pseudo-globulin fraction of the serum proteins. He had previously made a comparative study of the antigenic relationships of the plague bacillus and the pseudo-tubercle bacillus and was able to confirm the close kinship of these bacteria, as judged by the results of precipitin and immunity tests.

In 1912, MacConkey published a remarkable paper which indicated a seasonal change in the potency of diphtheria toxin when produced in regular weekly batches. His curves certainly seem to show a significant increase of toxicity during the winter months as compared with the level attained in the summer. Moreover, he directed attention to the close correspondence of the toxin curve with that of the prevalence of diphtheria in London and elsewhere. These observations are unique, and the present writer is disposed to believe that they are related to variations in the health and susceptibility to infection of the stock of guinea-pigs from which the test animals were drawn.

During the years of the War, MacConkey put his energies without stint into the task of enlarging and organising his department to meet the increasing demands made upon it by the army authorities for tetanus antitoxin, antidysentery serum, and antimeningococcus serum. He took a keen interest in the prophylaxis and treatment of tetanus by means of antitoxin, and he published several papers on the subject; in some of them he reviewed the observations of workers in many countries, and in others he gave an account of experimental work carried out by himself and his colleagues. served as a member of the War Office Committee for the investigation of tetanus. In his published articles he put forward a strong plea for devoting special attention to the early signs and symptoms of tetanus, on the ground that the antitoxin is likely to influence the disease only when administered as soon as the symptoms are recognisable. The limited response to his appeal and the scanty information which came to hand disappointed him, but it is probable that he had not sufficiently appreciated the difficulty of discriminating between the premonitory subjective symptoms of tetanus and those which were attributable to sepsis and to the nervous strain from which the patients were suffering.

MacConkey, as the writer has good reason to know, was essentially a man of a kindly disposition. His sense of duty was so strong that, during the trying years of the War, he suffered from the strain to an extent which weakened his resistance and laid the foundation of a cardiac disability from which he never really recovered.

G. F. P.

MR. E. TORDAY.

The death, at the age of fifty-six years, of Emil Torday, which occurred on May 9, at his London home, removes one of the most distinguished of African ethnologists. A Hungarian, his adventurous spirit led him to the heart of the Dark Continent some thirty years ago. He there acquired a great affection for its savage native in-

habitants, and by his personality inspired in them an equal affection for himself.

Deeply interested in native manners and customs, Torday made these his life's study. To this end his wonderful linguistic talents helped very considerably. He spoke seven European languages and eight of the tongues of Central Africa. His works on the ethnography of the Negro, written in collaboration with Capt. T. A. Joyce of the British Museum and published by the Belgian Government in French, "Les Bushongo" and "Peuplades de la forêt et Peuplades des prairies", are surely models to be followed by future students of native life. In lighter vein, but scarcely less informative to the general reader, is his "Causeries congolaises", published in Brussels in 1925. In English he published "On the Trail of the Bushongo" and "Camp and Tramp in African Wilds", besides contributing numerous articles and reviews on African ethnology to the Journal of the Royal Anthropological Institute, Man, and Africa. Only just before his death he had completed his monumental volume on "African Races" for the series of works upon descriptive sociology founded by Herbert Spencer, which was reviewed in NATURE of May 2, p. 655.

Of Torday's personal courage a word must be said. Upon one occasion he stepped in between a party of defenceless children and the warriors of a hostile tribe who had their bows already drawn to annihilate the children of their national enemies. Torday, unarmed, stepped in between the warriors and their victims, and, by his utter disregard of personal safety, saved the lives of innocents and the commencement of an inter-tribal feud which would probably have lasted to this day.

The loss of Torday, could it be made known to them, would most certainly be regretted by many tribes in Central Africa. It will as certainly be regretted by scientific workers in Europe. One who was privileged to accompany him for two years upon his last great Central African journey mourns his loss not least of all.

M. W. HILTON-SIMPSON.

Mr. Torday's contribution to the science of African ethnology was twofold. His publications have already been mentioned; they constitute a record of the highest importance. But he was also distinguished as a practical field-worker; and the ethnographical collections from the Belgian Congo, all carefully documented, with which he enriched the British Museum between 1907 and 1910, are of outstanding excellence. Both in quantity and quality they are unrivalled among our African collections, and it is not too much to say that the study of them is essential for anyone who would understand the high level of refinement in decorative and textile arts of which the Bantu are capable. In performing this signal service to the nation, Torday has incidentally achieved a fitting memorial to himself and his labours, which will increase in value with the passage of time. He worked for some years in an unofficial capacity at the British

Museum, arranging and labelling his own and other collections, and his deep knowledge of African matters was always placed freely at the disposal of the staff.

Mr. Torday was also one of the most active members of the Royal Anthropological Institute, attending its Council meetings regularly, helping in the improvement of the library, reading papers, and rendering invaluable and unselfish service in a variety of ways. In 1929 the Institute awarded

him the Rivers Memorial Medal for anthropological work in the field. Torday was also a Chevalier of the Order of the Crown of Belgium, and by his own country he was awarded the Great Gold Medal for Literature and Science, a rare distinction.

By his death African ethnology loses one of its most brilliant, sincere, and devoted students, and his friends the privilege of a delightful and stimulating personality.

H. J. Braunholtz.

News and Views.

It was a remark of Lord Oxford's, that the business of biography is the vivid delineation of a person, and that for its success one of its obvious conditions is that the person delineated should have the power of permanently interesting his fellow-men. Of all men of science, Faraday assuredly was such a person, his rare mental qualities, combined with a singularly refined moral nature, making him as worthy a subject for the biographer as a Pasteur or a Lister. Some of the characteristics of Faraday were admirably brought out by Dr. R. L. Mond, who on June 11 delivered the Second Spiers Memorial Lecture to the Faraday Society. Referring to the approaching celebrations of the centenary "of one of the most fruitful conceptions of the human mind", Faraday's discovery of electro-magnetic induction, he said many, well qualified, will comment on the origin of this conception, its development and application, but there is one aspect of this triumph of the human mind which deserves special consideration, namely, the study of the conditions and of their influence on the individuality which makes the conception a possibility. This naturally led Dr. Mond to refer to Faraday's early environment. One dominating influence was his association with the Sandemanian form of belief, which combines (like that of the Quakers and Unitarians) a great simplicity of mind with exemplary conduct and love and esteem for your fellow-members. Next came the influence of books; the writings of Bacon, of Dr. Watts, of articles in the Encyclopædia Britannica, and of Mrs. Marcet's book on chemistry. Faraday also found both assistance and inspiration by his association with the ardent spirits of the City Philosophical Society; and then came the turning-point in his career when he was engaged by Davy, a step which in turn led to his memorable tour on the Continent, "a high school of incomparable value ".

"But", said Dr. Mond, "what can we learn from Faraday's career, that we can usefully apply both to the search for new knowledge, the Perfection of what we all possess, and the Perfectibility of those who are devoting themselves to this research?" This question led to the examination of Faraday's views on education. Giving evidence before the Public School Commission in 1862, Faraday said, "I do think that the study of natural science is so glorious a school for the mind that, with the laws impressed on all these things by the Creator, and the wonderful unity and stability of matter, and the forces of matter, there

cannot be a better school for the education of the mind". Reverence for the beauties of Nature and the laws which control them, in Faraday was combined with a reverence for great thinkers and the truths they were unfolding. One of the problems of to-day is how to guide the footsteps of those whom we hope will emulate our great prototype, and the task often is "how to bring the great pupil to the great teacher". Modern civilisation has evolved an intellectual machine which, from heterogeneous raw materials, attempts to produce a uniform product, but we shall have to provide opportunities where the young mind can develop, untrammelled by any hard and fast system, under the agis of a wise and kind direction, and where every suitable aid to self-development and facilities for scientific research are amply provided.

THE English Channel was crossed for the first time by a British-built glider with a British pilot, Mr. Lissant Beardmore, on June 19. The pilot, having been towed by an aeroplane to a height of about 14,000 ft. above Lympne, at 4.30 P.M. released his machine and glided in a continuously falling path, landing at St. Inglevert aerodrome just after 6 P.M. It is unfortunate that he will not be officially recognised as being the first person to glide the Channel, since he was prevented from applying to the British Gliding Association for the proper observation of his performance by the anomaly that he did not hold the most advanced of the certificates awarded to glider pilots, and was therefore not judged competent to undertake the feat. Herr Kronfeld, on a Germanbuilt machine, accomplished the same flight, in a similar manner, under official observation, on June 20. He flew from France to England, and thus becomes the holder of the official distinction. He afterwards made a return glide from Dover to St. Inglevert, being again raised to the required height by an aeroplane that had accompanied him, and qualified for the Daily Mail prize for the first glide across the Channel in both directions on the same day.

THE executive committee of the Committee on Intellectual Co-operation of the League of Nations at its April meeting considered a request from the Chinese Government for co-operation with the League organisations in the intellectual and scientific field. The principal suggestion related to the exchange of university professors. The Chinese Government proposed to send to Europe students, writers, philosophers, historians, and archæologists, and invited the League to organise tours in China for specialists in medical,