

charm of manner and sympathy, gained for him the respect and admiration of his African friends.

Essentially he was a man of independent thought and idealistic in his outlook; consequently he was not always practical in his own life, nor could he easily tolerate what he considered to be less enlightened views or opinions. In latter years he evinced an interest in and admiration for Islam, and embracing that faith he was buried as a Moslem. No one who met and knew him will easily forget his hospitality, good comradeship, his brilliant power of expression and the vivid descriptions of his wide and varied experiences in Africa and elsewhere; and his friends will be glad that he died suddenly, as he

would have wished to die, and was spared a lingering illness.

E. B. HADDON.

WE regret to announce the following deaths:

Prof. H. Bateman, F.R.S., professor of mathematics, physics and aeronautics, California Institute of Technology, since 1917, aged sixty-two.

Dr. F. Bullock, secretary and registrar of the Royal College of Veterinary Surgeons, on February 14, aged sixty-six.

Major S. S. Flower, O.B.E., formerly director of the Zoological Gardens, Giza, on February 3, aged seventy-four.

NEWS and VIEWS

Losses among Polish Zoologists during the War

DR. T. JACZEWSKI, formerly acting director of the Polish Museum of Zoology, Warsaw, now attached to the Polish Repatriation Mission, B.A.O.R., has been able to compile the following data concerning the fate of Polish zoologists during the Second World War. The total death-roll amounted to fifty-four persons, that is, more than 25 per cent of the number of zoologists working in Poland in pre-war times. Of these fifty-four people, twenty-five died a natural death, although in most cases certainly a premature one, caused by hardships and privations under the German occupation; thirteen were killed in action, four were executed by the Germans, eight died in German concentration camps, and four are reported missing since 1939 or a later date. Eighteen were university professors, seven belonged to junior university personnel, ten to the staff of museums, biological stations, etc., six to the staff of economic zoological institutions, and thirteen were private workers. Among more prominent names may be mentioned: Prof. K. Białyaszewicz (University of Warsaw, physiology, died 1943), Prof. T. Garbowski (University of Cracow, animal psychology, died 1940 in concentration camp, Oranienburg), Prof. E. Godlewski, jun. (University of Cracow, embryology, died 1944), Prof. S. Kopeć (University of Warsaw, general biology, executed 1941), Dr. Z. Koźmiński (hydrobiology, killed in action 1939), Prof. R. Kuntze (Warsaw School of Agriculture, economic zoology, executed 1944), Dr. S. Minkiewicz (economic entomology, died 1944), Prof. W. Roszkowski (University of Warsaw, general and systematic zoology, executed 1944), Prof. M. Siedlecki (University of Cracow, general zoology, died 1940 in concentration camp, Oranienburg), Dr. J. Wiszniewski (hydrobiology, killed in action 1944). It is feared that the above data are still not quite complete, as the fate of several persons who left the country in 1939 or later, or were forcibly displaced by the Germans, is not yet certain.

Acta Pharmacologica et Toxicologica

DISCOVERIES of the last few decades have turned the minds of the medical world from preoccupation with diagnosis to the study of therapeutics and have greatly increased the importance of pharmacology. The Germans were the first to realize the possibilities of this subject, and at the end of the last century they led the world in the introduction of new remedies,

but they had been overtaken by other countries before 1939. The output of papers on the action of new drugs is increasing rapidly but these papers tend to be scattered widely in all sorts of journals. There are not enough pharmacological journals, and there will be a widespread welcome for the *Acta pharmacologica et toxicologica*, the first numbers of which appeared in 1945. The new journal is published under the aegis of the Pharmacological Society of Copenhagen. It is edited by Prof. K. O. Møller, with the collaboration of pharmacologists in Denmark, Sweden and Finland. Papers may be written in English, French or German, but all those in the first two parts are in English. The journal is attractively produced, and the editors are to be congratulated on the care which they have devoted to practically all the small points which make a journal convenient to use. The only obvious criticism is that the pages were uncut. It is hoped that this small fault can be remedied.

The first parts of the new journal contain a number of interesting papers on hormones and vitamins, and on drugs which antagonize these natural substances, on the precursor of acetylcholine, on the normal occurrence of piperidine in the urine and its pharmacological properties, on biological standardization, on sulphonamides, and on the fate in the body of cyanides, alcohol, procaine and penicillin. This brief list gives some idea of the range and interest of the subjects covered. All good medical libraries will have to subscribe to this new journal. The price of each volume is 35 Danish kroner, post paid; the publisher is Einer Munksgaard, Nørregade 6, Copenhagen, Denmark.

Universities Federation for Animal Welfare: Oxford Branch

The inaugural meeting of the Oxford branch of the Universities Federation for Animal Welfare was held on February 22. Dr. Edward Hindle, president of the Federation, gave an address in which he stressed the fact that the humane treatment of animals is not simply a national question, but also an international one, and therefore most appropriate for a university body. Cruelty, he said, is not usually deliberate, but generally the result of ignorance and carelessness, and one of the main objects of the Federation is to try to spread information which would lead to a better state of affairs. A handbook on the care of laboratory animals, dealing with the health, feeding,

etc., of various animals commonly kept in laboratories, will shortly be published on behalf of the Federation, which is also founding a research studentship for the investigation of more humane methods of dealing with rodent control. The occupant of this post will spend at least a year investigating the possibility of developing a more humane poison than those now in general use and also other methods of controlling the rodent population in a particular district. Dr. J. R. Baker said that in Great Britain obvious cruelty to animals has been almost eliminated, but much suffering is still caused by thoughtless actions. Accurate knowledge of animal life is necessary, and the zoological departments of universities should be especially active in the cause of animal welfare. Major C. W. Hume, Chairman of the Federation, said that apathy towards the reasonable rights of animals is due partly to a reaction against cranks, but mainly to imperfect education in the sense of a lack of broad culture. The Universities Federation for Animal Welfare works in harmony with the Royal Society for the Prevention of Cruelty to Animals and kindred societies, and their functions do not overlap. During the present century science has been gradually coming into its own in public affairs, and many Government departments now have a staff of scientific advisers. The place of the Federation in the animal-welfare movement is somewhat analogous; but although most of its activities hitherto have had a scientific quality, there are other fields of thought and knowledge to which it must turn its attention, notably jurisprudence, pedagogy and the psychology of man's behaviour in relation to animals. The address of the Federation is 284 Regent's Park Road, London, N.3.

Indexing and Filing

A ONE-DAY conference convened by the Association of Special Libraries and Information Bureaux was held at Friends House, London, on February 15, to discuss problems connected with the indexing and filing of unpublished material. Some hundred and fifty members and guests were present. The chair was taken by Captain Harry Ward, secretary of the Industrial Management Research Association, and papers were presented by Miss M. Shaw on "The Indexing and Filing of Correspondence in the Laboratories of J. Lyons & Co., Ltd.", Dr. Holmstrom of I.C.I., Ltd., on "Moot Points in the Filing of Business Correspondence" and Mr. K. S. Jefferies of the Treasury on "The Practice of the Civil Service". These were followed by Miss L. G. Thomerson of the Printing and Allied Trades Research Association, Mr. A. E. Dodd of the British Refractories Research Association, Mr. W. Ashworth of the British Cast Iron Research Association, and Miss D. Knight of the National Institute for Research in Dairying, who described the schemes used by their organisations to deal with technical data contained in correspondence, certificates of tests, technical reports and other unpublished material. Interesting points that emerged from the discussion were the importance of the routine handling of such documents and the widespread misconception that 'filing' is an unskilled job. The Association of Special Libraries and Information Bureaux was urged to investigate the present facilities for training and to formulate the qualifications needed for such posts. If the demand is sufficient it is hoped to publish the proceedings of the conference together with a summary of the discussions. Non-members interested should notify the General Secretary, ASLIB, 52 Bloomsbury Street, London, W.C.1.

Green Crops for the Market

THE Ministry of Agriculture and Fisheries is replacing Bulletin No. 53, "Cabbages and Related Green Crops", by two publications, which deal with the subject in greater detail. Bulletin No. 132, "Cabbages, Brussels Sprouts and Miscellaneous Green Crops" (Pp. 30+15 plates. H.M. Stationery Office. 1s. 0d. net) has now appeared. It has been produced by a committee headed by Mr. F. A. Secrett and is a really sound practical handbook. Such modern developments as irrigation and transplanting by machine are discussed; it seems important that irrigated soil should be worked soon after the water has been given, and mechanical planters should be used on soil which has been rolled. Firm planting is a necessity. In wet districts a 'rucker' or mechanical device for making small mounds of soil is drawn down the drills before planting. This drains away excess water from the young plants, for too much water is as bad as too little. One useful paragraph outlines routine measures of pest control in the seed bed, with applications of naphthalene, calomel and nicotine or pyrethrum. A casual statement that liming provides a permanent cure for club-root disease will strike a north of England grower as too facile a dismissal of the problem; it does not seem to work there or in Scotland. The rest of the advice about pests and diseases is sound, however, and the grower will find very useful information about cultivation, manuring, varieties and marketing. A calendar for the production of cabbage and savoy throughout the year in the south of England is given, and local practices in the main production centres are described. "Miscellaneous Green Crops" mentioned in the title include sprouting broccoli and kale.

Behaviour of Bees when Foraging

IN the *Journal of the Royal Society of Arts* (August 1945), Dr. Colin G. Butler of the Rothamsted Experimental Station discusses this subject. It appears that when a bee works a group of plants, she almost always alights on one particular plant and returns to it when about to take off for the homeward journey back to the hive. The factor which decides whether a young bee will become a member of a fixed 'population' of a foraging area is the time taken to fill her honey-sac. If this takes longer than 30-60 minutes she will wander to another area. If, on the other hand, she has collected a full load in a given time she makes orientation flights over the area before returning to the hive, observing landmarks by means of which she can locate it again. On subsequent foraging expeditions she flies straight to this area upon which she has decided and continues to visit it. The author also discusses the value and importance of bees in the pollinating of orchards. Fruit-growers are often willing to pay good prices to beekeepers who are willing to move their hives into orchards for four or five weeks while the trees are in bloom. Dr. Butler points out that as much as £3 has been paid for the use of a colony of bees during this period. The average rent seems to be about £1 per colony, and the author would like to see a minimum strength of colony for pollination decided upon on a systematic basis. Whether the honeybee is a more efficient pollinator than various other insects is a question that is sometimes asked; but Dr. Butler believes that bees as a group are better in this connexion than flies, moths, etc.