

horn, with one angle directed forwards. At the upper side of the base of the beak is a bright red band of soft tissue, like an attempt at a "comb," such as is possessed by an ordinary rooster, only transversely placed. The whole is a handsome bird of heavy gait, absolutely unable to use its wings for their natural purpose of flying. Indeed, one of the interests of the bird zoologically is that, like several native birds of New Zealand, it is flightless, though its congeners in other countries are able to fly. The Takahe is closely allied to the Pukeko, and not far removed from the Brown Woodhen; all these belong to the family of Rails, which usually frequent more or less marshy ground, and in countries other than New Zealand are able to fly as well as other birds. On the other hand, the Takahe can run very actively, and its powerful beak must be a formidable weapon, which it could use with effect on enemies when at close quarters.

The specimen captured in 1898 is a young female, of practically the same size as the bird examined by Sir W. Buller twenty years earlier. The first specimen of the bird ever captured was taken in 1849, and its skin is now in the British Museum (Natural History). The second was caught in 1851, and is also in the British Museum collection. The third was captured in 1879—nearly thirty years after the second had been taken—and its remains were purchased by the Dresden Museum for one hundred guineas. The specimen caught in 1898 appears to be much the best yet obtained, and as much as 300*l.* was offered for it. The rarity of the *Notornis* and other members of the New Zealand fauna makes it essential, as Sir W. Buller points out in his paper, for naturalists to do everything in their power to possess, if not a few living representatives, at any rate a full life-history of the expiring forms.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

A COURSE of six free public lectures on "Prehistoric Chronology" will be delivered by Prof. Montelius at University College, London, on Tuesdays and Fridays at 4 p.m., beginning on Friday, May 4.

MR. J. F. HUDSON has been appointed mathematical lecturer at University College, Bristol, in succession to Mr. J. F. McKean, who has been appointed a mathematical lecturer at the Royal Naval Engineering College, Devonport. Mr. Hudson has for the past three years been assistant lecturer in Jesus College, Oxford, and assistant demonstrator of physics in the Oxford University Laboratory.

MR. W. TUCKER, C.B., a principal assistant secretary to the Board of Education, has retired from the service on reaching the age of sixty-five. The following promotions have been made in the office of the Board of Education:—Mr. J. White (assistant secretary) to be a principal assistant secretary; Mr. F. R. Fowke (assistant director for science), Mr. H. W. Hoare, Mr. W. I. Ritchie, and Mr. H. M. Lindsell to be assistant secretaries.

THE following appointments have been made by the Irish Department of Agriculture and Technical Instruction:—To be superintendent of statistics and intelligence branch, Mr. W. P. Coyne, professor of political economy and jurisprudence, University College, Dublin. To be inspector in agriculture, Mr. J. S. Gordon, Department of Agriculture, Edinburgh University, principal of the Cheshire County Council Agricultural and Horticultural School.

IN commemoration of the fiftieth anniversary of the foundation of the North London Collegiate School for Girls, and in honour of the late Miss Francis Mary Buss, a jubilee number of the school magazine was published on April 4. Mrs. Sophie Bryant, D.Sc., describes the foundation and growth of the school, and shows that it has been a very important factor in the development of secondary education for women. During the past twenty years 59 old students have passed Part I. of the Tripos examinations of the University of Cambridge, and 7 have passed Part II., while 10 have qualified for the ordinary degree. It is noteworthy that 33 of the 59 who passed Part I. took mathematics and natural science as their subjects, and 5 of those who went on to Part II. At Oxford University 9 old students have

passed the Honours Moderations (8 taking mathematics), and 8 have passed Final Honours. The College has 116 old students who are graduates of London University, 22 being Bachelors of Science, 4 Bachelors of Medicine, 2 Doctors of Science, and 1 Doctor of Medicine. Since the opening of the degrees of London University to women, 1220 women have graduated, and the North London Collegiate School claims 10 per cent. of this number as old students.

SCIENTIFIC SERIALS.

Bulletin of the American Mathematical Society, March.—Prof. Pierpont, in an article on mathematical instruction in France, gives an account of the way in which France is educating students who wish to become mathematicians, and indicates rapidly what positions a talented young man may hope to reach, how he attains them, and what his duties are in the various stages of his progress. He subsequently calls attention to the advantages which Americans can enjoy in studying mathematics in France, particularly in Paris. The article should be useful.—Prof. Ernest W. Brown reviews M. Poincaré's "Cinématique et Mécanismes, Potentiel et Mécanique des Fluides," the *Annuaire* of the Bureau des Longitudes for 1900, and the "Elements of Precise Surveying and Geodesy," by Mansfield Merriman.—Prof. F. Morley gives a sketch of E. Duporcq's "Premiers principes de Géométrie Moderne," a work to give students, who have some acquaintance with analytic geometry, a liking for the purely geometric point of view.—Prof. F. Cajori briefly notices "Opinions et curiosités touchant la Mathématique d'après les ouvrages Français des xvi^e, xvii^e, et xviii^e siècles," by G. Maupin (a work, apparently, which merits a place in a modern "Budget of Paradoxes"), and "La Mathématique: Philosophie, Enseignement," by C. A. Laisant.—The number closes with the usual items of "Notes" and "Publications."

THE March issue of the *Bulletin de la Société Astronomique de France* contains an interesting article on solar and lunar halos, with particulars and illustrations furnished by several contributors. Reproductions are given of two excellent photographs obtained by M. Basile de Balasny, at Poltava in Russia, one showing distinctly the halo, the other a definite column of light appearing as a prolongation of the sun above the horizon, the time being just after sunset. The same journal contains four photographs of the eclipse of the moon, December 16, 1899, by M. l'Abbé Moreux; M. Flammarion also continues his illustrated series of naked eye drawings of the moon.

SOCIETIES AND ACADEMIES.

LONDON.

Royal Society, March 29.—"Certain Laws of Variation." By H. M. Vernon, M.A., M.D., Fellow of Magdalen College, Oxford. Communicated by Prof. Lankester, F.R.S.

In a former paper (*Phil. Trans.*, B, 1895, p. 577) it was shown that the ova of the Echinoid *Strongylocentrotus lividus* were extraordinarily sensitive to their environmental conditions at the time of impregnation. For instance, by keeping the mixed ova and sperm in water at about 26° or 8° C. for an hour, the plutei obtained after eight days' development were some 5 per cent. smaller than those from ova kept at about 20° at the time of impregnation.

By splitting up into groups the 20,600 measurements which have been made from time to time on *Strongylocentrotus* larvæ, according to the amount of effect which had been produced in their size by varying degrees of favourable and unfavourable environment, and by determining the average variability of the larvæ in each group, it was sought to prove the existence of a law of variability. This may be worded as follows:—"An organism varies least when it is best adapted to its surroundings, so that the less it is adapted the more variable does it become."

Entomological Society, March 21.—Mr. C. O. Waterhouse, Vice-President, in the chair.—Mr. R. McLachlan exhibited an extraordinary aberration of *Enallagma cyathigerum*, Charp. The remarkable feature consisted in the predominance of black over blue in the coloration of the abdomen.—Mr.