Institutions aided.	Work.	Grant, 1897-98.
		£
University College of North Wales, Bangor	Collegiate centre	800
University College of North Wales, Bangor	College farm	200
Durham College of Science, Newcastle-on-Tyne	Collegiate centre	800
Durham College of Science, Newcastle-on-Tyne	College farm	200
University College of Wales, Aberystwyth	Collegiate centre	800
Reading College	Collegiate centre	800
Yorkshire College, Leeds	Collegiate centre	600
University College, Nottingham	Collegiate centre	600
South-Eastern Agricultural College, Wye	Collegiate centre	600
Cambridge and Counties Agricultural Education Committee	Collegiate centre	500
Eastern Counties Dairy Institute, Ipswich	Dairy instruction	300
British Dairy Institute, Reading	Dairy instruction	300
Royal Botanic Garden, Edinburgh	Class for foresters and gardeners	150
Bath and West and Southern Counties Society	Field experiments	50
Bath and West and Southern Counties Society	Cider experiments	50
Bath and West and Southern Counties Society	Cheddar cheese research	200
Highland and Agricultural Society	Agricultural experiments	100
Agricultural Research Association, Aberdeen	Agricultural experiments	100
Stewartry of Kircudbright Dairy Association	Cheese discoloration inquiry	50

The grants to the collegiate centres in England and Wales are of a general character, intended to assist and improve the local provision made for instruction in the higher forms of agricultural education. The thirty-two separate counties are thus provided with an efficient and economical means of systematising their local instruction, and of supervising demonstration plots and agricultural experiments by securing scientific advice and the assistance of qualified lecturers drawn from the collegiate educational staffs. The Durham College of Science and the University College of North Wales have been granted special assistance in consideration of their having taken farms for practical work and field experiments.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, September 12.—M. Faye in the chair.—Meadow land in warm dry summers, by M. Ad. Chatin. A list of those species of plants which have been found to be the most capable of resisting a hot, dry summer.—Observation of an aurora borealis, by M. H. Deslandres. An aurora was observed at Meudon on September 9 about 9 p.m., and its general direction was very nearly that of the magnetic meridian, the rays having a greenish colour.—On the crystallisation of the anhydrous sulphides of calcium and strontium, by M. Mourlot. The crystallised sulphides of these metals can be prepared in two ways, either by heating a mixture of the corresponding sulphate with carbon, or by simply fusing the anhydrous sulphide obtained by the method of M. Sabatier, the temperature employed being that of the electric furnace with a current of 1000 amperes at 60 volts. The crystallised sulphides thus produced are more stable than the corresponding amorphous salts, and are attacked with difficulty by reagents; carbon at a very high temperature converts them into carbides. Both crystallise in the cubic system, and are without action upon polarised light.—On a double carbide of iron and tungsten, by M. Percy Williams. This compound, the existence of which was indicated in an earlier paper, is prepared by heating a mixture of tungstic acid, iron and coke, in the electric furnace with a current of 900 amperes at 45 volts. The ingot formed in the reaction contains the carbide of tungsten WC, probably W_2C, and the double carbide $3W_2C.2Fe_3C$.—On the commercial extraction of thorium, by MM. Wyronhoff and A. Verneuil. The mineral is worked up by one of the usual methods as far as the production of the oxalates, these precipitated by sodium carbonate and hydroxide, and the washed precipitate dissolved in hydrochloric acid. This liquid is treated with small portions of barium peroxide, until hydrogen peroxide no longer gives a precipitate. The deposit, which is of a reddish orange colour owing to the presence of cerium, contains the whole of the thoria, with about 20 to 30 per cent. of impurities. Further treatment with hydrogen peroxide after a similar set of operations readily gives a very pure thoria. The method has been applied on the large scale, starting with five tons of monazite, with good results.—On the composition of the humic constituents of the soil, by M. G. André.—On the transformation of luminous variations into mobile relief, by M. Dussaud.—On a new coccus, by M. Louis Leger. The new species is found in the digestive tube of *Lithobius hexodus*, and belongs to the genus *Echinospora*. Its microgametes are furnished with vibratile cilia; the name *E. ventricosa* is suggested.—Influence of light on the form and structure of the branches of the wild grape and ground ivy, by M. Maige. Comparative cultures placed in light of decreasing intensities showed that both from the morphological and anatomical points of view, a feeble light increases the adaptive powers of climbing plants, diffused light favouring the conversion of a flower-bearing bud into a tendril. Direct sunlight produces the opposite effect.—On the adherence of the cupric solutions used for curing the cryptogamous diseases of the vine, by MM. Guillon and Gouirand.

BOOKS RECEIVED.

BOOKS.—The Unconscious Mind: Dr. A. T. Schofield (Hodder).—U.S. Department of Agriculture: Report of the Chief of the Weather Bureau, 1896-97 (Washington).—Bird Studies: W. E. D. Scott (Putnam).—Coffee and India-rubber Culture in Mexico: M. Romero (Putnam).—The Sphere of Science: Prof. F. S. Hoffman (Putnam).—A Text-Book of General Astronomy: Prof. C. A. Young, new edition (Arnold).—A Pocket Dictionary of Hygiene: C. T. Kingzett and D. Homfray (Baillière).—University College, Bristol, Calendar, 1898-99 (Bristol).—A Memoir of T. Sterry Hunt: J. Douglas (Philadelphia).—Infinitesimal Analysis: Prof. W. B. Smith, Vol. I (Macmillan).—Die Photometrie der Gestirne: Prof. G. Müller (Leipzig, Engelmann).—Die Photographie der Gestirne: Prof. J. Scheiner (Leipzig, Engelmann).—Atlas to ditto (Leipzig, Engelmann).—Untersuchungen zur Physiologie der Pflanzlichen Organisation: Prof. G. Berthold, Erster Teil (Leipzig, Engelmann).—A Text-Book of Geodetic Astronomy: J. T. Hayford (Chapman).

CONTENTS.