

course of lectures on human osteology, and a series of demonstrations will be arranged to meet the requirements of those working in the department. The dissecting-room will be open daily for practical work and instruction.

The Rev. H. Boyd, Principal of Hertford College, has been nominated Vice-Chancellor for the ensuing year.

A mathematical fellowship has been awarded at Merton College to Mr. Arthur Lee Dixon, B.A., formerly scholar at Worcester College. Mr. Dixon was placed in the first class both at Moderations and in the final Mathematical Schools. He obtained the Junior Mathematical Scholarship in 1887 and the Senior Mathematical Scholarship in 1891. Also at Corpus Christi College a mathematical fellowship has been awarded to Mr. Arthur Ernest Jolliffe, scholar of Balliol College. Mr. Jolliffe was placed in the first class by the Mathematical Moderators in 1889, and in the first class by the Examiners in *Scientiis mathematicis et physicis* in 1891. He also obtained the Junior Mathematical Scholarship in 1889.

CAMBRIDGE.—The erection of the Newall telescope is nearly completed. Prof. Adams was able to use it for the first time last week, and took an observation of Neptune.

Prof. Ewing announces that the new Engineering Laboratory is ready for use, and will be occupied this term.

Mr. F. Blackman, of St. John's College, has been appointed Demonstrator of Botany.

By the return of Prof. Jebb, the University enjoys the distinction of being represented in Parliament by a Senior Classic (Dr. Jebb) and a Senior Wrangler (Sir G. G. Stokes).

Sixty-four candidates entered for the examination in sanitary science held last week. Of these forty-three have passed both parts of the examination, and receive the diploma in Public Health.

The Lecturer in Geography (Mr. Buchanan, F.R.S.) will this term lecture on physical and chemical geography, with especial reference to land surfaces and their development under climatic and other agencies.

The vote in the Senate on the question whether a syndicate shall be appointed to consider alternatives for Greek and Latin in the Previous Examination will be taken on Thursday, October 29, at 2 p.m.

University Extension.—It is announced that Mr. T. D. Galpin, of the firm of Cassell and Co., Limited, has offered to the Dorset County Council the sum of £1000 to be invested for the purpose of providing scholarships to send natives of Dorset to the Summer Meetings of Oxford and Cambridge. The scholarships will be awarded to the writers of the best essays, and it is proposed that the examination should be conducted by the University Extension Committee of the Oxford Delegates of Local Examinations. The scholarships are to be awarded without distinction of sex, or any political, sectarian, or social distinction whatever.

SCIENTIFIC SERIALS.

The American Journal of Science, October 1891. Some of the possibilities of economic botany, by George Lincoln Goodale. This is the Presidential address delivered before the American Association for the Advancement of Science, at Washington in August last.—On the vitality of some annual plants, by T. Holm. The author enumerates several species of plants which show a tendency to vary from annual to biennial or perennial.—A method for the separation of antimony from arsenic by the simultaneous action of hydrochloric and hydriodic acids, by F. A. Gooch and E. W. Danner.—Notes on allotropic silver, by M. Carey Lea. The blue form of allotropic silver is mainly considered. The action of light on this form is remarkable, for its effect is first to increase the sensitiveness to reagents and then to completely destroy it. This reversing action is analogous to that which light exerts upon silver bromide. Mr. Lea has also examined the point as to whether in the reduction of silver, the allotropic or the normal form is produced, and he finds that when the silver passes from the condition of the normal salt or oxide to that of the metal, the reduced silver always appears in the ordinary form. But when the change is first to sub-oxide or to a corresponding sub-salt, the silver presents itself in one of its allotropic states.—Structural geology of Steep Rock Lake, Ontario, by Henry Lloyd Smyth.—On the so-called amber of Cedar Lake, North Saskatchewan, Canada, by B. J. Harrington. The resin or "retinite" examined by the author had a hardness

of about 2.5, and a specific gravity 1.055 at 20° C. An analysis gave for its composition, carbon 80.03, hydrogen 10.47, and oxygen 9.50.—Geological horizons as determined by vertebrate fossils, by O. C. Marsh. The method of defining geological horizons by vertebrate fossils was first used by the author in 1877, and appears to afford the most reliable evidence of climatic and other geological changes. It is now extended and revised. A section accompanies the paper representing, in their geological order, the successive strata at present known with certainty from characteristic vertebrate fossils.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, October 3.—M. Duchartre in the chair.—On the variations of composition of Jerusalem artichokes from the point of view of mineral matters, by M. C. Lechartier. The author gives the results of some investigations made at the Rennes Agricultural Station, on the culture of artichokes in soils differently treated. He has also studied atmospheric influences as indicated by cultures on similar plots for three consecutive years.—Observations of Wolf's comet made with the great telescope of Toulouse Observatory, by M. E. Cosserat. Observations for position were made and are recorded, extending from August 13 to September 28.—On the value of electrostatic tension in a dielectric, by M. L. de la Rive.—On the simultaneous existence, in cultures of *Staphylococcus pyogenes*, of a vaccine substance capable of being precipitated by alcohol, and of a substance soluble in alcohol, by MM. A. Rodet and J. Courmont.—On some parasite Copepods, by M. Eugène Canu.—Observations of the fall of a solar prominence into a spot, by M. E. L. Trouvelot. The observations relate to some remarkable luminous filaments occurring in a group of spots from August 6 to August 10.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

The Physical Geology and Geography of Ireland: E. Hull, 2nd edition (Stanford).—*On Surrey Hills, a Son of the Marshes* (Blackwood).—*By Seashore, Wood, and Moorland*: E. Step (Partridge).—*An Introduction to Human Physiology*: Dr. A. D. Waller (Longmans).—*Guide to the Examinations in Physiography, and Answers to Questions*: W. J. Harrison (Blackie).—*Journal of the Chemical Society*, October (Gurney and Jackson).—*London and Middlesex Note-Book*, vol. 1, No. 3 (E. Stock).—*Botanischer Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie*, Vierzehnter Band, 3 Heft (Leipzig, Engelmann).—*Quarterly Journal of the Royal Meteorological Society*, July (Stanford).—*Meteorological Record*, vol. x. No. 40 (Stanford).—*Himmel und Erde*, October (Berlin).

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