RETURN OF THE ANTARCTIC EXPEDITION.

CONVERSAZIONE AT THE TOWN HALL, WEDNESDAY, APRIL 18, 1900.

WELCOME TO THE LEADER, SCIENTIFIC STAFF, CAPTAIN, AND MEN.

A welcome, in the form of a conversazione, was given by the Council of the Royal Society of Tasmania at the Town Hall, on Wednesday evening, April 18, to Mr. Borchgrevink and those who accompanied him on the recent Antarctic Expedition. The attendance was large and fashionable, and amid such a gathering it would be impossible to give anything like an accurate list of names. A perusal of the names of those who tendered a welcome to the returned explorers will show how representative was the gathering. Owing to the indisposition of his Excellency the Governor, the Chief Justice (Sir John Dodds) presided. Lady Gormanston and party, however, were present. In addition to Mr. Borchgrevink, the members of the scientific staff and the officers and crew of the steam yacht Southern Cross were on the platform, and also a couple of dogs that had taken part in the expedition. In one corner of the platform was a map showing the points that the different explorers had reached. As Sir John Dodds, Mr. Borchgrevink, and others ascended the platform, the city organist played English and Norwegian national anthems.

The Chief Justice said—

In consequence of the regretted absence of His Excellency the Governor, who is *ex officio* President of the Royal Society, and the inability of Sir James Agnew, senior Vice-President, to attend, the Council have conferred upon me the great honour of presiding at this meeting. We have this evening the pleasure of welcoming Mr. Borchgrevink and his companions back to the port from which, sixteen months ago, they sailed away on their adventurous visit to seas and lands that may (in a sense of the word no longer applicable to any other region of the world) be called unknown. But our pleasure is mingled with sorrow that one of those who left us in the Southern Cross, one who, during his brief stay in Hobart, made many friends who

will not soon forget him, has not returned. I believe that it is now some eight years since Mr. Borchgrevink came to Australia, fired with the ambition of making a voyage of discovery to the Antarctic regions. In his many endeavours to accomplish this purpose he was greatly assisted by one well known to members of our Royal Society, the late Baron von Mueller, of Melbourne. After experiencing much disappointment, Mr. Borchgrevink's hopes, or rather a part of what he hoped for, seemed at length likely to be realised. A Norwegian steam whaler arrived in Australia on her way to the Antarctic in search of the sperm and other whales. Abandoning at once the scholastic work on which he was engaged in New South Wales, Mr. Borchgrevink proceeded to Melbourne in the hope of being able, with Baron von Mueller's assistance, to arrange for a passage in the whaler. But in this he was disappointed: whales, and not scientific discoveries, were the business of the Norwegian captain's voyage and he had no wish to encumber the very limited accommodation of his vessel with a passenger whose objects were likely to clash with his own. Nothing daunted, however, Mr. Borchgrevink, finding that there was a vacancy on board for an ordinary sailor, offered his services, and they were accepted. The whaler at length arrived near Cape Adaie. A boat was lowered, Mr. Borchgrevink being one of the crew. Determined to be the first to set foot on the shore, he achieved this by jumping out of the boat into the icy water, with the result that he could fairly claim the distinction of being the first man to stand on Antarctic ground since the voyage of Captain Ross, sixty years before. So far as whales were concerned, this expedition was not a success; but so far as it stimulated Mr. Borchgrevink to "stick to his guns," I think that we may venture to say that the voyage of the whaler "Antarctic" by no means merely resulted in a waste of time and money. For we now find Mr. Borchgrevink more than ever determined to arrange an expedition to the south polar regions and, with a view to rousing public interest in his plans, giving lectures in these colonies, at home in England, and in the United States. At last he met with his reward. Sir George Newnes, widely and honourably known for his public spirit and liberality, fitted out at his own expense the well-equipped little vessel that now lies at one of our wharves, and Mr. Borchgrevink was appointed to the leadership and entire management of the expedition. As you all know, he arrived here in November, 1898, and just before Christmas in that year started on his long journey in search of the South Magnetic Pole. It rightly belongs to Sir Geo. Newnes to make known to the world the full details of what this expedition has accomplished. We have, however, already

heard sufficient to justify us in greeting our guests to-night as the first explorers who have penetrated that mysterious land of whose limits we as yet know so little, but which we assuredly may speak of as a continent, since, on a very moderate estimate, its size exceeds that of Australia. Mr. Borchgrevink is also the first to have reached the Southern Magnetic Pole; and it gratifies our just pride as citizens of Greater Britain that our flag has now been raised over this end of the great earth magnet, as it was raised nearly seventy years ago over the northern end by Mr. Borchgrevink's great predecessor in Antarctic work, Sir James Clark Ross.* In the situation of the two magnetic poles there is a wide difference. The Northern Magnetic Pole is on the mainland of America, in a region more or less inhabited, or at least which is further south than districts permanently occupied by the Esquimaux, forming, indeed, a part of the Dominion of Canada. On the other hand, the South Magnetic Pole lies beyond many hundreds of miles of ice-covered ocean and land, and fully two thousand miles from the nearest dwelling of man. But I do not invite you to welcome our guests to-night as mere adventurous explorers—as men who have suffered hardships and overcome difficulties in going where no one has been before, and who by-and-bye will excite in us an arm-chair interest through the narration of those hardships and difficulties. They have a far more important, a far more serious claim to our regard; for they have carried with them into those unknown regions of the earth scientific training and skill, and they have brought back results which will in due time be built up into that ever-growing fabric of co-ordinated knowledge which is one of the chief glories and delights of the human mind. It is especially appropriate to us, as members of a Society whose aim is the promotion of Science, to bear this in mind; but I will proceed upon a broader basis than the fact that I am addressing the Royal Society of Tasmania. It is the birthright of every civilised man or woman to take joy in the progress of knowledge, even of knowledge which in all its details we individually do not, perhaps cannot, understand. And this is the true answer to that irritating question which shallow minds sometimes put when they hear of some new scientific discovery, "But is it of any use?" One wants to ask such people in return, "What do you mean by *use?* Do you mean something that will help some one to get richer?" For we can hardly help suspecting that this is the idea in most cases underlying the question. When we say a thing is of *use*, we understand by this that it satisfies or helps to satisfy some *human want.* And is not the desire to

* Sir John Ross was in command of this Arctic expedition, but it was his nephew, Lieut. J. C. Ross who first reached the Magnetic Pole, 1831.

comprehend more and more thoroughly the great universe in which we live, and the laws which govern it, one of the very strongest wants of civilised humanity? Does not the man who fails to appreciate this fact stand self-condemned as at bottom merely a barbarian? Let us take a hasty glance at the chief branches of science which will be furthered by Antarctic research, not only by the expedition whose successful return we are this evening celebrating, and others of a similar character—that is to say, by operations conducted principally on land—but by all the various methods of exploration and investigation of the Antarctic regions which we may feel certain will more and more fully and vigorously be adopted in the coming century. I have time for little more than a bare enumeration. First, there is the geographical problem. As was pithily said by Major Darwin at the last meeting of the British Association, the greatest unknown feature of the Antarctic regions is the Antarctic Continent itself. The whole unknown region embraces an area of some six or seven million square miles, with a circumference of, say, 9,000 miles. The magnitude of these figures is rather appalling, and it is clear that the work of becoming acquainted with such an area, or even with such parts of it as may prove accessible, will last for many years, and engage many expeditions. What is most wanted at first is to attack the problem in a way which may be described as taking samples—as many as possible. Mr. Borchgrevink's expedition has just obtained a sample in a region of especial interest, that surrounding the Magnetic Pole. But besides this detailed examination of small portions, more extended operations acting circumferentially would be of great interest, particularly as giving us a truer idea of the extent of the Continent and of its outlying islands and archipelagos. At present no man can say whether nearly the whole area I have mentioned is continental or only about half of it, or, it may be, even less than that. Such preliminary reconnaissances may take the form of either coasting voyages or land travel along or near the coasts. The nature of the icy covering of both sea and land will determine the best course to pursue, and in different parts of the circuit different methods will very possibly be found most effective. Either form of expedition will find far more objects of investigation, coming under the head of physical geography, than the mere charting of coast lines. On the one hand, there is the vertical contour of the land to be observed, and the problems, merging into the domains of the physicist and the geologist, connected with its glacial covering, its mode of accumulation, structure, movements, and ultimate separation and dispersion. Petrological examination of the rocks will

doubtless throw light on the history of this portion of our planet; indications will there be found either of the permanence, or the reverse, of its glaciated condition during past geological ages. On the other hand, observers on the sea will be able to gain information as to its depth and the vertical distributiou of temperature, nature of sedimentary deposits, the character and inter-relation of floating ice in all its varieties, the seasonal changes and movements of the ice and their bearings on the temperature of the water and on oceanic circulation generally throughout the whole Southern Hemisphere. Much of this work will involve the undertaking of voyages of circumnavigation outside the areas where ice obstruction is a serious impediment. If these are prosecuted simultaneously with observations taken within the icy regions, of course the results will be much more capable of effective co-ordination. Passing from the domain of physical geography proper, the next branch of science to be mentioned is Meteorology. And here, more than in any other department, is the necessity apparent for observations continued for as long periods of time, and extending to as many stations as possible. At present any view we please as to meteorological conditions on the Antarctic land may be held, because we have no facts by which to regulate our speculations. Observations within the Antarctic region proper should be conducted in conjunction with the establishment of stations at such places as Cape Horn, the Falkland Islands, and the South Shetlands, the Crozets and Kerguelen, Macquarie Island, and the Auckland Islands. It will be seen that the places mentioned, together with a few others in their neighbourhood, fall naturally into three geographical groups, which we may designate as the South Atlantic, the South Indian Ocean, and the South Pacific. If with each group is associated a station to the south of it, within the Antarctic circle—say at Graham's Land, Enderby Island, and the Balleny Islands respectively—there will be three observational areas situated at about equal intervals round the globe, each of which would suffice to determine exactly the track of every cyclonic disturbance crossing it, while the three in conjunction would probably suffice to render account of every meteorological event of Antarctic origin that took place during the time the stations were maintained. This idea was suggested at the last meeting of the British Association by M. Arctowski, the meteorologist of the recent "Belgica" Expedition, who brought it forward as a scheme for international co-operation, and we may note that a similar scheme, due to Lieut. Weyprecht, of a set of international circumpolar stations was carried out some years ago in the Arctic regions with considerable results to science. But in our hemisphere such a

system would be likely to produce far more important results, owing to the much greater simplicity of the meteorological conditions, and the consequent probability that such observations would lead to a fuller understanding of the laws regulating the phenomena. It is obvious that such a set of observing stations on land would co-operate most importantly with any simultaneously conducted voyages of observation outside the pack ice area, for investigation of the phenomena of floating ice and oceanic currents and temperature, and that such co-operation would be mutual. It would extend not only to the gathering in of the scientific harvest, but to many points of practical convenience besides. I may also remark that observations of ice and current seem likely to have a bearing no less considerable than that of direct meteorological phenomena upon the problems of our climate and weather, problems of an importance highly practical as well as theoretical. It seems difficult to resist the impression that the rainfall of the southern half of Australia, of Tasmania and New Zealand—not to mention South Africa and South America—must in its seasonal variations be largely influenced by the movements of the Antarctic ice; movements which we already know have the effect of causing large alterations, year by year, in the areas of open water—and perhaps, too, in the temperature of the water—whence our rain is derived by evaporation. If meteorological science, through such observations as I have referred to, ever arrives at the point when forecasts of our seasonal rainfall could be made 12, or even six months in advance, it is difficult to over estimate the pecuniary benefit that would accrue to the leading industries of Australasia.

I have left myself no time to do more than just mention two of the most important of the other scientific domains certain to be extended by Antarctic research. These are Biology, especially Marine Biology, and the science of Terrestrial magnetism The former was one of the principal objects of that great national undertaking, the cruise of the Challenger, which may be said to have inaugurated a new province of knowledge which has since been extended in a surprising way by the efforts of all the leading countries of the world, and which at the present time needs for its further development—perhaps more than anything else—the pushing forward of investigation into more southern regions. With regard to Terrestrial magnetism, we may bear in mind that its study formed the chief aim of the voyages of the Erebus and Terror, voyages which most people think of mainly in connection with geographical discoveries in the region from which Mr. Borchgrevink and his companions have just returned, but in which those discoveries formed only an incident. Although appealing but slightly, if at all, to "the practical man," to

science terrestrial magnetism is of the very highest interest, with its bearing on questions of pure physics on the one hand, and on the structure and history of our planet on the other. For our further understanding of this subject, observations, extended both in time and place, in southern regions are urgently needed.

The purpose of my remarks has been to draw your attention to the many and diverse questions whose solutions lie hidden in these southernmost parts of the earth—questions for the most part, though not wholly, of abstract interest—and to remind you of the prizes of knowledge which await the attack of investigators such as those for whose welcome we are met to-night. And we *do* welcome them most heartily, not only for themselves and for what they have achieved, but because their labours are representative of the interest in Antarctic research which, after many years, is now again awakening, and which brings promise of more and more of such achievement in the years to come. This is an interest we share with all the civilised nations of the earth, an interest deepened by the thought that we are confronted with problems which hereafter will engage the attention "of the loftiest minds when you and I, like streaks of morning cloud, shall have melted into the infinite azure of the past."

The Bishop of Tasmania said—

Mr. Chairman, and Ladies and Gentlemen,—Everyone will understand with what warmth and cordiality the Royal Society of Tasmania welcomes back the members of the Antarctic Expedition. They have indeed established a record. No expedition, with the exception of that of Ross, can be even compared with it for results, and it may well be that it may have contributed more than all previous expeditions put together in scientific results. Even the veriest tyro could not have lived for twelve months on the Antarctic continent without obtaining deeply interesting results, and we may be confident that Mr. Borchgrevink and his staff spent every available moment in observations and scientific research. We all of us remember the eagerness with which Stanley's account of his journey across Africa was awaited. I think I may assure the leader of this expedition that his story of the first sojourn on a still more unknown continent will be looked for with still greater eagerness.

And now, Mr. Chairman, perhaps it will not be out of place if I put before this audience, first, a very brief summary of what has up to the present been accomplished in Antarctic regions, and next, some of the points on which we hope for light. It may be that a pathetic appeal to Mr. Borchgrevink,

backed up by your pleading faces, may even permit him to give us, when he speaks, a few crumbs upon which to live till his record is published.

The map prepared for you by Mr. Morton will enable you to follow quite easily this short account of past Antarctic discovery.

The credit of first getting near the South Polar regions lies with the Dutch. In 1598, that is, in Queen Elizabeth's reign, Admiral Mahn discovered the South Shetlands in lat. 64°. But it is England that claims to have first crossed the Antarctic Circle (67° 30′ S.); Captain Cook twice crossed it in 1773 and 1874, and in 1874 he reached 71° 10′, and afterwards was the first to completely circumnavigate the Antarctic ice fields.

What is specially interesting in recording Antarctic travel is the fact that lat. 70° S. seems to be almost an English enclosure beyond which only one ship not English in its starting point has ever yet penetrated. I will come to the exception presently.

If you will look at the map you will note that a good many have approached lat. 70°, but few have crossed it. The Russian Bellinghausen just reached it in 1819-20, in two places, but did not cross it. Now follow the course of English enterprise within the charmed circle. Cook twice crossed in 1773-4. Biscoe in 1830 possibly crossed behind Enderby Land. But it is Weddell who made the next great step after Cook. In two sealing ships he beat Cook by three degrees, and reached 74° 15′ S., and saw no ice southward except three icebergs, but dare not proceed on account of time. The white space, therefore, on the map is not all ice, but uncharted surface. Weddell's furthest south, accomplished in a ship, is right in the middle of that white space. And so we come to Ross and Crozier's famous achievements. You will note also how Ross pierced towards the Pole from opposite sides, reaching in two successive years 78° 10′ from the Tasmanian side, and 71° 30′ from the opposite side. He also landed on two islands near Victoria Land—Possession Island and Franklin Island—(78° 10′ has been therefore until now the furthest south). The only ship not fitted out in England which has crossed 70° S. is the "Antarctic," with which Mr. Borchgrevink's name is also connected. So Norway has had the credit of reaching in a whaler 74° S., and also of recording the first landing on the Antarctic continent, and of gathering the first specimen of plant life at so high a latitude.

There sit before us now some 30 men who have beaten Ross by some 40 miles, have done it on land, and are with marvellous consistency keeping back their fascinating secrets.

The next expedition, ladies and gentlemen, is likely to be a joint one next year—an English and a German ship—sent by their respective Governments. I believe it is intended to divide the South Polar region into four quadrants, each ship to take two of them—and to take opposite pairs. Thus England would take what we may call for once "the Rosses"; Germany, the "Enderby" and "Weddell" quadrants.

I trust I have not wearied you by this rapid sketch. If you will bear with me for a few more minutes I will indicate just a few points upon which we desire information. Mr. Borchgrevink, when appealed to thus definitely, may be able to grant some slight favour to this audience, if it would be consistent with his engagements First and foremost—the *Magnetic Pole.* Ross believed he was within 160 miles of it, and located it with some certainty at 75° 5′ S. (the *North* Magnetic Pole being 73° 35′). We long to ask Mr. Borchgrevink whether he reached the Magnetic Pole. That, I fear, he may not tell to-night, but I wonder whether he may tell us whether Ross was right or wrong. Just that and no more.

The *Barometer.* At present it has been believed that the normal pressure in latitudes above 65° S., at sea level is 29° or less. We long to know whether this is confirmed. So, again, rain was said to be very rare, but snow fell every other day. Or, if we turn to *Icebergs*—At present the bergs of the Antarctic fields are known to be flat and stratified, breaking off from long lines of coast, *not* from deep fiords and down valleys, as at the North Pole. Has he found any exception to this rule? Or, if we turn to *Geology,* we have been given to understand heretofore that the Antarctic rocks are much the same as those on the West Coast of Tasmania. How exciting to our miners. There is also the theory that a continent once existed, of which Kerguelen, the Crozets, and Marion Island are mountain tops. Is there any fresh light?

Turning to *Flora.*—Up to the present Fuegia is said to be the centre of Antarctic Flora, and yet, strange to say, it contains English plants which grow nowhere in intermediate places; 44 per cent. of New Zealand flora being also Antarctic. Have any additions been made to this subject?

And lastly, and to some of us it is the most interesting subject—

What of *animals* and *birds*? Are there any land animals or land birds?

Turning to sea animals and sea birds—Did Mr. Borchgrevink meet with our mysterious mutton birds between May and September, when they vanish entirely from our world? We have learnt at present that other sorts of petrels form

well-defined rings, guarding the Pole, or acting as beautiful signals whereby almost to fix the latitudes roughly. Thus the albatrosses stop at 55° S., and white-bellied petrels take their place; but these, again, do not leave the dreaded pack through which all ships have to pass on the way to the inner open water. So the ice pack and the white-bellied petrel give way simultaneously to the black-bellied petrel, who conducts voyagers to the regions of the snowy petrel, which delights apparently in perpetual frost. Such facts (if they are facts) add romance to the mysterious Antarctic, and we long to know whether we may now add to our knowledge. It was Mr. Hansen's department.

I think that Mr. Borchgrevink may at least tell us by an imperceptible wave of the hand, or some slight motion, whether he has settled the question of the "right whale." Ross said he saw plenty. The Antarctic saw none. What is the truth? And if they again saw on many seals long and deep scars in parallel lines. Is it the shark which is responsible? If the Royal Society cannot elicit for your benefit answers to any of these questions, then we feel we really may ask for something to make up for our disappointment. That something is this—that when Mr. Borchgrevink unpacks his collections at home he will ask Sir George Newnes to grant us a few specimens. I have no doubt Mr. Morton's patriotic rapacity will do all that is possible. Ladies and gentlemen, the Royal Society at this splendid meeting desires to exclaim, in company with you all, "Well done, Southern Cross."

The Secretary of the Royal Society (Mr. Alex. Morton) read the following letters and telegrams: —

Letter from His Excellency, regretting his inability to attend and preside.

London.—Royal Geographical Society, April 4, 1900.—To C. E. Borchgrevink. — "Warmest congratulations." (Sd) Clements Markham, President.

Christiania, University of Christiania, April 3, 1900.—To C. E. Borchgrevink. — "Congratulations. Your success creating sensation."—Professor Mohn.

Royal Society of New South Wales, April 9, 1900.—"Hearty congratulations members of the Antarctic Expedition, from the Rayal Society, Sydney." (Sd) H. H. Knibbs, hon. sec.

Royal Society of Victoria, April 9, 1900.—"Hearty congratulations success- Antarctic Expedition."—(Prof.) W. Kernot, President.

Royal Society of South Australia, April 10, 1900.—"Royal Society of South Australia joins in hearty congratulations to the Antarctic Expedition." (Dr.) W. L. Cleland, President.

Royal Society of Queensland, April 11, 1900. — "Please convey congratulations Royal Society of Queensland to the members of the Antarctic Expedition." (Sd) J. F. Cailey, hon. sec.

Royal Geographical Society of Victoria, April 9, 1900.—"President and members of the Royal Geographical Society, Victoria, heartily welcome back C. Borchgrevink and his brave Antarctic Antarctic explorers."—(Sir) John President.

Royal Geographical Society of South Australia, April 4, 1900.—"Hearty congratulations; splendid result; expedition surpassing all previous Antarctic explorers; deeply regret Hansen's death; glad other members of the party are in good health, and hope the Southern Cross may call at Adelaide."—J. Bonython, Vice-President.

University of Victoria, Melbourne, April 6, 1900.—"Heartiest congratulations; as a member of the forthcoming Antarctic Expedition, anxious to see you."—Professor Gregory (Professor of Geology).

Norwegian Society, Melbourne, April 6, 1900.—"Norwegians congratulate you heartily on the success you have obtained."—A. J. Schrender, Vice-President.

Premier's Office, Hobart, April 14, 1900.—"The Premier regrets that absence from Tasmania on public business will prevent him being present at the conversazione to be held at the Town-hall on Wednesday, April 18, to welcome Mr. Carsten Borchgrevink and the scientific staff and officers of the Southern Cross. He will be obliged if Mr. Morton will convey to Mr. Borchgrevink and his plucky staff and officers his hearty congratulations upon the success of their Expedition, and upon their safe return to Tasmania." — N. E. Lewis, Premier.

From the Hon. Sir James Agnew, K.C.M.G., M.D., Chairman of the Royal Society of Tasmania.—My Dear Mr. Borchgrevink,—I greatly regret my inability to be present at the Town-hall this evening, but although absent, I desire, partly as being senior vice-president of our Royal Society, to give you and your brave companions my most cordial welcome on your safe return (unfortunately with one exception) from the Antarctic regions; and also to express my heartiest congratulations on the success of the work you have accomplished in the great cause of science. The published records of the work will be looked for with keenest interest by all your numerous friends in Tasmania. With best wishes to Mrs. Borchgreevink and yourself for a pleasant voyage on your return to the Old World.—I am, very sincerely yours, J. W. Agnew. C. E. Borchgreevink, Esq., F.R.G.S. Hobart. April 18, 1900.

Town Clerk's Office, Hobart, April 10, 1900.—Alex. Morton, Esq. Sir,— "I have the honour to acknowledge the receipt of your favour of the 9th inst., and wish to thank you for the kind invitation therein contained. The R.W. the Mayor desires me to state that, he being far from well, intends leaving town for Easter, and it is more than probable that he will be unable to be back on the date mentioned; but has instructed the senior Alderman (Mr. George Hiddlestone) to welcome Mr. C. E. Borchgrevink and the officers of the Antarctic

Expedition, on behalf of himself, Aldermen, and citizens."—I have, etc., J. W. C. Hamilton. Town Clerk.

Chamber of Commerce, Hobart, Tasmania, April 18, 1900. To C. E. Borchgrevink, Esq., Leader of the Antarctic Expedition.—Dear Sir,—"As representing the members of the Chamber of Commerce, I have sincere pleasure in welcoming you and your staff on your return to this port, after bravely enduring the extreme hardships of the South Polar Regions. I trust that all the information you desired to obtain by the expedition have been secured, and that you will return to Europe to enrich our geographical knowledge, and receive the encomiums you have so well deserved; and I trust to fully re-establish good health. The mercantile community of Hobart feel especially interested in the result of your labours, because this port has been the starting and returning point of the two most celebrated expeditions to Antarctic regions."—Yours, etc., C. H. Grant, President.

Field Naturalist Club of Victoria, Melbourne, April 10, 1900.—Alex. Morton. Dear, Sir,—"At our meeting last evening, I was instructed by resolution to forward the congratulations of the above club to the members of the Antarctic Expedition on their safe return and trust you will convey same to them." — Yours, etc., George Coghill, hon. sec.

Launceston Microscopical Club, Launceston, April 12, 1900.—C. E. Borchgrevink, Esq., F.R.G.S., etc. Sir,—"On behalf of the members of the above club, we beg to tender our hearty congratulations upon your safe return from the perilous voyage of discovery so nobly undertook in the interests of science, to the regions bounding the Southern Pole. We trust that in due course, when the final results of your work are made known to the world, the forecasts made two years ago will be amply verified. We also hope that, in the near future, you will be spared to have the privilege of leading a second expedition, so as to still further enhance our store of knowledge respecting the Antarctic regions. It is with deep regret that we heard of the lamented death of Mr. Hansen, of the zoological staff. We offer our sincere condolenc trusting his demise at the post of du may to some extent mitigate the loss." We have the honour to remain, on b half of the Launceston Microscopic Club, yours, etc., W. F. Petterd, Pre dent; F. E. Burbury, acting hon. sec.

To Carsten E. Borchgrevin F.R.G.S.—Sir,—The Council of t Civil Service Association of Tasman desire to join with other public bodi in the colony in tendering to you and the scientific staff and officers of t ship Southern Cross a very hearty w come upon your return to our shor from the Antarctic regions. Although do not expect you to publish here a of the results of your explorations, feel assured your discoveries duri your arduous expedition will necessari prove of intense interest to the wor at large and of great utility in scie tific circles. We wish the Southe Cross a pleasant voyage to Europe, a we trust that you and each of your co rades will receive a due recognition the indomitable pluck and perseveran you have exhibited. We remain, yo faithfully, Bernard Shaw, Presiden A. Moat, Secretary. Hobart, April 1 1900.

The Treasurer (Hon. B. S. Bird), behalf of the Government, welcom the leader and members of the exp tion, and expressed regret at the a sence of the Premier, which was avoidable. He was proud to take pa in the welcome which the Governme accorded to the leader and members the expedition. They welcomed t men, but not entirely without sorro as the expedition had cost a life. St they were anxious to offer the explore a true British welcome. (Applaus Of course they would like to hear so of the particulars of the expedition, b they must wait until a report was pu lished by Sir George Newnes. So people were apt to ask what was t benefit of the expedition? Whether t results of the expedition had a comme cial or geographical value, the inform tion obtained must be of great interes All they could do at present was heartily congratulate Mr. Borchgreevi and his party on their attempt to brid the gulf between the ignorance that w and the knowledge that now existed. I hoped to see a further exploration mad

as the expedition just made would be a base for future operations. It was to be hoped that Mr. Borchgreevink himself would lead another party with the same brave spirit that had characterised the recent exploration.

The Chief Secretary (Hon. G. T. Collins) endorsed what Mr. Bird had said. He would briefly extend to the leader and members of the expedition the heartiest congratulations and welcome that they could give. The Government took an interest in the expedition, and on behalf of the northern part of the Island, as well as for the south, he welcomed the explorers back. (Applause.)

The Hon. Adye Douglas, as President of the Legislative Council, also tendered a welcome to the captain and members of the expedition. The party were to be congratulated on the success of their mission. Such a large and representative meeting should be gratifying to Mr. Borchgreevink, whom he hoped would soon return to Tasmania, and give them more information than had yet been imparted. (Applause.)

The Hon. Nicholas Brown, on behalf of the Assembly, also delivered a congratulatory address. The results of the voyage were not yet known, but all were aware that a great deal of bravery had been shown by members of the expedition, which entitled them to the warmest of welcomes. Tasmania was an outpost of Great Britain, and was also an outpost in the cause of science. The Royal Society of Tasmania had done much in the way of fostering and extending science. Although the benefits of the recent exploration seemed remote, they would in the future have an important bearing on the world generally.

Alderman Hiddlestone (in the absence of the Mayor) read an address of welcome from the City Council. After congratulations, the address noted that the citizens had eagerly awaited the return of the explorers, and now still more eagerly awaited the report of their expedition: and, finally, expressed regret at the death of Mr. Hansen. Alderman Hiddlestone added several hearty words of congratulation and welcome on his own account.

Addresses of welcome were also presented by the following bodies:—The Marine Board of Hobart (by Captain T. M. Fisher); Australian Natives' Association (by Mr. A. J. Nettlefold).

The Chairman explained that Colonel Legge wrote congratulating Mr. Borchgrevink and the other members of the expedition on the success that had attended their undertaking.

Mr. Borchgrevink, who was received with long-sustained applause, said:—Lady Gormanston, Sir John Dodds, ladies and gentlemen,—I am rather in an unfortunate position to-night in one way—wishing to say much and still obliged to say little. I shall not make an exception from a rule I always follow—multum in parvo; I like to say much in little, and I hate doing the reverse. However, I feel that the good-bye we of the Southern Cross got from Hobart, and the reception we have got here to-night, justify me in opening-out my heart so much that I find some revelations I must make. ("Hear, hear," and applause). Well, we have been successful. We have carried-out the aim of the expedition. (Loud applause.) Thanks, that is, to all on board, from my scientific staff to the humblest sailor. (Applause.) Everyone has been a cog in that wheel which is necessary to carry human knowledge onwards. Standing here to-night speaking not alone on behalf of myself, but also on behalf of those who risked their lives, and who at all times were ready without murmur to endure all for the purposes for which they had joined the expedition—I feel that we are a small band and that Providence has kept a protecting hand over us, and helped us in our efforts; and I feel also that this small band will only be the poineers of a roll of illustrious Britons who we hope will benefit by our experience. (Applause.) Not least, I believe, will Tasmania benefit by giving a helping hand in future Antarctic research; for I believe that the opening up of Antarctic exploration in the year 1900 must in time to come be a bright intellectual landmark in the history of the culture of the nations of the Southern Hemisphere. (Applause.) When we left, the Bishop was kind enough to inform me that he did not expect impossibilities from us; I was very glad to hear it, and I hope he will maintain that kind feeling now. (Laughter and applause.) Especially as touching upon the position of the Magnetic Pole. He asked whether Sir Jas. Clark Ross's calculations of the position of the South Magnetic Pole were

accurate or not. It is impossible for me to say; because the South Magnetic Pole is not stationary. We have at present determined the present position of the South Magnetic Pole; and we have been fortunate enough to penetrate further south than man ever put foot before—deg. 78.50. In the biological direction great discoveries have been made, some of which must needs startle the scientific world and upset former theories about these regions. When I in 1896, at the Imperial Institute, before the International Geographical Congress, had the honour to lay down my first plan of Antarctic exploration, I proposed to winter on the Antarctic Continent. That plan had never been put before the world before, and considerable doubt arose as to whether it would be feasible, or at least advisable, to venture it, because of the meteorological conditions there. We did not know whether the forces within the Antarctic circle would be too hard for human endurance and energy; and when we landed on that small slip of land, where our modest little hut was put up, we did not know whether the water at high level would come over the slip of land, nor whether the cold would be too much for us; and we did not know the force of the wind in those regions. Touching on meteorology, I will say that the forces observed in the Antarctic circle are far beyond expectation, and we have had hard and difficulties from these conditions, which also will come as lightning from a clear sky to the scientific world. I cannot but feel that your good-bye to us here in Hobart followed us, stimulating us through times of trial. We felt that kind hearts beat in the nearest civilised country to us—Tasmania. (Applause.) We knew that kind hearts beat in Europe also; but still our thoughts drew us to the nearest land where we last found interest and heartiness. As a result of this expedition great discoveries must rapidly follow. I hope shortly to be able to lay some of our experiences before the Royal Geographical Society of London, and thus help the great national enterprise of Antarctic exploration, which is proposed. Some of our ancestors—some of the old Vikings—settled on the English shore, and so the Great British nation and the Norwegian stand near together. (Applause.) I hope the British Antarctic enterprise will be still successful, and I hope some Norwegians may be able to share in it. (Applause.) It is good to feel for the small countries. I know that it is an honour to sail under the flag of such a nation as the British—(applause)—and that each small nation standing under the Union Jack is nearer to victory than any other. (Renewed applause.) As a boy I read the reports of Sir James Clark Ross's voyage with admiration; now, after our experience, I read them with reverence. (Applause.) How that great navigator, without the help of steam, managed to do what he did, and enlighten the scientific world as he did, I do not know.—There were lion hearts aboard the Erebus and Terror. (Applause.) Great risks are met with within the Antarctic circle, and I think it would be wrong of me not to put great weight on one point in advising future expeditions; that point is—two vessels! (Hear, hear.) When the vessel left us down there, we first really realised that we were cut off from the great beating world—2,500 miles south of Australia—with no means whatever of returning to civilisation, in case the Southern Cross met with disaster. To-day, now we have succeeded in landing here, I feel the more how much each has had to depend on the other—how each, from the humblest sailor upwards, has had to do his utmost towards our success; and I feel how much one must recognise the protecting hand of Providence all through. In thanking you for your kind reception to-night, I will only say—I hope and believe that in the future any Antarctic expedition, from whichever country it may come, will call here—(applause)—as a better port and kinder hearts cannot be met with. (Loud applause.)

A number of solos on the organ were played by Mr. T. Julian Haywood, and Mr. J. Brown, with the Vice-regal band, played a piece composed by himself, in honour of the members of the expedition, and entitled "The Southern Cross Waltz."

At the conclusion of the programme, refreshments were served in the anteroom.