

development in the history of the British Association. He further referred to the remarkable advances in the making of scientific instruments during the last three hundred years, to the ever-growing importance of instrumentation, and to the unavoidable complexity of the apparatus needed for some of the simplest and therefore the most fundamental of scientific inquiries.

Admission to the exhibition was not confined to members of the British Association; to whom it was free, but the doors were opened to any member of the public on payment of the moderate sum of one shilling for one day only, while three times that amount guaranteed admission at any time during the fortnight of the exhibition. The results for the first week show that this arrangement was happily inspired, and that the exhibition was as popular with the outside public as with members of the association. The number of daily tickets sold was quite naturally largely in excess of the number of season tickets, but the demand for the latter was quite sufficient to justify their issue.

The exhibition committee was fortunate indeed in having at its disposal the excellent accommodation afforded by the Central Technical Schools, Byrom Street, and the exhibits occupied the rooms on three floors of this magnificent building. The fine lecture hall enabled daily lectures, in some cases illustrated by cinematograph films or experiments, to be given by men of science, a feature which contributed in no small degree to the success of the exhibition. The popularity of these lectures is sufficiently illustrated by the fact that arrangements were made for two at least to be delivered a second time—"The Optophone," by Professor Barr, and "Researches in Special Steels," by Mr. S. A. Main (Research Department of Sir Robert Hadfield's, Ltd.). Other lectures included "Ripples," by Professor L. R. Wilberforce; "Research and Industry," by Sir Frank Heath; "Experiments on Coal Dust Explosions in Mines," by Professor H. B. Dixon; "The Compass in Navigation," by Captain Creagh-Osborne, R.N.; "Flame," by Professor A. Smithells; "Kodachrome Cinematograph," by Dr. Mees (Kodak Co., London); "Developments in Wireless Telegraphy," by Commander Sleet (Marconi Co., London).

#### CANADA'S BUFFALO HERD

So successful have been Canada's efforts to save the buffalo from extinction that it has been found necessary, in order not to overcrowd the ranges in the great park at Wainwright, Alberta, to dispose of about 2,000 animals. Sixteen years ago it was the general opinion of naturalists and others that the buffalo was doomed to follow the passenger pigeon

and the great auk into oblivion. However, the Dominion Government, through the Department of the Interior, grasped the opportunity to secure a herd of 716 animals, and had them placed in Buffalo Park at Wainwright. To-day the greatest tribute to the government's foresight is the immense herd of 8,300 animals in the reserve; and the increase of these animals when protected and allowed to roam freely over a part of their old habitat has set at rest the fears as to their possible extinction and indicates a possible line of industrial development.

Notwithstanding the number taken from the herd from year to year to supply specimens to other parks in Canada, the United States, Great Britain and other parts of the Empire, it was found that some other disposition must be made of a large number in order that the park might not become overcrowded. Hence the decision, indicated above, to kill two thousand animals, surplus to the requirements of the herd.

All arrangements have been completed for the killing which will be conducted by experienced men under the supervision of government officials and carried out with expedition and the employment of humane methods which will also insure the best economic results. Experiments have been made in every phase of the work and the plans incorporate the most modern methods in connection therewith.

In Buffalo Park certain ranges are retained as winter quarters, where grazing is not permitted in the summer months, in order that ample forage may be provided for the cold season. When the time comes for the migration to the winter quarters this fall the animals which are to be killed will be kept in the main enclosure and not allowed to enter the reserved areas with the main body of the herd. Riders will herd the selected animals and drive them near the buildings where the dressing is to be done. The buffalo will then be quickly dispatched by expert marksmen using powerful rifles, this being the most humane method of dealing with animals of such size and strength.

The autumn has been selected for the killing since atmospheric conditions at this season are more favorable for the handling and preservation of the meat, and also because at this time the buffalo is in prime condition, that is, in good flesh and with an excellent coat ready to resist the severities of the winter.

The contract for the slaughter calls for the preservation of the hides and heads, which will be prepared for market as they can best be utilized. Robes, garments and novelties can be manufactured from the hides, while the mounted heads provide an ornament much in demand. The sum thus secured will be used to help to meet the cost of maintaining the herd, and it is hoped that it is but the beginning of a revenue of considerable proportions from this source.