"Rigakuhakushi." All the memoirs above named are valuable contributions to science, and are profusely illustrated by lithographic plates, which compare favourably with the best European work. Prof. Mitsukuri's memoir on Chelonian development is the most important; it forms a continuation of a memoir on the germinal layers of the Chelonia, published by him in conjunction with Mr. Ishikawa in 1887 in the Quarterly Journal of Microscopical Science.

English-speaking naturalists may congratulate themselves on the fact that the English language is chosen by our Japanese confrères as their medium of publication: English, indeed, appears to be the official language of the Imperial University of Tokyo throughout. Whilst the Russian Government encourages its scientific protégés to withdraw themselves more and more from European intercourse by publishing their investigations in the Russian language, the Far East steps gladly into the place among civilized nations vacated by the long-suffering subjects of the Czar.

E. RAY LANKESTER.

EVIDENCE OF A WING IN DINORNIS.

IN 1889, Mr. A. Hamilton, of the Otago University, submitted to me some of the Moa bones he had exhumed from a swamp near Te Aute, in the North Island of this colony. Among them there were several very diminutive scapulo-coracoids and sterna, which I hope soon to figure and describe. Among the former was one which presented a small but distinct hollow in the situation where the glenoid cavity occurs in the winged Ratitæ. I made a sketch at the time, and exhibited the bone at one of the meetings of the Philosophical Institute of Canterbury. Though satisfied in my own mind that this hollow did represent a humerus articulation, I have been unable to find confirmation of its existence in any other scapulocoracoid among the Moa collections I have examined. Among the bones, however, which I lately dug up from a peaty hollow near Oamaru, in the South Island, I have found a large scapulo-coracoid presenting a deep, wellmarked depression, with a beautifully smooth and polished concavity, which leaves no room for doubt that it has



been a functional glenoid cavity for a humerus possessing a head not less substantial at least than that in the Cassowaries. The accompanying drawing (half the natural size), made by camera lucida, will convey better than a description the form and position of the depression. Proximally to the cavity, and separated from it by a smooth ridge, there is a shallow impression (not seen in the figure), as if it were an antitrochanter for some tuberosity on the humerus. The coracoidal termination of the bone fits perfectly into a deep and rounded depression in a sternum obtained at the same time and place as the scapulo-coracoid, belonging to Dinornis maximus of Owen. Prof. T. J. Parker has proved that the Apterygidae are undoubtedly descended from birds that could fly: the finding of so unmistakable a glenoid cavity in the present bone confirms the generalization for the Dinornithidae.

Canterbury Museum, Christchurch, N.Z., November 4, 1891.

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NOTES.

THE medals and funds to be given at the anniversary meeting of the Geological Society, on February 19, have been awarded as follows:—The Wollaston Medal to Baron Ferdinand von Richthofen; the Murchison Medal to Prof. A. H. Green, F.R.S.; and the Lyell Medal to Mr. George H. Morton; the balance of the proceeds of the Wollaston Fund to Mr. O. A. Derby; that of the Murchison Fund to Mr. B. Thompson; that of the Lyell Fund to Mr. E. A. Walford and Mr. J. W. Gregory; and a portion of the Barlow-Jameson Fund to Prof. C. Mayer-Eymar.

PROF. WILLIAMSON, F.R.S., has been elected a corresponding member of the Imperial Academy of Sciences, St. Petersburg.

THE Belgian Academy is preparing to celebrate the fiftieth anniversary of M. Van Beneden's membership. He is the Professor of Natural Sciences at the University of Louvain.

THE private or preliminary installation of the Duke of Devonshire as Chancellor of the University of Cambridge, in succession to his father, took place at Devonshire House on Tuesday. An admirable speech was delivered by the new Chancellor in reply to addresses by the Vice-Chancellor and the Public Orator Speaking of the University of Cambridge as it was it was in hisundergraduate days, he said that the University did not at that time present in so attractive a form as she did now that instruc, tion in the study of history, constitutional law, political economyand natural sciences, which perhaps, at the present day, formed the best preparation for one who intended to aspire to take part in the management of the affairs of his country. He believed that the estimation in which high education was held had been so greatly enhanced that the Universities had nothing to fear from attacks of cupidity, envy, hostility, or ill-will. The worst they had now to apprehend was excessive zeal on the part of those who, with the best intentions, but perhaps with insufficient knowledge and experience, sought to extend more widely and more generally their influence and their usefulness. The University of Cambridge had been steadily increasing its influence and responsibility. In an expanse so wide as that covered by science and learning, the time would never come when new fields would not be open for everyone. Most of what had been done was due to the devotion and ability of their own members -men whose names were more familiar to those present than they were to himself, so that it would be invidious for him to attempt to specify them. The progress of the Cambridge University in the future, as in the past, must be mainly its own work. The time might come when their ever-extending labours -labours undertaken in response to the growing wants of the community-might be received with even wider national recognition than they had hitherto been. So far as it might be in his power, in the office to which they had done him the honour to call him, to serve as one of the links which bound the University to the great body of the people whom she existed to serve and instruct, that service, imperfect as it might be, would be cheerfully given.

The nineteenth annual dinner of the old students of the Royal School of Mines was held at the Holborn Restaurant on Tuesday. Mr. H. Bauerman occupied the chair, Sir G. Stokes and Sir Lyon Playfair being among the guests. Responding to the toast, "The Mining and Metallurgical Industries," proposed by the Chairman, Prof. Roberts-Austen spoke of the value of metallurgical science. In illustration of its importance, he said that, if the thousands of tons of steel in the Forth Bridge had contained two-tenths less of carbon, the material would have been worthless, that thousands of tons of copper would be useless if it contained a trace of bismuth, and that the eighty millions sterling of gold coin which Sir C. Fremantle had been responsible for would have crumbled away if