

## ANTARCTIC EXPLORATION.

MR. C. E. BORCHGREVINK contributes to the *London Times* an article on 'Antarctic Exploration,' in which he deduces reasons, both commercial and scientific, in favor of undertaking an expedition toward the South Pole in the near future. The recent Antarctic expedition was a commercial venture, and was equipped with the object of capturing the 'black whale,' valuable for its whale bone. The failure to accomplish this object is attributed by Mr. Borchgrevink to the fact that the expedition did not penetrate far enough into the large open bay in the vicinity of the volcanic peaks, Erebus and Terror. This bay and South Victoria Land were discovered by Sir James Clark Ross in 1841, whose predictions that large numbers of the black whale would be found in the southern latitudes Mr. Borchgrevink believes will be verified in the future. The blue whale is present in large numbers, but in the recent expedition (the first since 1841) these could not be captured owing to the lack of proper appliances. There is also a probability of finding many seals. The guano beds discovered by the 'Antarctic' are reported to be well worth the attention of business men. From the analysis of specimens of rock brought back from the mainland there is a possibility, or even a probability, of the presence of valuable minerals. The discovery of vegetation on the mainland also materially increases the possibilities. Mr. Borchgrevink considers it undesirable, while practically little is known of the many hundreds of miles further north, to attempt at present to reach the pole, but urges that if this can eventually be reached the value of observations made at the south magnetic pole would be of very great scientific value.

Mr. Borchgrevink then describes the plans proposed for the expedition which he hopes will be undertaken next season. It

has been suggested that the members of the expedition, with appliances and food, should be taken to Cape Adare in a whaling vessel and left there until the ice breaks up in the following summer; that the whaler should then take in cargo, sail for Australia and pick up the exploring party (which would go into winter quarters on the peninsula at Cape Adare) on the return voyage. Mr. Borchgrevink, however, urges that a small vessel (say of 200 tons), to fall back upon in case of need, would greatly add to the safety of the party. A small light vessel would be able to encounter dangers which would be insuperable for a bulkier craft. Mr. Borchgrevink considers the number of men sailing with the expedition should not exceed twelve and that these should be chiefly composed of men of culture. Besides the ordinary outfit on board, which should be of the best, it would be necessary to include two good whaling guns with harpoons and other tackle, Norwegian ski and Canadian snowshoes with necessary footgear. The expedition should also have a sufficient number of sledges, and to drag these a large number of Eskimo dogs would have to be procured. Fuel for 18 months would form a very important item.

Mr. Borchgrevink also recommends two or three semi-globular shaped huts, composed of hard wood, so built as to withstand the pressure of the snow and the force of the wind, and covered with some material capable of resisting a possible rain of stones from the adjoining volcanic craters. A captive balloon with the necessary appliances on the vessel would be extremely valuable, both for the purpose of ascertaining the exact location of open water within the pack, and also to enable a closer view of the magnificent aerial phenomena appearing in these latitudes. It would be desirable also to include letter-carrying balloons in the outfit.