

by Dr. S. K. Banerji with the aid of a Milne-Shaw seismograph located in Bombay, and also of recent researches into the system of upper winds over India. At the present time, maps are prepared daily showing the wind systems at seven different levels between 500 metres and 6,000 metres above the ground. These maps are of great service to aviation. Speaking of the dangers to flying in India, Mr. Field pointed out that these include most of those encountered in Europe with the addition of dust storms, and of hail storms that at their worst probably surpass any that occur in Europe; he spoke of cases where hail stones of at least five inches diameter have destroyed Indian villages and killed every living creature in them. A point that emerged very clearly was the inadequacy of the financial provision for dealing with the requirements of aviation over the Indian section of the air route from England to Australia. The service was described as a "skeleton provision, materially below the standards recommended in the International Air Convention". This, fortunately, can be regarded as a matter that in the forward march of aviation must inevitably be set right, sooner or later. It is to be hoped that realisation of the importance of more complete meteorological information will not be delayed until after numerous fatal accidents have directed public attention to the subject.

#### Plant Collecting in Asia

MR. F. KINGDON WARD contributes the first of a series of articles about his twelfth expedition in Asia to the *Gardeners' Chronicle* of August 4. His object was, of course, to find new plants with which to enhance the beauty of gardens, and to add to the knowledge of the systematic botany of Asia. He was accompanied on part of the journey by Mr. R. Kaulbach, and by Mr. Brooks-Carrington, who is a cinematographer sent out by Ray-Col British Corporation Ltd. Ten thousand feet of colour film illustrating "Plant Hunting on the Edge of the World" have been prepared, and will shortly be on view in Great Britain. Mr. Kingdon Ward's journey began at Calcutta on February 25, 1933; thence he journeyed to Sadiya by way of Shillong, the capital of Assam. From Sadiya he went to Rima and beyond, to the snow range, entering the unexplored regions beyond Shugden Gumpa. Returning to Zayul, he explored that province, and finally returned from Tibet to Assam via the Delei valley. A number of new plants were collected on the expedition, and will be described in subsequent instalments of the narrative, which is also highly descriptive of the country traversed.

#### Pollen Carried by Dust Storms

IN connexion with a note published in *NATURE* of June 16, p. 905, on the high proportion of pollen found in the dust storms experienced this year in the United States, Mr. K. Biswas, curator of the Herbarium, Royal Botanic Garden, Calcutta, directs attention to the "Puspa-bristi" (rain of flowers) frequently noticed in India. During late February and March, which is the flowering period of a large

number of trees in the plains and *terai* of the Eastern Himalayas, the pollen seems often to be carried up to high levels in the hot air and then distributed over a wide area by dust storms. The pollen settles later with the dew or rain in drops of liquid, which dry upon the foliage of the plants leaving residues of pollen grains.

#### Useful Birds

THE Royal Society for the Protection of Birds has just added to its attractive series of coloured food-charts of birds, pictorial representations of the proportions of useful, harmful and neutral work (so far as human interests are concerned) done by the jackdaw, kestrel, nightjar and yellow-hammer. The cards, which are issued at 4d. each post free, or 4s. 4d. for the series of 16, are telling exhibits for use in museums or school-rooms. Recently the Ministry of Agriculture and Fisheries has issued Advisory Leaflets describing the characteristics and habits of the barn owl, woodpeckers, starling, swallow, martins and swift, lapwing and wagtails. A leaflet in the same series describes some simple nest boxes for the encouragement of the breeding of useful birds in gardens, orchards and allotments. They cost 1d. net each.

#### Dinosaur Discovery in Wyoming

DR. BARNUM BROWN, leader of the American Museum Sinclair Dinosaur Expedition, has discovered (according to Science Service, Washington, D.C.) an extraordinarily rich collection of fossil dinosaurs in Red Gulch Quarry, twenty-five miles east of Greybull, Wyoming. The number of skeletons unearthed up to the end of July was twelve, and Dr. Brown believes that they represent the remains of a herd of gigantic sauropod dinosaurs, caught in drying lakes and swamps, during an extended drought in the area some 125 millions of years ago.

#### An Automatic Firedamp Recorder

THE Safety in Mines Research Board has issued as Paper No. 86 an account of an automatic firedamp recorder, reference to which has already been made and a picture of the plant published in the twelfth annual report of the Safety in Mines Research Board, whilst the recorder had previously been described in the *Transactions of the Institution of Mining Engineers*. The present paper, however, gives the construction in more detail than either of the previous publications above referred to. The paper is by Mr. H. Lloyd, who designed the instrument in question.

#### Stemming Materials

THE Safety in Mines Research Board has just published Paper No. 84 dealing with stemming materials and written by Prof. J. A. S. Ritson and Mr. H. Stafford. This paper is practically a resumé of a number of papers and observations which Prof. Ritson and his colleagues have been carrying out for a number of years. The first paper was published by them in the *Transactions of the Institution of*

*Mining Engineers* of 1930, and they have continued their work practically up to the present. They find that sand between 1/10 in. and 1/100 in. is the most effective material, and that a mixture of sand and clay (three of the latter to one of the former) is practically as efficient as sand alone and is much more convenient for stemming horizontal shot holes. To enable the material to be stored without getting dry, the authors recommend 3-5 per cent of calcium chloride to be added, and they state that by the use of a sand and clay stemming, blown-out shots can be prevented, the amount of fumes can be reduced, and up to one third of the cost of the explosives can be saved. From the practical point of view this paper, published at 6d., is of very great value.

#### The Sir John Cass Technical Institute

THE Sir John Cass Technical Institute, Aldgate, in the City of London, announces the completion of a new wing adding some seventy-five feet to the frontage of the main building, and providing accommodation for new library and reading rooms, a students' common room, a geology room and museum, and laboratories for metallurgy and pyrometry, assaying and mechanical testing and engraving, and a research laboratory. The new wing is to be opened on October 10 by the Earl of Athlone, Chancellor of the University of London. The Institute provides instruction in pure science as well as in the biochemistry of fermentation, petroleum technology, and fuel technology, in arts and crafts, tailoring and languages, and includes a Nautical School. Sir John Cass, to whose charitable interest in education the Institute owes its origin, was an alderman of the Ward of Portsoken from 1710 until 1718 and sat in Parliament as one of the representatives of the City of London.

#### Social Hygiene Congress

A CONGRESS of social hygiene will be held at Lyons on October 7-9, with M. Edouard Herriot as president of honour and M. Risler, member of the Institut de France, as president. The following papers among others will be read: Thirty years' campaign against tuberculosis, by Prof. Courmont; the work done by the Rhone Departmental Committee in the campaign against tuberculosis, by Dr. Mouisset; the efforts made on behalf of cheap housing at Lyons, by M. Lévy; the Lyons regional centre and the campaign against venereal diseases, by Prof. Nicolas; biological and medical foundations for the campaign against infantile mortality, by Prof. Mouriquand; the municipal work for infantile and maternal protection at Lyons, by Drs. Vigne, Trillat and Gardere; the Franco-American foundation for children, its work and results, by Prof. Lepine; the social hygiene centre of the school of nurses and health visitors of Lyons, by Dr. Charles Gardere; and the work of the anti-cancer centre at Lyons, by Prof. Berard. Further information can be obtained from the general secretary, Prof. Rochoaix, 61 rue Pasteur, Lyons, or from Alliance d'Hygiene Sociale, 5 rue Las-Casas, Paris.

#### Announcements

By an order of the Committee of Privy Council, the Most Hon. the Marquess of Linlithgow is appointed a member of the Medical Research Council on the retirement of the Right Hon. the Viscount D'Abernon. Lord Linlithgow will succeed Lord D'Abernon as chairman of the Council.

ON Wednesday, October 3, Prof. G. Barger, professor of chemistry in relation to medicine in the University of Edinburgh, will deliver the inaugural sessional address of the Pharmaceutical Society of Great Britain at its School at 17 Bloomsbury Square, London, W.C.1.

EARLY in 1935, a new international botanical year-book, to be known as *Chronica Botanica*, will be published by Fr. Verdoorn, P.O. Box 8, Leyden, Holland. The journal will include important dates of the past, present and future of interest to botanists; announcements and reports of the International Botanical Congress, and other international societies, congresses, etc.; elections of officers and the reports of botanical societies; a survey of pure and applied botany during the previous year; and correspondence.

"How to Use a Medical Library" is the title of a booklet by Leslie T. Morton, assistant in the library of the Royal Society of Medicine (London: John Bale, Sons and Danielsson, Ltd., 2s. 6d. net). It should prove a useful guide for research workers and others to the sources of information respecting medical literature and the compilation of medical bibliographies. A list of the principal medical indexes and abstracting journals is included, together with an account of the facilities afforded in medical libraries in Great Britain.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—An assistant for work on electrical equipment for aircraft in the Directorate of Technical Development—The Chief Superintendent, Royal Aircraft Establishment, South Farnborough, Hants (Oct. 3). An assistant investigator of coal measure strata, in the Safety in Mines Research Board—The Under-Secretary for Mines, Establishment Branch, Mines Department, Cromwell House, Dean Stanley Street, London, S.W.1 (Oct. 6). A mechanical engineer in the Department of the Chief Officer, London Fire Brigade—The Clerk of the Council, County Hall, Westminster Bridge, S.E.1 (Oct. 15). A permanent advisory economist at Seale-Hayne Agricultural College, Newton Abbot, Devon—The Secretary. A head of the Department of Mechanical Engineering at the Municipal Technical School, Gamble Institute, St. Helens—The Secretary for Education, Education Office, St. Helens. A teaching scholar in the Department of Botany, University of Birmingham—The Secretary. A technical assistant in the Department of Economics, South Eastern Agricultural College, Wye, Kent—The Secretary.