of the medium as well as its refractive index, in agreement with the theory of Lorentz rather than with the older one of Fizeau.

## Dr. A. C. Haddon

CONGRATULATIONS are due to Dr. A. C. Haddon, of Christ's College, Cambridge, and formerly reader in ethnology in the University, on the attainment, on May 24, of the age of eighty years. Apart from his personal qualities, of which this is not the place to speak, Dr. Haddon's lifelong and unselfish devotion to scientific research have won him the admiration and respect of a wide circle; while his originality of thought and his scientific achievement hold a commanding position in anthropological studies, which has stood unchallenged for more than a generation. When in the course of his first visit to the Torres Straits he turned from zoology to the study of the native peoples, the technique of ethnological investigation in the field was in its infancy. The great expedition to the Torres Straits, which he organised later, in the closing years of the nineteenth century, under the auspices of the University of Cambridge, has been an inspiration and a model for all the more important of the expeditions of ethnological investigation which have followed.

THE Torres Straits expedition served also as a training school, for of those who accompanied Dr. Haddon, the late Dr. W. H. R. Rivers and Prof. C. G. Seligman in their turn became great teachers, and in the field and the lecture-room developed and passed on his methods and ideals to generations of students. Dr. Haddon's insistence on the importance of field-work has become a fundamental principle in modern ethnological training; and his stress on its urgency has ensured many a record of custom and institution which otherwise might have been lost owing to rapid change among the backward peoples. His efforts in promoting the training in anthropology of officials and missionaries have been no less beneficial to science than to the Empire; and in the organisation of anthropological studies in Great Britain his influence has long been profound and farreaching. We wish him still some years in which to enjoy the fruits of his labours in contemplating the continued advance of anthropological science.

## Centenary of the Royal Observatory of Belgium

THE Royal Observatory at Uccle has just celebrated its first centenary by a number of official functions. At the opening ceremony, which was graced by the presence of His Majesty the King of Belgium, addresses were read on the history of the Observatory by the director, M. Paul Stroobant, and on Adolphe Quetelet the founder of the Observatory by M. Demoulin, president of the Observatory Council. Receptions were given at the Hotel de Ville by Burgomaster Max and at the Fondation Universitaire. But the event of chief scientific interest was the visit to the Observatory itself, when the Minister of Education inaugurated a number of new instruments obtained with the aid of a generous Government grant. Amongst these mention must be made

of an Askania meridian circle, a Zeiss double astrograph, a 1-metre Zeiss reflector and a number of auxiliary pieces of apparatus. The meridian circle is provided with a number of electrical devices and gives a photographic record of the reading circles for each observation ; it can be reversed in 30 seconds. The Zeiss double astrograph is of focal length 2 m., working at f/5; the object glasses are quadruplets designed by Sonnefeld. The Zeiss reflector works at f/3 at the Newtonian focus for direct photography, but it is hoped later to add a Ross correcting lens. A 2-prism spectrograph is provided for use with the telescope as a Cassegrain reflector at f/10. The whole of the recently acquired equipment, on which the Observatory and its director are to be congratulated. is described in full detail in the Bull. ast. de l'Obs. roy. de Belgique, 2, 1935. The British delegates attending the centenary were Dr. L. J. Comrie, director of the Nautical Almanac, Mr. J. H. Reynolds, president of the Royal Astronomical Society, and Prof. F. J. M. Stratton, general secretary of the International Astronomical Union.

## Search for Oil in Great Britain

THE danger of dependency on foreign supplies of liquid fuel and the necessity of finding alternative domestic resources are now openly avowed by all thinking people. There are some who fervently believe that there is sufficient petroleum below the ground in England to supply the entire demand for petrol and oil for an indefinite period, and are prepared to back their opinions financially, in spite of adverse geological opinion (NATURE, March 31, The regulations prepared by 1934, p. 487). the Mines Department of the Board of Trade under the Petroleum Production Act constitute an official invitation to those people to prove their theory. At the same time they safeguard the interests of the State in the event of a systematic search for oil proving successful, and ensure that development of any resources found will be conducted in an orderly manner. The essential facts are that if no negative resolution is passed by either House within the twenty-eight Parliamentary days, both prospecting and mining licences will be issued under these regulations. Applicants for such licences must furnish evidence of their technical and financial qualifications and then on payment of the requisite fee, £20 for a prospecting licence or £50 for a mining licence, will be entitled to a monopoly of the area covered. The prospecting licence is tenable for three years and may be renewed for two further yearly periods; the mining licence for fifty years with the possible extension for a further twenty-five years. Prospecting licences will be granted in respect of areas not exceeding 200 square miles or less than 8 square miles, and mining licences in respect of areas neither larger than 100 square miles nor smaller than 4 square miles. The rate of royalty payable to the State has not yet been fixed but it will not be less than 3s. nor greater than 6s. per ton of crude oil. For any 'casinghead' spirit recovered, the royalty imposed will be not less than one-eighth of a penny or more than 2d. per gallon.