and no discounting beforehand how the young might be deformed in consequence of some real or supposed fright or injury received by the mother.

Edinburgh.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv., Prooemium.

CHILDREN'S HOSPITAL, BIRMINGHAM.

A CASE OF CYSTINURIA WITH FORMATION OF CALCULI.

(Under the care of Mr. GAMGEE.)

THE presence of cystin in the urine may always be taken to indicate the occurrence of an abnormal breaking down of albumin, either in the alimentary canal, as in most cases, or in the tissues of the body, as occurs in acute yellow atrophy of the liver. Cystin calculi are usually single, but occasionally, as in Mr. Gamgee's case, many of these calculi may be present.

A boy, aged 12 years, was admitted into the Children's Hospital, Birmingham, on Oct. 20th, 1900, complaining of the frequent passage of calculi per urethram. The patient was sent into the hospital by Dr. E. A. Sadler of Ashbourne, who has supplied many details of the history.

The family history showed that the patient comes of a long-lived family. His paternal grandfather died at the age of 63 years from heart disease. His paternal great-grandfather died when he was 80 years of age from "stoppage of the water," but there is no history of there having been a vesical calculus present. His paternal grandmother is still alive, aged 70 years, and is always in good health. The patient's father has six brothers and four sisters, all alive and well. The grandfather and grandmother on the mother's side are still living; they are over 70 years old and are always well in health. There is no history in the family of phthisis, gout, or rheumatism, except that a sister of the patient's mother died, when she was 21 years old, her relatives saying that at the time of her death she was "a bit consumptive." The patient's father and mother are alive and well.

As regards the patient's personal history he had bronchitis during his first dentition and his tonsils have been enlarged for some years. He has had no other illness. There is no point of importance about the patient's diet. Two years ago the patient, for the first time, passed a small stone per urethram, and he has done this four times since, passing one stone each time. The father and mother are quite certain that the stones passed on these occasions were quite different from those passed a few days before the boy was admitted into the hospital, for they were very gritty, were yellow in colour, and had a rough surface. During the week previously to admission the patient passed eight small calculi, the passage of them being very painful and causing retention of urine. These stones are very small, are yellowish-white in colour, have a smooth surface, and together weigh two grains. The quantity of urine passed in 24 hours varied from 34 to 44 ounces and the quantity of urea varied from 374 to 484 grains. There was neither albumin nor sugar present. On standing the urine deposited a slight sediment, which was found to contain many typical hexagonal crystals of cystin.

On Oct. 23rd the patient was sounded and another calculus was found. This, after being removed by suprapubic cystotomy, was found to weigh eight grains and to be oval in shape. Its surface was in one part exactly like those of the smaller calculi already described, but the greater part of the surface was covered with glistening yellow crystals. The patient made a good recovery after the operation. Scrapings from the calculi were dissolved in ammonia solution. On evaporation of the liquid hexagonal crystals of cystin were deposited.

Remarks by Mr. GAMGEE.—Cystinuria is undoubtedly in

some cases hereditary, but in this instance the family history has been inquired into very carefully and no trace of the affection in other members of the patient's family has been met with. At times, too, cystinuria is present in patients who either are themselves the subjects of tuberculosis or who come of a tuberculous family, but here again in the case now under review the history is negative. Urine containing cystin is said to decompose rapidly and to contain only a small amount of urea, but rapid decomposition was not noticed in this case and, as has been stated, the amount of urea passed was well up to the average. The parents' statement as to the character of the calculi previously passed is curious. The passage of cystin calculi usually recurs at intervals, and it seems unlikely that this patient passed calculi sometimes of cystin and sometimes of some other material. The causation of cystinuria is obscure, but the condition is probably due to the presence in the intestines of certain specific micro-organisms producing an abnormal decomposition of proteid matter.

DEVIZES HOSPITAL.

A CASE OF PERFORATED GASTRIC ULCER WITH OPERATION AND RECOVERY.

(Under the care of Dr. H. MACKAY.)

THE manipulations necessary for the suture of a perforated gastric ulcer on the posterior wall near the cardiac orifice are much facilitated by an additional incision of the abdominal wall towards the left ribs; yet even with this the operation is never easy. All records of operation for perforating ulcer of the stomach are of value and enable more exact ideas to be formed as to the diagnosis and treatment of this condition. Dr. Mackay's case recorded below illustrates the value of sponging in removing the effused gastric contents.

A domestic servant, aged 17 years, was seen by Dr. G. C. Phillips on the afternoon of Nov. 23rd, 1900. She was very ill and complained of severe pain in the epigastrium and right hypochondrium. She had been faint and violently sick. The pain had come on suddenly while she was at work about one o'clock on the same day. With the pain came a sudden feeling of faintness and sickness and then she collapsed on the floor. Her previous history revealed that she had suffered from anæmia and gastric pain for nearly twelve months and that she had been under treatment for gastric ulcer in the preceding April. Hæmatemesis and melæna were denied. During the few days preceding the present attack she had not felt worse than usual. On the evening immediately preceding it she had gone home and had a "good" supper of cold roast pork, after which she went to bed. She was awakened an hour later by pain in the epigastrium, but she went to sleep again. All the following morning she had gastric pain, which was increased by her breakfast of bread-and-butter and tea. As already stated she was at her work about one o'clock when the attack occurred for which advice was sought.

Dr. Phillips found her in a condition of collapse, with a pale, anxious face, shallow, jerky breathing, a small rapid, weak, irregular pulse, and cold surfaces and extremities. The pain, which was acute, was referred to the epigastrium and left hypochondrium, from which it extended up the left side almost to the axilla. The tongue was foul. The bowels had acted the day before without difficulty. The temperature was 99° F. Physical examination showed a hard resisting abdomen with slight distension, some tenderness in the region to which the pain was referred, and a tympanitic note over the whole abdomen with complete absence of liver dulness. A diagnosis of perforated gastric ulcer was made by Dr. Phillips, and the patient's removal to the hospital was recommended. On subsequent examination at the hospital, the same physical signs being present, it was decided, with the concurrence of Dr. Phillips and Dr. A. V. Trow, to operate at once.

The extremities and trunk of the patient being swathed in warm Gamgee tissue the abdomen was opened by a three-inch incision in the middle line between the xiphi-sternum and the umbilicus. On dividing the peritoneum a gush of turbid fluid and gas occurred and the presence in the fluid of minute oil globules like those present on the surface of soup was taken as evidence of gastric contents in the