

powerfully manned and adequately financed for exploration no less efficient than that carried on by foreign missions; but for this clearly the time is not yet ripe.

#### Suggested Use of Red Filters for Improving Vision

IN the *Klinische Wochenschrift* for November 3, Dr. Arnold Berliner, editor of *Die Naturwissenschaften*, has advocated the use of a red filter for improving vision when the media of the eye are hazy, as from vitreous opacities, incipient cataract, etc., since in such media light of short wave-length is scattered more than that of longer wave-length. The theoretical validity of this physical argument is undoubted, but physiological considerations render it doubtful whether much advantage would accrue. It is interesting to note that somewhat similar improvement of vision has been predicted for a glass of very different transmission characteristics by Dr. Birch-Hirschfeld (*Z. Augenheilkunde*, 77; 1932) and Dr. Danmeyer (*Hansa Deutsche Schiffarts-Z.*, December 1933). This 'neophan' or 'neodym' glass contains neodymium, and is slightly blue-violet in colour. It will be remembered that Sir William Crookes made and investigated the light transmission of such a glass, which differs little from that of the 'Crookes' glass now on the market, though it apparently has a rather more pronounced absorption band between 550 m $\mu$  and 650 m $\mu$ . It is held that the diminution of the yellow reduces the dazzling effect upon the retina. Prof. H. Hartridge, however, has given good reasons for thinking that these rays of highest luminosity in the spectrum are those most important for accurate discrimination of the retinal diffusion image with incident white light.

It might well be expected on physical grounds that monochromatic light would afford the sharpest retinal image, and the observations of Uhthoff and others support this view, provided that the intensity of the light is adequate. The eye, however, is an extremely complex optical instrument, and its physiological properties are such that maximal central discrimination depends not only upon the accuracy of the optical image, but also upon the sensitivity of the neural receiving apparatus. This is profoundly modified by the conditions of adaptation to light, and also by the condition of the surrounding retina. In many cases, central vision is enhanced by moderate illumination of the surrounding field. Hence the normal scattering of light which takes place in the eye may quite possibly be beneficial. Too much optimism should not therefore be indulged in when based only upon theoretical considerations of a purely physical nature.

#### Eyesight with Yellow Light

THE high luminous efficiency of the sodium vapour electric light makes it probable that it will be more extensively used in the future, if it can be shown to have no deleterious effect on human eyesight. Under the supervision of the Port of New York Authority and the United States Public Health

Service, this question has been investigated by Mr. James E. Ives, senior physicist of the Public Health Service, and his conclusions are included in Public Health Report No. 1640. Two groups of clerks, each about a dozen in number, worked four hours a day at their usual tasks, one group in a room illuminated solely by sodium vapour lamps, the other group with the usual gas-filled tungsten lamps. In each case the illumination of the plane of work was 10 foot candles. The eyes of each subject were examined clinically four times during the investigation, which lasted three months. The sodium light was found soft and easy on the eyes, and no permanent effect on the eyes could be detected, nor was there any difference in the amounts of work done by the two groups.

#### A Scottish Bird Station

SCOTLAND is well placed for intercepting certain movements of birds on migration. The records made by Dr. Eagle Clarke and after him by the late Admiral J. H. Stenhouse at Fair Isle, ably supplemented by the skill and knowledge of the islanders themselves, have made that remote spot between the Shetland and Orkney Islands a name known to all students of bird migration. But Fair Isle is remote and difficult of access, and it must be admitted that it receives the full tide of migration only under peculiar conditions of weather. On the other hand, the Isle of May, situated off the entrance of the Firth of Forth, is not far from centres of population, is easily reached in most kinds of weather, and has been proved, by many annual visits of Miss Baxter and Miss Rintoul, to be a good post of observation. Accordingly a few enthusiastic ornithologists, the Midlothian Ornithological Club, have decided to make the Isle of May a bird station at which regular, and so far as possible continuous, observations of bird movements will be made, partly by field study, partly by trapping and ringing adult birds. The carrying out of the project has been made possible by the permission of the Commissioners of Northern Lights, and every naturalist will wish success to this promising enterprise.

#### Pioneer Bird Observatories

THE first bird observatory for making day to day records of passing birds and marking migrating species with numbered aluminium rings in the adult stage, where mortality is much less than in the nestling stage, was formed at the beginning of the present century by Prof. Thienemann at Rossitten, East Prussia, followed shortly after by Prof. Rudolf Drost's observatory at Heligoland. In the United States, the first bird-ringing or 'banding' station was established by S. Prentiss Baldwin on a 100-acre farm at Cleveland, Ohio, with a winter branch at Thomasville, Georgia, but the United States Bureau of Animal Biology now maintains two bird observatories, at Berkeley, California, for migration and waterfowl studies, and North Eastham, Massachusetts, for migration, in addition to general observation reserves for birds and mammals. In the British

Isles the first permanent bird observatory and ringing station was established on Skokholm Island, off Pembrokeshire, in 1932, though since 1927 the Oxford University Ornithological Society has maintained a trapping station at Christ Church meadow and in the Museum grounds. In Denmark, Mr. P. Skovgaard has maintained ringing stations near Copenhagen, and in Russia, the Institut Lesnov carries on the work near Leningrad. In France, the Ministry of Agriculture recently commenced bird migration studies at the Institut des Recherches Agronomiques, at Versailles.

#### Holism in International Affairs

THE *African World* of November 1934 contains full reports of the more important speeches made by General the Right Hon. J. C. Smuts during his visit to Great Britain in October 4–November 15, 1934. These include his installation as Rector of the University of St. Andrews and his impressive address on "Freedom" (see NATURE, Oct. 27, p. 654), his speech in response to the presentation of the freedom of the City of Dundee, in which he pleaded for faith and vision as opposed to the spirit of pessimism and defeatism which is so widely encountered, a speech at Christ's College, Cambridge, on October 21, speeches on African problems, on Jewry, an Armistice Day speech on post-War obligations and his challenging plea for peace at the dinner of the Royal Institute of International Affairs at the Savoy on November 12. In the latter speech he asserted that the way out of our present troubles lay in our steadily increasing sociality, the interweaving of interests, points of view and ideas, in the 'open door' and the removal of barriers and restrictions, in the dominance of large human principles transcending national boundaries and in the recognition that in mankind we are members one of another. The driving power should be the same urge towards integration and co-operation which characterises holism and the creative process in Nature.

#### Alaskan Archaeology

DR. ALEŠ HRDLIČKA has recently returned to Washington, D.C., from his sixth expedition to Alaska, where he has been engaged in investigating the 'archaic' culture of Kodiak Island. The past season is the third consecutive summer he has spent in extensive excavations on the island, and once more his results have added considerably to knowledge of the culture of the people who have inhabited it, without, however, it may be added, obtaining a solution of the ethnological problem. A peculiar feature by which, according to a communication issued by the Smithsonian Institution of Washington, Dr. Hrdlička has been confronted is the occurrence of 'nest-burials', in which a considerable number of individuals of both sexes have been found together, without any of the customary funerary offerings found in the ordinary graves. It has now been ascertained that many of these skeletons have cracked skulls and broken limbs. Dr. Hrdlička, therefore, concludes that this may be taken as evidence of a village massacre,

from which a few individuals escaped to return and bury their dead. Considerable progress has been made in uncovering the 'metropolis' site of the island, a once important centre of population situated on a bay. It shows three stages of settlement. The first and second, by far the longest, belong to the unknown people, whose culture was considerably richer than that of their successors. They show slight affinities with the Eskimo, but can scarcely be considered as of the same strain. After them come the Konings, who are practically identical with the Aleuts of to-day. As is now well known, the unknown people were master craftsmen, especially in the making of beautiful stone lamps and ivory carvings. Dr. Hrdlička regards as one of the most important results of this year's excavations, the evidence of differentiation and occupational specialisation as between family households.

#### Staff Management Association

AT the inaugural meeting of the Staff Management Association on December 5, which was recently formed under the auspices of the Institute of Labour Management, Mr. F. W. Lawe, staff manager of Harrods, Ltd., said that the Association and its parent body cover practically the whole field of personnel work between them. The Institute's work is concerned with the operative employees, the new Association with the administrative and clerical employees. To-day there is a marked tendency to develop special departments for staff management in industry and commerce, though for many years Government and municipal departments have had their 'establishment officers' whose duties cover the same field. The new Association aims at improving the technique of staff management by pooling mutual experience and comparing methods, and by exploring the aid which can be derived from various sciences. The application of these methods, however, will always be an individual art which must be exercised with human understanding and wisdom. The field of staff management lies in the recruitment and engagement of suitable employees; the training of employees for their work; all questions of salaries and promotions; a considerable responsibility for conditions of work including hours; direct charge of all social, educational and welfare work and, finally, sole charge of the responsible duty of dismissal. Slipshod methods of learning one's life job are still the rule rather than the exception in Great Britain. The old rough and ready apprenticeship method has largely fallen into disuse, but an enormous all-round improvement could be obtained if training for work were taken seriously. It is significant that most great department stores, for example, have a golf-school for customers but very few have a work-school for their staff.

#### Electrical Accidents in 1933

THE review of the accidents and dangerous occurrences in Great Britain which took place during 1933 ("Electrical Accidents", 1933. London: H.M. Stationery Office. 6d.) is instructive.