goitre since the age of eighteen. Commenced treatment in July, 1875. Came under the author's care in January, 1877, having received little or no benefit from the previous treatment. The tumour was very firm and large, dipping deeply into the neck, chiefly on the right side. The pressure on the oesophagus was such that she had been unable to swallow solid food for six months. Breathing much impeded; her general health was very bad, and she was excessively weak. She took tincture of perchloride of iron and cod-liver oil up to August, 1877, when a seton was passed perpendicularly through the entire length of the tumour. This was followed by a free discharge of the thin offensively smelling fluid, with very slow diminution of size, and the gland was extremely tender. This state of things continued till February, 1878, when she commenced taking fifteen-minim doses of dilute fluoric acid, which were shortly increased to twenty minims. On March 19th the seton was removed. There was a marked improvement in her health; she could swallow solids. The swelling was now about the size of a hen's egg, and very hard. On April 30th the dose of the acid was increased to thirty minims. The upper wound made by the seton had healed, but the lower one discharged freely. Tumour much smaller and less painful. In July she was taking fifty minims. This dose in September caused inconvenience and was reduced to thirty minims. In November there was a further diminution of the tumour and the acid was increased to forty minims. This dose at times caused gastralgia and faintness, on which account she was directed to intermit the medicine at intervals. In June, 1879, there was still some discharge, though the tumour was reduced so much that it occasioned no inconvenience. She was last seen in the spring of 1880, when a nodule about the dimensions of a filbert was all that remained. She was in robust health, and did not attend subsequently. Time of taking acid, about two years.

CASE 15.—A. D—, youth aged fifteen years, had noticed his neck enlarging for a year previous to January, 1878. He was then living in Berkshire. His mother was goitrous. The tumour extended chiefly vertically, and was of the soft variety. He commenced the acid on January 21st, taking ten minims; this was followed by rapid increase, so that the growth, which was $13\frac{1}{2}$ in., became in the course of a week $14\frac{1}{2}$ in. He continued the acid for six months, attaining a maximum dose of forty minims. During this time the perpendicular dimensions of the swelling diminished, and the growth became normal, but the improvement was very slow. A later report, received about fifteen months from the commencement of treatment, states that the disease had nearly disappeared.

CASE 16.—E. S—, a female, married, aged thirty-three years, living in Soho, presented in February, 1878, a swelling of medium hardness in one lobe, of the size of half a walnut. She began with fifteen minims of dilute fluoric acid, which were shortly increased to thirty-five minims. There was no improvement by August; on the contrary, the growth had enlarged considerably. After this trial of eight months without benefit the acid treatment was relinquished.

CASE 17.—E. H—, a female, aged twenty-six. Seen Sept. 1878. The disease commenced when living in Essex, five years previously; she moved to Hackney three years since, and during this time the enlargement had much increased. She presented a fibrous goitre, chiefly of the right lobe, extending upwards and backwards. She suffered much from dyspepsia, and generally feeble health. Commenced with fifteen minims of dilute acid on Sept. 11th, and on Oct. 9th the dose was increased to thirty minims. This dose caused sickness, and was first reduced, and then discontinued. Recommenced, in January, 1879, with thirty minims, which in February were increased to fifty minims. Again the sickness returned, and the medicine was discontinued finally. The failure was probably in some degree due to the irritable state of the digestive organs. The dimensions were the same as at the commencement.

CASE 18.—A. K—, a male, aged sixteen years, living in the Strand. Seen June, 1878. He presented a mixed goitre of one year's duration; girth $14\frac{1}{2}$ in. Commencing with twenty-five minims of dilute fluoric acid, the dose was increased to sixty minims during the ensuing five months. No improvement occurred during this time. Failed.

CASE 19.—Mr. A—, aged forty, was seen in consultation at the close of 1879. She had a large, firm, fibrous goitre of the entire gland of many years' duration. She was ordered to take half-drachm doses of fluoric acid in water. As she returned to the country I have not seen her since,

but received from her medical attendant in October, 1880, a report to the effect that the acid was taken for about six months, and that "her neck has never been so small as now during the eight years I have attended her, notwithstanding she has had iodine, &c. Had she persevered with the fluoric acid I feel sure the result would have been complete."

CASE 20.—S. C—, aged twenty-four, housemaid (Feb. 1880), states the enlargement has existed as long as she can remember. She lived in Essex till the age of fourteen, when she came to London, since which it has increased, especially during the last year. Her mother is goitrous. There is a fibrous goitre of isthmus and right lobe, very firm and large. Feb. 13th, commenced with twenty minims of dilute fluoric acid; Feb. 24th, increased to half drachm doses; March 2nd, to forty minims; March 9th, to fifty minims. Goitre smaller and softer. April 6th, increased to sixty minims; April 29th, to seventy minims. This was continued to September, at which time careful examination revealed only a trace of thickening behind the sterno-mastoid muscle. She did not attend afterwards. Cure.

Harley-street, W.

GONORRHOEA FOLLOWED BY ABDOMINAL TUMOUR; CONTENTS REMOVED BY ASPIRATOR; RECOVERY.

BY WILLIAM ALEXANDER, M.D.,
SURGEON-MAJOR, ARMY MEDICAL DEPARTMENT.

CORPORAL O. L—, aged twenty, a strong healthy young man, but with a phthisical family history, was admitted to hospital on Aug. 18th, 1880, suffering from an attack of gonorrhoea. Ordered a saline cathartic, an alkaline mixture, and to remain in bed.

Aug. 26th: Urethral discharge ceased; the patient feeling unwell, and unable to eat.—27th: Complained of pain in left lumbar region; skin hot; the thermometer in the mouth registering 105° . Was ordered one ounce of diaphoretic mixture with one minim of tincture of aconite every hour, which reduced temperature.—28th: Skin still hot, and tongue furred.—29th: Had an attack of bilious vomiting; temperature 102° ; no sore-throat or any pain except what he describes as a "horrid pain" in left lumbar region. Nothing can be detected to account for this condition; hot fomentations give no relief.—30th: Still in the same condition. Ordered a hot bath; diaphoretics with small doses of tincture of aconite.—31st: No improvement; tongue covered with a long white fur; pulse 88, soft and regular; temperature, morning 101° , evening 103.2° .

Sept. 1st: Much the same. Temp. 101° ; bowels acted well. From this date till Sept. 6th the condition remained unchanged. A "horrid pain" in left lumbar region, a thickly furred tongue, a pulse varying from 75 to 88, and a temperature of about 101° , rising in the evening to 102° or 103° .—6th: Complained that the pain was extending round the back to the right side. On examining him on this date, detected a small immovable tumour two inches to the left and on a line with umbilicus, having a doughy feeling. Considered it an accumulation of fæces. Ordered castor oil, which was followed by an enema administered by a long tube.—7th: At evening visit found patient moaning and restless, bathed in perspiration, and calling out about the pain in his back; tongue hard and brown. From this date hypodermic injections of morphia had to be given to keep patient quiet.—8th: Asked Mr. J. Appleyard to see the case with me, the tumour being then prominent and immovable and the size of a large orange, and with the same doughy feeling. The nature of the tumour was discussed. There was no bruit, no pulsation; in fact, no indication as to its nature. To make assurance doubly sure, it was decided to clear the bowel by a strong purgative. Castor oil, with croton oil, was administered and followed by enema.—9th: The bowels acted freely, but without effecting any change in the tumour. Temperature, morning 100.6° ; evening 102° .—13th: Tongue furred and brown; temperature, morning 100° ; evening 102.6° . Detected an obscure feeling of fluctuation in tumour.—14th: A decided feeling of fluctuation observed. Temperature, morning 101.2° ; even-

ing 101°.—15th: Very weak; face bathed in perspiration. Pulse 76; temperature 101°. The fluctuation can be felt round the left loin to within three inches of the spine. In consultation with Mr. Appleyard, a small-sized needle was introduced into the most prominent part of the tumour in front and two inches to the left of the umbilicus, and seven ounces of healthy pus withdrawn by aspirator, which relieved him very much.—16th: Much easier. Pulse, morning 80; evening 80; temperature, morning 101.4°; evening 101.4°.—17th: General condition somewhat improved; some tenderness at the seat of puncture. The same needle was again introduced close to the former puncture mark, and seven ounces of healthy pus withdrawn by aspirator.—18th: Complained of great pain at the seat of puncture; to keep a recumbent position.—20th: The tongue cleaner than it has been since the commencement of the disease. Pulse 80; temperature 100°.—23rd: Pulse 80; temperature, morning 100°; evening 99.2°. Removed twenty ounces of healthy pus, inserting the needle close to the seat of the former puncture. The propriety of withdrawing from behind was discussed, but the idea was ultimately abandoned.—25th: Very weak. Pulse 84; temperature 98.4°.—26th: The fluctuation more evident posteriorly than it has been.

Oct. 1st: Twenty-two ounces of healthy pus were removed as before, the needle being withdrawn on the first tinge of blood being observed in the pus, and an abdominal bandage applied. After this, for three days, the temperature was normal, the patient improving in strength. When he was able to move a little it was found that the lower lobe of the left lung was quite consolidated.—5th: Some pain at the seat of puncture of a dragging character; pulse 84. Temperature, morning 98.4°; evening 103°. After this for several days, though feeling quite easy, there was a high evening temperature, varying from 101° to 103°.—11th: General appearance much improved, tongue clean, appetite good, and sleeps well. From this date a gradual and steady improvement set in, the tumour gradually becoming less and less perceptible to the touch, till it gradually disappeared. The health rapidly improved, and the weight increased at the rate of 4 lb. per week.

Dec. 15th: Feels perfectly well. No indication of any tumour in abdomen, and a faint murmur can be detected in the lower lobe of left lung.—21st: Respiratory murmur perfectly re-established at base of left lung. The man states he feels as well as ever he did, and presents all the appearance of good health. Discharged.

Throughout this protracted case the urine was free from albumen, but loaded with urates; and so long as the absorption process was going on there was a considerable rise of evening temperature, which may have been assisted by the rapid development of tissue. The general treatment was on the broad principles of medicine and the free use of stimulants, without which the patient would have sunk at the most critical period. I am greatly indebted to Mr. J. Appleyard, of Bradford, for his kind assistance throughout this remarkable case.

On March 1st the man was in perfect health in every respect. Bradford, Yorks.

THE BLOOD-CELLS IN ANÆMIA.

By W. G. TACEY, L.R.C.P., &c.

THE recent published observations on the appearances of the blood-cells in anæmia by Dr. Bastian, Dr. Cavafy, and others have afforded to many a desire for further information and investigation on this very interesting subject. With this view I venture to offer a few observations upon two cases of anæmia kindly sent to me for examination; both were well marked instances of this condition, and of long duration. The blood in each case was microscopically examined under $\frac{1}{2}$ objective immediately after removal from the finger of the patient, and was again examined eight hours afterwards under one of Zeis's high-power objectives. The white corpuscles were very abundant, more than the average size, and exhibited very feeble amœboid alteration in shape; but, after careful watching, I was at length able to distinguish decided pseudopodia in one or two cells, and more than once the prolongations reminded me of the filamentous protrusions of the *Amœba princeps* or the *Actinophrys sol*, as figured in Carpenter's "Microscope." If, according to Dr. L. Beale, these are vital movements, and

the corpuscle possesses no cell-wall, vibratile filaments can be demonstrated by the aid of modified heat; or again, if, according to Cohnheim and others, the corpuscles are able to pass through the capillary walls (diapedesis), it does not appear so very improbable that these pseudopodia-like changes in the white blood-cells should occur.

With reference to the red corpuscles, considerable variations in the contour of these cells were evident enough; the

general tendency seemed to be towards irregular curvation, and corresponded with the description communicated some few months ago by Dr. Finny and Dr. Churton.

In addition to this irregularity, I noted a slow oscillatory movement of these corpuscles, to all appearance identical with the molecular agitation usually seen in granular solids. If my observation is correct, and this motility is shown to exist, is the motion vital or physical? The red blood-cell is said to have no granular contents; therefore the movement cannot be included in the category of the so-called "Brownian motion."

On this occasion I also examined blood from a case of Bright's disease of some duration, and observed a similar want of uniformity in the outline of the red corpuscles; crenation was conspicuous by its absence. In this case the slow movement was evident, and could be seen several hours after removal from the patient. Here, again, the leucocytes were in abnormal quantity, but not so distinctive in size and number as compared with the above-mentioned cases of anæmia.

Bradford, Yorks.

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. Proœmium.

WESTMINSTER HOSPITAL.

POPLITEAL ANEURISM, CURED BY THE APPLICATION OF
ESMARCH'S BANDAGE.

(Under the care of Mr. MACNAMARA.)

FOR the following notes we are indebted to Mr. R. Sanderson.

C. T—, aged thirty-two, a fishmonger, who had been in the habit of drinking five or six pints of beer and smoking upwards of half an ounce of tobacco daily, was admitted on July 4th last. His general health had been good until about three weeks before, when, without any assignable cause, he began to feel great pain behind his left knee. His ankle and leg then commenced to swell, and after a day's work he noticed that the veins of the left leg were much distended.

On admission a pulsating tumour was felt in the left popliteal space, about the size of a hen's egg. The pulsation could be nearly stopped by pressure on the femoral artery.