

upwards and to a less distance. As I walked home along elevated country roads, the effect produced by a dark sky on one side with a bright sky on the other, as if lighted up by an invisible full moon, was very beautiful.

E. H.

Sheffield, February 1

THE aurora borealis which occurred last night was first visible here at 6 p.m. As is usual, the glow extended in an arc about 15° above the horizon, and was of a faint greenish colour.

From it arose frequent streamers of the same colour, having a slow westerly motion: these streamers attained to various heights, one at 6.55 reaching almost to the zenith; their colour, of various intensities, was as a rule greenish, but at times the streamers were of a reddish tint, more remarkably that one which occurred at 5.55, above referred to. At 6.50 the low arc changed its character, becoming irregular, finally assumed the form of a double arc, of which the centres of curvature were north-east and north-west of the place of observation.

At irregular intervals, during the whole of the first half hour, after the first appearance of the aurora, a flickering arc of light would ascend from the lower arc, up to an elevation, in many cases, of about 80° . At 7 p.m. the aurora decreased in intensity, and at about nine o'clock had disappeared.

Cirencester, February 1

G. W. PREVOST

UNIVERSITY AND EDUCATIONAL INTELLIGENCE

OXFORD.—The term's work has been delayed a little by the severity of the weather. Many of the colleges were but half filled on the regular day of meeting.

At the University Museum the following courses will be given during the term:—Prof. Henry Smith lectures on Pure Geometry, and Prof. Barth. Price on Geometrical and Physical Optics. Prof. Clifton will lecture on Terrestrial Magnetism at the Clarendon Laboratory. In this department Messrs. Stocker and V. Jones will lecture on Mechanics, and will give practical instruction in Physics. In the Chemical Department Dr. Odling will continue his course on Organic Chemistry. Mr. Fisher will lecture on Elementary Inorganic, and Dr. Watts on Elementary Organic Chemistry. The laboratories will be open under the direction of Messrs. Fisher, Watts, and M. Robb. Dr. F. D. Brown will lecture (for the Professor) on Chemical Affinity. In the Physiological Department, in the absence of Dr. Rolleston through illness, there will be practical instruction given by Messrs. Robertson, Hatchett Jackson, and Thomas. Mr. Jackson will lecture on Circulation and Respiration; Mr. Thomas on Comparative Embryology; Mr. Robertson will form a class for Practical Microscopy; and Mr. Lewis Morgan will form a class for Human Anatomy.

The following afternoon lectures will be given in the Museum: Prof. Prestwich will lecture on the Palæozoic Strata, and Prof. Westwood will give an informal lecture on the Arthropoda. In the University Observatory Prof. Pritchard gives two courses, one on the Lunar and Planetary Theories, the other on General Elementary Astronomy, once a week in the evening.

At the Botanical Garden Prof. Lawson gives a course of elementary botany.

At the Colleges which possess laboratories the following courses will be given:—At Christchurch Mr. Baynes will lecture on Thermodynamics; Mr. Dixon, owing to the illness of Mr. Vernon Harcourt, will continue his course on Inorganic Chemistry. At Balliol Mr. Dixon will lecture on Elementary Electricity and Magnetism; at Exeter Mr. Lewis Morgan will lecture on Histology; at Magdalen Mr. Yale will give a series of practical demonstrations on the Physiology of Circulation and Respiration.

In the School of Natural Science Prof. W. A. Tilden has been nominated as Examiner in Chemistry; Dr. S. J. Sharkey, of Jesus College, has been nominated Examiner in Biology; and Mr. J. W. Russel, of Merton College, has been nominated Examiner in Physics.

An examination for a Fellowship in biological subjects will be held in March at University College. The examination will comprise papers of questions, and practical work in zoology, physiology, and botany, and will begin on Thursday, March 3, at 9 a.m. Intending candidates are desired to send in their names to the Master (if possible) before February 11, with a list of the subjects they offer for examination. They are also invited to mention any original work on which they have been engaged, and to send copies of any original articles or books on

biological subjects of which they are the authors. Candidates are desired to call on the Dean with the usual testimonials and certificates on Wednesday, March 2, between 5 and 6 p.m.

CAMBRIDGE.—The senior wrangler in this year's Mathematical Tripos is Mr. Andrew Russell Forsyth, of Trinity College, born in Glasgow in 1858, and educated at Liverpool College. The next two are Mr. Robert Samuel Heath and Mr. Ernest Steinthal, both also of Trinity.

In connection with the list published in these columns in December, of those who had obtained first class honours in the Natural Sciences Tripos, the following statistics may be of interest:—In the year in which the Tripos was instituted (1851), 6 names appeared in the list; the same number in 1861; in 1871, 14; in 1878, 22; and in 1880, 31 passed the examination, obtaining honours. In 1869, 7 men passed the Special Examination in Natural Science for the ordinary B.A. degree; the number increased to 25 in the Easter examination of 1870; in 1878 it slightly diminished to 22; and in 1880, 16 passed the examination in December. So far as these results go, it would appear that an increasing number of those students who declare for natural science at Cambridge aim at thoroughness in their work, and are not content with that superficial smattering of book knowledge which is considered sufficient in the examination for the Pass degree.

M. FERRY, the French Minister of Public Instruction, has given an important character to the next meeting of the schoolmasters of France. Each of the 40,000 teachers of the 40,000 parishes (communes) is to meet with his fellow-teachers at the proper district towns. There are about 2000 of each of these little assemblies, each of which is to elect a delegate who will go to the chief town of the Department, and all these cantonal delegates are to appoint a department of delegates, who will go to Paris with a memoir written for communication and discussion before the pedagogical congress. All these memoirs are to deal with questions proposed by the Government.

SOCIETIES AND ACADEMIES LONDON

Royal Society, January 27.—“*Polacanthus Foxii*, a large undescribed Dinosaur from the Wealden Formation in the Isle of Wight.” By J. W. Hulke, F.R.S. (Abstract.)

A description of the remains of a large dinosaur, discovered in 1865 by the Rev. W. Fox, in a bed of shaly clay between Barnes and Cowlaze Chines, in the Isle of Wight. Head, neck, shoulder girdle, and fore-ribs were missing, but the rest of the skeleton was almost entire. Some of the præ-sacral vertebrae recovered show a double costal articulation. In the trunk and loins the centrum is cylindroid, relatively long and slender, with plano-concave, or gently biconcave ends. Several lumbar centra are ankylosed together, and the hindmost to the sacrum. The sacrum comprises five relatively stout and short ankylosed centra of a depressed cordiform cross-sectional figure. The post-sacral vertebrae have a stout short centrum.

The limb bones are short, their shafts slender, and their articular ends very expanded. The femur has a third trochanter, and the distal end of the tibia has the characteristic dinosaurian figure.

The back and flanks were stoutly mailed with simple, keeled, and spined scutes, and the tail was also sheathed in armour.

The animal indicated by these remains was of low stature, great strength, and probably slow habits. It is manifestly a dinosaur, and is considered to be very nearly related to *Hylæosaurus*.

Linnean Society, January 20.—The Rev. J. M. Crombie, F.L.S., in the chair.—The proposed alterations in the bye-laws were again successively read, voted for, and confirmed, excepting sect. 2, chap. viii. which was not confirmed.—Portfolios of British sea-weeds and zoophytes, prepared by Mr. W. Smith of Falmouth, were exhibited by the Rev. J. Gould.—A squirrel's nest was also shown and commented on by Mr. Chas. Berjeau.—A new form of microscopical cabinet designed by Mr. W. Hillhouse of Cambridge was explained by him, its compactness and portability rendering it advantageous to teachers.—Mr. Thos. Christy exhibited some horn-shaped galls growing on a branch of *Pistacia atlantica*, and somewhat similar in appearance to those known in India under the name of “*Kalera-singhi*” galls. From the galls a substance exuded not unlike Chian turpentine; Mr. Christy also drew attention to the fruit of the