directly on the pillow and lay quite still. Pulse imperceptible. 5.50 P.M.: Sudden spasm and vomiting of a large quantity of coffee-coloured fluid. Marked rigidity of all muscles and then extreme opisthotonos. Convulsive spasm of abdominal and neck muscles; stoppage of respiration; death. At frequent intervals food with brandy had been administered by enema, or brandy had been given subcutaneously.

To Mr. Rogers, assistant pathologist, we are indebted for the following notes of the microscopical appearances:—Sections of the spinal cord showed the vessels to be very congested and in places there were capillary hæmorrhages. These were most numerous in the posterior segment of the cervical portion. The medulla was much softened, especially in the floor of the fourth ventricle, and there was an excess of leucocytes in that position. The bloodvessels were also very full. No other changes were noted.

Remarks by Mr. PAGE.—The notes of this case, which are necessarily much condensed, fail probably to convey an adequate impression of the improvement which did unquestionably follow the administration of the opium and eserine. The original idea was to get the child as quickly as possible under the influence of mercury, in the hope that that might act as an antidote to the specific poison, even though the chances of its acting as such at that date were as small as could be. It was at the suggestion of the house surgeon that eserine was substituted for it. Pushed as this was to physiological effects, as clearly indicated by the record, these effects were constantly, and with hardly any intermission, watched by Mr. Davis himself, and the impression on his mind was that of distinct, though only temporary, benefit. The fact of the matter, however, is this: that at that period of the disease no drug treatment can be of the least avail to stay the progress of the effects which the specific poison of rabies has wrought in the most vital parts of the nervous system. The antidote must begin its work at an early period, and no unprejudiced mind can doubt that that is to be found in the inoculations of M. Pasteur. Some of those who are not free from prejudice have even gone as far as to say—such are the delusions of mankind—that the phenomena of rabies in the human subject are solely the result of fear engendered by the bite of a dog. The case here recorded is an answer to such surmises. The little boy had no idea that there was danger in the bite, and none that he was suffering from hydrophobia. The spasms induced by the sight of fluids or attempts at drinking were genuine and real, for it was obvious that he did his very best to obey the wishes of those who nursed him whenever he was told to drink. It has been said, moreover, that the sufferings in this disease are purely imaginary or grossly exaggerated. It may be no easy thing to measure the agony of dying, but the sight which this child presented was sad and terrible, and his manner of death was by all comparison more painful than that which is ordinarily seen. It will be observed that the pathological changes were more marked than usual. It seems not improbable that they bore a definite relation to the symptoms.

SUSSEX COUNTY HOSPITAL.

A CASE OF INTESTINAL OBSTRUCTION; RECOVERY WITHOUT OPERATION.

(Under the care of Mr. F. A. HUMPHRY.)

WE have not infrequently published the records of cases of intestinal obstruction in which recovery followed some form of operative treatment, where, in fact, but for that treatment in all probability the result would have been far otherwise. We publish below the account of a case in which symptoms of intestinal obstruction of grave character were present, where the difficulty in diagnosis was very great, and in which the procedure called abdominal taxis was resorted to with success. Many causes contribute to produce the high percentage of deaths which obtains after laparotomy for acute obstruction. We do not purpose to consider them; the subject, of great importance, is also of wide extent, and much depends on the individual case. Statistics are useless when employed in analysing such a subject. Mr. Hutchinson,¹ writing on the treatment of intestinal obstruction, says: "An accurate diagnosis of the cause of obstruction is not in four out of five cases

possible, and the merit of early use of anæsthetics and abdominal taxis is that, whilst eminently adapted to the relief of many, it is hardly likely to be prejudicial to any. The only cases in which the surgeon is the least likely to regret having employed it are those in which peritonitis simulates obstruction." And again:² "My argument has been, that in a large majority of cases of uncertain diagnosis as to cause, however severe the symptoms in the early stage, recovery may be hoped for." He would not, however, recommend delay in the performance of an exploratory laparotomy if the symptoms return in an urgent manner after recovery from the anæsthetic. For the following report we are indebted to Mr. F. J. Paley, house surgeon.

M. J. M.—, aged eight, was admitted on November the 20th, 1889. She was stated to have been in her usual health till November 14th, when, during afternoon school, she was suddenly seized with pain in the abdomen, and vomited. The vomiting continued, and for the last two days had been fæcal, as observed by her medical attendant. She had also complained of constant griping pains in her stomach. Since the first onset of the pain nothing had passed the bowels (which had acted naturally on the morning of the 14th) except a few small hard scybala after an enema, several of which had been given. No blood or mucus passed, and there had been no straining. The child was not known to have eaten anything unusual, and denied having done so. She had always been a delicate child, but with the exception of a somewhat similar attack to the present, but much less severe, some months ago, she had had no illnesses. No details of this previous attack could be obtained. The mother stated that she had lost one child a year old from "obstruction."

On admission, she was a delicate, thin child, with flushed cheeks and a pinched expression. Tongue moist but furred. Temperature 98.6°; pulse 100, small. Thoracic organs apparently sound. Abdomen not distended, but hard and firmly contracted. The whole abdomen appeared to be resonant, so far as could be ascertained from the extreme tenderness. Per rectum, a few small pieces of hard fæces felt, but no intussusception or anything abnormal. Urine acid, sp. gr. 1015; no albumen. The child vomited two or three times soon after admission, bringing up a thin yellow liquid, extremely fæcal in odour. She lay on her back with knees drawn up. A few hours after admission chloroform was administered and the abdomen again examined. There was a sense of resistance and a boggy feeling in the left iliac fossa, and the percussion note was here high pitched. It was thought that an indefinite swelling or fulness could be felt just below and to the right of the umbilicus, but no tumour was certainly made out. A consultation as to the advisability of opening the abdomen was held, but it was decided to wait. The abdomen was thoroughly kneaded, and a large olive oil and gruel enema thrown up by a long tube and funnel. A hot poultice was applied over the abdomen, and ten minims of tincture of opium and tincture of belladonna given as soon as the effects of the chloroform had passed off. The belladonna was repeated every four hours.

Nov. 21st.—No vomiting since the chloroform; no pain. General aspect improved, but abdomen still hard and tender; legs still drawn up. The enema was returned with no motion. Child very thirsty; pupils dilated; tongue moist; temperature 97.8°; pulse 120, small and thready. Ten minims of tincture of opium repeated; belladonna continued; child fed on teaspoonful doses of milk and soda-water every half-hour.

22nd.—Very drowsy all last night, but no sound sleep; very thirsty, and pupils still dilated; vomited four times, but the vomit not now fæcal; abdomen as before; temperature 97.2°; pulse 120. Consultation again held, but it was decided to wait. Enema repeated.

23rd.—No action of the bowels, but flatus passed after the enema; no vomiting. The tincture of opium was repeated last night; belladonna given every six hours; pulse 120; tongue dry in the centre.

24th.—No vomiting; no action of the bowels, but flatus again passed; abdomen remains unaltered. Five minims of tincture of opium were given at midnight last night, after which there was slight delirium, but no sleep; temperature 99°; pulse 132; tongue dry; losing flesh rapidly, although the milk was well retained. Five minims of tincture of opium to be repeated in the evening; belladonna continued.

¹ Archives of Surgery, vol. i., No. 1, p. 10.

² Ibid., No. 2, p. 134.

25th.—Condition unchanged. The dose of opium to be given night and morning; belladonna continued.

26th.—During the night three semi-solid motions were passed naturally. Child much relieved; temperature 97° 6'; pulse 100. Tongue moist; abdomen much softer and less tender. Opium discontinued; belladonna continued.

27th.—Two more large motions passed yesterday. Child much improved. Abdomen quite soft, and not in the least tender; pulse 84. Taking milk, beef-tea, and bread. Belladonna stopped. One drachm of glycerine to be given by the mouth every four hours.

28th.—No more motions. Great improvement.

Dec. 6th.—Since last note child had perfectly recovered. Bowels acted daily and naturally. Temperature and pulse normal. Taking ordinary diet. Up and about the ward.

11th.—Child went home well.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

"*Sable Intestinal*."—*Retro-peritoneal Hernia*.—*Ruptured Spleen and Kidney*.—*Myxo-fibroma of Pelvis*.—*Mal-formed Fœtal Generative Organs*.—*Infantile Enlargement of Spleen*.—*Epithelioma of Eyelid*.—*Cancer of Pancreas*.

AN ordinary meeting of this Society was held on Feb. 4th, Dr. W. H. Dickinson, President, in the chair. Before the commencement of the regular proceedings,

THE PRESIDENT asked the Society to pay a brief tribute of regret for the recent loss of one of their oldest and one of their most distinguished members. Few words would be needed where so many had been spoken, but few though they were it was right that the especial regret of the Society should be expressed. Sir William Gull was a great physician and a great genius; he was pre-eminently a great pathologist. It was true that the Society was not his habitual resort; indeed, in his later life his enormous practice made it impossible for him habitually to resort to any Society, but he occasionally took part in the discussions, notably on those which had been arranged upon cancer and syphilis. Together with Dr. Sutton, he contributed one paper to the Transactions, one of great labour and detail, on the Spinal Cord in Arterio-capillary Fibrosis. The best of his pathological work was elsewhere, but none the less to be appreciated. In proof of its quality he needed only to instance his papers on Abscess of the Brain and on Reflex Paraplegia. In his later work, that on Arterio-Capillary Fibrosis, he had a coadjutor. Besides this, Sir William Gull was the author of many other papers, all of value, bearing on pathological questions, and indeed it always seemed that his pathological knowledge was the largest element in his deserved success. The President was for many years often brought into contact with him, and often had occasion to admire the self-denying way in which he pursued his cases to their pathological issues. At the height of his practice he never hesitated to put aside the living for the dead, and Dr. Dickinson concluded by saying that he never met a physician in the post-mortem room whose diagnosis was so well borne out by what was found. The Pathological Society was not the place to discuss his powers, great as they were, otherwise than as a pathologist, but in that respect the members must lament the loss of one who deserved a place second to none in the Society.

It was unanimously agreed that an official letter of condolence should be forwarded to Sir William Gull's relatives.

Dr. DELÉPINE read a paper on "*Sable Intestinal*" and other Intestinal Concretions. The first specimen shown came from a lady seventy years of age, who was hysterical and had suffered from obstinate constipation for a long time. Her motions had at last assumed the form of rabbit droppings. On chemical examination, the particles were found to be composed almost entirely of cellulose and of a small amount of oxalate, phosphate, and carbonate of calcium. On microscopical examination, they showed distinctly the structure of the gritty particles found so commonly in cooking pears, plus a few crystals of oxalate of lime and indistinctly crystalline particles, some of which were soluble in acids, and others were insoluble in the strongest acids, and were evidently silicious. These small

concretions were therefore composed of lignified vegetable cells, which, owing to a rather prolonged stay in the intestine, had become slightly incrustated with calcareous salts, which had also entangled other particles, probably introduced with the food. It was found on inquiry that the patient had latterly been in the habit of eating baked pears. The specimen was a good instance of what Laboulbène had described under the name of *sable intestinal*, the vegetable cells forming the basis of the sand being constantly found in the fæces, as well as seeds and other indigestible products. It was, however, only when, owing to constipation or obstruction, these indigestible products remained for a long time in the intestine, and became coated with calcareous salts, that they formed the basis of small or large intestinal concretions. The second specimen was of the same nature, and he selected it from several other cases because it illustrated the resemblance of effects between simple constipation and obstruction of the bowel due to organic stricture of the gut. It presented in almost every respect the characters which had already been described in the first specimen, the only difference being that instead of sclerenchymatous tissue forming the basis of the concretions, as in the other case, fig seeds were found in this case. There was also but little calcareous matter connected with them. The specimen was chiefly interesting on account of the fact that on inquiry it was found that the patient had partaken of figs many days before evacuating their seeds, so that they had remained for some time in the intestine, and had accumulated so as to be expelled in rather large numbers at the same time. Both cases showed well how retention of fecal matters, whether due to constipation or to obstruction, favoured the formation of enteroliths or intestinal concretions. He brought forward two other cases, which were quite analogous, though not falling under the head of *sable intestinal*. A patient with bladder symptoms suggesting the presence of stone or tumour was told by a well-known specialist that he had a growth at the trigone of the bladder. Examination of some suspicious masses passed per urethram revealed the fact that they were the outer coats of barley grains, and as part of the patient's diet consisted of whole meal bread a recto-vesical fistula was diagnosed. The last case was one to which Mr. Knowsley Thornton had already publicly referred. A patient had been treated for gall-stones with large doses of olive oil; after a time he evacuated a large number of rounded bodies which were supposed to be gall-stones. Mr. Thornton not falling in with that view, sent some of these concretions to Dr. Lauder Brunton, who, after satisfying himself as to their not being gall-stones, handed them over to Dr. Delépine for examination. These concretions were about forty in number, irregularly rounded in shape, some almost spherical. The largest measured 16 mm. ($\frac{5}{8}$ inch) in diameter, the others were generally speaking much smaller. They were of a pale yellowish-green colour, and had a rancid butyric smell. The surface of the large ones was pretty smooth, but slightly granular and soft looking. The smaller concretions were much more uneven and looked very much like frozen oil. The large concretions were just hard enough to be cut with a sharp knife and to present a smooth surface. This surface was dotted all over with small, whitish, rounded spots which contrasted with the green ground substance of the mass. On chemical examination some reactions which are supposed to be typical of olive oil were obtained, whilst there was no indication of the presence of bile pigment or cholesterine. A number of the small whitish nodules referred to above were examined microscopically; they were in great part composed of tufts of curved acicular crystals, and in the centre of each some particles of undigested food, such as muscular fibres, starch granules, vegetable hairs, spiral vessels, &c, were found. It was therefore evident that (1) the concretions had been formed within the intestine, and not in the gall-bladder; (2) that they had not the character or composition of gall-stones; (3) that they were almost entirely composed of crystallised fats. It seemed probable that this crystallisation was not due in this case to the formation of earthy soaps. It seemed more probable that a partial splitting up of the oil having taken place under the action of steapsin, the fatty acids, stearic and palmitic acids, which are solid at the temperature of the body, had crystallised, holding between them what remained of the oil not decomposed. This would explain why these concretions had slowly resumed the fluid form.—Dr. SIDNEY MARTIN had seen a case of pancreatic functional disease, in which the patient passed in his fæces a quantity