faintness. Pains in the back had next become the most intense symptom. On the 13th she had vomited a pint of blood, "dark thick stuff." The next day she had again vomited one or two ounces of blood. On the 13th she noticed she had become yellow. Her bowels throughout had been very costive. On examination I found that the patient showed extreme prostration; her cheeks were brightly flushed, the tongue dry and black, and the breath extremely offensive. The pulse was 120, weak, thready, quick, and very compressible. Thinking the case was one of some acute specific fever probably, I took the temperature and was surprised to find it 98.5°. The girl was plump and well nourished; there was well-marked jaundice of face and body. The heart and lungs were normal. The whole of the abdomen was very tender to palpation. The liver dullness was diminished, and the liver area very tender. From the above symptoms, and from especially the history of sudden onset, and the normal temperature, I came to the conclusion that the case was one of acute yellow atrophy, or phosphorus poisoning. On cross-examination, she could recall having taken nothing injurious or poisonous of any kind; and after beating about with non-leading questions in vain, I asked her whether she had had any rat poison in her presence before her illness. She at once answered, as if it were quite a new idea to her as connected with her illness, that she had had some, which her mistress had given her to spread for rats. She stated most positively she had taken none, and had not touched it except with a knife with which she spread it on bread. However, the admission of possession seemed sufficient, and I admitted her on the phosphorus-poisoning diagnosis. She passed into a condition of coma the same evening, and after renewed hæmatemesis died at 7 A.M. next morning. Her urine was secured previously, and found to be very highly coloured, with a deposit of epithelial cells like bladder cells; free from albumen; it gave most brilliantly the crimson reaction with mercurous nitrate typical of tyrosin, and on evaporation showed numberless sheaths of fine tyrosin needles and transparent glassy plates of leucin. Besides these, there were numerous hedgehog balls of coloured acicular crystals looking like uric acid.

The necropsy was made by Mr. Thomas, house-surgeon, thirty hours after death. The weather was warm. The rigidity was marked. The body was plump and well formed, but generally jaundiced. There were no petechiæ. A liquid like coffee-grounds stuff streamed from the nose. On opening the abdomen the liver was found to be shrunk out of sight beneath the ribs. The bowels were distended and darkly stained. The pericardium contained two ounces of straw-coloured fluid. The left side of the heart was contracted, and the right flaccid; there were no clots. The tissue was friable and stained yellow. The lungs were slightly congested. The stomach contained about two ounces of "coffee-ground stuff." The mucous membrane was stained black on the top of the rugæ, and was very thick, soft, and friable all over. The intestines were full of "coffee-ground stuff" in the ileum and jejunum. The mucous membrane was in the same condition as that of the stomach. The large intestine was full of black-stained soft faeces. The liver was small in size and solid in consistence; it weighed forty-five ounces and a half. The capsule was adherent and thickened. The gall-bladder was empty. In the middle of the under surface of the right lobe was a natural fissure half dividing it into two lobes. The surface was of a uniform, bright chrome-yellow colour. On section it was found to be soft, intensely yellow, friable, greasy to the touch, and showing the lobules clearly marked out with fatty and congested areas. The liver resembled when broken yellow faeces more nearly than anything else. The cortex of the kidneys was very pale, soft, and friable; pyramids congested; capsule normal. The spleen was of normal size, pale, and diffuent. On opening the skull Mr. Thomas detected a distinct smell of phosphorus, and on making sections into the brain this was apparent to all in the room. The brain was otherwise normal. No luminosity could be obtained from the organs. In the inquest held on the case the most interesting fact was obtained that the girl had been giving a "dark *séance*" to other girls, and had rubbed the paste into her hands and face to produce blue flame, just before the onset of illness. She denied to me most positively having taken any by the mouth; and though she told me nothing of the *séance* she had said that she felt bad first after spreading the paste for rats. Probably she was ashamed of the *séance*, and had really felt

bad after anointing herself for this. The question therefore arises whether death could occur from inunction of rat paste, which seems probable here. There is no case on record, I believe, of such a death. Could she have rubbed the paste on her teeth and tongue, to emit blue flame possibly? From the severity of symptoms it looks as if much poison had been absorbed. There was no cause for suspecting suicide; the hymen was intact, and the uterus appeared to be just menstruating, a Graafian follicle having just ruptured in the left ovary, and her whole bearing was utterly unlike a suicide. Another point of interest in the case is the fact that the poison could be diagnosed from the symptoms alone. Had I been a believer in acute yellow atrophy as a disease apart from phosphorus poisoning, I should probably have put down the case to that, but believing the two to be one and the same thing I was sufficiently pertinacious in my cross-examination to hit on the right tract and to prove the necessary possession of phosphorus. The patient died in the usual time, on the eighth day after initial symptoms.

University College Hospital, W.C.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

LARGE VESICAL CALCULI REMOVED BY LITHOTRITY.

BY G. BUCKSTON BROWNE.

DR. LEWIS MARSHALL'S case of large uric-acid calculus weighing two ounces and a half, reported in THE LANCET of Feb. 15th, is a good one, but in mentioning two ounces and three-quarters as about the limit of modern lithotripsy, he is not saying all that can be said for the operation, as the following cases taken from my note-book will show.

CASE 1.—J. P.—, aged sixty-four. Uric-acid calculus; weight two ounces and three-quarters. Seen with Dr. Herbert Renshaw of Sale. Successful; no return.

CASE 2.—R. W. W.—, aged fifty-seven. Uric-acid calculus; weight three ounces and seven drachms. Seen with Dr. Hardyman of Cardiff. Successful; a small calculus required removal eleven months afterwards.

CASE 3.—Dr. H. G.—, aged sixty-five. Cystine; weight two ounces and a quarter. In correspondence with Mr. Cadge of Norwich about the case, and Dr. Salter of Tolleshunt D'Arcy was present at the operation. Successful. Owing to the great size of the stone (for cystine is light) a London operator had proposed supra-pubic lithotomy.

CASE 4.—T. A.—, aged seventy-nine. Uric-acid calculus, very hard; weight three ounces and thirty grains. Successful.

CASE 5.—F. H.—, aged seventy. Uric-acid calculus mixed with phosphates; weight three ounces, five drachms, thirty grains. Seen with Mr. Manley Sims. Successful.

It will thus be seen that I have three times crushed and removed stones weighing over three ounces, and that once I have been within a drachm of four ounces. All these stones were (except in one instance) removed by one operation, and the proceeding only in one case occupied more than an hour.

Wimpole-street, W.

DISEASE OF THE HEART RESULTING FROM EMOTIONAL CAUSES.

BY DR. ROBERT LEE.

IN the discussion which not long ago occurred at the Royal Medical and Chirurgical Society on the connexion between chorea and rheumatism, a question of great importance was raised which has not yet received the attention it deserves: Is it possible for emotional disturbances, for fright, anxiety, or worry to cause disease of the heart? The question is one of rather wide interest, because the pathologist, the metaphysician, and especially the clinical observer, are equally entitled to deal with it. It will probably occur to those who