charging freely; glands still painful. Good food; wine, sixteen ounces, in the twenty-four hours.

16th.—Glands less tender; sores better. From this time she continued to improve.

21st.—Ordered one drachm of cod-liver oil three times a day.

29th.—The hands are now nearly well, there is entire exfoliation of the inner surface and sides of the fingers affected, and also of the palms of both hands.

Remarks.—Unless this case was due to some animal poison, I do not know to what it can be attributed; there is no chemical agency that I know which could occasion so much mischief beneath the surface with so little on the surface itself. It was fortunate that the glandular system was not affected until the greater portion of the spots were better, and it was singular that two little places, almost imperceptible at first, should have increased in size and suppurated whilst the others were getting well, and these places had certainly not been in contact with anything that could have caused them since the patient had been under treatment.

Liverpool.

A Mirror OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noseendi 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.

KING'S COLLEGE HOSPITAL.

EXTRACTION OF CALCULI FROM THE BLADDER PER URETHRAM, WITH THE LITHOTRITE SCOOP; REMARKS.

(Under the care of Mr. WILLIAM ROSE.)

A MAN, aged fifty-two, an omnibus driver, applied at the Out-patient Department of the hospital, complaining of symptoms of stone in the bladder. He stated that some years ago he had undergone a crushing operation at another hospital, and showed a small match-box full of small uric-acid calculi, which he had passed recently. In spite of this he expressed himself certain that there was something in his bladder which would not come away.

On introducing the sound, Mr. Rose detected a stone, and after withdrawing the sound he introduced a lithotrite scoop, seized the stone, and drew it carefully out of the bladder, along the urethra, until it arrived at the meatus. He then relaxed his hold on the stone, withdrew the lithotrite, and squeezed the stone after some difficulty through the orifice of the urethra. The stone, which was composed of uric acid, was spheroidal in shape, flattened at the poles, and measured half an inch in its longest diameter. The patient was ordered a pill containing two grains of quinine and half a grain of opium, and left the hospital complaining of no pain or inconvenience.

He returned in a week with the following account of himself:—He had passed a little blood for the first few hours after leaving, but had felt no pain along the urethra, and although able to drive his omnibus, he still complained of a sensation in the bladder similar to that which he had experienced before. Mr. Rose sounded him again, and detected another stone, which he withdrew in the blades of the lithotrite scoop as before, except that the lithotrite lost its hold on the stone at a point in the urethra just anterior to the scrotum. Extraction, however, was easily effected by the use of urethral forceps and a small scoop. The size of this stone was similar to that of the former, though if anything slightly thicker.

The patient behaved with great pluck during each sitting, narrating meanwhile the sufferings which he had previously undergone. He left the hospital at once, and returned to report himself on Friday, July the 15th. His account was most satisfactory; he had lost all pain and discomfort, and an examination failed to detect anything in the bladder.

Remarks.—Mr. Rose said that this case served to show the capacity of a normal urethra, and the possibility of withdrawing a calculus of such a size intact from the bladder without danger to the patient; and he added

that it was obvious that if calculi, which cannot pass naturally, can be seized and safely withdrawn at this early stage, the suffering and ultimate risk may thus be greatly diminished. After his experience in similar cases, as well as in the successful removal of such bodies as portions of tobacco-pipe and catheters from the bladder, and the recollection of those cases published by Mr. Henry Smith, Mr. Harrison of Liverpool, and others, Mr. Rose considered that such operations were strictly in accordance with true surgical principles.

HEREFORD GENERAL INFIRMARY.

A CASE OF PROGRESSIVE PERNICIOUS ANÆMIA; CHANGES IN THE MEDULLA OSSIUM; VASCULAR HYPOPLASIA; DEATH; REMARKS.

(Under the care of Dr. SMITH.)

FOR the following interesting notes we are indebted to Mr. C. J. Devis, late house-surgeon.

T. H—, aged twenty, farm labourer, first came under observation on Sept. 23rd, 1880. Four months before, after a few days' ailing, he had an attack of epistaxis, which lasted off and on for fourteen days. The loss of blood was not continuous, nor large at a time, but occurred in small amounts each day, though sometimes one or two days passed without bleeding. He became pale and felt very weak. For three months and a half he had had no return of nose-bleeding, but had sometimes found that his gums had bled during the night.

Two months before being seen his sight began to fail, and he had attacks of palpitation and shortness of breath, with frontal headache, giddiness, and drowsiness. He continued to get weaker, was quite free from pain excepting the headache, and without cough, and had not lost flesh. Previous to the present illness he had been in good health, had lived fairly well, and had not been confined to the house. He had never had rheumatism, gout, or syphilis; and had been temperate in every respect. His family history revealed no trace of rheumatism, syphilis, struma, or tendencies to bleeding.

On admission the patient's physique was good, robust, and well formed. There was no evidence of struma, and no enlarged glands. He constantly kept his eyes half closed, avoiding the light. He walked very well. He was intelligent and cheerful. The skin and visible mucous membranes were highly anæmic, resembling those of a person rapidly bled to a severe extent. The carotid arteries pulsated violently; the gums were not spongy, but presented traces of recent bleeding. Patient complained of shortness of breath, palpitation, headache, and vertigo. The chest was well formed, movements regular and equal on both sides. The heart's apex impulse was in the sixth intercostal space, one inch and a quarter to left of nipple line. The area of visible pulsation was large. The percussion note of the chest was good all over, the hepatic area was normal, and the præcordial dulness was bounded above by a line drawn from the upper border of the third left costo-sternal articulation to the apex beat, and extended $1\frac{1}{2}$ in. to the right of the sternum. The respiratory sounds were normal, a little exaggerated over the left front. A loud systolic bruit was heard at the apex of the heart, and conducted into the axilla. At the base a systolic, rather harsh, slightly musical bruit was heard, having the point of maximum intensity at the second left interspace close to the sternum, and heard also at the sterno-clavicular articulations and over the brachio-cephalic trunks. The second cardiac sound was reduplicated. A venous bruit was heard in the neck over the jugulars. The abdomen was normal, no splenic or lymphatic enlargement. No osteal pains or tenderness. Appetite good; bowels constipated; urine pale, specific gravity 1009, without albumen. Temperature 99.4° ; pulse 88, small and soft. Ophthalmoscopic examination revealed neuro-retinitis in both eyes, with numerous small hæmorrhages. The disc was a dull reddish-grey, the edges blurred, the surface striated, and the vessels completely hidden. There was no hæmorrhage on the disc-surface nor in the region of the yellow spot. The blood was pale vermillion, and watery; the red corpuscles were greatly diminished in number, and almost devoid of colour; rouleaux short and few in number. Size of individual corpuscles not less than healthy blood, except in a small proportion. The white cor-

puscles, though relatively to the red increased, were diminished in actual number; their size was small, not larger than the red corpuscles. These measurements were all made by comparison with healthy blood, precautions being taken as to the time of the day and propinquity of the preceding meal.

From the first day of observation, in spite of the free administration of iron, strychnia, and cod-liver oil, with a liberal diet, the patient grew rapidly worse. The pallor increased, assuming during the last few days of life a yellow tinge, most marked on the face, ears, and forearms; the weakness rapidly increased, so that by the end of the first week the man was unable to stand unaided. On Oct. 6th gastric irritation showed itself in anorexia, nausea, foul tongue, &c., becoming in the succeeding four days very severe—the stomach rejecting everything swallowed, thereby augmenting the prostration. On Oct. 9th nutritive enemata were administered, one every eighth hour. The fourth of these was rejected. On Oct. 11th the vomiting ceased and did not return, enabling him to partake of fluid nutriment; this he did largely, as he complained of constant thirst, which continued till within half an hour of his death.

During the last week of life he constantly complained of darting pains through the temples, attaining sometimes great severity. He was, moreover, very drowsy, and occasionally delirious. On Oct. 9th retention of urine occurred, and the catheter had to be used from that time. From Oct. 11th there was constant shivering, great sensitiveness to contact with cold bodies, and the temperature, which had varied from 99° F. to 101·2° F., gradually fell, being on the 11th 98·4° F.; on the 12th, 97·2° F.; on the 13th and 14th, 96·8° F.; and on the evening of the 14th, 95·4° F. The pulse had varied from 100 on Oct. 8th to 124 on the 12th; previous to the former date it was usually between 80 and 90, and after the 12th it again diminished in frequency. The urine was pale throughout, the average quantity during the last ten days of life being 32 oz. It was free from albumen until the 10th, when a very faint trace appeared, the microscopic examination giving negative results. The urea, estimated for the twenty-four hours, was on Oct. 6th, 13·8 grammes; on the 8th, 13·0 grammes; on the 10th, 15·5 grammes; on the 12th, 11·2 grammes.

On the morning of the 14th the respiration was shorter and more feeble, becoming during the day an evident effort, the death agony commencing at about nine o'clock in the evening. At that time his pulse was regular, 88 per minute, and, for him, good. The cardiac sounds were weaker, the bruit still audible. At 10.30, the pulse still being perceptible in the carotid and radials, the apical bruit was almost inaudible, whilst the basic bruit remained very distinct. At 11.20, five minutes before death, the radial and carotid pulses were imperceptible; the systolic sound was faintly heard at the apex, becoming rapidly inaudible. The bruit at the second interspace was distinct, continuing audible after respiration had ceased, until within the final eight or nine cardiac contractions, and these at long intervals. The several examinations of the blood made during life revealed nothing further than did the first one. The left retina presented a fresh hæmorrhage, one patch invading the margin of the disc.

Necropsy, thirty-six hours after death.—The body was well developed and fairly nourished. There was great general pallor of skin, of mucous membrane, of lips and mouth, of conjunctivæ, and of nails, the latter not being tinged with yellow, as were the face and ears. Rigor mortis was considerable, lasting until after the 17th—(i.e., three days after death). Hypostatic discolouration only represented by a small light purple patch in the right hand. No cutaneous extravasations and no oedema. Panniculus adiposus considerable— $\frac{3}{8}$ in. to $\frac{1}{2}$ in.; fat bright yellow. The muscles were well developed and of a bright colour. The abdominal viscera were normal in position; omentum small, but well provided with fat, as also the appendices epiploicæ. The hollow organs were very anæmic. The pericardium was uncovered by lung from opposite the second left interspace to the apex of the heart; its tissue opaque, containing a little fat, and its cavity about three ounces of pale straw-coloured fluid. The left pleura was obliterated by old adhesions; the right pleura contained a small quantity of yellow fluid. The heart surface was pale red, mottled all over with yellow fat. The right border was thin; the left very thick and rounded. The auricles were distended, but not projecting. The right auricle was dilated, walls thin, cavity containing a yellow clot, which passed through the auriculo-ventricular orifice.

The right ventricle contained a small quantity of yellow fibrin and about half an ounce of fluid blood. The walls were attenuated and of a pale greyish colour. The left auricle was much dilated, walls thin, cavity filled with yellow fibrin of tolerably firm consistence. The left ventricle held of pale fluid blood and fibrin together about 1½ oz.; the walls were firm, $\frac{1}{8}$ to $\frac{1}{4}$ in. thick, showing slight fatty changes. The muscular papillares were large and firm. Microscopically the muscular fibre was seen to be in an early stage of fatty metamorphosis. The aorta was narrow, admitting a small index finger. The circumference at the insertion of the valves was 1½ in. There were no fatty changes in the arterial coats. The brachio-cephalic trunks were smaller than usual. The cardiac valves were all healthy-looking and competent. Weight of heart 16·75 oz. The left lung was smaller than normal, adherent throughout its whole surface, pale mottled with pale crimson in front, and deeper crimson to purple behind; on section there exuded a considerable quantity of sanguineous frothy fluid. The right lung was more voluminous than the left, and non-adherent; otherwise similar. The liver was normal; weight 56·5 oz. The spleen was small, 3½ in. by 7½ in.; weight 3·45 oz. The capsule was shrunken; tissue rather tough, dark flesh-coloured. The kidneys were very pale, the pyramids scarcely differing in colour from the cortex; cortex increased $\frac{1}{8}$ to $\frac{1}{4}$ in. in width; surface of section granular; epithelium fatty; weight together 13·5 oz. The adrenals were of normal appearance. The stomach and intestines were remarkably pale; nothing noticeable about their follicles. The lymphatic glands were of natural size and consistence. The bladder was distended with pale urine. The textures of scalp, meninges, and brain-substance were all healthy, excepting for the great pallor; the substance of brain was of usual consistence; the ventricles contained half an ounce of serum in each. The retinæ were removed within twelve hours of death. They were pale pinkish grey, opaque and oedematous-looking, and literally covered with hæmorrhages varying in size from microscopical points to that of a pin's head, only one or two being any larger. In the left retina 120 of these hæmorrhagic points were counted, and this number did not represent the total, as only the posterior half of the eyeball was removed. In the right eye the hæmorrhages were still more numerous, and all punctate. The optic papilla was scarcely raised above the level of the surrounding retina, the physiological cup was very shallow, the disc was dirty grey, striated, edge becoming blended with the neighbouring tissue, that of left disc invaded by one of the larger patches of extravasation, but both surfaces were free from hæmorrhage. The vessels were not visible on the disc, but in the retina they were seen to be very pale, and their course was frequently interrupted, some parts being hidden. Medullary matter obtained from shafts of humerus and femur was dark red in colour, becoming brighter after a few minutes' exposure to the air, mottled with greyish-yellow, the red by far predominating. It was of semi-fluid consistence, with small fragments of a firmer nature in suspension. Under the microscope a large number of coloured cells were seen, having the characters of red blood-corpuscles, most of them, however, being spheroidal or cup shaped, and not bi-concave discs, contents homogeneous, some few having distinct nuclei of about half the diameter of the cells, the nuclei disappearing on addition of acetic acid. The nuclei were usually eccentric and without nucleoli. About equal in number, at a rough estimate, to the coloured cells were spheroidal colourless bodies, from half as large again to twice as large as ordinary leucocytes, having coarsely granular contents and large highly refracting nuclei with nucleoli; in some instances two or three nuclei were present in the same cell. A number of smaller cells similar in size and appearance to the leucocytes from the blood during life, and under the normal size of leucocytes, differing, however, in that their nuclei were very large and clear, their contents purely granular. There were also large myeloid cells with several highly refracting nuclei, the cells being very variable in size and shape. Numerous minute bright particles were present, resembling nuclei broken loose. There were a few compound granule corpuscles. The fat cells were not numerous and contained in several instances crystalline stellate rosettes (?cholesterine).

Remarks.—The above is a typical case of progressive pernicious anæmia, exhibiting, with one exception, all the symptoms usually seen in that condition, that exception being the absence throughout the illness of any form of

dropsy, which, according to Immerman, is to some extent a diagnostic feature between it and chlorosis, being very rarely met with in the latter malady. It differs, however, from chlorosis in its progressive and fatal character, the presence of pyrexia, its resistance to therapeutic measures, and the tendency to hæmorrhages, retinal and otherwise. The absence of splenic and lymphatic enlargements, and of osteal tenderness, with no increase of leucocytes in the blood, serve to distinguish it from leukhæmia in any one of its three forms, and the absence of enlarged spleen from pseudo-leukhæmia. On reference to the morbid anatomy of the case one is struck with certain points of resemblance between it and chlorosis on the one hand, and it and the myelogenous form of leukhæmia on the other. In the *British Medical Journal* for November 6th, 1880, I recorded a case of chlorosis in the male subject, presenting somewhat unusual cardiac phenomena, which I surmised were due to a congenitally narrow aorta with a consequent hypertrophy of the heart. On comparing the cardiac phenomena of that case with those of the present one their similarity in the two cases is obvious, and the alterations found in the heart and aorta on autopsy in the present case fully supports the diagnosis made as to the vascular changes. Thus the thickness of the left ventricle, which was 6 to 8 mm. above the average, and the weight of the heart 16·75 oz., compared with 11·5 oz., the maximum weight of the normal heart, show a large amount of hypertrophy, chiefly of the left ventricle; whilst the circumference of the aorta at the attachment of the semilunar valves being 13·5 mm. below the average, indicates the arterial hypoplasia. As far as I have been able to ascertain this is the first case of progressive anæmia in which this cardiac condition has been noted, although it is a recognised condition in certain cases of chlorosis. The pathological point of resemblance of this case to leukhæmia consists in the alterations found in the medulla of the long bones, and which have been noticed in other cases. Thus from the whole aspect of the case one might consider it as a link between the pathological condition of chlorosis and leukhæmia, or perhaps, in accordance with the views of Professor Pepper, the myelogenous form of pseudo-leukhæmia. The remarkably small size of the spleen is worthy of note, as is also the considerable and protracted rigor mortis, which is contrary to what is stated in books; and, lastly, the sudden onset of the attack, the patient being quite sure of his health not having failed in the least until a few days before the initial epistaxis.

Reviews and Notices of Books.

A Treatise on the Principles and Practice of Medicine. By AUSTIN FLINT, M.D. Fifth Edition, revised and largely rewritten. Philadelphia: Henry C. Lea's Son and Co. 1881.

THIS work has been so long and favourably known, and has obtained so high a position amongst modern treatises on medicine, that it is hardly necessary to do more than announce the publication of this fifth edition. Its distinguished author is to be congratulated upon the success of his work, and he deserves that success for the pains he has taken to render it thoroughly abreast with the progress of science. All who peruse it must be struck by the extensive research which has been undertaken in the revision of this edition, combined with much original thought. There is hardly a subject which does not receive fresh illustration and discussion, opening up new lines of inquiry which had not been thought of when the previous edition appeared. We know no better plan for those who desire to trace the progress of an art than to take such a standard work as this, and follow in its successive editions the gradually-increasing tide of new observations, the substitution of teachings that have proved to be insecure for those based on surer foundations, and the elimination of hypotheses that have not stood the test of time and advancing knowledge. In medicine there are two fields at least in which the advance has been most remarkable—viz., in diseases of the hæmatopoietic system, and of the

nervous system, whilst in all departments the growth in pathological knowledge has outstripped our gains in clinical observation.

In the present edition the pathological part of the work has been revised by Dr. W. H. Welch, of Bellevue Hospital Medical College, and includes the addition of some chapters on general pathology, which are among the most concise and complete in our language. In the body of the work we notice admirable accounts of leucocythæmia, Hodgkin's disease, and pernicious anæmia, the last-named especially being complete, exact, and discriminating. Dr. Flint himself appears to lean towards the view that gastric derangement is at the root of many of these fatal cases of anæmia, and in speaking of chronic gastritis he refers to cases which ran the course of "pernicious anæmia." The articles on the nervous system have been carefully revised and extended, although for the sake of the student it might have been as well had there been some diagrams inserted in these sections. But this, like Niemeyer's work, is destitute of engravings, not even a single temperature chart or pulse tracing being found on its pages. Of course, such additions are not absolutely necessary, but there can be no doubt that they are a great help to the student in elucidation of the text.

If, where all is of such good quality, one might single out any portions where Dr. Flint is particularly strong, it would be those dealing with diseases of the respiratory organs. His article on "Pneumonitis," as he with unconscious pedantry phrases it, is excellent; and yet we might tax him with inconsistency for keeping it where it is. For Dr. Flint is one of the great advocates—and the idea is a growing one—of the specific nature of pneumonia. He believes that "pneumonic fever" is the more appropriate name to call it, and points out that, etiologically, pathologically, and clinically, it need no more be regarded as a local disease than typhoid fever need to be looked upon as an enteritis. The lobar pulmonary exudation is only the local manifestation of a general febrile process. He advocates the antipyretic treatment of pneumonia—in the administration of quinine and cold baths,—just as in typhoid fever he is also a supporter of this method of treatment. As this question of the nature of pneumonia is one which is occupying considerable attention at present, the following quotation from the book (page 183) may be read with interest:—

"Assuming that there are grounds sufficient for adding to the list of essential fevers, *febris pneumonica*, or pneumonic fever, we may define the disease as follows. It is a fever characterised anatomically by an abundant exudation deposit in the air-vesicles of a single lobe, or of two and sometimes three lobes of the lungs, with, in general, circumscribed bronchitis and dry pleurisy. It is a fever which rapidly reaches its maximum intensity, and has a short career, the duration averaging about eleven days. It proves fatal chiefly in consequence of associated diseases, complications, or accidents, and the mode of dying is by asthenia. It is non-communicable, and depends on a cause or on causes specific in character, the nature of which is at present unknown, but having relations to season and climate. It sometimes aborts spontaneously, and it is in some instances arrested by remedies. If not arrested, it may be favourably modified, its duration abridged, and the danger to life diminished by treatment addressed, not to the pulmonary affection, but to the fever."

In his chapter on Pleurisy, Dr. Flint gives (p. 144) two cases of permanent chronic effusion, the patients regaining good health, but one would hardly speak of such cases as instances of "recovery." He does not make special mention of hæmorrhagic pleurisy, save in a remark that "a sanguinolent effusion renders probable the co-existence of phthisis,"—and it might be added—"or cancer." Instances are given of simple pneumothorax with recovery, a condition not perhaps so unusual as the meagre records