

Herald Island, failed to turn up. Captain Bartlett crossed Long Sound and with great difficulty reached the Alaskan coast, which he followed eastward to Emma Harbour, whence a whaler took him to St. Michael. From there a relief ship set out to Wrangell Island and brought back the remaining survivors of the *Karluk*. Three of the party had died on the island, and later search failed to reveal any trace of Dr. Mackay and his party, all of whom probably perished by falling through the ice.

Meanwhile Stefansson had attempted to retrieve the fortunes of the expedition. After a winter in the Mackenzie delta (1913-14), he set out northward over the ice with seven companions, starting from Martin Point, 140° W., on March 22, 1914. Three weeks later the supporting party turned back, bringing news that Stefansson meant to continue northward for at least another fifteen days. A small vessel, the *Polar Bear*, searched for them along the coast of Banks Land last year, but found no trace, and it was generally supposed that Stefansson and his party had perished until the news came last week. Travelling over the ice, and often drifting with it, the party reached 73° N., 140° W. Stefansson then decided to turn eastward, and ninety days after leaving Cape Martin landed on Banks Island, thirty miles south of Cape Alfred. From there he went south to Cape Kellat and met his supply ship. In the winter a four-hundred mile sledge journey to Victoria Island failed to reveal Eskimo. In February this year Stefansson, with three companions, set out northward *via* Cape Alfred to Patrick Island, and up its eastern side to Cape McClintock. To the north-east they discovered an extensive new land rising to a height of 2000 ft. The return journey was along the west coast of Melville Island, across McClure Strait, to the Bay of Mercy, and thence across Banks Island to Cape Kellat. From there Stefansson reached Herschell Island in the *Polar Bear*. Throughout his travels he lived chiefly on caribou, bears and seals, and suffered no want. He has since returned to Banks Island, and next year intends to explore his new land, and to make a journey over the Beaufort Sea. Surveys were made of the lands visited, and the work of Sir Robert McClure amplified and extended. R. N. R. B.

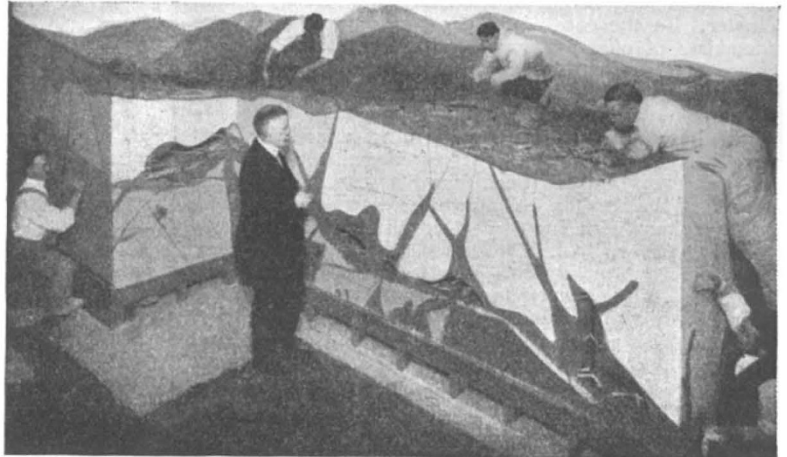
THE STANDARDS AND FUNCTIONS OF MUSEUMS.

OUR forefathers regarded museums simply as store-houses for freakish, reminiscent, or merely curious objects, and as the place in which to deposit the various oddments presented by travellers abroad. There was no "purpose" in the display of the objects exhibited, other than that of perchance amusing stray visitors. So far as this country is concerned, the new era of museum management began with the foundation of the British Museum at Bloomsbury, when the first attempt was made to eliminate the purely "show-man" element and substitute meaning and purpose in the arrangement of its contents. As compared with the Continental museums, it stands easily first in the character of its endeavours to interest, as well as instruct, the public. But in this we have serious rivals in the museums of the United States, as may

be gathered from the forty-sixth annual report of the American Museum of Natural History. In this, and other similar institutions in America, huge sums are spent on large groups of mammals and birds mounted to reproduce the exact environment in which such animals lived. And this illusion is further heightened by skillfully painted backgrounds, executed by artists who accompany the collectors in order that they may reproduce the actual environment in which the specimens lived. This, however, is but an extension of the methods of exhibition introduced by the British Museum many years ago.

In exhibitions designed primarily to instruct rather than to amuse, it is an open question whether our rivals are not over-reaching their ideals—at any rate, in so far as the work of a natural history museum is concerned. Mineralogy, for example, no doubt must find a place here, but large models of a copper mine, such as that reproduced here, and the method of raising ore, would seem to have a more appropriate place in a museum of technology.

The students' collections of such museums must either be of insignificant proportions, or the staff must be much larger than that attached to museums in



Copper Queen Mine Model, Department of Geology and Invertebrate Palaeontology. The American Museum of Natural History.

Great Britain, otherwise the curatorial work in connection therewith would make it impossible for the staff to devote so large a portion of their time to work which is done, indifferently well, it is true, in this country, under the auspices of the Board of Education, as "Nature-study." That this should be so is unfortunate, for, as a means of awakening the intelligence and powers of observation, there is no more efficient aid than the study of natural history, using this term in its widest sense.

In addition to lectures to children and teachers, special rooms are set apart in American museums for children's collections, while this work is supplemented by travelling museums sent round from school to school by means of motor-vans. Something of this kind could well be imitated in this country.

The department of public health in the American Museum of Natural History answers to no more than one aspect of the department of economic zoology of the British Museum of Natural History—that which concerns the organisms injurious to man—for no attempt seems to have been made to bring together a collection of domesticated animals. On the other hand, our rivals are ahead of us in having instituted

an exhibition of living bacteria such as more or less affect the well-being of the human race.

It is to be hoped that this report will be widely read in this country by all who are concerned with the management of museums, for it is full of most valuable information, and it is becoming increasingly clear that the museum is becoming more and more a factor in the well-being of the community. W. P. P.

FORTHCOMING BOOKS OF SCIENCE.

ANTHROPOLOGY AND ARCHÆOLOGY.

A. Brown and Son, Ltd.—Early Staffordshire Pottery, being an illustrated description, by C. Earle, of the Earle Collection, deposited in the Municipal Museum, Hull, with a preface by F. Falkner, and an introductory chapter on The Evolution of the Potter's Art, by T. Sheppard. *Cambridge University Press.*—The Northern Bantu: An Account of some Central African Tribes of the Uganda Protectorate, Rev. J. Roscoe (Cambridge Archæological and Ethnological Series). *Duckworth and Co.*—Where Animals Talk: Folk Tales of West Africa, Rev. R. H. Nassau. *Seeley, Service and Co., Ltd.*—Prehistoric Man and His Story, Prof. G. F. Scott Elliot, illustrated. *Macmillan and Co., Ltd.*—An Untamed Territory: The Northern Territory of Australia, Elsie R. Masson, illustrated; *The S.P.C.K.*—The Language Families of Africa, A. Werner; The Red Indians of Canada, Rev. J. Hines, illustrated. *Williams and Norgate.*—The Antiquity of Man, Prof. A. Keith, illustrated.

BIOLOGY.

F. Alcan (Paris).—L'Évolution des Plantes, N. Bernard. *John Bale, Ltd.*—Les Plantes Tropicales, P. de Sornay, translated; Rubber Industry of the Amazon, J. F. Woodroffe; Guide to Coconut Planting, R. W. Munro and L. C. Brown; Braun's Animal Parasites: brought up to date, mostly rewritten, with numerous additions and fresh illustrations, by Prof. Stephens and Dr. H. B. Fantham, edited by F. V. Theobald. *Cambridge University Press.*—Botany: A Text-Book for Senior Students, D. Thoday; Mimicry in Butterflies, Prof. R. C. Punnett. *Cassell and Co., Ltd.*—The Greenhouse: Its Flowers and Management, H. H. Thomas; Bulb Growing for Amateurs, H. H. Thomas. *Dulau and Co., Ltd.*—The Flowering Plants of Africa, F. Thonner, illustrated. *Duckworth and Co.*—Birds and Man, W. H. Hudson, new edition. *H. Holt and Co. (New York).*—Mechanism of Mendelian Heredity, T. H. Morgan and others. *Longmans and Co.*—British Birds, written and illustrated by A. Thorburn, vols. ii., iii., and iv. *Methuen and Co., Ltd.*—How to Know the Ferns, S. L. Bastin, illustrated; British Insects and How to Know Them, H. Bastin, illustrated. *L. Reeve and Co., Ltd.*—Transactions of the London Natural History Society for the Year 1914. *Whittaker and Co.*—Recent Researches in Plant Physiology, Dr. W. R. G. Atkins.

CHEMISTRY.

G. Bell and Sons, Ltd.—Quantitative Laws in Biological Chemistry, Dr. Svante Arrhenius. *C. Griffin and Co., Ltd.*—Text-Book of Inorganic Chemistry, edited by Dr. J. Newton Friend; The Alkali Metals and their Congeners (Group I. of the Periodic Table), Dr. A. J. Walker; The Alkaline Earth Metals and their Associates (Group II. of the Periodic Table), Dr. H. V. A. Briscoe and E. Sinkinson; Aluminium and its Congeners, including the Rare Earth Metals (Group III. of the Periodic Table), H. F. V. Little; Carbon and its Allies (Group IV. of the Periodic Table), Dr. R. M. Caven; Nitrogen and its Congeners (Group V.

of the Periodic Table), Dr. J. C. Withers and H. F. V. Little; Sulphur and its Congeners (Group VI. of the Periodic Table), Dr. Douglas F. Twiss and A. V. Eldridge; The Halogens and their Allies (Group VII. of the Periodic Table), Dr. G. Martin and E. A. Dancaster; Iron and the Transitional Elements (Group VIII. of the Periodic Table), Dr. J. N. Friend and Dr. W. E. S. Turner; The Manufacture of Ink: The Production and Properties of Printing, Writing, and Copying Inks, C. A. Mitchell and T. C. Hepworth, new edition, illustrated. *Gurney and Jackson.*—The Manufacture of Sulphuric Acid and Alkali, vol. iv., containing Electrolytical Methods, Prof. G. Lunge; Coal Tar and Ammonia, Prof. Lunge and Dr. J. Kraemer, new edition. *Longmans and Co.*—Chemistry, First Stage, F. P. Armitage. *Methuen and Co., Ltd.*—A Senior Experimental Chemistry, Drs. A. E. Dunstan and F. B. Thole. *John Wiley and Sons, Inc. (New York).*—Quantitative Chemical Analysis, Prof. F. A. Gooch; The Microscopy of Vegetable Foods, Dr. A. L. Winton, new edition. *Williams and Norgate.*—The British Coal-Tar Industry: its Origin, Development, and Decline, edited by Prof. W. M. Gardner, illustrated.

ENGINEERING.

Chapman and Hall, Ltd.—The Strength of Materials: A Text-Book for Engineers and Architects, E. S. Andrews, illustrated. *Constable and Co., Ltd.*—Overhead Transmission Lines and Distributing Circuits, F. Kapper, translated by P. R. Friedlaender, illustrated; Oil Fuel Equipment for Locomotives, A. H. Gibbins, illustrated; Practical Design of Steel Framed Sheds, A. S. Spencer, illustrated; Continuous Current Engineering, Dr. A. Hay, new edition, illustrated. *C. Griffin and Co., Ltd.*—Land and Marine Diesel Engines, Prof. Spinno, translated by Engr.-Commr. A. G. Bremner and J. Richardson, illustrated; Centrifugal Pumps, E. W. Sargeant, illustrated. *Scott, Greenwood and Son.*—Portland Cement: Its Properties and Manufacture, P. C. H. West; Design of Machine Tools, G. W. Burley; Bridge Foundations, W. Burnside; Calculations for a Steel Frame Building, W. C. Cocking; Gear Cutting, G. T. White; Moving Loads by Influence Lines and Other Methods, E. H. Sprague; The Stability of Arches, E. H. Sprague; Drawing Office Practice, W. Clegg; Estimating Steelwork for Buildings, S. Bylander and P. F. Gleed; The Theory of the Centrifugal and Turbo Pump, J. W. Cameron; Strength of ships, J. B. Thomas; The Thrust of Earthwork and the Design of Retaining Walls, E. H. Sprague. *The University Tutorial Press, Ltd.*—A First Course in Engineering Science, P. J. Haler and A. H. Stuart. *Whittaker and Co.*—High Speed Internal Combustion Engines, W. E. Dommett; Gas and Petroleum Engines, H. Garrard. *John Wiley and Sons, Inc. (New York).*—Elements of Highway Engineering, Prof. A. H. Blanchard; Elements of Railroad Track and Construction, Prof. W. L. Wilson, new edition; Field Engineering, W. H. Searles and Prof. H. C. Ives, new edition, 2 vols.; Graphics and Structural Design, Prof. H. D. Hess, new edition; Theory and Practice of Modern Framed Structures, part 3, Design, J. B. Johnson, C. W. Bryan, and F. E. Turneaure, new edition; Elements of Refrigeration, Prof. A. M. Greene, jun.; Engineering Thermodynamics, Prof. J. A. Moyer and J. P. Calderwood; Mechanical Equipment of Buildings, Profs. L. A. Harding and A. C. Willard; Mechanical Engineers' Pocket Book, Dr. W. Kent, new edition; Steam Boiler Economy, Dr. W. Kent, new edition; Alternating Current Electricity and its Applications to Industry, W. H. Timbie and Prof. H. H. Higbie, second course.