mittee of gentlemen experienced in scientific education, have made the following appointments to the science scholarships for the year 1892. The scholars have been students of science for at least three years, and have been recommended for the scholarships by the authorities of their respective Universities or Colleges, as indicating high promise of capacity for advancing science, or its applications, by original research. The scholarships are of the value of £150 a year, and are tenable for two years (subject to a satisfactory report at the end of the first year) in any University at home or abroad, or in some other institution to be approved of by the Commissioners. The scholars are to devote themselves exclusively to study and research in some branch of science, the extension of which is important to the industries of this country.

ARTHUR ELLIS, Major-General,
Secretary.

18, Victoria-street, Westminster, August, 1892.

University of Edinburgh.—Mr. Andrew John Herbertson.
,, Glasgow.—Mr. James Blacklock Henderson.
,, Aberdeen.—Mr. John Macdonald.
Mason Science College, Birmingham.—Mr. Lionel Simeon Marks.
University College, Bristol.—Mr. George Lester Thomas.
Yorkshire College, Leeds.—Mr. Harold Hart Mann.
University College, Liverpool.—Mr. James Terence Conroy.
Owens College, Manchester.—Mr. Thornton Charles Lamb.
University College, Nottingham.—Mr. Edward Arnold Medley.
Firth College, Sheffield.—Mr. William Henry Oates.
University College of North Wales.—Mr. Edward Taylor Jones (*conditionally*).
Queen's College, Cork.—Mr. George Ryce.
,, ,, Galway.—Mr. William Gannon.
University of Toronto.—Mr. Frederick J. Smale.
,, Adelaide.—Mr. James Bernard Allen.
,, New Zealand.—Mr. David Hamilton Jackson.
,, Sydney (*postponed from* 1891).—Mr. Samuel Henry Barraclough.

ROYAL COLLEGE OF SCIENCE, LONDON (SESSION 1891–92).—List of Scholarships, Prizes, and Associateships, awarded July 1892 :—

First Year's Scholarships... ...	Spencer, Bernard E. West, George S. Gray, Charles J. Verney, Harry.	
Second Year's Scholarships ...	Allan, William. Melton, George R.	
"Edward Forbes" Medal and Prize of Books for Biology	West, William Vanstone, John H.	2 Medals and Prize divided.
"Murchison" Medal and Prize of Books for Geology	Starling, Sydney E.	
"Tyndall" Prize of Books for Physics Course I	Spencer, Bernard E.	
"De la Beche" Medal for Mining ...	Cooke, Lewis H.	
"Bessemer" Medal and Prize of Books for Metallurgy	Jeans, Harold.	
"Frank Hatton" Prize of Books for Chemistry	Perry, George H.	

Prizes of Books given by the Department of Science and Art.

Mechanics	Longbottom, John G.
Astronomical Physics	Bruce, James.
Practical Chemistry	Perry, George H.
Mining	Cooke, Lewis H.
Principles of Agriculture ...	Jones, Thomas.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, August 16.—M. Duchartre in the chair.—Theory of a condenser introduced into the secondary circuit of a transformer, by M. Désiré Korda.—Vaporization in boilers, by M. de Swarte.—On some new combinations of piperidine, by M. Raoul Varet.—On an application of chemical analysis for fixing the age of prehistoric human remains, by M. Adolphe Carnot. This determination is based upon the progressive diminution of fluorine contained in the fossil bones of the various geological ages. If the quantity contained in the most ancient remains be designated by 1, we shall have 0·64 for Tertiary remains, 0·35 for "Quaternary," and 0·05 or 0·06 for the recent ones. This fact was utilized in fixing the age of a human tibia found in the sandy layers of Billancourt (Seine) in the neighbourhood of some remains of undoubted Quaternary origin. The ratio of the quantity of fluorine contained in the animal fragments to that in the human tibia was found to be 0·469 or 0·578 to 0·066. This establishes the more recent origin of the tibia.—On a new genus of permio-carboniferous stems, the *G. Retinodendron Rigolloti*, by M. B. Renault. The specimen upon which this new genus has been founded was discovered by M. Rigollot in the silicified layers of Autun. It represents a stem 12 mm. thick, 3 mm. of which belong to the wood and 9 mm. to the bark. The latter is composed of several eccentric zones of gum or resin canals, and of cells with sclerified walls in regular alternation. The canals are arranged in continuous circular lines; their cavities enclose a brown substance which is sometimes granular. The structure of the wood indicates that the new genus belongs to the gymnosperms; its density and the small thickness of the ligneous cellular rays distinguish it from the ordinary cycads, while their composite nature makes it impossible to class them with the conifers. Hence it belonged to a family of gymnosperms which is actually extinct. It may be concluded that at no other epoch have the plants secreting gums, resins, tannin, &c., been more abundant, and that the carbonization of these products is the origin of the yellow or brown substances found not only in the bituminous schists, forming bands or small lenticular patches, but also in pitcoal, impregnating more or less the preserved tissues, and in cannel-coal, enclosing a large number of recognizable vegetable fragments.—Pancreatic diabetes, by MM. Lancereaux and A. Thiroloix. Further experiments show that there exists a diabetes actually consequent upon the destruction of the pancreas; this diabetes is not, however, caused by the absence of the external glandular secretion, but simply by the absence of the liquid secreted internally by the gland and absorbed by the blood-vessels and the lymphatics.—On a new treatment of the glanders, by MM. Claudius Nourri and C. Michel. This is identical with that applied recently to human tuberculosis, with which it has much in common.

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