourth decade. The disease is essentially chronic in its course, the lesions making their appearance insidiously and developing slowly. Aside from the moderate pruritus, especially in the beginning, subjective symptoms are rare. The areas of predilection are at the base of the neck, in front and behind, the upper portion of the chest and back, but the lesions may appear on the extremities, various portions of the trunk, on the genitals, etc.
The essential lesion is a small white spot. The color may be snow-white, ivory-white, mother-of-pearl, bluish-white, etc. The lesions may vary in size from a large pin-head to a dime. They may be isolated, sparse, and widely scattered, or they may be numerous, grouped, and confluent. The surface may be smooth or wrinkled, glistening or dull, depressed or slightly elevated, or level with the surrounding skin. There may be a raised edge and a (relatively or actually) depressed centre. The entire surface of the lesion may be uniform in color and consistence, or there may be a peripheral band which is bluish, reddish, or lilac in color. Sometimes fine blood vessels may obtain at the edges. The individual spots are usually round, oval, or polygonal in shape, sharply circumscribed, and having the appearance of being imbedded in the skin like a mosaic. The integument surrounding the lesion is normal. The spots may or may not be peri-follicular; some of them may be pierced by a hair, or by several hairs; or they may contain one or more horny plugs.

To the palpating finger the lesions may be imperceptible, or they may impart a sense of resistance (induration), or they may feel exactly like the normal skin, or appear to be even softer than the normal skin.

In some of the cases the lesions were somewhat scaly. In others the superficial portion of the entire lesion could be picked out of the skin with the finger nail, disclosing a reddish-white bed beneath, sometimes showing fine blood vessels. Vigorous rubbing would detach a scale in certain instances, leaving the deeper portion intact. Atrophy appeared to be a prominent feature in some of the cases. In others, nothing suggestive of atrophy could be discerned.

Conclusions.

We believe that all the recorded cases of white spot disease can be divided into two groups, namely, the lichen planus group and the scleroderma group.

Therefore, there is no entity that can be called white spot disease.

On the other hand, we believe that the name white spot disease should be retained, but with the understanding that it should signify a special form of scleroderma occurring clinically as white spots.

—The Journal of Cutaneous Diseases, September 1914.
Surgical Progress.

Under the charge of A. S. Taylor

NOTES ON THE TWO-STAGE OPERATION.

In an address before the American Surgical Association, April 9th, 1914, Dr. George W. Crile again emphasized his great specialty, namely that the surgeon should strive in every way possible to preserve the strength of his patient, and not subject him to the dangers of unnecessary shock. In this paper the author discusses the conditions in which a two-stage operation will “lessen the risk.”

Cancer of the Rectum. The preliminary colostomy prepares the way for the major operation. The establishment of the artificial anus is passed through so easily, and the patient’s strength is so conserved that the major dissection of the cancerous growth is entered upon without reluctance, and in a field free from gross infection. (Since adopting this plan, Dr. Crile reports sixteen consecutive operations for cancer of the rectum without a fatality.)

Cancer of the Stomach. A preliminary gastro-enterostomy is strongly advised, because by this means the patient is first allowed an opportunity to make a physiological and anatomical readjustment after the smaller operation, before he is called upon to undergo the radical removal of the growth. By thus dividing the traumatism the risk is less than if one “massive chance” had been taken.

Cancer of the Cervix. In this operation it is suggested to destroy first all the cancer cells in the cervix with the actual cautery. The blood vessels running from the vagina to the uterus are also cauterized. The resulting anæmia will destroy all the detached cancer cells in a day’s time, and will prevent immediate reimplantation of these cells during the abdominal hysterectomy.

Cancer of the Larynx. First pack the deep planes of the neck on each side with iodoform gauze. This leads to a local reaction which fixes the trachea and protects the mediastinum from descending infection. By carrying this dissection on one side all the way to the upper margin of the field of the subsequent operation, the vagus nerve on that side must at this time “take the brunt of exposure and adjustment before the larynx is removed.” At the time of the laryngectomy this vagus will be ready to take up its function again. (Twenty-eight of these operations are reported, with but a single death.)

Cancer of the Tongue. The growth in the mouth should first be removed. This is done by the cautery alone, if the part involved is not very extensive. If, however, the tumor is large, it is best on one day to cauterize the diseased area, and on the next day to excise the entire cancer field in the mouth. The preliminary cauterization guards against the very dangerous possibility of spreading living cancer cells. After the patient has well recovered from this mouth operation, then all the glands of the neck can be removed without great danger from shock or infection. When the entire procedure is carried through at one sitting, the resulting very sore neck interferes greatly with the taking of nourishment, and predisposes to inhalation pneumonia.

In conclusion, Dr. Crile enumerates the following conditions which
can also be treated successfully by the two-stage operation: acute salpingitis (first by vaginal puncture, and later by a salpingectomy if necessary), acute appendicitis with a strongly walled off abscess, acute cholecystitis, obstruction of the bowels from cancer, gangrene of the intestines with heavy intoxication, and exophthalmic goitre.

In all these cases the principles of anoci-association are utilized. The address closes with this striking statement: “We confidently expect to see the present mortality in stomach and intestinal resections reduced at least one-half by the two-stage operation, under the technic of anoci-association.”

Hæmostasis by Application of Living Tissue.

Sir Victor Horsley, F.R.S., F.R.C.S. (Brit. Med. Jour., July 4th, p. 8).—Many years ago, acting on a hint obtained from Magendie’s Physiologie, the writer showed that it is easy to arrest bleeding from bone by the use of an aseptic plastic wax which adheres to the cancellous spaces and to their walls. On the other hand, it is difficult to stop bleeding and haemorrhagic oozing from soft tissues except by a ligature, or pressure with a gauze tampon, or by irrigation with hot liquid (110° to 115° F). For a long time the writer used amadou in experimental investigations where asepsis was not required, and with good results, as it adhered well to the bleeding point. To obtain, however, the same result in aseptic operations is not so simple. The factors which had to be obtained were: (1) asepticity; (2) adhesiveness; (3) thrombokinesis.

In view of the work of Woolridge, it occurred to the writer that probably the best material would be living vascular tissue—that from the (injured) surface of a cut fragment of muscle, in all probability, thrombokinetic processes would most readily start; not merely on account of the plasma and plasmatic corpuscles of the tissue, but also of the thrombokinetic by-products in the effused blood and the development of so-called blood platelets. Such a fragment of the animal’s own muscle offered all these advantages, and also asepsicity. The writer was rather surprised to find that the necessary factor of adherence was also satisfied in a very remarkable degree. If the bleeding point—for example from the cut surface of the brain, liver, or any soft tissue—be gently pressed with gauze, and this instantly replaced by a piece of living muscle, and pressure again applied from 15 to 20 seconds, it will be found that the muscle fragment closely adheres to the tissue it is applied to. Such adhesion is necessarily limited by the pressure at which the blood is escaping from the bleeding point. By direct experiment on divided arteries (including the aorta) in the cat and dog, he found that a muscle hæmostasis would resist as much as 60 to 80 mm. Hg blood pressure. Further histological investigation of the exceedingly thin viscous layer occupying the plane of contact of the two masses of tissue shows that it contains blood platelets, fibrin fibrils, etc., within 5 to 10 minutes of commencing the preparation.

To estimate the degree of active thrombokinesis the writer also tested the utility of the muscle after it had been boiled for five minutes at 100° C. Such boiled tissue had a poor hæmostatic effect. It seemed as if this was partly owing to the great loss of adhesiveness which is caused by the coagulation completely altering the physical surface of the muscle tissue.

Of other tissues, the writer exhaustively tried only fascia, which
did not prove satisfactory. It has not the factor of adhesiveness sufficiently well marked, though it can be employed where it is not convenient to take a piece of muscle.

When the remarkably rapid hemostatic effect of living tissue had thus been shown the writer used it freely in operations—above all, where it was necessary and convenient to leave a resting plug or tampon in a wound. Where an operation has been performed in two stages, he occasionally had the opportunity of examining the isolated muscle tissue, and found it firmly attached and "organized." In no instance has any ill effect followed.—Medical Review.

PINEWOOD SAWDUST AS A SURGICAL DRESSING.

Charles W. Cathcart, F.R.C.S., senior surgeon to the Royal Infirmary, Edinburgh, British Medical Journal.—Sawdust has been used from time to time by many surgeons as a surgical dressing, but its merits do not yet seem to be appreciated as they deserve. At the present time, when an efficient, cheap, and easily prepared material is desirable, I wish to draw attention again to sawdust.

Among those who have recognized its value are the late Owen Thomas of Liverpool, the late Surgeon-Major Porter, R.A.M.C., the late Mr. Callender, and the present active surgical workers in Cashmir, the brothers Neve. In a recent paper by Professor Saundby reference is made to the value of pinewood sawdust as a deodorizer, which was demonstrated to him by the late Professor Vivian Poore.

I have used it extensively in the past, and am using it now in Edinburgh at the Royal Infirmary and at the 2nd Scottish General Hospital at Craigleith, not only for operation wounds but also for septic cases of all sorts. It has also been much appreciated as a dressing for the shell wounds of the wounded German sailors in Edinburgh Castle, and it is very valuable for cases of incontinence of urine.

As to the wood, the sawdust from various kinds of pinewood has given good results. The softer kinds are the best, being more absorbent, while the harder kinds, although less absorbent, have the advantage of containing more resinous material. Commercial hard woods like mahogany or oak should be excluded if pinewood can be obtained. A simple method of testing the absorbent property of a sample piece of planed wood is to draw a stroke across it with a pen full of ink. If the ink spreads laterally, and dries in quickly as it would on blotting paper, the fibre of the wood is good for surgical purposes. If the ink remains on the surface, as on writing paper, the absorbent power is deficient. Apart from the wood itself, however, a good deal of absorption will take place between the individual particles of the wood.

The method of preparation I have found useful is the following:

Two large standard wire sieves are required—No. 8, that is, eight threads per inch, and No. 40 that is, forty threads per inch. In order to reject the coarse fragments the sawdust, as obtained from the sawmill, is passed through No. 8 sieve and allowed to fall on to No. 40. It is then well shaken and rubbed on No. 40, and the very fine particles which pass through are discarded, because they would escape too readily from the prepared pads and cause an inconvenient dust.

The sawdust which remains on No. 40 sieve is put into a box or sack and sent to the theatre sister. The bags are made of butter muslin, and the sizes may be reg-
lated according to requirement. Two sizes have, however, been found generally useful with us, and these may be shaped from a square yard of muslin as follows: Fold the square once on itself and divide the elongated double piece into three. Each of these thirds will make one large or two small bags. One end is left open, the others are closed by sewing if they do not happen to be folded. The nurse fills the bag about two-thirds full with the sifted sawdust, and then closes it with a coloured thread. The filled bags or pads are sterilized by steam in the same manner as other dressings. After use the coloured thread is withdrawn, the sawdust thrown away, and the bag washed, boiled, and dried for future use.

Besides the advantage of cheapness, and the relative ease with which it may be obtained, sawdust is very absorbent. The pads are somewhat bulky, but this feature, with careful management, is seldom inconvenient. The discharge is so evenly distributed throughout the mass of sawdust, that the bandages and bedclothes are not soiled nearly so quickly as they are with other forms of dressing. The resin of the wood seems to act as a deodorizer, and probably also as an antiseptic.

Sawdust is well adapted for civil or stationary military hospitals. Its extensive use at the present time would save hundreds of pounds. Other materials more portable, but more expensive, might be reserved mainly for field use.

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**Department of Obstetrics.**

*Under the charge of Dr. M. H. Polk.*

**PITUITRIN: ITS ABUSES AND DANGERS.**

A. J. Rongy and S. S. Arlick, both of New York, have an interesting and pertinent article on pituitrin in the *New York Medical Journal* of May 2nd, 1914, which they open by saying that in spite of the fact that it is received with all the enthusiasm of a new therapeutic agent its therapeutic action is vague and uncertain in the minds of a large number of medical men. They write this article to offset the influence of some recent articles that have given the impression that pituitrin is "practically devoid of harmful effects; its dangers are few and easily guarded against. Also that it is of value occasionally for the induction of labor at or near term."

"In the light of our experience, extending over a series of about 300 cases, we find that such conclusions are not only not warranted, but may even prove dangerous. . . . . . For the proper conception of the therapeutic effect of pituitrin, a brief reference to its physiological action is necessary. It is now well established that the action of this drug is transient in character, lasting at most an hour. Its action is primarily peripheral, acting on all unstriped muscle, producing strong contractions, which are most marked in the muscles of the uterus. It is essential, however, that these muscular structures maintain their state of tonicity, for pituitrin will, very poorly if at all, stimulate an already tired or fatigued muscular organ. Pituitrin also secondarily raises blood pressure.

Clinically the principal action of this drug is on the muscular structure of the uterus, particularly after
labor has set in, causing prolonged and more powerful contractions of the uterus, and not infrequently changing their character from tonic to that of clonic. The latter fact must be constantly borne in mind, for should this emergency arise, delivery must be rapidly terminated, or an anesthetic administered, in order to prevent rupture of the uterus or asphyxia of the child.

Having the physiological action before us, we are better able to outline its indications in the field of obstetrics. Since it does not primarily produce contractions of the uterus, its efficacy, per se, in induction of labor is questionable. This was proved in a series of experiments carried out by Dr. A. M. Hilkowich, about three years ago, in his service at the Jewish Maternity Hospital.

"On the other hand, pituitrin is of great aid in cases in which pregnancy is interrupted in the early months, either by the use of the catheter or the bag. In these cases it has been our custom to give it as soon as there is evidence of uterine contractions. When given at this stage the uterine wall is thick, the contractions are not violent, and the resistance offered to the foetus is comparatively small. All this justifies the administration of pituitrin in this class of cases. It is to be remembered that it is to be given only after labor pains have commenced, for as previously stated, pituitrin by itself will not produce contractions. It has been our experience in the induction of labor by the catheter method, the only procedure followed by us, that while labor nearly always sets in, still the contractions are nearly always irregular, frequently feeble, and sometimes disappear entirely. By administering pituitrin at this early stage, the pains become more regular, more intense, and labor is more likely to continue uninterruptedly.

It is a well known fact that spontaneous rupture of the uterus takes place in cases of dystocia, owing either to a rigid and undilatable cervix or to a disproportion between the presenting part and the pelvis. It is but reasonable to assume that when contractions are reinforced by so active a drug as pituitrin, rupture is much more likely to occur. We are personally acquainted with two such cases, and know of several others.

Inertia uteri.—No one condition in obstetrics is so little understood and so improperly treated as inertia uteri. The underlying causes are usually not correctly analysed. The practice of obstetrics would be greatly improved if the fundamental underlying physiological principles governing the functioning powers of the various organs were applied to inertia uteri.

It has long since been demonstrated that the tonicity of muscle is limited, and that after undue exertion, muscle passes into a state of fatigue. In this condition it will not respond to stimulation of any form. A period of absolute rest is necessary before it will regain its tonicity. In inertia uteri we have an absence or loss of muscular tone, usually due to over exertion, and therefore the most rational procedure would be to put the uterine muscles at complete rest until its tonicity was fully regained. Any artificial measures to make this exhausted muscle contract will not only fail in its purpose, but may even become harmful. We can now very readily see why pituitrin is contraindicated in this condition. The uterine wall is thinned out, the contraction ring is very high, and to try to induce contractions under these circumstances, even were it possible, would be unsafe.
Our rule is to leave the patient alone until sufficiently rested. This rest is best obtained by the use of morphine hypodermically. After the patient has rested for a short period of time, the uterus regains its irritability and labor pains again set in. If we now find that the contractions are weak or irregular, pituitrin may be given to reinforce them. We cannot too strongly emphasize the fact that a state of exhaustion in any organ in the body requires rest and this is sometimes best obtained by the use of morphine, particularly in the case of uterine inertia. For some reason physicians are reluctant to use this drug, fearing its baneful effects upon the child. We have seldom found such to be the case, even though doses of morphine were at times very large. Morphine, in addition to inducing sleep and rest, causes relaxation of the circular muscles of the cervix and thus helps dilatation.

Malposition.—Many authors recommend the use of pituitrin in some of the malpositions, and also in slightly contracted pelves. From our observation we believe it to be unsafe. It is impossible to tell how pituitrin will act in a given case, for apparently some patients are more susceptible than others, with the result that it will produce violent contractions in one case and prove ineffectual in another. Bearing this fact in mind, we feel that it would be inadvisable to produce long and continued contractions in a case in which the resistance to the presenting part is great, either because of malposition or of contracted pelves. The procedure may prove to be harmful not only to the mother but also to the child. As a general rule pituitrin should not be used in any form of dystocia, unless labor has progressed to a stage where artificial delivery can be accomplished readily with reasonable safety to the mother and the child.

Pituitrin is never indicated in cases with high blood pressure, particularly in the toxæmas of pregnancy. It is also contraindicated where a rise in blood pressure would prove harmful, for it is well established that pituitrin quickly raises blood pressure from twenty-five to forty mm. This fact has been vividly impressed upon us by those cases in which pituitrin was administered intravenously. This sudden increase is likely to be harmful in various cases of cardiac disease. In order to study the exact changes in blood pressure, we injected pituitrin intravenously in seventeen cases and found that within two or three minutes after injection, the pressure rose on an average from twenty to thirty-five mm., and remained so from thirty to forty minutes. This rise was often followed by a fall below normal.

Conclusions.

1. Pituitrin does not induce labor pains.
2. It should not be used in the early part of the first stage of labor, for its action is too transient.
3. It should not be used in complete inertia because of danger of rupture of the uterus.
4. It is contraindicated in cases of dystocia due to malposition or to contracted pelves.
5. It should never be used in cases in which a sudden rise of blood pressure would prove dangerous.
6. A single dose of pituitrin may be used as an adjuvant in cases where pregnancy is interrupted either by catheter or bag, and only when contractions of the uterus have already set in.
7. It should be used only in cases where the cervix is dilated or dilatable and the presenting part engaged in the pelvic outlet.
8. It should be used cautiously in cases in which the foetal heart sounds are feeble or irregular.
9. It should never be used unless a general anaesthetic is within easy reach,
Preventive Medicine.

for the contractions may become so violent that rupture of the uterus becomes imminent.

Finally, the conclusions reached in this paper are based purely on our personal observations of the actions of this drug in a very large series of cases. We feel that it may not be in accord with the experiences of many other observers, still we maintain that in order to obviate many complications, which at times may become very dangerous, this drug should be used very conservatively.

We appreciate its value when properly used; we realize its dangers when given injudiciously; and we cannot but advise the general practitioner to be conservative in its use.

Preventive Medicine.

Under the charge of Dr. W. W. Peter.

DUCKS AND MOSQUITOES.

It is an easy matter to tell our patients that malaria is transmitted by mosquitoes, but much more difficult to answer the question, "How shall we get rid of the mosquitoes?" Is the answer "Raise ducks"? Dr. Samuel G. Dixon, Commissioner of Health of Pennsylvania, in the October 3rd issue of the Journal of the American Medical Association writes:

"The duck is one of the greatest known enemies of the mosquito, and therefore of yellow fever and malaria. After trying the ability of fish to devour larvae and pupae of mosquitoes, with varied success, I built two dams near together on the same stream, so that each would have the same environment for the breeding of mosquitoes. Each covered nearly 1,400 square feet. In one, twenty mallard ducks (Anas platyrhynchos) were permitted to feed, while the other was entirely protected from water fowl, but well stocked with goldfish (Carassius auratus), variety americanus.

"The one in which the ducks fed was for several months entirely free from mosquitoes, while the pond protected from ducks and stocked with fish was swarming with young insects in different cycles of life.

"To the infested pond ten well-fed mallard ducks were then admitted, and as they entered the pond they were first attracted by the larval bactrachians, tadpoles. They, however, soon recognized the presence of larvae and pupae of the mosquito and immediately turned their attention to these, ravenously devouring them in preference to any other foodstuff present. At the end of twenty-four hours no pupae were to be found and in forty-eight hours only a few small larvae survived. The motion of the water, made by the ducks, of course drowned some of the insects—what proportion cannot be estimated.

"For some years I have been using ducks to keep down mosquitoes in swamps that would have been very expensive to drain, but I never fully appreciated the high degree of efficiency of the duck as a destroyer of mosquito life until the foregoing test was made."

Dr. Dixon then quotes other writers as of the opinion "that aquatic birds could be used for the purpose of destroying mosquito larvae, resting on the surface of the water." And, "While other
birds, fish, spiders, bactrachians, anthropods and reptiles are all enemies of the mosquito, none of them have the wide geographical range and the capacity of devouring large numbers of the larvæ and pupæ on land and water as the duck." Another observer states that "the best insect destroyers are the beautiful wild duck (Aix sponsa) and the green-winged teal (Nettius carolinensis). These ducks are smaller than the mallard and their diet more insectivorous."

Dr. Arthur Stanley of Shanghai writes, "I have not heard of ducks as malaria and yellow fever preventers—but it sounds encouraging, although they are dirty beasts."

It would be natural to assume that the duck and goose common through the Yangtse valley also had something to do with mosquito life. In Nanking, I have noted that the ponds nearest Chinese dwellings are not as infested with mosquitoes as those in less frequented regions. But I never associated this fact with the presence of the common duck or goose except as they kept the water stirred up and muddy. My explanation was that since the ponds nearest human dwellings were an essential part of household economy the mosquitoes preferred places not disturbed by people who came at all hours of the day to wash vegetables and pound clothes. At the same time these nearby ponds were kept fairly clear of tall grasses which were cut for fuel, while those in outlying districts were full of and surrounded by undisturbed vegetation, thus affording an ideal place for feeding and breeding.

THE ATTITUDE OF THE ST. B. H., MINNESOTA, REGARDING SMALLPOX.

"Millions for vaccination: not one cent for pest-houses. We will furnish, to all who desire it, vaccination without cost. We will not force you to accept it, except in special emergency cases. Any person claiming his divine right to death or defacement from the most hideous of diseases may go ahead and die in his chosen way. But not at our expense. We will not house him or furnish him with food, medicine, or care. Better use can be found for our money than saving fools from the fool-killer."—S. H. Adams in McClure's Magazine.

TEACHING HEALTH IN SCHOOLS.

For those who wish to introduce the study of hygiene and sanitation in mission schools, the Christian Literature Society has prepared translations of Ritchie's two books, adapted to conditions in China. The texts are simple and well-arranged in short chapters with a summary of "points to be remembered" at the end of each.

TUBERCULOSIS.

"Prevention of tuberculosis is common-sense hygiene. A campaign against it is a campaign against all disease. It is dependent upon adverse living and industrial conditions. Everyone has a little tuberculosis and doesn't want any more. The way to protect yourself is to fight against the disease."

—Exchange.

FOOD.

"What you eat to-day is either walking around to-morrow or keeping you in bed."—Exchange.

"Do you know my definition of a doctor? Why it is just an ordinary man like Jesus, who lays his hand on the filth of the world's flesh, but who lays his heart and his soul on bruised hearts and broken souls... . . . We need people to clean cellars,
Correspondence.

To open windows, to heal bodies, to bring in those mysterious ultraviolet rays of the spirit that dissolve the knot in the heart and the kink in the soul!"
—from "Dr. Rast." (James Oppenheim.)

A CORRECTION.

The statement, in the September issue, giving the cost of Rosenau's "Preventive Medicine and Hygiene" as $7.50, Mexican, should read: "Gold $6.00, or Mexican $9.00."

W. W. P.

Correspondence.

[The Journal does not hold itself responsible for the opinions or assertions of correspondents; nor can it undertake to return unused MSS.]

To the Editor of "The China Medical Journal."

Sir: It is a pleasure to announce through the columns of the Journal that the medical school scheme, which we have so long been fostering in Changsha, has at last materialized.

Dr. Yen is to read a paper at the Conference, describing in full the steps through which we have come to the present working status, and he will tell the members of the Association at that time his views as to the advantages and disadvantages of our method. I shall therefore only mention at this time, the fact that our school is under the control of a joint board of managers, ten elected by a Chinese society and ten by the Yale Mission. The enterprise is therefore truly co-operative. The Chinese society includes among its members some of the most prominent educators of Hunan as well as a number of officials and other prominent men. They have secured from the Hunan government, with the full consent of the Peking government, annual grants-in-aid, sufficient for the upkeep of the medical school, the Yale Hospital, and two schools of nursing. In addition, the Hunan government has deeded to the Chinese society a large residence wherein the medical school and the hospital and the school for women nurses may find ample accommodation during the next two or three years.

Yale furnishes all the medical teachers and, during the present pre-medical course, a large majority of the teachers for biology, chemistry, English, etc. In addition, Yale is to contribute to the cooperation a large modern hospital, and the Chinese society is to receive funds from the government for the erection of suitable modern buildings for the medical school.

The present class, admitted in December, is doing regular medical preparatory work, with laboratory courses in chemistry and biology. The course in laboratory physics will follow in the second year. After the first class has done two years of preparatory work, the regular medical course will be commenced.

The annual fee for tuition and board is, at present, only Mexican $60, but uniforms (not compulsory) and books are extra.

Inquiries may be addressed to the Principal, Dr. F. C. Yen, or to the undersigned, in care of the Yale Hospital.

Very truly yours,
Edward H. Hume.
Nanking, November 20th, 1914.

To the Editor of

"The China Medical Journal."

Dear Sir: Allow me to express a few words through your pages in regard to the question of adopting the Chinese language in teaching of medical science by the majority of medical schools in China which appeared in the Report of the President of the C. M. M. A. after his visit to the medical schools.

I think that those who are in favour of teaching medicine in the Chinese language have the idea that at present it is not easy to get students who know English well enough to study medicine, therefore they are obliged to adopt Chinese in teaching. I do not wish to hurt the feelings of those doctors who have been in China as long as Dr. Main has stated in his report but according to our idea we think that medicine is a science that needs to be followed up and with constant reading and study of up-to-date journals and new editions of books, etc. Unfortunately there is hardly a medical journal worthy the name in the Chinese language at present so we have to read the foreign journals to keep up with progress in our profession, it is impossible for us to do this without a knowledge of some foreign language.

Many good English scholars (Chinese) now-a-days, are not willing to study medicine on account of the low standard that the medical schools that teach in Chinese have been forced to adopt, for they prefer to be a teacher in the schools than to be a "half-tub-doctor" in practice.

The Chinese are not advancing medical science because they have had no thorough training in medicine. We at present are not in so great need of foreign doctors to practice medicine as for medical teachers and editors of medical journals. If we want to educate Chinese students and expect them in due time to carry on the medical work which the foreign doctors have begun, the medical schools ought to have a high standard and the students must have good knowledge of some foreign language and be trained to do high class work. When graduated from such a school they will find no difficulty in teaching their own countrymen in their own mother tongue.

I have no doubt that the medical schools in China, especially those that are established and supported by the missionary societies have high ideals and desire not only to procure medical assistants for their own dispensaries, but to educate first class doctors to carry on medical teaching and be medical leaders in their own land, etc. I think that the teaching of medicine in English is the most advantageous because nearly every large town in all the provinces has had schools established for teaching English, so that young men with some knowledge of English are not very difficult to find who can study medicine in that language.

I would call attention to the announcement which appeared in your Journal, September issue, that the Rockefeller Foundation of New York offers free scholarships to Chinese graduates in medicine to pursue their medical studies in America but the applicant should submit evidence to show that he is qualified to study medicine in English. This is an important matter for Chinese physicians, for these scholarships and research laboratories in America founded by Mr. Rockefeller and Mr. Carnegie are closed to those not having a knowledge of English.
Now may we hope that the authorities of medical schools in China will press every effort to accomplish this great task of teaching and to teach in English, and that we will soon have well educated Christian Chinese medical men, not only to lead their fellow-men to Christ, but also to develop modern medical science in their own language and in their own land.

Very truly yours,  
C. S. Yang, M.D.

To the Editor of
"The China Medical Journal."

Dear Sir: We would like to ask through the Journal if the Nurses' Association recommends any scale of charges to be made by Chinese nurses graduated from our hospitals.

Very truly yours,

C. S. Yang, M.D.

To the Editor of
"The China Medical Journal."

Dear Sir: My hospital supply of absorbent cotton wool is running short and as on account of the war there is doubt whether new supplies from home will be obtainable, I am writing to ask if anyone can tell me how to make native cotton wool absorbent. I have heard that it can be done, but how I do not know. I shall be very grateful to anyone who can tell me.

Yours,

M. C. Poultner.

PERSONAL RECORD.

BIRTHS.

At Tsinanfu, October 2nd, to Dr. and Mrs. Harold Balmer, E. B. M., a daughter.

At Shanghai, November 13th, to Dr. and Mrs. H. H. Morris, a son.

At Chaoyang, S. China, November 21st, to Dr. and Mrs. C. Byron Lesher, A. B., F. M. S., a daughter (still-born).

MARRIAGES.


At Shanghai, November 18th, Dr. Jesse H. Baldwin to Miss Gertrude I. Drusbach, both of M. F. M.

At Hankow, December 25th, Rev. William G. Davis to Miss Laura A. Shepard, both of C. and M. A.

DEATH.

At Peking, November 4th, Dr. H. V. Wenham, of the Union Medical College, Peking, from pneumonia.

ARRIVALS.

October 5th, Dr. and Mrs. J. A. Anderson, C. I. M., and two children (ret.).

October 10th, Dr. and Mrs. E. J. Stuckey and four children (ret.).

October 15th, Dr. and Mrs. C. H. Barlow and two children, A. B. F. M. S. (ret.), Dr. and Mrs. R. T. Shields and two children, S. P. M., Dr. and Mrs. Russell, M. F. Chi., South, Dr. and Mrs. Best, Can, Meth. Mission.

December 15th, Dr. and Mrs. S. Cochran and children, A. P. M.
NOTICES.

FINAL PRELIMINARY REPORT OF CONFERENCE COMMITTEE.

The committee desires to make it clear once more that, as far as possible, all papers will be in print and given to the delegates actually present at the Conference only (and to the authors of papers who are unable to be present).

Will delegates apply at the Y. M. C. A. enquiry office for their copies of the Conference papers, so that they may read them before the sessions begin and thus discussion may be of value.

ORDER OF BUSINESS AT DAILY SESSIONS.

9 a.m.-9.15 a.m. Devotional Exercises.
9.15-10 Reports, business, etc., all to be in print as far as possible.
10-12 Session for discussions, etc.
2 p.m.-4 p.m. Session Practical Demonstration and also Discussions.
4-5 Tea and Exhibition.
5-6 Lantern Lectures

With the exception of Monday evening's social reception, there are no evening sessions. The above is subject to alteration at any time.

To the programme as already printed the committee desires to add "Lantern Lecture on Heredity," by Dr. E. M. Merrius.

A. F. Cole.
Chairman Programme Committee.

PUBLICATION COMMITTEE.

Attention is called to the new books issued by the Publication Committee. These are indicated by a star before the name of the volume in the advertisement pages of the Journal.

P. B. Cousland,
Editor and Secretary, Publication Committee.

SCOTT'S EMULSION NOTE BOOK.

Readers of the Journal who for some years have been receiving the neat vest pocket Note Book, issued by the manufacturers of Scott's Emulsion, will regret to hear that this convenient little book will not be issued this season, as Messrs. Scott and Bowne, Ltd., have been compelled to cut down their advertising appropriation owing to the war. Not only is the China edition of the Note Book suspended this season, but the editions for all other countries as well, including Great Britain.

WANTED.

The following copies of the CHINA MEDICAL JOURNAL:

1887 March, June.
1888 March.
1889 March, June.
1890 March, June.
1894 September.
1899 October.
1901 January.
1902 January, July, October.
1903 January, April, July, October.
1904 January, July.
1905 January.
1906 March, May.
1907 January, March, May, September, November.
1908 January, March, July, September.
1909 September.
1910 January.
1911 May.
1913 May.
1914 January, March, September.
Index for 1911.

Anyone caring to dispose of their copies, please make offer to JOHN A. SNELL, SOOCHOW.