

Early in his professional career, Hadwen was associated with the late Prof. G. H. F. Nuttall in studies on the chemotherapy of piroplasmiasis in dogs and cattle, in the course of which the fundamentally important discovery was made that trypan blue is specifically curative—a landmark in chemotherapy. He contributed largely to the literature of a problem still unsolved, namely, the causation of bovine chronic hæmaturia, a disease that is endemic in different countries. Ticks and the diseases with which they are associated interested him tremendously, and he had ample opportunity to study the problems concerned. His publications on 'tick paralysis' as it occurs in Canada are still important; the disease has since been studied in Southern Europe, Africa and Australia, but its real nature has still to be demonstrated. He contributed work on the systematic classification of ticks and on their bio-nomics. Warble flies interested him greatly, and he made important observations on *Hypoderma bovis* and studied other members of the group. Helminth parasites, too, he understood well and studied continuously.

In his later work at the Ontario Research Foundation the subjects were those of importance to the Ontario Province. Much of it was done with Dr. R. Gwatkin and various colleagues, on bovine contagious abortion, mastitis and other problems of intensive husbandry very different from those to which he devoted most of his life.

Hadwen contributed important reports on reindeer; on the management of the herds, fertility in reindeer, their diseases and the manner in which reindeer meat in Alaska could be marketed on a large scale. He had travelled in Labrador and Lapland, studying the problems that had aroused his interests in Alaska. His work and publications

indicated measures necessary for the maintenance of health of the herds and the need to change methods that had led, even in such a land of wide open spaces, to seasonal over-crowding with consequent parasitic infestation and ill-health. Wild animals had claimed his attention, and his writings include observations on snowshoe hares and on seals. In addition, he made expeditions to Labrador, and with the East Arctic Patrol to Ellesmere Island.

Hadwen was a member of several learned societies and had been elected an honorary member of the Section of Comparative Medicine, Royal Society of Medicine.

W. A. POOL

#### Mr. C. H. Creasey, O.B.E.

THE death is announced of Clarence Hamilton Creasey at Llangerniew on May 22. Educated at the Royal College of Science, he became principal of Wellingborough Technical Institute, and inspector of technical schools under the Board of Education. He was the author of books on continuation and technical education and was a popular lecturer and broadcaster. He collaborated with Prof. A. S. Eve in writing the "Life and Work of John Tyndall", published in 1945; and with H. G. Wells in "Work, Health and Happiness of Mankind". His book, "Discoveries and Inventions of the Nineteenth Century", published under the pen-name 'Edward Cressy' in 1914, was widely appreciated. Under the same pseudonym, he also wrote "An Outline of Industrial History" (1915), "A Hundred Years of Mechanical Engineering" (1927), "Stories of Engineering Adventure" (1928), "Civil Engineering To-day" (1938). He took an active part in the organisation of education for gas engineers in association with the Institution of Gas Engineers.

## NEWS and VIEWS

### Trinity College, Cambridge

At the celebration, on June 3, of the four hundredth anniversary of the foundation of Trinity College, Cambridge, the guests of honour were the King and Queen, and the Duke and Duchess of Gloucester. As the royal guests drove across Great Court between crowds of cheering undergraduates, a fanfare of trumpets sounded triumphantly in welcome from above the Great Gate. After a short service in the College chapel, representatives of the town and the university waited upon their Majesties, and the morning's proceedings culminated in lunch in Hall. During the afternoon, a garden-party was held under ideal conditions, and representatives of many different types of College activity were presented to the King. The celebrations ended at five o'clock, except for a very fine firework display late in the evening, which included as a set piece a realistic portrait of the College founder, King Henry VIII.

An outstanding feature of the day was the speech at the luncheon by the King, proposing the health of the College. He spoke of the pleasure felt by the Duke of Gloucester and himself in returning to the College which they entered as undergraduates just after the First World War, and praised the outstanding contributions of members of Trinity in the State, in the humanities and in science. In particular, he referred to the introduction of the principles of

inductive logic by Bacon, and their first flowering in the great achievements of Newton. In replying on behalf of the College, the Master also spoke of the extension of natural science in the hands of Maxwell, J. J. Thomson and Rutherford, and mentioned with regret the recent death of another famous Trinity man of science, Sir Frederick Gowland Hopkins. The Master discussed, too, the value of residential colleges in fostering breadth of vision, and encouraging friendship and the free exchange of ideas between those working in the sciences and in the arts. All the friends of Trinity will join in hoping that the contributions of the College to the solution of the problems of to-day and of the future may equal and even exceed the achievements of its illustrious past.

### Prof. J. H. Quastel, F.R.S.

THE Montreal General Hospital has established an Institute of Special Research and Cell Metabolism under the direction of Dr. I. M. Rabinowitch, and has appointed Dr. J. H. Quastel as director of the Enzyme Research Division and associate director of the Institute, while McGill University has simultaneously announced his appointment to a professorship in the Department of Biochemistry, the chairman of which is Prof. D. L. Thomson. Prof. J. H. Quastel graduated at the Royal College of Science, London, and went to

Cambridge in 1921 as a research student under the late Sir Frederick Gowland Hopkins. These were the pioneering days of enzymology, which saw its development into an exact science, and it was to this field that Prof. Quastel made some of his most important contributions. His exhaustive studies of the resting metabolism of bacteria, which form the basis of present-day microbiological techniques, led to the characterization of new enzyme systems, while his discovery of the specific competitive inhibitors of enzyme action has had the widest application in this field. Prof. Quastel's fundamental contribution at this time was his work on the reversibility of dehydrogenase action. Working with succinic dehydrogenase, he showed that the change in free energy determined from the observed equilibrium point agreed closely with the value calculated from thermal data.

In 1929 Prof. Quastel was appointed director of research to the Cardiff City Mental Hospital, where he investigated the biochemical aspects of mental disease. Fruitful results arising from the integration of clinical and research aspects of these problems has encouraged the development of similar units elsewhere. Following the outbreak of war, Prof. Quastel accepted in 1941 the invitation of the Agricultural Research Council to organise a Unit of Soil Biochemistry at Rothamsted. In this field his work showed the same originality of outlook that was apparent in his earlier work. By repeated percolations of a small quantity of soil by an aqueous solution in a closed circuit and periodic addition of reagents or removal of samples for analysis, detailed qualitative data on soil metabolism, in particular nitrogen metabolism, were obtained. Prof. Quastel was awarded the Meldola Medal in 1927, and was elected a fellow of the Royal Society in 1940. One can with confidence anticipate the development, under his guidance, of a vigorous school of cellular metabolism at McGill University.

### Institute of Fuel : New Building

THE Institute of Fuel was founded in 1927, soon after the general strike in Britain—a national disaster which started much thought about fuel problems. In several directions action was taken to establish new technical organisations which eventually, by processes of mutual attraction or absorption, led to the foundation of this Institute of Fuel. After ten years or so of useful work, the Institute gathered together about 1,000 members. Then came the War to provide new tasks and opportunities for service which the staff and members were able and ready to seize. As a result, its roll of members has since increased threefold. Regional sections have been formed, schemes of education have been launched, including examinations to qualify for membership, and in 1946 a petition for incorporation by Royal Charter was granted. This year, in order to carry on its work more effectively, the Institute has acquired permanent headquarters at 18 Devonshire Street, London, W.1. It has issued an appeal to all who are interested to contribute sums in support. Already about £8,000 has been received. Cheques should be addressed to the Secretary, Institute of Fuel, 18 Devonshire Street, London, W.1.

### Civil Aircraft Research

It has been announced that the terms of reference of the Civil Aircraft Research Committee of the Aeronautical Research Council are: "To consider the basic research problems arising from the evolution

and operation of civil aircraft, having regard, *inter alia*, to the probable requirements of the operators; to recommend periodically to the Council programmes of research; and to report to the Aeronautical Research Council". The members are Prof. A. A. Hall (chairman), Prof. A. R. Collar, Dr. T. E. Easterfield, Prof. S. Goldstein, Major F. M. Green, Sir Melville Jones, Prof. R. L. Lickley, Dr. H. R. Ricardo, Mr. P. A. Sheppard, Prof. G. Temple, and representatives of the Ministry of Supply, the Ministry of Civil Aviation, the National Physical Laboratory, and the three airways corporations.

### Zoological Society of Bengal

THE Government of India has recently decided to transfer the office of the Zoological Survey of India from Calcutta to Delhi. As a result, the zoologists of Bengal will be deprived of the use of the only zoological library in that part of the country. In order to meet this difficulty, the Zoological Society of Bengal is issuing an appeal for assistance in the hope that zoologists will present them with reprints of their papers and put the Society on their mailing lists. The Zoological Society of Bengal was only founded last year, but the annual report for 1946 shows that already 294 members have been enrolled and various meetings held. Among the speakers has been Prof. H. Munro Fox, one of the British delegates to the Indian Science Congress Association. The Society proposes to issue monographs of typical Indian animals and also a bulletin dealing with simple zoological laboratory technique. It also hopes to publish a journal devoted to zoological research in India. The president is Prof. H. K. J. Mookerjee, and secretary, Dr. S. P. Ray Chaudhuri. The Society's address is 35 Ballygunge Circular Road, Calcutta.

### A Science Journal for South Africa

At a meeting of the South African Association for the Advancement of Science, held in Johannesburg on May 16, it was resolved that the Association should commence publication at the earliest possible date of a monthly periodical covering the whole field of science. The venture will be paid for by the Association and will not be in any way a profit-making organisation; it is intended that the journal should be distributed free to all members of the Association, and that it may later be made available for sale to the public. It is hoped to present leading articles, reviews of books, and articles of a general character, and to devote three or four pages to "Letters to the Editor", a section which it is hoped will become a forum for scientific discussion. It is intended that articles, etc., should be of such a nature as to appeal to scientific workers in fields other than those of their own speciality, and it is believed there will be sufficient popular material to appeal to the more general reader of scientific interests. The journal will be produced by the Association, the honorary editor being Dr. H. B. S. Cooke, of the University of the Witwatersrand.

### American Institute of Physics

THE January issue of the *Review of Scientific Instruments* contains an important announcement concerning the reorganisation of the American Institute of Physics. The five societies, the American Physical Society, the Optical Society of America, the Acoustical Society of America, the Society of Rheology and the American Association of Physics