tained 11·2 grains of albumen; another sample, measuring 3050 grains, was darker than the previous one: it evidently contained a larger admixture of blood, and it yielded 23·35 grains of albumen. The sample, and in some cases the first two samples of the natural colour and appearance, voided subsequently to that with the blood, likewise usually contained a small amount of albumen, and when boiled and treated with nitric acid, became more or less of a reddish colour, indicating that some of the colorific elements of the blood were still present. When the hæmorrhage had ceased for a day or two, the albumen was found to have entirely disappeared, and the urine to have returned to its normal condition.

The dark granular sediment, so abundant in the coloured samples, was collected on a filter, and well drenched with boiling water, in which it was to a great extent insoluble. It was not, therefore, composed of urate, but judging from this fact, as well as its granular composition, and the other characters which it presented under the microscope, it was of an albuminous nature, and consisted mainly of globulin, resulting from the disintegration, or breaking up, from some cause or other not hitherto explained, of the blood-corpuscles. It was remarkable, that in no instance were blood-corpuscles in the entire state present in this urine.

The treatment for the most part consisted at the onset of the attacks, and in order to cut short the feeling of coldness and shivering which ushered them in, of warm stimulating drinks,

and in the intervals in the administration, night and morning, of powders containing tannic and gallic acids, and burnt alum, and during the day of a mixture containing full doses of quinine and sulphate of iron, with excess of sulphuric acid. This treatment was decidedly beneficial, and restrained considerably the hæmorrhage, and under it the general health greatly improved, the complexion especially becoming clearer, and the face acquiring more colour. It did not, however, stop the attacks entirely, for one occurred on exposure to a strong cold east wind, as late as Saturday, the 6th of May, since which period, however, there has been no recurrence of the hæmorrhage.

The second case was that of a young man, aged twenty-four, of a comparatively healthy appearance, but who I was given to understand had tried his constitution somewhat. The affection had lasted, at the time he consulted me in February last, for about a year and a half, the attacks being confined to the winter and to cold weather.

The urine voided was dark-coloured, and sometimes almost black, but after being passed once, or at most twice, of that colour, it reacquired its natural appearance and characters, retaining them until the recurrence of the next attack.

The complexion was not, as in the previous case, sallow, nor were the attacks ushered in by shivering, but still he was generally able to tell when they were coming on by (to use his own words) feeling "out of sorts."

Large dark-red caudate cells detected in the urine in the *second* case of intermittent hæmaturia above recorded.

Examined by the microscope the urine was found to contain a great many granular casts, and also numerous cells of a red colour and of larger diameter than the tubes of the kidneys themselves. These cells may probably have been altered epithelial cells, but nothing at all resembling them was to be met with in the case first related. Their appearance was so remarkable that I thought it was well to have them portrayed.

The treatment in this case consisted in the administration of a powder, night and morning, containing tannic and gallic acids and burnt alum, and in the exhibition during the day of full doses of the tincture of perchloride of iron. Under this treatment in the course of about a week he ceased to pass bloody urine, and had no return whatever of the hæmorrhage until the end of March, the date at which I last saw him.

Although these two cases agree in their main features, there are yet striking differences. While the pale aspect of the patient in the first case, and the occurrence of shivering previous to the attacks are suggestive of an aguish disposition, these characters were wanting in the second case.

The pathology of intermittent or recurrent hæmaturia is obviously at present exceedingly obscure, and we can do but

little more than hazard conjectures. The absence of blood-corpuscles, and the presence, distinctly ascertained in the first case, of globulin in a granular state, are remarkable facts.

Wimpole-street, Aug. 1865.

CASE OF CÆSAREAN SECTION.

By WALTER HARDIN, L.K.Q.C.P.I., &c.

Mrs. H—, aged thirty-five, came to me in the fifth month of her pregnancy. On examination, I found the pelvis greatly distorted, so much so that the forefinger would scarcely pass between the promontory of the sacrum and the symphysis pubis, the lumbar vertebra, curving downwards and forwards, occupying the false pelvis. I at once determined upon the operation of Cæsarean section at the full period of utero-gestation.

I was called to the case at eight A.M. on Feb. 25th, and found the liquor amnii had escaped two hours previously, but

there were no uterine contractions. I prescribed an opiate, and at twelve o'clock, accompanied by Dr. Page, and Messrs. Norman, Goold, and Garrington, to whose kindness in assisting me I am greatly indebted, proceeded to operate.

The patient was in good spirits, and, although aware of the seriousness of the operation, left her bed and mounted the table with perfect composure. When she was sufficiently under the influence of chloroform, I made, with a convex-edged bistoury, an incision from the umbilicus to the pubes. Dividing the integument, and exposing the linea alba, through which a director was introduced and afterwards two fingers, the cavity of the abdomen opened to the extent of the original incision. On opening the peritoneal cavity, some ounces of serum escaped. The uterus being now exposed, an incision six inches in length was made in its anterior wall. The head of the child presenting, he was extracted without difficulty, and the placenta withdrawn. The uterus immediately contracted; but, as the incision was somewhat serrated, it was deemed advisable to put in a couple of metallic sutures. Several others were put in the abdominal walls, a bandage put on, and the patient returned to bed. Beef-tea and jelly ordered every fifteen minutes. — Ten P.M.: Mother and child doing well. The patient describes herself as feeling comfortable. Has passed urine twice since the operation; tongue moist; pulse 80.

Feb. 26th (second day).—Patient still animated and cheerful; makes no complaint of pain; has passed water frequently during the night, and has slept a little. The wound appears to be uniting, the tongue is still moist, and the pulse about 72.

27th.—The patient still seems to be doing well, but has not slept; the wound still looks healthy; tongue moist; pulse risen to 80. I prescribed an opiate.

28th.—She is much worse to-day; has had no sleep; has an anxious countenance, brown tongue, and rapid weak pulse; abdomen tympanitic, with pain on pressure. I find the patient has had neither beef-tea nor jelly as ordered, indeed nothing since the operation but a little weak arrowroot. Opiates given; the abdomen painted with a strong solution of nitrate of silver; and injections of beef-tea given, as she is unable to retain anything on her stomach. — Six P.M.: Patient seems to be rapidly sinking; edges of wound ununited.

29th.—Patient in articulo mortis; retching has been constant during the night; the pulse is very rapid and scarcely perceptible. Death took place at two P.M.

Autopsy, thirty hours after death.—Abdomen much distended. The edges of the incision were not united, and towards the lower part they were dark-coloured. On opening the wound some coils of intestine were found in contact with its upper half, and the bladder, partially distended, presented over the lower half. The peritoneal cavity contained about a pint of thick brownish fluid. The intestines were much distended with gas; their coats were intensely vascular, and their contiguous surfaces either adherent to each other, or covered with purulent fluid and flakes of yellowish lymph. The uterus was situated in the right iliac region, and was completely hidden by the bladder and intestines. Its peritoneal surface was everywhere united by recent adhesions to the neighbouring organs except around the opening which had been made in its walls. It measured six inches in length and four in breadth. The incision was contracted to two inches. The muscular substance of the organ looked pale and healthy, and was about an inch and a quarter in thickness, but it was somewhat thinner towards the fundus. Its cavity was quite empty, and the lining membrane had a brownish appearance, except over a round space about the size of a crown—the original position of the placenta—which was covered with a soft dark-coloured clot. The other organs of the body were healthy. The extremities were fairly muscular, and they all presented the characteristic appearances of early rachitis. The femurs measured eight inches, and were bent forwards and outwards; the tibiae were only ten inches long, with a curvature looking directly forwards. The diameters of the pelvic brim are as follow:—Antero-posterior, 1 in.; transverse, $4\frac{1}{4}$ in.; oblique, $4\frac{3}{4}$ in.*

Notwithstanding the fatal termination of this case, I am in no way disposed to think unfavourably of the operation, especially when performed early, as it was in this case, before the strength of the patient was exhausted; and although we cannot say that with the proper amount of care the patient would have recovered (the results of cases on record pointing in quite an opposite direction), still I am of opinion that the poor woman's chances of recovery were considerably lessened by want of proper care and nourishment.

Southam, Sept. 1865.

* For these notes I am indebted to Dr. Cousins, of Portsea.

CASE OF FIBRINOUS CONCRETION IN THE PULMONARY ARTERY.

By GEO. HARE PHILIPSON, M.A., M.D. CANTAB.,
PHYSICIAN TO THE NEWCASTLE-ON-TYNE DISPENSARY AND FEVER HOSPITAL.

At eight A.M., January 25th, 1865, my friend Mr. T. Y. Thompson was hastily summoned to visit Mrs. A—, who was thought to be dying. Living only a few houses distant, he was soon in attendance, but only in time to see her expire. Having been previously engaged, and knowing that she was daily expecting her accouchement, Mr. Thompson suggested to the friends the propriety of the immediate performance of the Cæsarean section; but he was not able to obtain their consent.

This woman was thirty-five years old, had been twelve months married, and was pregnant of her first child. For a few days she had been suffering from a slight attack of bronchitis, and was seen the day before her death by Mr. Thompson, when no complaint was made or any unusual appearance observed. Indeed, she was so far recovered as on the morning of her death to rise at six o'clock, dress, breakfast, and was in the act of answering the street door, when she fell to the ground, and was dead within a few minutes.

The examination was made seven hours after death, at which I was present. The body was that of a fair woman, of medium stature and moderate obesity. The cheeks and lips were turgid, of a deep-purple hue, and covered with frothy mucus, which was exuding from the mouth and nostrils. On making the incision, dark blood quickly issued, following the scalpel in a stream. The pleuræ and pericardium contained the normal quantity of serosity. The right auricle was very fully filled with blood, almost black, of the consistence of soft jelly. The venæ cavæ were widely distended; the blood was exceedingly dark and fluid. In the right ventricle was a fibrinous mass, which extended through the pulmonary artery, its right and left divisions, as far as they could be traced in the lungs. The cavity of the ventricle was nearly filled by the concretion, and did not contain any other coagulum or serosity. The concretion in the ventricle was very firm, spirally laminated, easily separable into layers, deeply indented by the semilunar valves and ventricular wall, and of a fawn or yellowish-brown colour. It was very firmly adherent and interwoven amongst the columnæ carneæ, near the chordæ tendineæ, springing from the anterior wall of the ventricle. The ventricular portion was continuous with the part in the pulmonary artery and its branches. These vessels were completely filled, and upon being cut open, the concretion was found to be firmly adherent to the lining membrane. On cross section, the concretion was most like a tube, filled with ordinary clotted blood. The circumference was of a pale-yellow colour, fully two lines in thickness, removable in layers, and enclosing a coagulum, soft and dark. On microscopical examination of the pulmonic portion of the concretion, the exterior was found to be made up by a close network of fibres, intermixed and entwined with each other, the central portion being composed of blood-corpuscles, a few fibres, but no pus or granulation cells. The tricuspid and pulmonic semilunar valves were quite healthy. The left auricle and ventricle were both void of any coagulum or blood. The mitral and aortic valves were healthy. The cardiac veins were enormously distended with dark fluid blood. The lungs were remarkably blanched and exsanguine. At both apices the pleural surface was puckered; close adjoining were a few cretaceous tubercular particles, but no cavities. The uterus contained a female child, apparently mature. The membranes were unbroken; the os uteri was closed. The other organs were quite healthy. Permission was not obtained to examine the head.

The characters of this concretion were very distinct, and plainly indicated its formation anterior to death. The manner in which it was attached and interwoven among the columnæ carneæ, the deep way in which it was indented by the surrounding structures, could only have been produced while the heart was in action. The large size, solidity, and spiral lamination still further prove its fabrication *ante mortem*, while the blood was going its circuit.

The appearances render it most probable that for some time before death—in all likelihood hours—a layer of fibrin was being deposited on the interior of the ventricle, where the con-