

"ether, chloroform, and ethyl chloride have been used to bring about hypnotic sleep with some interesting results" (*loc. cit.*, p. 134).

Outside the medical world, however, Janet received full recognition, becoming president of the Academie des Sciences Morales et Politiques, while to many Parisians he was affectionately known as 'Papa Janet'. Last autumn, in spite of his years, he travelled to Zurich and delighted a psychological congress with the charm and erudition he showed in an extempore address. His work is now rather overshadowed by the developments of psychoanalysis, but he stands out as the pioneer who, almost single-handed, brought psychology into practical alliance with medicine.

MILLAIS CULPIN

Dr. A. H. Jay

THE tragic death of Dr. A. H. Jay on February 27 at the age of forty removes one of the most colourful characters from the ranks of X-ray workers in Great Britain. At conferences and discussions one could always be sure that Dr. Jay would present a novel aspect of whatever problems were being aired, and he presented it with a vigour that was characteristic of the man. His pronounced north country accent and his use of personal reminiscences gave his lectures a spice and flavour out of the ordinary.

Those who knew him on more intimate occasions knew also that his originality was not reserved for the lecture room; it manifested itself in many different ways, in research and in committee meetings. As a member of the committee of the X-ray Analysis Group of the Institute of Physics, Jay was a staunch advocate of individuality, and strongly opposed those of us who wished to introduce more standardization into X-ray matters; he had designed and built most of his own X-ray equipment, and he did not see why the coming generation of research workers should not do the same. What he did not realize was that so few were possessed of his energy and initiative, his

ability to overcome obstacles. As an example, his high-temperature camera might be cited. Jay designed this camera at Manchester and did much useful work with it; yet, after he left, nobody produced any results with it. The reason for this was obvious: there were so many points in it that had to be attended to at once that only Jay could manage to look after them all!

Jay's qualities were particularly well suited to the type of research work he undertook. His work with Bradley on superlattice formation in the iron-aluminium system is accepted as a model of completeness, and has been the basis of much theoretical investigation. It involved a quantity of measurement that would have daunted a lesser man, but work seemed to give Jay an appetite for more. This quality stood him in good stead in his work for industry, which involved the taking of large numbers of X-ray photographs of refractories. The interpretation of these photographs and the analysis of the results obtained from them enabled him to make many important fundamental contributions to the study of these materials, and it is probably true to say that the main importance of these contributions has yet to be seen.

It is sad to think that he has not lived to enjoy the pleasure of seeing his results applied. Britain can ill afford the loss of men of Jay's type in the present sombre conditions.

H. LIPSON

WE regret to announce the following deaths:

Mr. C. W. Hobley, C.M.G., secretary during 1923-36 of the Society for the Preservation of the Fauna of the Empire, on March 31, aged seventy-nine.

Dr. Willard L. Valentine, editor of *Science* since January 1946, formerly professor of psychology in Northwestern University, on April 5, aged forty-two.

Henri Vallée, *Correspondant* for the Section of Rural Economy of the Paris Academy of Sciences, on March 12.

NEWS and VIEWS

Bacteriology and Immunology in the University of London: Prof. E. T. C. Spooner

DR. E. T. C. SPOONER, who has been appointed to the University of London chair of bacteriology and immunology tenable at the London School of Hygiene and Tropical Medicine, went to Epsom College and to Clare College, Cambridge, where he obtained first classes in both parts 1 and 2 of the Natural Sciences Tripos. After the completion of clinical study at St. Bartholomew's Hospital, he was house-physician to the late Sir Walter Langdon-Brown; he was elected to a Commonwealth fellowship and worked for two years with Prof. Hans Zinsser in the Department of Bacteriology of Harvard University. On his return from America he was elected to a fellowship at Clare College, and a University demonstratorship in the Department of Pathology at Cambridge. He was later elected to a University lectureship and took charge of the teaching in bacteriology for both Part 1 and Part 2 of the Natural Sciences Tripos.

On the outbreak of war in 1939, Spooner became a member of a group of workers at St. Bartholomew's

Hospital, which had been 'evacuated' to St. Albans, who were engaged in the study and prevention of the spread of streptococcal infection in surgical wards. Afterwards Dr. Spooner was appointed by the Medical Research Council as the bacteriologist member of a group of medical men who were sent to the Middle East to report on the hospitals and laboratories in North Africa, Egypt and Palestine. On his return to England, Dr. Spooner was for a time in charge of the E.P.H.L.S. laboratory at Cambridge. At the end of the War, Dr. Spooner resumed his work as a University lecturer; in 1944 he was appointed senior tutor of Clare College. Dr. Spooner has published work on the spread of infective disease, especially streptococcal infection, and for his work in this field was awarded the Horton Smith Prize at Cambridge. His chief interest is in the filterable viruses and in virus-produced disease.

Awards of the Valdemar Poulsen Gold Medal

THE Valdemar Poulsen Gold Medal was instituted by the Academy of Technical Sciences in Copenhagen on the occasion of Valdemar Poulsen's seventieth

birthday on November 23, 1939, and the first award was made on that date to Dr. Poulsen himself. Owing to the War, it was not possible to make further awards until 1946, when medals were awarded to Dr. E. F. W. Alexanderson and to Sir Robert Watson-Watt.

Dr. E. F. W. Alexanderson was awarded a Valdemar Poulsen Gold Medal for outstanding contributions to radio-technics, and particularly for the development of a radio-frequency alternator of high power and other system components important in the early progress of radio communication; Dr. Alexanderson was born in Sweden, but his whole work with radio-technics has been done in the United States, where he is a chief engineer of the General Electric Co. at Schenectady.

Sir Robert Watson-Watt was awarded a Valdemar Poulsen Gold Medal for outstanding contributions to the development of radio and particularly for his leading scientific part in the invention and development of the use of radiolocation.

New Chairmen of Research Boards

THE Lord President of the Council has made the following appointments to chairmanships of research boards of the Department of Scientific and Industrial Research from April 1, 1947: Sir Edward Salisbury, director of the Royal Botanic Gardens, Kew, to be chairman of the Forest Products Research Board in succession to Prof. V. H. Blackman; Engineer Vice-Admiral Sir Harold Brown, recently senior supply officer, Ministry of Supply, formerly engineer-in-chief of the Fleet and, during the War, controller general of munitions production, to be chairman of the Fuel Research Board in succession to Sir Harold Hartley; Sir Stanley Angwin, chairman of Cable and Wireless, Ltd., formerly engineer-in-chief of the General Post Office, to be chairman of the Radio Research Board in succession to Lieut.-Colonel Sir George Lee.

A New Form of Camera

MR. EDWIN H. LAND, president and director of research of the Polaroid Corporation, demonstrated recently before the Optical Society of America a camera which produces a dry positive on paper 60 sec. after releasing the camera shutter. The camera contains a roll of film of conventional type, except that the support is opaque, and the exposure is made in the usual way. The camera also contains a roll of specially prepared paper which is not sensitive to light. The paper support is also opaque, and has attached, at intervals equal to the length of the picture, capsules containing a viscous solution of the processing materials. This solution includes hydroquinone and 'hypo' and is released when the capsule is burst on passage of the film and paper between pressure rollers. This takes place after exposure, and the solution is spread as a thin layer between the film and paper, where the following action is said to take place. The hydroquinone rapidly reduces the silver halide in the film in those regions where light action has taken place, thus immobilizing the silver in these regions. In the unexposed regions the 'hypo' takes the silver halide into solution, and diffusion and reduction take place, with the result that silver is deposited in the prepared surface of the paper, producing an image in silver. Since most silver is deposited in the paper in those regions where the least exposure occurs in the camera, the paper image is a positive. The film and paper are pulled apart when the action is complete, yielding a paper 'print' which has a slightly damp surface. The film-paper

sandwich passes out of the camera immediately after passing the pressure rollers. The purpose of the opaque supports is to protect the film from further light action while the 'processing' is taking place. In some variants of the system further prints can be obtained from the 'negative', but in general it appears necessary to rephotograph the original to obtain further copies.

Historia Naturalis

IN September 1944, a small group of biologists met in Rome to consider means of promoting the interests of their science, and by December of the same year their suggestions had received sufficient support to justify the formation of a society of naturalists, *Unione Italiana Naturalisti*. By 1946, the society was strong enough to issue its own journal. This publication, *Historia Naturalis*, is about the same size as *Nature*, and each part so far published consists of 24 pages, exclusive of the cover. It is illustrated with line and half-tone text figures and is quite well printed. It appears three times a year—in March, June and September—and the issues of the first year are now to hand.

The object of the journal is not merely to record the meetings and activities of the society, which are many—indeed these only occupy a page or two—but to emphasize the fundamental unity of the biological sciences, interpreting these in a wide sense. It appeals not only to the professional specialist but also to the intelligent amateur. The major portion of each issue is therefore devoted to original studies and researches, to reports of conferences and symposia, to reviews and essay reviews covering diverse aspects of natural history. The original contributions have included, among others, general and vertebrate palæontology, geology (tectonics), evolutionary problems, animal populations and experiments on Coleoptera. We should like to congratulate our colleagues on their courage in making a start in this field when general conditions were far from encouraging, and welcome the new journal, which undoubtedly fills a need. If the publication fulfils the promise of its first year—and there is no apparent reason why it should not—it is assured of a permanent place in scientific literature. The annual subscription to *Historia Naturalis* is 150 lire, to be sent to Domenico Rossi, via Tomacelli, 132, Rome.

Engineering Degree Courses for Ex-Servicemen

MANY who were studying engineering before being called up for national service have been unable to complete degree courses, and although they have become competent engineers, their future career would benefit greatly if they were able to obtain a degree. Mr. O. S. Puckle, of R.F. Equipment Ltd., Langley Park, near Slough, Bucks, believes that suitable courses of study at a number of technical colleges throughout Great Britain, either in the form of a full day on Saturday or a half-day on Saturday and, say, one, or at most two, evenings per week, could be devised to meet this need. He therefore invites engineers or physicists who are interested in such a proposal to communicate with him. Should the number of replies prove to be sufficient, he proposes to communicate with the Ministry of Education in order to ascertain whether something can be done to meet the situation. He has in mind two types of course, covering two or three years and leading to final B.Sc. or B.Sc.(Eng.), depending on whether the intermediate examination has been