coat of the *Pitta* to attend a wedding, and did not return it. The disconsolate *Pitta* wanders through the jungle calling on the peacock to restore its dress—hence the cry, *ayittam, ayittam* (my dress, my dress). The cry of the hornbill (*Kandetta*) is inauspicious and a sure sign of drought. The bird is doomed to suffer intolerable thirst; not being able to drink from any stream or rill, it has the power only to catch the rain-drops in its bill to quench its thirst, and keeps continually crying for rain.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

THE following is the list of candidates successful in the competition for the Whitworth Scholarships, 1887:—James Whitaker, 21, engineer student, Burnley, £200; John Calder, 20, mechanical engineer, Glasgow, £150; John Smith, 22, carpenter, Belfast, £150; Nicholas K. Turnbull, 21, mechanical engineer, Glasgow, £150; James C. Talbot, 23, engineer, Southampton, £150; Arthur F. Horne, 25, mechanical engineer, Moreton-in-Marsh (formerly of Glasgow), £150; Edward J. Duff, 23, engineer, Glasgow, £150; Robert N. Blackburn, 20, engineer apprentice, Liverpool, £150; William Thomson, 20, engineer apprentice, Glasgow, £150; William W. F. Pullen, 20, engineer apprentice, Cardiff, £100; Edwin Griffith, 20, engineer apprentice, Glasgow, £100; Frederick C. Tipler, 23, assistant chemist, Crewe, £100; Thomas H. M. Bonell, 24, analytical chemist, Swindon, £100; Richard J. Redding, 22, metallurgist, Plumstead (Woolwich), and Arthur W. Sisson, 25, mechanical draughtsman, Lincoln (equal), £100 each; Arthur H. Abbott, 22, engineer, Great Yarmouth, £100; George Hough, 23, engineer, Wolverton, £100; Harry G. Christ, 19, engineer apprentice, London, £100; Harry D. Griffiths, 21, engineer apprentice, Cardiff, £100; Denholm Young, 24, engineer apprentice, Edinburgh, £100; Benjamin G. Oxford, 20, engineer apprentice, Liverpool, £100; Bernard H. Crookes, 21, engineer student, Liverpool, £100; George J. Wells, 23, engineer, London, £100; John Eustice, 23, engine fitter, Camborne, £100; Augustus H. H. Bratt, 24, engineer, Plumstead (Woolwich), £100.

SOCIETIES AND ACADEMIES.

LONDON.

Entomological Society, August 3.—Dr. D. Sharp, President, in the chair.—Mr. J. W. Peers and Mr. R. G. Lynam were elected Fellows.—Jonkeer May, the Dutch Consul-General, exhibited a pupa and two imagos of *Cecidomyia destructor* (Hessian fly) which had been submitted to him by the Agricultural Department.—Mr. W. White exhibited, and made remarks on, a specimen of *Philampelus satellitia*, Linn., from Florida, with supposed fungoid excrescences from the eyes. Mr. Stainton said he was of opinion that the supposed fungoid growth might be the pollinia of an Orchis. Mr. Poulton expressed a similar opinion, and the discussion was continued by Mr. Pascoe and Dr. Sharp.—Mr. White also exhibited a specimen of *Catephia alchymista*, bred from a pupa collected last autumn on the south coast.—Mr. McLachlan sent for exhibition a number of oak-leaves infested by *Phylloxera punctata*, Lichtenstein, which he had received from Dr. Maxwell Masters, F.R.S.—Mr. Champion exhibited two rare species of *Curculionidæ* from the Isle of Wight—viz. one specimen of *Baridius analis*, and a series of *Cathormiocerus socius*. He remarked that *C. maritimus*, Rye, had been placed in recent European Catalogues as a synonym of the last-named species, but that this was an error. He also exhibited a series of *Cicindela germanica*, from Blackgang.—M. A. Wailly exhibited, and made remarks on, a number of living larvæ of *Antheræa pernyi*, *A. mylitta*, *Telea polyphemus*, *Platysamia cecropia*, *Attacus cynthia*, *Callosamia promethea*, and other silk-producing species. He also exhibited imagos of the above species, imagos of *Antheræa yama-mai*, and a number of species of Diurni from Sarawak.—Mr. Poulton exhibited crystals of formate of lead obtained by collecting the secretion of the larva of *Dicranura vinula* on 283 occasions. The secretion had been mixed with distilled water in which oxide of lead was suspended. The latter dissolved, and the acid of the secretion being in excess the normal formate was produced. Prof. Meldola promised to subject the crystals to combustion, so that their constitution would be proved by the final test.

EDINBURGH.

Royal Society, July 15.—Special Meeting.—Dr. J. Murray, Vice-President, in the chair.—Prof. Tait submitted a communication by Sir W. Thomson on the stability of the steady motion of a viscous fluid between two parallel planes.—Sir W. Turner communicated a note by Mr. George Brook on the epiblastic origin of the segmental duct in teleostean fishes, and birds.—Prof. T. R. Fraser read a preliminary note on the chemistry of strophanthin.—Mr. J. J. Coleman described a new diffusimeter and other apparatus for the study of liquid diffusion.—A paper by Mr. Frank E. Beddard was communicated by Prof. Sir W. Turner.—Dr. Murray read a paper on the mean height of the land of the globe. The lower limit he gives is, in round numbers, 1900 feet. The higher limit, which he believes to be more nearly correct, is about 2100 feet.—Mr. J. T. Cunningham, of the Scottish Marine Station, read a paper on the *Chætopoda sedentaria* of the Firth of Forth.

July 18.—Sheriff Forbes Irvine, Vice-President, in the chair.—The Chairman intimated the foundation by Dr. Gunning of the Victoria Jubilee Prize, and the conditions of award which have been approved by the donor. The first award of the prize was made to Sir W. Thomson, for a remarkable series of papers on hydrokinetics which he has communicated to the Society.—Mr. W. Durham read the second part of his paper on the laws of solution.—Prof. Tait communicated a paper by Prof. W. Burnside on the partition of energy between the translatory and rotational motions of a set of non-homogeneous elastic spheres. The rotational energy is equal to two times the translational energy.—Dr. H. R. Mill submitted a paper on the salinity, temperature, &c., of the Firth of Forth.—Prof. Tait communicated a paper by Mr. Albert Campbell on the direct measurement of the Peltier effect. Mr. Campbell has experimented with three pairs of metals. His results agree in every case with Prof. Tait's thermo-electric diagram. The agreement in the case of iron and nickel is of special importance.—Dr. Alex. Scott communicated a paper on vapour-densities at high temperatures.—Prof. Tait read a paper by Dr. G. Plarr on the determination of the curve, on one of the co-ordinate planes, which forms the outer limit of the positions of the point of contact of an ellipsoid which always touches the three planes of reference.—Mr. Buchan read a paper by Mr. A. Rankin on the mean temperatures of the various winds at Ben Nevis Observatory.—Prof. Crum Brown read a paper on ferric ferricyanide as a reagent for detecting traces of reducing gases. This reagent gives a test depending on the production of colour, which is a more delicate test than one which depends on its disappearance.—Prof. Tait communicated some results on the compressibility of water, of mercury, and of glass. The average compressibility of a 20 per cent. aqueous solution of common salt per atmosphere for the first 100 atmospheres is 0·0000316. It diminishes rapidly with the percentage of salt in solution. The compressibility of common lead glass is 0·0000027 at a temperature of 19° C.—Prof. Berry Haycraft submitted a description of experiments to show the truth of Sir J. Lister's theory of coagulation.—Dr. Murray communicated a paper by Mr. Adam Dickie on the chemical analyses of sea-water from the Clyde sea-area.—The Chairman mentioned the number of papers read during the session, classifying them under various heads. He also read the Jubilee address which had been presented to Her Majesty by the Secretary of State on behalf of the Society.

PARIS.

Academy of Sciences, August 8.—M. Janssen in the chair.—Observations of the minor planets, made with the great meridian instrument of the Paris Observatory during the first quarter of the year 1887, communicated by M. Mouchez. The right ascensions and polar distances are given of Leto, Sophrosyne, Undine, Hebe, and nine other minor planets at various dates with Paris mean time, all comparisons being referred to the ephemerides published by the Berlin *Jahrbuch*, except those of Undine, which are referred to those published in No. 288 of the circulars of the Berlin *Jahrbuch*. The observations were made by M. O. Callandreau.—Fresh documents on the relations existing between the chemical and mechanical work of the muscular tissue, by M. A. Chauveau,