## WHAT SCIENCE AND COMMERCE MAY GAIN FROM AN ANTARCTIC EXPEDITION.

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What is to be gained from an Antarctic Expedition is a question so frequently asked that some notice should be taken of it, and an answer framed that, if possible, shall be

satisfactory.

Perhaps a reference to what has been done by Arctic Exploration may encourage belief that some benefit would accrue from a properly equipped expedition to the Antarctic region. Observations in the far north have been of incalculable value for the confirmation or correction of scientific theories relating to ocean currents, magnetic deviations, climatology, geographical distribution of plants and animals, and a host of similar subjects; while, as to commerce, it is only necessary to mention the discovery of the White Sea route to Russia, with its consequent trade, the establishment of the Spitzbergen fisheries, and the opening up of new and lucrative whaling grounds in Baffin's Bay and Prince Regent's Inlet, as convincing proofs of the usefulness of many expeditions that promised less in the way of discovery than one to the Antarctic regions. Magnetic researches of the higest value were made during the voyage of Captain Ross to the South Polar regions, and he was able to fix the position of the line of non-deflection of the compass.

Until we know all that can be discovered as to the limit of pack ice, the extent of the Antarctic Continent, the influence of Mount Erebus, the distribution of flora and fauna, and the probabilities of successful whale fishing, there will still be enough to gain, either from a commercial or scientific point of view, to make it worth while to send an expedition to the Antarctic regions. If the *Times* (England), has been correctly reported, it advocates, in preference to an Antarctic Expedition, a fresh attempt to discover traces of Leichhardt in Central Australia. One can scarcely conceive what comparison is possible between the two, though each might be said to be desirable from different points of view, but if they are to be compared, I should be inclined to think that by far the greater advantage, whether for scientific or commercial purposes, lies with the expedition we are

considering.

Dr. Neumayer, who for many years has kept the subject of Antarctic Exploration before Germany and the world, com-

ments on the importance of scientific observations inside the Polar Circle, and maintains that for the purpose of discovering those general laws which are necessary as guides and standards in the interpretation of phenomena in climatology and physical geography generally, the South Polar regions are much better adapted than the North. The dictum of Captain Cook, that the ice he met in lat. 71deg. 10min. S. extended to the Pole, and his prediction that no man would venture further than he had done, was set aside successfully by Captain Ross, who penetrated 420 miles to the south of the point at which the great navigator turned back.

With the general results of his voyages, accomplished, be it remembered, without the aid of steam, you are all perfectly familiar. And here let me say that while heartily sympathising with the Geographical Society of Australasia in its efforts to assist the proposed expedition under Baron Nordenskiold, and appreciating the private liberality which has been displayed in the matter, I yet think the sum of £10,000 quite inadequate to produce any great results, or to fit out an expedition that would do much more than has already been done.

Let England and Australasia unite in sending an expedition, so equipped and manned, that failure, if not impossible, shall at least be unlikely, and we may confidently look for results that shall satisfy even the most incredulous as to the wisdom of Antarctic Exploration. Some remarks by Dr. Petermann on "Circumpolar Expeditions," read at a meeting of the Royal Geographical Society, of London, are worth quoting for their applicability to the case in hand:—
"Although the Geographical and Scientific world," he says, "would be contented were an Expedition sent out for the sake of Science alone, nevertheless the whale fisheries in the Polar regions are also of great importance, as instanced by the one fact that the American whale fisheries in Behring Straits amounted in two years to the value of 8,000,000 dollars.

The English, having the best men, vessels, outfit, and resources, are best fitted to send out an expedition. When the French and American Expeditions, under Captain d'Urville and Lieutenant Wilkes, were sent out to the Antarctic Seas, together with Sir James Ross, it was clearly seen that only the English were quite at home in the Polar elements; they fearlessly went on with their important explorations for three consecutive years, whereas the other squadrons were always beaten back in their attempts to penetrate towards the South Pole. Captain Sherard Osborne, R.N., C.B., an eminent authority on the Polar regions, in a paper read before the Royal Geographical Society of England in 1865, speaks as follows:—"An

exploration of the Polar area should always be sent under naval auspices and naval discipline. I have no faith in purely private expeditions; on such a service as this I advocate we need all the resources of a naval dockyard, all the special knowledge collected in various departments—whether in the preparation of vessels, food, raiment, sledges, or equipment—to insure the work being well and safely done. The Navy of England cries not for mere war to gratify its desire for honourable employment or fame, there are other achievements it knows well, as glorious as victorious battle. Upon these points, as well as those of scientific results, it would not be too much to ask for a fraction of the vast sum yearly sunk in naval expenditure, for two small screw vessels and 120 officers and men, out of the 50,000 men annually placed at the disposal of the Admiralty."

This practical advice, coming from such an authority in 1865, is worthy of serious consideration at the present moment. In a letter written by Lady Franklin, dated Madrid, April 6, 1865, the following passage occurs:—"For the credit and honour of England, the exploration of the North Pole should not be left to any other country. It is the birthright and just inheritance of those who have gone through fifteen years of toil and risk in Arctic Seas. The glory that yet remains to be gathered should be theirs."

I should like to say in concluding, for the credit and honour of England and Australasia, the exploration of the South Pole should not be left to any other country, but should be taken up by England, who would, I am sure, be ably and willingly assisted by her loyal Australasian subjects.

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