Annual Conference of the Museums Association.

THE fortieth annual conference of the Museums Association, held at Worthing on July 1–5, was in many respects the most successful in the history of that body. The success was due to many favouring circumstances. The Royal Commission on National Museums and the Miers Report on Provincial Museums had awakened the interest of a wider public; hints from the Commission that the national establishments might be helped to give more practical shape to their acknowledged sympathy with the local museums, as well as the bodily presence of two Carnegie Trustees with their secretary, roused the hopes of curators; the nearness to London enabled many busy people to attend and contribute papers; and, above all, the choice of Sir Henry Miers for president promised a practical address and a fruitful discussion.

A main object of the Association is to promote co-operation between museums of every kind. Sir Henry Miers took that as the subject of his address, and speakers had been chosen to approach it from various sides. Sir Henry has in mind a museum service for the whole country, parallel to the library service that has cast a net which now gathers in even small villages. As driving force for such a scheme he sees only the Museums Association. With small means the Association has already done much, but voluntary labour, manifesting its results only in the annual conference, the Museums Journal, and a few circulating collections, is no longer enough. central office and a whole-time secretary are urgently needed, and to provide these more museums should come in. There is too much individualism and competition, too little co-operation and mutual aid between museums; the larger museums do not realise how much they stand to gain by helping their weaker brethren. Sir Henry indicated many openings for co-operation, among them the guidance of archæological excavation, the interchange of loan exhibits, and the training of curators.

In the ensuing discussion, Dr. Cyril Fox extended the idea of co-operation to the overseas members, and showed how ethnographical material stored in our museums might now be of more use if returned to the Dominions whence it came long ago; he suggested a central clearing-house for archæological objects. The Earl of Crawford, comparing museums, picture-galleries, and libraries, pointed out that the public appreciation of museums called for greater mental effort; the three classes should be put on a level, since each is necessary for intellectual progress. Mr. A. J. K. Esdaile urged the need of a central office for arranging exchanges and exhibitions. Mr. Tate Regan thought that junior members of museum staffs should be welcomed to the Association at a

smaller subscription but without the Journal. Dr. F. A. Bather replied that this would not help the juniors so long as their superiors did not encourage them to attend the Conference. As for a central clearing-house, the best course would be for each department of the national museums to receive and distribute its own class of material, but much could be done directly if use were made of the Journal. Other speakers advocated the extension of regional federations under the auspices of the Association.

The discussion was revived later by Dr. Hay Murray's suggestion that every large museum should adopt a small museum, and was carried further by Mr. Lawrence Haward's account of the scheme of loans initiated by the late C. Rutherston's bequest to the Manchester Art Gallery, by Major Longden's informative paper on exhibitions of foreign art, and by a most vigorous address from Dr. G. H. Locke, public librarian of Toronto, on co-operation between libraries and museums. Mr. Eric Maclagan here arrived to explain the kind of help the Victoria and Albert Museum could give to provincial museums, and reopened the discussion on training.

Most of the remaining papers dealt with the educational work of museums. Mr. Harold L. Madison, curator of education at the Cleveland (Ohio) Museum of Natural History, gave a thoughtful and instructive address on the work of his museum in connexion with schools. Miss Bertha Hindshaw related the efforts of the Ancoats Museum, Manchester, to get hold of the 'young visitor' from that poor district. Sir William Furse explained how he had managed to get the numerous small-scale panoramas which add so greatly to the attraction of the Imperial Institute Galleries. Mr. C. A. Siepmann, of the British Broadcasting Corporation, made a suggestive speech on the relations between broadcasting and museums, and this also provoked an animated discussion.

The more technical papers included a demonstration by Mr. W. E. Mayes of making wax models of plants, and notes by Mr. J. Ritchie on the preservation of ancient tempera paintings and on celluloid mounts for insects and herbarium specimens.

After so much time given to papers, the delegates enjoyed a visit to Tarring Cottages and Cissbury Camp, the latter admirably elucidated by Mr. T. Sheppard, and a whole-day excursion to Arundel Castle, Goodwood House, Chichester, Bignor Roman Villa (explained by Mr. S. E. Winbolt), and Petworth House. The remarkably smooth working of the excursions, as of all the other arrangements, was due to the organising capacity of the local secretary, Miss Marian Frost, of the Worthing Museum, aided by the ladies of her staff.

Biology of Norwegian Lakes.

BRAARUD, B. Föyn, and H. H. Gran, in a recent paper entitled Biologische Untersuchungen in einigen Seen des östlichen Norwegens August-September 1927" (Norske Videnskaps-Akademi i Oslo, I. Mathem. Naturvid. Klasse 1928, No. 2), report on several lakes in the east of Norway with regard to the plankton and its environment. The work was carried on in a similar way, but for a longer period, in the Hurdals-See in 1926, and the results published in this same publication (1927). In the Hurdals-See the temperature, oxygen content, hydrogen ion concentration, and distribution of the plankton were investigated at different depths from May to October,

the preserved plankton centrifuged and estimated quantitatively side by side with living net-plankton estimated qualitatively, the result showing that most of the species were in largest numbers in summer with a maximum in August–September. Only *Dinobryon sertularia* formed a maximum in June.

The other lakes, and also the Hurdals-See again, were worked in August and September 1927 with the same methods and apparatus. The plankton of the Hurdals-See was poorer than in 1926, probably because of the very wet summer.

Amongst the nine lakes in question, the Haugatjern was distinctive in having large masses of plankton