

dyestuffs made it clear that here was a piece of work of which much has been done, but of which much—the greatest part perhaps—yet remains to be done. Work yet closer to the trade processes has also been done, and apparatus likely to be of general use has been devised; the Research Association stroboscope may be mentioned in this connexion. The list of publications of the Association which, with a plan of its buildings, concludes the pamphlet, is an excellent indication of the comprehensive character of its work, and it is perhaps regrettable that the liaison between those engaged in pure science and those in technical research is not stronger and more generally established. No doubt wider publication of the work of research associations might help materially in this respect.

HONORARY DEGREES.

In a congregation of the University of Leeds in the Great Hall on Tuesday, Sept. 6, at 12 noon, the following honorary degrees were conferred:—*LL.D.*: Sir Arthur Keith, Conservator of the Museum and Hunterian professor of the Royal College of Surgeons of England; Her Grace the Duchess of Atholl, Parliamentary Secretary, Board of Education; The Hon. Sir Charles Parsons. *D.Sc.*: Prof. J. S. Haldane, honorary professor and director of the Mining Research Laboratory, Birmingham University; Dr. N. V. Sidgwick, reader in chemistry in the University of Oxford; Prof. F. O. Bower, emeritus professor of botany in the University of Glasgow; Dr. R. A. Millikan, chairman of the Executive Council of the California Institute of Technology and Director of the Norman Bridge Laboratory of the Institute. *Ph.D.*: James Graham, Director of Education, Leeds.

REPORT OF COUNCIL.

The report of the Council presented to the General Committee on Aug. 31, expresses profound gratitude to Sir Alfred Yarrow for his munificent gift of £10,000 to the funds of the Association for general purposes, and accepts the wise condition that the gift should be expended as to both capital and interest within twenty years.

The Council has had under discussion with the Board of Trade the question of the duty required

by H.M. Customs on the introduction of kinematograph films into Great Britain for scientific purposes and not intended for commercial uses. The matter was referred to the Lords Commissioners of H.M. Treasury, from whom a reply was received that "having regard to the impracticability of framing a statutory exemption which would be free from grave difficulties of definition and administration," they were unable "to submit to Parliament proposals of the nature desired by the Association."

Reference is made in the Council's report to the two conferences called to consider the possibility of establishing a Science News Service. The essential condition for success of such a scheme is that scientific societies and institutions themselves should desire its organisation.

In view of the lack of unanimity and of enthusiasm evinced at the two conferences, the committee appointed to indicate the ways in which this support might be given, considers that no useful purpose would be served by communicating with the scientific societies. The opinion is expressed, however, that should sufficient funds be forthcoming for the establishment of a Science News Service, the Council of the Association—possibly in co-operation with the British Science Guild—might appropriately undertake the organisation of the service.

The Council has had under consideration the question of inviting "the co-operation of the British Science Guild in considering whether, having regard to the close community of scientific interests between the Association and the Guild, their objects would, as the Council believe, be more fully attained by means of a working union between the two societies; and if so, by what means such union would best be given effect." A joint committee of the two bodies has prepared a report in which the general methods by which such a fusion might be effected are stated. This report came before the General Committee of the Association on Sept. 6, when it was decided that the Council be authorised to continue the negotiations and report to the meeting of the General Committee at Glasgow.

Next year's meeting of the Association will be held at Glasgow under the presidency of Sir William Bragg. The meeting in 1929 will be held in South Africa, and invitations have been received to meet at Bristol in 1930 and Leicester in 1932.

Obituary.

PROF. H. R. PROCTER, F.R.S.

HENRY RICHARDSON PROCTER, born at North Shields in 1848, was the son of a tanner, a member of the Society of Friends. He was educated at Bootham School and received his scientific training at the Royal College of Chemistry and the School of Mines. He entered the tanning industry and remained on Tyneside until 1891, when he was invited to the Yorkshire College, Leeds, to take charge of a new department to be opened there in the special interest of the leather industry. In this Procter achieved distinguished success, and his work

afforded as fine an example as could well be cited of the part which applied science may properly take within the circle of university studies. Students came to Procter from all parts of the world. He was a thorough man of science, an eager and fruitful investigator, and an excellent teacher. He gave to the industry the means of scientific control and development in many directions, and placed his discoveries freely at its disposal. His text-books have long been the standard works in the science of leather manufacture.

Though Procter's scientific studies were centred

upon the problems of the leather industry, he revelled in pursuing their general theoretical bearing, and wherever they carried him he read himself in with great thoroughness. It was typical of his mental proclivities that he should have been the translator of the first text-book of practical physics—Kohlrausch's—that found general use in physical laboratories in Great Britain. His later researches on gelatine were of fundamental importance and exhibited his power of dealing with the most abstruse problems of colloid chemistry.

Beyond this, Procter was a man of wide culture, keenly interested in languages, literature, and philosophy. He was an excellent countryman and had much of the artistic sense which has appeared so strongly in his sons.

The value set upon Procter's work was so great that when the time arrived for his retirement, a movement took place for the establishment of a research laboratory which should serve as a memorial and as a place where he could continue his investigations. This project secured international support, and in 1914 Procter became the first honorary director of the international research laboratory at Leeds bearing his name. The honour done to Procter was fully earned by the scientific and industrial value of his labours, but it was intensified by the respect and affection in which he was held for his personal qualities. His fine character, his devotion, unselfishness, and modesty, together with his great companionableness, endeared him alike to his pupils, his colleagues, and the members of the industry to which he rendered such memorable service.

Procter was elected fellow of the Royal Society in 1923 and received the honorary degree of D.Sc. from the University of Leeds. He was honorary president of the International Association of Leather Trade Chemists, of which he was a founder, and he received the freedom and livery of the Leathersellers' Company. He died on Aug. 17 at Newlyn, Cornwall, where he lived in happy retirement after leaving Leeds. A. S.

PROF. E. B. TITCHENER.

THE announcement of the death of the English psychologist, Prof. Titchener, in his sixty-first year, which occurred after a short illness at Ithaca, N.Y., on Aug. 3, will be received in Great Britain with mingled feelings of regret and surprise. Regret will be felt for the loss of one who spent his abundant energies so generously in nursing to adolescence a new-born science. Surprise will be felt at the tidings that Titchener remained an Englishman, despite his thirty-five years' residence at Cornell University, and that with his full record of work he had only attained the age of sixty years at the time of his death.

Edward Bradford Titchener was born at Chichester on Jan. 11, 1867. From Malvern College he entered the University of Oxford in his nineteenth year, where he became a classical scholar at Brasenose, obtaining first class both in Moderations in 1887 and in *Literae Humaniores* in 1889. He

took his B.A. in 1890, his M.A. in 1895, and in 1906 he was awarded the degree of D.Sc. at that University. From classics and philosophy he passed to the study of physiology at Oxford, and worked there as a research student during the year 1889-90. Attracted to experimental psychology, he proceeded to Leipzig, where he studied under Wundt and obtained the Ph.D. degree in 1892. Returning later in this year to Oxford, he began to inquire into the possibility of obtaining a permanent teaching post in experimental psychology, while he was giving university extension lectures in biology. He was advised by Burdon Sanderson, however, that there were no immediate prospects in England, and consequently he accepted the immediate offer of an assistant professorship in psychology at Cornell.

Here from 1892 onwards Titchener spent the remainder of his life. In 1895 he was made Sage professor of psychology, and in 1910 his professorship became attached to the Graduate School of the University. His specific aims at Cornell were to emancipate psychology from the leading-strings of philosophy, to establish undergraduate, as well as post-graduate, instruction, to compile a graded series of text-books in psychology, and to organise laboratory research in the subject. His achievement of these aims was indeed remarkable. Within twelve years he had established a completely independent department of psychology, in which finally he had a staff of two professors, two instructors and three assistants. He had an annual entry of nearly one thousand undergraduates. In 1896 he published "An Outline of Psychology" (replaced in 1910 by his "Text-book of Psychology"). In 1898 his "Primer of Psychology" appeared (which in 1915 was replaced by "A Beginner's Psychology"). In 1908 his book on "Feeling and Attention" was published, followed in 1909 by "The Experimental Psychology of the Thought Processes."

Titchener's *magnum opus*, however, a thirteen years' task, the financial cost of which, he used to say, nearly ruined him, was his "Laboratory Manual of Experimental Psychology," issued in four volumes during the years 1901-5. While preparing this monumental work, he devised and standardised many useful pieces of apparatus for laboratory teaching. It was translated later into most European languages, and into Chinese and Japanese. It was the source of many later more elementary text-books, and it led to requests for his help in planning psychological laboratories in practically every part of the world.

In 1917 a commemorative volume of essays, marking the close of twenty-five years' teaching work at Cornell, was presented to Titchener by his friends and students. By the end of 1923 the number of his published articles had amounted to 190, while the papers issuing from his students (for which he was personally responsible) numbered 158. From 1894 until 1920 he acted as American editor of the British philosophical periodical, *Mind*, and during the years 1894-1925 he was associate editor, and finally editor, of the *American Journal of Psychology*.

Titchener's unbounded energy and his abilities