

University Events

CAMBRIDGE.—The degree of Sc.D. has been conferred on C. H. Waddington, of Christ's College, lecturer in zoology.

The Faculty Board of Economics and Politics has appointed M. Paul van Zeeland, of Brussels, to be the Alfred Marshall lecturer for the year 1938–39.

The General Board has made the following grants from the income of the Worts Fund: £25 to F. H. Stubbings (of Emmanuel College) towards the expenses of a visit to Ithaca for archaeological purposes; £12 to C. G. L. Shankland (Queens' College) towards the expenses of a visit to Italy to study the architecture of that country; £30 to L. H. McCabe (Peterhouse) towards the expenses of an expedition to Iceland to study the geography of that island; £100 to N. E. Odell (Clare College) towards the expenses involved in accompanying the Mount Everest Expedition 1938 for geological and glaciological study; £40 to G. E. Daniel (St. John's College) towards the expenses of a journey in France for the study of certain megalithic monuments in that country; £40 to F. J. Simonds (St. John's College) towards the expenses of a visit to Yugoslavia for a study of the ecology of certain insect larvæ in the streams of that country; £40 to M. Ballinger (St. John's College) towards the expenses of a visit to the Marine Biological Station, Tamaris, South France, to study the metabolism of the electric organ and muscular tissues of the torpedo; £60 to D. M. Carmichael (St. John's College) towards the expenses of an expedition to West Greenland to study the social habits and psychology of the Eskimo.

CAPE TOWN.—Prof. A. W. Falconer, professor of medicine in the University, has been appointed principal and vice-chancellor in succession to Sir Carruthers Beattie, who has retired.

LONDON.—Prof. I. M. Heilbron has been appointed as from October 1 to the University chair of organic chemistry tenable at the Imperial College of Science and Technology. Since 1935 he has been Sir Samuel Hall professor of chemistry and director of the chemical laboratories in the University of Manchester.

Mr. W. J. John has been appointed as from October 1 to the University chair of electrical engineering tenable at Queen Mary College. Since 1936, he has been University reader in electrical engineering at that College.

MANCHESTER.—Dr. Willis Jackson has been appointed Edward Stocks Massey professor of electro-technics and director of the Electro-Technical Laboratories of the University as from September 29, when the appointment of Prof. Robert Beattie expires. Dr. Jackson is at present research engineer to Metropolitan-Vickers Electrical Co., Ltd.

MELBOURNE.—Dr. J. S. Turner has been appointed professor of botany. Dr. Turner is at present senior demonstrator of botany in the University of Cambridge.

OXFORD.—Dr. J. R. Baker, New College, lecturer in zoology, has been granted the degree of D.Sc. for his work in zoology and biological chemistry.

SHEFFIELD.—Dr. W. H. Pearsall has been appointed professor of botany in succession to Prof. B. H. Bentley, who is retiring at the end of the present session.

Science News a Century Ago

The Copper Mines of Cornwall

At a meeting of the Statistical Society held on March 19, 1838, Sir Charles Lemon read a paper entitled "An Account of the Origin and Progress of the Copper Mines in Cornwall" in which he dealt with the history of the mines, the adoption of steam pumps and steam winding engines, production, employment, wages, consumption of coal and timber and the health of the workers. Newcomen engines were introduced early in the eighteenth century, but these had all been superseded by the improved engines of Boulton and Watt.

The total amount of coal reported to have been used in 1837 was 1,213,439 bushels, of 84 lb., and the total amount of water pumped by 60 engines was 31,141,800 tons. The production of ore and its value at various intervals between 1771 and 1837 was given as follows:

	Ore (tons)	Copper (tons)	Value of ore in £
1771	27,896	3,347	189,609
1800	55,981	5,187	550,925
1821	98,426	8,514	605,968
1837	140,753	10,823	908,613

The total number of persons employed in 59 mines was 10,624 men, 3,802 women and 3,490 children, and it was calculated that in 1836 about £482,000 was paid in wages. The average wages of a miner was 51s. 6d. per week.

Flooding of the Thames Tunnel

THE *Annual Register* for 1838 under the date of March 20 gives the following account of an irruption of the river into the Thames Tunnel on that day:

"One gang of labourers had been relieved by another when the water began rushing in with a loud noise. . . . In a few minutes the tunnel was filled. . . . Since the last irruption in Oct. 1837 the excavations had proceeded with more than usual rapidity owing to great increase in the enormous quantity of clay thrown down over the tunnel which formed an artificial bed of great consistency past which the works were advanced 3 ft. making in all 20 ft. added to the tunnel since the break-in six months before. At the beginning of the week the soil became loose, a vein of sand was encountered and it was found necessary to proceed with more than ordinary caution. On the night before the irruption the ground presented some indication of giving way, and much difficulty was experienced in going on with the excavations, the entrance of the sand and water being only prevented by the intrepidity of some of the old miners. Every precaution was consequently taken to prevent the loss of life which has sometimes attended the breaking-in of the river and the previous indication of danger, and the formation of the double gangways, enabled the workmen to get away without losing one of their number. Immediate measures were taken to stop up the aperture, which was soon ascertained to be of no very great dimensions. Several large loads of clay were thrown down immediately above the spot; and the shore engine employed to pump the water from the tunnel, which by the end of the month was completely cleared so as to allow of the works being resumed."