English was not a mere invasion of one race by another, but as complete a dispossession as could possibly be imagined. The *Bos longifrons* lingers in Wales, after having once occupied the whole country, just as its Celtic owners still linger, while the urus is an invader just in the same sense as their English possessors. The *Bos longifrons* is of a stock foreign to Europe, and the urus was most probably domesticated in some other region by those Neolithic people. Both these animals have probably been derived from an area to the south and east of Europe, and were introduced by the Neolithic herdsmen and farmers at a very remote period.

DUBLIN

Royal Dublin Society, November 20.—Prof. R. Ball, M.A., in the chair. Mr. Maurice Cole exhibited and explained a working model of an improved seed sowing machine.—Prof. Edward Hull, F.R.S., read some notes of a recent visit to Vesuvius.—Dr Emerson Reynolds exhibited a new apparatus for gas analysis, and Mr. A. G. More exhibited some specimens of well-stuffed birds from the museum of the Society.

Royal Irish Academy, November 30.—Rev. J. H. Jellett, president, in the chair. The Secretary read a paper by M. Donovan on Earl Stanhope's alleged imperfections of the tuning fork; also for Dr. Whitley Stokes a paper on a fragment of Cormac's glossary.—Mr. G. H. Kinahan read a paper on and exhibited sketches of what appeared to him a new type of Clochân, observed in the county of Mayo, South of Louisburgh. The structure was composed of large flags inclining inwards to form sloping sides and roof, the very apex of which was covered by horizontal flags. He also exhibited a sketch of a form of cross observed in the same neighbourhood, and which was unlike anything he had ever seen.

PARIS

Academy of Sciences, December 11.—M. J. Boussinesq read a paper on a remarkable property of the points where the lines of greatest slope of a surface have their osculatory planes vertical, and on the difference which generally exists at the surface of the earth between the lines of the ridge or the thalweg, and those along which the slope of the soil is a minimum.—M. Becquerel presented a third memoir on the discoloration of flowers by electricity, and on the cause of the phenomenon, in which he shows that electricity acts in this case by destroying the envelopes of the cells containing the coloured materials. Heat produces the same effect. The author remarked upon some general applications of these facts.—A paper on the diffusion and deleterious influence of mercurial vapours, by M. Merget, was read. The author disputed the conclusions of Faraday, founding his opposition upon experiments and observations which show that the vaporisation of mercury is a continuous phenomenon not even interrupted by the solidification of the metal, and that the vapours emitted by it are capable of great diffusion, nearly in accordance with the dynamic theory of gases. M. Dumas called attention to some observations on this subject by M. Boussingault.—M. C. A. Valson presented a note on the part played by space in the phenomena of solution, in which he discussed the contraction produced by the solution of various salts in water.—A note on different acoustic phenomena observed during balloon-ascents, by M. W. de Fonvielle, was read. The author remarked upon the fact that certain acute but very feeble sounds are often heard in balloon ascents, and accounts for the phenomenon by the reverberation of the balloon itself.—M. Serret presented a note by M. de Tastes on a new propeller, consisting of a plate or fan worked in the manner of the tail of a fish or whale.—M. A. Barthélemy presented a memoir on the vibrations communicated to mercury and liquids in general, in which he described and figured the curious effects produced by these vibrations in vessels of various forms.—M. Delaunay read a note on the cold of the 9th December, containing some interesting observations on the range of this extreme cold over the Continent of Europe; and M. C. Sainte-Claire Deville presented a second note on the precocity of the cold in the present year.—M. P. P. Dehérain presented a memoir on the intervention of the nitrogen of the atmosphere in vegetation, in which he demonstrated by experiment the absorption of the atmospheric nitrogen by decomposing organic matters, and suggested that by this means nitrogen may be absorbed by the soil.—M. Wurtz presented a note by MM. C. Friedel and R. D. Sylva, on the action of chlorine upon chloride of isopropyl; and a note by M. E. Grimaux on derivatives of chloride of tollylene.—A note was read by M. Dubrunfaut on the combustibility of carbon, in which he maintains that carbon is combustible only in gases containing water; and another by M. F. Jean on the quantitative determination of glucose, recommending a process depending on the precipitation of metallic silver by protochloride of copper, prepared from the protoxide precipitated by glucose.—The deposits of phosphate of lime in France formed the subject of three papers, namely, a note on the composition of that recently worked in the Departments of Tarn-et-Garonne and of the Lot, by M. A. Bobière; an account of the deposits of Saint-Antonin and Caylux, in the former department, by M. Trutat; and a short note on the organic origin of the deposits in the Quercy, by M. Malinowski. M. Trutat described the structure of the deposits, and noticed the remains of certain mammalia found in them.—M. Daubrée communicated a note by M. P. Fischer on the existence of Lower Tertiary strata in Madagascar. These beds, belonging apparently to the great Nummulitic formation, occur on the west and south-west coast of the island. No nummulites have been found in them.—M. E. Blanchard presented a note by M. A. Milne-Edwards on the structure of the placenta in the Tamandua. The author describes this placenta as differing in various respects from those of other Edentata, and remarked that the diversity in the fœtal envelopes of those mammals would lead to the supposition that either the characters derived from them are not so important among the Edentata as in other groups, or the forms united in the Edentata are less nearly related than is generally supposed. He is inclined to the latter opinion.—M. Duchartre communicated a note by M. J. de Seynes on *Penicillium bicolor*, Fr.; and M. Robin presented a note by M. Rabuteau on the physiological properties of various chlorides.

BOOKS RECEIVED

ENGLISH.—Nature; or, the Poetry of Earth and Sea: From the French of Madame Michelet (T. Nelson and Sons).—The Mountain: From the French of J. Michelet (T. Nelson and Sons).—Beautiful Birds in Far-off Lands: M. and E. Kirby (T. Nelson and Sons).—Text Books of Science; Theory of Heat: J. Clerk Maxwell (Longmans).—A Manual of Zoology: H. A. Nicholson; 2nd edition (Blackwood).—Comparative Metaphysics; Part II.: S. H. Hennell (Trübner).

FOREIGN.—(Through Williams and Norgate.)—Handbuch der vergleichenden Anatomie: E. O. Schmidt.—Mineralogische Mittheilungen, Jahrg. I., Heft 1: G. Tschermak.

DIARY

THURSDAY, DECEMBER 21.

ROYAL SOCIETY, at 8.30.—Contributions to the History of Orcin. No. II. Chlorine and Bromine Substitution Compounds of the Orcins; Note on Fuedsol: Dr. Stenhouse, F.R.S.—On some recent Discoveries in Solar Physics; and on a Law regulating the Duration of the Sunspot Period: W. De La Rue, F.R.S., B. Stewart, F.R.S., and B. Loewy.

LINNEAN SOCIETY, at 8.—On the Anatomy of the American King-Crab (*Limulus polyphemus*, Latr.): Prof. Owen, F.R.S.

CHEMICAL SOCIETY, at 8.

LONDON INSTITUTION, at 4.—The Philosophy of Magic. 1. The Magic of Modern Conjurers: J. C. Brough, F.C.S.

FRIDAY, DECEMBER 22.

QUEKETT MICROSCOPICAL CLUB, at 8.

THURSDAY, DECEMBER 28.

ROYAL INSTITUTION, at 3.—On Ice, Water, Vapour, and Air. No. I. Prof. John Tyndall, F.R.S.

LONDON INSTITUTION, at 4.—The Philosophy of Magic: 2. The Magic of the Theatre: J. C. Brough, F.C.S.

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ERRATA.—P. 123, col. 2, line 36 from top, for "or D1 . . . or D2," read "on D1 . . . on D2."