into a drowsy condition. Strong ammonia was then applied to her nostrils, and a cup of hot strong coffee given her to drink. Friction applied to the chest appeared to have a decided beneficial effect. This treatment was kept up for about an hour and a-half when she appeared to be regaining consciousness. She was then covered up, and removed to her home a few yards away, and placed in a chair before a large fire, with plenty of wraps round her, and some more coffee given to her.

I then left the patient and returned in about an hour, and found her quite cheerful and talkative, and next day she appeared quite well, and showed no ill effects. In two days she was able to give evidence at the inquest of the woman. It appeared that both of them had gone to bed between 9 and 10 on Thursday night. They awoke at half-past three in the morning, and the woman got out of bed to put the gas out, as it was smelling. They then went to sleep again and awoke at 5, both complaining of headache and being sick, and the woman attempted to get out of bed but almost rolled out. Both again went off to sleep and were found as I said at about 12.45 P.M. One point of interest in the case, was that a paraffin lamp was found burning on the dressing table, so that the gas must have been in a diluted condition, otherwise there would have been an explosion, and this again proves that the explosive point is above what is necessary to cause death. The treatment in this case was exactly what has been stated in the discussion: (1) The treatment of the asphyxia by means of artificial respiration. (2) The treatment of cardiac failure by means of stimulants, ether hypodermically being in my opinion decidedly beneficial, until the patient has regained a certain amount of consciousness, when coffee is undoubtedly the best stimulant to administer. (3) The lowering of the body temperature which was kept up by friction to the chest and heat, applied in this case, by placing the patient before a large fire with plenty of wraps round her.

A CASE OF RECURRENT ICTERIC HÆMOGLOBINURIA.

By G. WASHINGTON ISAAC, M.B., C.M. EDIN.

F. C., a single lady, aged 29. Her father and mother are living and in good health, as are also three sisters and two brothers. One of the sisters has suffered from ague. The family have lived for many years upon a hill, around the base of which ague was not uncommon. The patient has no history of ague, and she left the district eight years ago.

Seven years ago, while studying nursing, the patient contracted pleurisy; her right side was tapped upon two occasions; the first time 30 ounces of clear fluid was withdrawn, but the second time very little came away.

On the night of December 28th, 1895, she felt very cold and shivered, and at 7 A.M. the next morning she vomited; in the evening she noticed that her urine was very dark in colour, and a doctor was sent for. He found that her temperature was 104.5° F. On the following morning, December 30th, it was 103° F., she was markedly jaundiced, and passed some urine also very dark in colour. During the day, however, her urine was almost normal in appearance. By January 1st, 1896, the urine had become normal, and the jaundice had disappeared.

On or about February 3rd, 1896, the patient discovered upon awaking that she was jaundiced, and that her water was again nearly black. During the day, however, the water was apparently normal or nearly so. She had this time a slight cough, and some "crepitations" were heard over the site of her old pleurisy. The jaundice lasted as before, about four days, and the early morning urine cleared up *pari passu*.

On or about March 4th, 1896, she complained of pain in her back, and her sisters thought she appeared to be yellow, and on the following morning she found she was jaundiced, and the urine was again very dark. The attack lasted about four days as before.

During the intervals between the attacks the patient, usually of a very energetic temperament, had felt very languid, and unfitted for her household duties.

On June 2nd, 1896, she awoke, and found herself jaundiced and her urine very dark.

On June 3rd I visited her. She was somewhat anæmic, but the face was very much flushed. The temperature was 99°, the pulse 80, weak and compressible, the tongue was clean, the heart sounds normal. She was jaundiced (bright yellow). There was no increase of liver dulness, no pain on pressure over the gall bladder, no irritability of the skin. Her bowels had been opened, and the motion, I was told, was drab coloured. The urine which had been saved from the morning appeared black, but that passed later had only a very slight dark sediment. I ordered a pill containing hydrarg. subchlor. gr. $\frac{1}{2}$ and podoph. res. gr. $\frac{1}{4}$, to be taken at night.

Next morning, June 4th, the jaundice was decidedly less, the urine passed first thing in the morning was black as before, but that passed later appeared quite normal. The bowels were opened; the motion contained bile. She was ordered a mixture containing perchloride of iron and nuxvomica.

On June 6th the jaundice had quite gone; the morning water had only a slight dusky sediment.

Examination of the dark urine passed June 3rd: Reaction acid, specific gravity, 1028. The naked eye appearance suggested the presence of blood, but it in many respects differed from ordinary bloody urine. It was not quite so smoky, and after standing a short time the deposit was not so dense, and the supernatant fluid was a bright brownish red. Boiled with nitric acid or picric it yielded a copious precipitate of albumen. I then filtered some of the water, and it still gave a copious precipitate of albumen. Microscopically I found no blood corpuscles, but a large quantity of amorphous debris, some hyaline casts containing granular matter and epithelial cells. Spectroscopically it showed the absorption bands of oxy-hæmoglobin. I expected to find bile present, but on shaking the bottle I noticed that the film left was not yellow nor was the slight froth produced of a yellow tint. I tested it with a drop of nitric acid upon a white plate, and a friend of mine tested it with Pettenkofer's test with negative results. I tested a specimen of the day urine passed on June 4th, and it was normal in all respects.

Remarks.—Excepting during the first attack the only dark urine passed was that which was voided first in the morning; the subsequent passages were all apparently normal or nearly so. McIlhatton's¹ description of the urine of hæmoglobinuria tallies very nearly with my examination. All the authorities I have consulted agree that hæmoglobinuria is chiefly confined to the male sex. Although the patient was anæmic, and she had had at time some numbness of the right leg and arm, there was no further feature indicative of Raynaud's disease. The recurrence of the attacks first of all at intervals of one month, and then after an interval of 3 months, would suggest a relationship to the menstrual periods—these were, however, of the 21 days type, scanty, but normal.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

RENI-PUNCTURE.

A study of the cases mentioned by Mr. Reginald Harrison leads me to suggest that the condition which was relieved by the operations was hydronephrosis, and not merely nephritis. It is quite clear from the description that this was so in the second case, and it appears to me highly probable that a similar condition existed in the other two patients. Many of the symptoms mentioned are found in cases of hydronephrosis, and are relieved by exploration of the kidney even when no cause for the dilatation of the pelvis is found at the time of operation.

In the second case quoted from Dr. Newman, it is said there was no hydronephrosis, but I think it is hardly likely that a movable kidney which gave rise to symptoms such as those mentioned could fail to leave some dilatation of the pelvis.

¹ Sajous. *Times and Register* (Philadelphia).