

of union on the one hand, with the femur and the fibrous tissue in the recesses of the joint on the other hand. About a dessertspoonful of blood was lost; and, the knife having been withdrawn, the wound was closed, as after tenotomy, by a compress and strapping. The limb was now forcibly bent to a right angle, and then secured in the extended position by a back splint. Ice-bags were applied to the knee.

June 6th. The wound had healed by primary union, and there was very little pain about the knee. The splint was removed, and passive movements were commenced. The patient was desired to move the limb occasionally as he lay in bed.

June 10th. The patient was ordered to get up and to make repeated efforts to extend and flex the leg.

July 20th. The patient had daily exercised his leg, gradually increasing both the angle of flexion and power of extension. When standing, he could raise the foot and bring the leg to an angle of about 107 degrees with the thigh. When he was seated in a chair, no difference could be perceived in the two limbs, as each knee was flexed to an angle of about 95 degrees. On extending the leg, the atrophied quadriceps could be felt, by the hand placed upon it, to contract. The upper patellar fragment could be moved laterally, and could also be felt to move when the patient bent his leg. He walked with a scarcely perceptible halt. He was greatly pleased with the result of the operation, and confident of still further improvement.

In undertaking the operation, Mr. Maunder said that he had very little anxiety with regard to any possible injurious consequences, because it must be remembered that he proposed to introduce a knife and divide certain structures, in the site of a joint it is true, but which joint, with its usual susceptibilities to inflammation, no longer existed. He was uncertain as to the result, and had explained this to the patient. Success had exceeded his anticipation.

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.

DISEASE OF RIGHT KNEE-JOINT: OLD AND RECENT SYNOVIAL MISCHIEF: CHRONIC OSTITIS: ULCERATION OF CARTILAGES: EXCISION: RECOVERY.

(Under the care of Dr. J. WARD COUSINS.)

G. S., AGED 11, six years ago, had an attack of measles. Soon afterwards, his right knee became painful and swollen, and for those symptoms he was admitted to the Royal Portsmouth Hospital. He was re-admitted on May 10th, 1874. His mother then stated that his leg had been much worse for six months. The boy looked pale and delicate, and had recently lost flesh. The leg was useless. The knee was enlarged and tender. It was flexed at an angle of 90 deg., and any attempt to straighten it caused much suffering. The patella was fixed, and tender when pressed against the joint. His nights were often disturbed. The condyles of the femur were much enlarged, and likewise the head of the tibia, but the enlargement of this bone was not so marked.

Excision was performed on May 23rd; and, after the operation, the limb was securely fixed in a Liston's splint. The joint contained a few teaspoonfuls of thin pus. The synovial membrane was universally thickened and vascular, and overlapped the articular surfaces. The adhesions between the bones were readily broken down. The greater part of the cartilages had disappeared, and several worm-eaten spots were visible in them. Some old ulcerations which allowed the probe to pass to soft bone were found at the intercondylar notch and in the outer condyle. The patella was extensively softened; and it was, therefore, entirely removed. About an inch-and-a-half of bone was taken off the femur, and three-quarters of an inch from the head of the tibia. At the time of resection, the cancellous tissue, especially that of the femur, was so soft and fatty that it could be broken down with slight pressure with the finger, and this raised a reasonable doubt as to the possibility of recovery.

Very little constitutional disturbance followed the operation. The process of repair favourably progressed: firm fibrous union was at length established, the swelling of the joint subsided, and the wound healed.

He was discharged on November 24th, 1874, with a very useful limb.

August 31st, 1875. The patient continued well, and could walk several miles at a stretch with ease. He still wore a back leather splint. Some movement existed at the joint, and the limb was shortened about three quarters of an inch.

REMARKS.—The case was interesting, because, at the time of resection, the cancellous structure of the bones was soft and unhealthy; still the progress of the case was very satisfactory. Cases have been reported in which the bones presented the same vascular and unfavour-

able appearance, and yet very favourable results were obtained by resection. The free division of the osseous tissues seemed to arrest the inflammatory process within the cancellous structure, and to promote induration and repair. In the treatment of diseases of the knee-joint, it is often an anxious question for the surgeon to decide between amputation and excision. The above case in every respect appeared favourable for the latter procedure. The disease was essentially chronic, with hopeless destruction of the joint, malposition, and fibrous ankylosis; at the same time, the constitutional powers of the patient were tolerably good. He was not worn down with suppuration and irritation. He looked able to bear the shock of the operation, and to submit to the tedious after-treatment, which, under the most favourable conditions, is generally prolonged through many months.

REVIEWS AND NOTICES.

ZOOLOGY FOR STUDENTS. By C. CARTER BLAKE, D.Sc. Daldy, Isbister, and Co. 1875.

THE long solitary reign of Rymer Jones's *Animal Kingdom* has been succeeded by the struggle for existence of a variety of zoological handbooks of very different degrees of merit. The youngest of these, by Dr. CARTER BLAKE, is very modest in its claims, and avowedly intended for mere students only. The book comes out with Professor Owen's *imprimatur*: a fact which will recommend it strongly in the eyes of the majority, though it will evoke no little hostility amongst some of an opposite school. Feeling, as we do, that deference and respect are due to Professor Owen's judgment now, as well as gratitude for his many labours in the past, we avow ourselves as belonging to the former category. The author tells us in his preface: "I have been careful to exclude from a manual intended for the student all unproved facts or problematical classifications"; and, in so doing, we think he has done wisely.

Of the whole book, 228 pages are devoted to the Vertebrata, and 154 to the Invertebrata. In such a space, of course, so vast a subject as the zoology and structure of the lower animals can be treated of in a fragmentary manner only. Nevertheless, the student who reads them carefully will acquire a mass of information, and will find the task a pleasant one, calculated to whet his appetite for the acquisition of more special knowledge than the handbook itself pretends to furnish. The classification adopted by the author is mainly that of Professor Owen, and therefore diverges from that which has become more generally adopted. There are some omissions we see with regret in a work having so many merits. Thus the little group of *Rhinocephala* is passed over in silence. A more serious defect is the omission of an index: a want likely to be specially felt by the student who has not yet formed acquaintance with the zoological terms of the table of contents. For all this, however, we can cordially commend Dr. Blake's *Zoology* as a work containing a mass of useful information conveyed in an agreeable and attractive form.

NEW BOOKS AND NEW EDITIONS.

The Royal London Ophthalmic Hospital Reports for September contain some important papers. Mr. Hulke gives a summary of 192 cases of Astigmatism. Mr. Jonathan Hutchinson's continuation of his report on the Forms of Eye-Disease which occur in connection with rheumatism and Gout contains the results of much careful observation. Some peculiar cases of eye-disease are contributed by Messrs. Swanzy, Henry Wilson, and Priestley Smith. The Curator's Pathological Report, contributed by Mr. Brailey, and the copious Periscope, add to the varied interest of this well-conducted periodical.

A second, revised, and cheaper edition of Dr. LEISHMAN'S *System of Midwifery* (Maclehose, Glasgow) shows that professional appreciation of this handbook has been even more active in exhausting the first issue than could have been expected.

DR. LEARED'S little monograph on *Imperfect Digestion* (Churchill) has reached its sixth thousand. It is pleasantly written, and, though devoid of striking novelty, there are few who can read it without "getting a wrinkle" likely to be useful.