Many times the incision may not be any larger than to admit the index finger, but the finger once introduced, the state of affairs may at once be determined and thus save us from malpractice suits and the humiliation that we sometimes experience in treating fractures.

The incision once made, the question would then arise as to how the fragments of the bone may be best secured, that they may be replaced to their normal position and allowed to remain so until Nature comes to our rescue. I would say, in this connection, that I have found nothing to equal the silver wire, secured with an Aveling coil and mounted with a perforated shot. The wire may be passed around the fragments by means of a Collins' needle. The wire is made taut by an Aveling coil mounted by a shot. This may be allowed to remain indefinitely, as it causes no irritation. It may be removed at the end or four, six or eight weeks, in which case it is best to have the coil to stand at a right angle to the bone or the ends of the wire may be secured, the coil placed parallel with the bone, the periosteum be made to overlie it and allowed to remain. In this case, the bony structure is thrown out and soon encompasses the wire and its attachments. As many of these may be used as may be necessary. So far I have not seen any bad results. With one or two of the dogs I found that the integuments healed and that they caused no serious trouble.

The fragments once secured by this means, the wound should be closed and the drainage tube, which should be rubber, inserted; as we are more likely to need drainage in the reparation of the bone than any other tissue. As to the after dressing, I have found nothing better than the application of simple water dressings. These enable the wound to be kept soft and the discharge to escape freely. Towels saturated in boiled filtrated water, can be applied every hour or so as the occasion may require. It may, or may not, be necessary to place the injured extremity in plaster.

Of all the dressings, I think the plaster is the most desirable. It has been my desire in bringing this paper before you, to excite an interest in this very important matter; knowing that it will require a great deal of time, experimentation and observation to enable us to arrive at definite conclusions, in this as in all other matters, I am desirous of having your coöperation and assistance in bringing this subject before this Association at its next meeting, wherever it may be.

A JAPANESE MEDICAL NOBLEMAN.—The Emperor of Japan has named Dr. Hide Miyake, professor in the Medical Faculty of the Imperial University of Tokio, a member of the House of Peers.

AN ABDOMINAL WICK.

Read in the Section of Obstetrics and Diseases of Women, at the Forty-second Annual Meeting of the American Medical Association, held at Washington, D. C., May 1891.

BY ROBT. T. MORRIS, M.D.,

OF NEW YORK.

In my first sixty-three laparotomy cases, dependence had been placed upon a drainage tube that was so efficient, so ready at hand, and so simple in its workings that I thought it good enough to be patented. That drainage tube was the patient's intestine, running through the middle of the great lymph bag of the abdomen, and ready to abstract from the sac any collection of fluid that was enticing to microbes, and to set it out of doors where their fatal breath would be exhaled into valueless space as they fought for possession of the sports.

Deliquescent salts passed through the alimentary canal or injected into my drainage tube by way of the anas had cleared the great lymph sac by osmosis so regularly and with such ease that any other sort of tube seemed to be a superfluity.

But one day this fine drainage tube failed. The case may be spoken of unpoetically as "number sixty-four," in order to avoid the identity that goes with initials. There had been a moderate degree of oozing from adhesions after the removal of her large ovarian cyst, but this was not disturbing to my assistants at the hospital, who had often managed similar cases without a ruffle of anxiety as to the outcome. This patient's bowels, however, failed to respond to the seidlitz powder on the following day. Then a large dose of Rochelle salts was given without effect. The patient was rapidly developing a septic peritonitis, and continued attempts at getting an evacuation from the bowels by means of Rochelle salts by mouth and by rectum were failures. Finally I reopened the abdominal cavity and out ran a thin wicked stinking fluid that had caused all of the mischief, but it was too late and the patient gradually failed and died. Her family and her physician had put confidence in me and that was what I had done for them. An artificial drainage tube introduced at the time of the operation or at the beginning of the peritonitis would probably have saved the patient's life, and I should have been spared remorse; but if one could have all experience at once it would not be necessary to go to the bottom of such a dark well for truth. I could not believe in time that the patient's bowels were not going to act as other bowels under similar circumstances.

My reasons for not using artificial drainage tubes after abdominal operations had been good ones. I had known of several fæcal fistulæ that had followed the use of hard tubes, and secondary infection can easily take place through the stright and narrow way that leads to destruction. Soft tubes collapse. Gauze used for abdominal

drainage may become so firmly adherent to the intestines that its removal means peril for the patient. Then again I know that the introduction of artificial drainage tubes mean a good deal of extra trouble for the surgeon. Of course, no one cares how much extra labor and trouble he is put to if he can thereby save life and prevent suffering, but it seemed unnecessary, judging from my facts in experience up to the time of losing the patient just referred to. Since that time I have occasionally thought it prudent to use artificial drainage apparatus, and to avoid the dangers of hard and soft tubes, and of unprotected gauze. Wicks of the form here presented were used. The simplest wick consists of a little roll of absorbent bichloride gauze, around which is wrapped a couple of thicknesses of Lister's protective oiled silk. The gauze protrudes a trifle from each end of the cylinder, and a few little holes snipped through the protective allow serum to reach the gauze elsewhere. In certain cases where injections through a tube are desirable the soft rubber tube can be surrounded with this wick. When a large gauze packing for the pelvis is needed, an apron of the silk can expand out over the gauze and protect against intestinal adhesions. The wick acts by capillary attraction; the silk wrap will not irritate the peritoneum and the whole thing is so soft that it adapts itself to curves readily, and I doubt if it will cause fecal fistulæ. The end of a wick which

if each one lead up into a bunch of absorbent cotton or gauze. A little wick as big as a lead pencil will take pints of fluid out of the abdominal cavity and transfer it to the absorbent medium outside. When the wick is at work it is important for the patient to remain upon her back, for if intestines are not inflated with gas the fluid rises naturally to the anterior abdominal wall, instead of settling, as many surgeons suppose, in the region of Douglas' pouch. If the patient turns upon her side the fluid rising to the highest point will be out of reach of the wick. The relative positions of peritoneal exudation or of blood serum and intestines will vary with the amount of gas in the intestines, but ordinarily immediately after work upon abdominal contents it may be observed that all free fluid is rising toward the anterior abdominal wall, and that is why the little holes are snipped through the silk of the wick at various points.

Apron and wick.

My drainage tube No. 1, is still the intestine. My drainage tube No. 2, is the wick, and this row of wicks at work in the pan of water is speaking more forcibly than I can to you who are observers.

133 W. 34th St.

projects at the external opening of the wound should be covered with enough absorbent cotton or gauze to hold all fluid that is coming from below. In the pan which I now fill with water a row of these wicks is introduced. And as you see, they empty the pan in a few moments by siphon action. They would empty it almost as quickly

PROF. REURERS, of Berlin, has used the cantharadinate of potassium (Liebreich's remedy) in a severe case of diphtheria, with prompt and favorable results. Reurers was led to try the remedy because of its effects upon swollen and infiltrated tissues, believing that it might have a specific action upon the diphtheritic membrane. The favorable results in the single case in which it was tried will lead to further observations.

AN open competitive examination of candidates for junior assistant physician in any of the State hospitals and asylums, will be held at the office of the Civil Service Commission, Albany, N. Y., Thursday, August 20, 1891, commencing at 10 o'clock A.M. A candidate for the position must be a citizen of the State of New York, at least 21 years of age, and have had at least one year's experience in a hospital, or three year's experience in the general practice of medicine. For application blank, address the Secretary of the New York Civil Service Commission, Albany, N. Y.

JOHN B. RILEY, Chief Examiner.

FURTHER PROGRESS IN MEDICAL EDUCATION IN NEW YORK.—The Medical Department of the University of the city of New York makes certain special announcements this year which should have a very general interest, indicating as they do a decided advance in educational methods. First: The Faculty have placed the college upon a true university basis; that is, the pecuniary interests of the college have been put entirely in the hands of a body separate from the Faculty, while the latter receive fixed salaries, and are free to give their time and energy to advancing the standard of the curriculum unincumbered by financial care. This step makes the Faculty quite independent of the number of students who may attend the college classes.

A second change consists in making the three years' course obligatory; and a third, perhaps the most important of all, consists in the introduction of the recitation system in place of the didactic lecture during the first and part of the second year.—*Medical Record*.

A DOMESTIC STERILIZER.—There are few houses in which a ready sterilizer is not at hand, namely the kitchen oven. The heat which can be generated in this culinary appliance would be more than sufficient to destroy those forms of germ life which are inimical to wound treatment. With a clean receptacle at hand, into which towels and other appliances required for the purposes of an operation could be placed, the kitchen oven could be relied on to effect the necessary sterilization of these with convenience and dispatch. Thus as an improvised "sterilizer" we can easily conceive of the occasions when a surgeon would be glad of the assistance of the kitchen oven.—*Medical Press and Circular*.

PHYSICO-CHEMICAL RESEARCHES ON THE ALIMENTARY FEATURES OF MILK.—In an interesting communication to the *Journal de Médecine de Paris*, Jolly calls attention to the necessity of a due proportion of phosphate of lime in milk, in order that it shall be capable of maintaining nutrition. Milk, to properly nourish an infant, and supply a sufficient quantity of phosphate of lime for the purposes of ossification, should contain at least 1.25 G. of phosphate of lime per litre. The needs of the infant economy are abundantly provided for by normal human milk, which contains about 450 G. of mineral constituents per litre, of which about one-half, or 225 G., is phosphate of lime. He cites the following cases illustrating the foregoing:

First Observation.—A nurse, aged 23 years, had been delivered about three months before. She had nursed a child twenty days. At the beginning the child had gained between 13 and 19 G. Towards the twentieth day it was observed that it had lost 26 G. in two days, and 300 G. on the weight which it had at birth. The nurse was changed and the child improved. An analysis of the nurse's milk showed it to contain the fat, casein and sugar in nearly normal proportions, while the mineral salts were only 1.50 per 100, or about 0.75 G. of phosphate of lime per litre.

Second Observation.—The nurse, a Breton of 24 years,

of average height, well proportioned, appeared to enjoy perfect health. Her milk per 1,000 G. contained: casein 35.00; fat 43.30; milk sugar 51.80; mineral constituents 1.60. The child increased only about 7 G. per day, and at the end of three weeks, for several days, it lost 15 G. per day. The nurse was submitted to a phosphatic treatment. At the end of four or five days the child was seen to pick up, and after the eighth day gained regularly 20 G. per day. It need only be stated that the phosphate administered was not the phosphate of lime.

Third Observation.—The most feebly mineralized human milk which Jolly has met with, merits attention. Its composition per 1,000 was as follows: Casein 8; fat 74; milk sugar 54; mineral constituents 0.40. This milk, extremely rich in fat, was extraordinarily poor in casein and mineral salts. The nurse was an obese woman of 32 years. She had a freshness of complexion, and amplitude of form, which is generally considered as representing the very type of vigor and health. Like most persons who have a tendency to fatty degeneration, this woman used mostly farinaceous food for alimentation, to the exclusion of meat. It goes without saying that the child which she nursed sank steadily. Attention is called to this milk for the following reason: The physician is frequently called to assist families in the choice of a wet nurse, and he is generally contented with a physical examination of the milk. Now, in the case in question, the milk had a creamy and rich appearance which was certainly deceptive as to its nutritive value.

The phosphatic composition of the milk of the cow similarly undergoes considerable variations, dependent upon the quality of the food and the abundance of the lacteal secretion. While it is not uncommon to find milk containing 4 or 5 G. of phosphates, Jolly has met with a natural milk, not adulterated, which, while it contained the organic constituents in nearly normal proportions, had only 1.05 G. of the different phosphates per litre; that is to say, a quantity absolutely insufficient to serve usefully as a food for an infant.

The preceding examples are intended to show that the mineral richness of woman's milk, and cow's milk, are not always so great as some analyses seem to indicate; that the phosphatic richness of a milk has not only a considerable importance with reference to ossification in the child, but also as to its general growth.

In consequence, the determination of the phosphoric acid in milk must be made, before its nutritive value can be known.—*Journal de Médecine de Paris*.

A NEW private polyclinical institute of some importance, and on a large scale, has just been opened in Berlin. It is to go by the name of the "Johanneum." The instruction is to combine hospital practice with clinical instruction and theoretical research. It contains eighty beds, is furnished with laboratories, microscope rooms, etc., an electro-mechanical institute, and a lecture theatre, in which courses are to be given by Professor Eulenberg on diseases of the nervous system; by Professor Zülzer on diseases of the kidneys and bladder; and by Dr. Scheimann on diseases of the nose and throat.

CALMATIVE FOR HYSTERIA.—

R. Chloral hydrat.
Sodii bromid., āā ʒj.
Ext. Hyoscyami, three-fifths gr.
Ext. cannabis indicæ, three-fifths gr.
Mucil. acaciæ, ʒij.

M. S. Dose, 2 to 4 drachms, every half to one hour, in a cup of orange-flower water. Specially useful for hysterical patients who complain of night terrors and insomnia. —Grassett, *La Méd. Moderne; Times and Register*.