

Captain Robert F. Scott

The Forthcoming Antarctic Expedition

ION OF GREAT BRITAIN





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Antarctic Expedition

by

Captain Robert F. Scott, C.V.O., R.N., D.Sc., F.R.G.S.



Lecture delivered by Captain Robert F. Scott at the
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WEEKLY EVENING MEETING,

Friday, May 27, 1910.

The Right Hon. Sir HENRY BURTON BUCKLEY, P.C., M.A.,
Vice-President, in the Chair.

CAPTAIN ROBERT F. SCOTT, C.V.O., R.N., D.Sc., F.R.G.S.

The Forthcoming Antarctic Expedition.

IN SETTING forth the plans of the coming Antarctic Expedition, I am anxious to give such information as will enable those who have a close or personal interest in the enterprise to picture our doings during those long months when we must necessarily be out off from communication with the world. At the same time I am too familiar with the unexpected happenings on such a venture to suppose that plans can be exactly or even closely followed, and I do not wish it to be supposed that I have failed to contemplate the possibility of circumstances which may upset some, if not all, calculations, and cause the results of the expedition to be very different from those which I am now attempting to foreshadow.

There is, unfortunately, a sharp difference of opinion as to the value of Polar exploration, and as to the results of Polar expeditions. The general public, whose knowledge of such matters is derived from the sensational press, can count success only in degrees of latitude, and hitherto it has been content to accept little more than bare assertion in support of such claims. On the other hand, there have been those better informed, and even eminent men, who have held or have affected a contempt for all result but that which accrues from the more advanced scientific study of the regions visited.

Within these limits there is every shade of opinion as to the relative value of the objects

to be pursued, and beyond them there is, and I fear will ever remain, the class which sees no good at all in Polar exploration. Excepting this last, I would express the opinion that there is much to be said for all points of view.

I submit that the effort to reach a spot on the surface of the globe which has hitherto been untrodden by human feet, unseen by human eyes, is in itself laudable; and when the spot has been associated for so long a time with the imaginative ambitions of the civilised world, and when it possesses such a unique geographical position as a pole of the Earth, there is something more than mere sentiment, something more than an appeal to our sporting instinct in its attainment; it appeals to our national pride and the maintenance of great traditions, and its quest becomes an outward visible sign that we are

still a nation able and willing to undertake difficult enterprises, still capable of standing in the van of the army of progress.

But though this attainment of a pole of the Earth be in itself a high enterprise worthy of national attention, it must be obvious that there are various ways in which such a project can be undertaken. It is possible to conceive the record of a journey to the pole which would contain only an account of the number of paces taken by the party, the food eaten, or the clothes worn. The interest of such a record would be entirely marred by our disappointment that so rare an opportunity to add to human knowledge should have been missed.

It becomes, therefore, a plain duty for the explorer to bring back something more than a bare account of his movements; he must bring us every possible observation of the conditions under which his journey has been made. He must take every advantage of his unique position and opportunities to study natural phenomena, and to add to the edifice of knowledge those stones which can be quarried only in the regions he visits. Such a result cannot be achieved by a single individual or by a number of individuals trained on similar lines. The occasion calls for special knowledge and special training in many branches. I have entered into these preliminary explanations in order to show the objects I have had in view in organising the expedition.

I have arranged for a scientific staff larger than that which has been carried by any previous expedition, and for a very extensive outfit of scientific instruments and impedimenta. Doubtless there are those who will criticise this provision in view of its published object—that of reaching the South Pole. But I believe that the more intelligent section of the community will

heartily approve of the endeavour to achieve the greatest possible scientific harvest which the circumstances permit.

In discussing my plans, it is perhaps as well to start with an itinerary. The *Terra Nova* will leave London in a few days—that is, on June 1.* She is to sail to Portsmouth for the adjustment of her compasses, and thence to Cardiff to complete her cargo of coal. She leaves Cardiff on June 15, and will reach Cape Town, after a call at Madeira, about August 1. After a week's stay she will sail for Melbourne, reaching that port approximately on September 13. After a week at Melbourne the ship will sail to Sydney, and thence to Lyttelton, New Zealand, where she is timed to arrive on or about October 13. The few stores that have not been shipped in London, such as petrol for motor sledges, forage for the ponies, and a supply of frozen mutton, will be taken on board at Lyttelton, as also the ponies, dogs, and motor sledges. As is generally known, a member of the expedition, Mr. Meares, left London several months ago to proceed to Siberia to collect the twenty ponies and thirty dogs which I have decided to take. I have received most satisfactory accounts of his progress, and feel confident that the animals that he will ship from Vladivostock via Kobe and Sydney to our base, will be as good as it is possible to obtain for our purposes.

Hitherto it has been the custom for expeditions to sail to the south in the latter end of December, as it has been thought

* *Terra Nova* left West India Docks, London on June 1, 1910, Portsmouth and The Solent on June 7, Bute Docks Cardiff on June 15, and Madeira on June 26. She reached Simons Bay, Cape Town on August 15, reached Melbourne on October 12—she apparently did not go to Sydney—and reached Lyttelton on October 28. She left Port Chalmers, New Zealand, for the Antarctic on November 29, 1910.

impossible to penetrate the ice-pack at an earlier date. I think that in a large ship like the *Terra Nova*, which has considerable power for a vessel of her type, it is well worth making the trial to secure the advantage which would be obtained by penetrating the pack at an earlier date; and I therefore propose to leave New Zealand towards the end of November. If all goes well, we should reach McMurdo Sound towards the end of December. Should delays occur, they may be profitably employed in taking soundings and making biological investigations.

Immediately on arrival in McMurdo Sound the hut, provisions, and equipment of the Western party will be landed. The party will consist of from twenty-two to twenty-five persons, and as soon as the winter station has been thoroughly established the greater number of these will proceed to the south to lay depôts.

I hope that it will be possible to start this party off not later than the third week in January, when sixty or seventy days remain for travelling. At the same time the ship will leave McMurdo Sound and proceed to the eastward. The region of King Edward's Land should be reached before the end of January or very early in February. If open seas are to be found in this region, they are certainly most likely to occur about this date. I believe that the exploration of King Edward's Land can best be conducted by landing a wintering party in this region, and every provision is being made for this object. A second hut, provisions, complete outfit, and travelling equipment for six men have been set apart, and, if a suitable spot can be found, a party of six or seven men will be left there.

I realise that this part of my plan is beset with many difficulties. A suitable wintering-place may not be found, and, even if found,

the difficulty of landing stores remains, in a region where heavy pack-ice is continually on the move. But the interest of the exploration of King Edward's Land justifies a great effort in the attempt.

Our present knowledge of King Edward's Land is of the roughest description. We have seen rising snow-slopes, and have here and there caught a fragmentary glimpse of exposed rock. Does this mean an archipelago of small islands, or some part of the main continental mass? It is not difficult to see how many interesting problems of land and ice distribution depend on the answer to this question.

The small Eastern party, if left, will be left with full supplies and some transport facilities. They will have to face the unknown severity of a winter in one of the most inhospitable parts of the Antarctic regions; they will have to face unknown difficulties and dangers in the journeys they undertake. But I can imagine no direction in which the hardships and difficulties of sledge journeys will be more amply rewarded. Should this party be safely landed, I should endeavour to give them some connection with the Western party—400 miles to the westward—by landing additional stores at one or two places on the Barrier edge, if such places can be found.

After landing the Eastern party, the ship will return to McMurdo Sound, and then proceed to the northward. I am hopeful that at the latest this will be in about the third week of February, and that a considerable supply of coal will still remain. If that is so, she will be directed to investigate the pack in the region of the Balleny Islands, and to proceed to the westward through or to the south of these islands. My hope is, that by then again steering to the south, she may throw some further light upon the coast-

line between Cape North and Adélie Land, and reconnoitre this coast with a view to landing parties upon it on a future occasion. It will be remembered that we found the sea shallow to the westward of the Balleny Islands, and therefore, even if the *Terra Nova* is unable to undertake further geographical discovery, I hope that some time may be spent in biological investigations in the shallow waters of this sea. These objects will occupy the ship during the month of March, after which she will be directed to return to New Zealand.

Returning to the Western party, I hope that the month of April will find all safely established in the hut, with suitable depots laid well south on the Barrier.

During the winter, preparations will be made for a great effort to reach the South Pole in the following season. By that time we shall know what reliance can be placed respectively on the ponies, the dogs, and the motor sledges. But in any case a large party of men will be detailed for the Southern party. Some of the scientific staff will remain at the wintering station throughout the summer. A small party will act independently in the western mountains for geological purposes; but at least sixteen, and possibly more, men will accompany the main transport agents on the road to the south.

I may pause here to give my opinion on the conditions and prospects of the southern journey. We know now that the first phase of that journey must be over the plateau of the Great Barrier, the second a climb through mountain passes, and the third a transverse of a lofty inland plain. It is only possible, certainly not probable, that any means of transport can be taken beyond the first phase. If it is impossible, then we shall have, as had Sir Ernest Shackleton, to make all further advance with the unaided

efforts of men alone: Shackleton's party started on the second phase with full loads, and achieved what is probably the maximum that could be accomplished under such circumstances. The only manner in which such a record could be beaten is by taking a larger party of men and sending sections of them back at intervals. This is, of course, a well-known expedient in polar work, but it has to be remembered that each multiple of the original number of men only adds a fraction, and a diminishing fraction, to the radius of action. In other words, a party with the aid of a supporting party of equal numbers can only hope to achieve a distance one-third greater than it would have done had it been without a supporting party. Taking this fact into consideration, together with the increased risk of individual breakdowns which the larger number of men must bring, it must be evident that the achievement of the South Pole, in view of the distance which has to be traversed in the second and third phases of the journey, is by no means a certainty. Of course, one is not without hope that either the ponies, the dogs, or the motor sledges may traverse the disturbed regions of the glacier, and if this is possible the difficulty of the journey should be greatly diminished. But, even so, it must be remembered that the last phase of the journey, owing to the height of the plateau, has to be accomplished under climatic conditions which for severity are unequalled either in the Arctic or Antarctic regions.

The excessive winter cold of the Great Ice Barrier does not seem to commence to pass away until the month of September, and conditions of travelling remain comparatively severe even in October. For this reason, perhaps more on account of the animals than the men, I do not propose to start upon the southern journey until the month

of October. That month and the following will be spent traversing the Barrier and ascending the glacier. I should hope to reach the upper plateau fairly early in December. An ideal day for reaching the South Pole would be the 22nd of that month, when the sun achieves its maximum altitude.

Special 4-inch theodolites have been constructed for the expedition. With such instruments, and the sun at an altitude of 23°, there is no doubt that the position of the pole could be determined with an accuracy of 1 mile, and it is interesting to consider a situation where the sun could be followed by the telescope of the instrument for twenty-four hours without any perceptible difference in its altitude.

Such is the main outline of my plan for reaching the South Pole.

I will turn now to give you some idea of the men who will help forward these plans. Time does not permit me to more than briefly note their names and the work that will be entrusted to them.

Lieut. E. R. G. R. Evans, a distinguished navigating officer in the Navy, and the possessor of former Antarctic experience, will be second in command of the expedition. He will be in command of the *Terra Nova* on her outward voyage, and be landed in the Western party.

Lieut. Victor Campbell, an ex-naval officer, will be in charge of the Eastern party.

With the Western party, for surveying and general executive duties, there will be associated Lieut. Rennick, R.N., and Engineer Lieut. Riley, R.N. With this party also will be Mr. Meares, whom I have already mentioned as being in charge of the ponies and dogs; Mr. Ponting, the photographer of the expedition, whose work is so well known to the public; Mr. Day, in charge of the motor sledges; and Captain Oates will assist Mr. Meares.

Without counting the scientific gentlemen, other members of the Western party will be Mr. Cherry Garrard, Mr. Grant, and Mr. Feather, together with six or more members of the crew. The Eastern party will also contain at least four members of the crew. The crew has been informed that no selection will be made for the landing parties until the ship reaches the ice. It is obvious that I will then be better able to judge which of them is best suited for the requirements of shore work. It is perhaps interesting to note in this connection that besides Mr. Evans, Mr. Day, Mr. Feather, and Mr. Cheetham, the following members of the crew will have had previous Antarctic experience: Evans, Lashley [*sic*], Crean, Williamson, Smythe, and Heald (all of whom were members of the *Discovery* expedition), and Paton (who served in the relief ship *Morning*). The knowledge which these men possess of Antarctic conditions will, of course, be a great asset.

In dealing with the scientific work of the expedition I must confine myself to noting the names of the various members of the staff who will undertake the scientific work, the localities in which their services will be employed, and the bare outline of the subjects to which their attention will be turned. Dr. Wilson will be the chief of the scientific staff; his Antarctic services are too well-known to need comment. He will, as heretofore, study the birds and mammals in his scientific capacity, and as artist continue the charming series of sketches which so greatly enhanced the *Discovery* records.

I have regarded geology as one of the most important interests which can be served on our expedition, and I have therefore included three geologists in the staff. Subject to modification, my plan is that one should be with the Eastern party, the second with the Southern party, and the third should

have a roving commission to explore Victoria Land within an easy distance of the Western station. The services of two distinguished geologists have already been obtained to fill these places: they are Mr. Griffith Taylor, an Australian who has completed his studies at Cambridge as a '51 scholar; and Mr. W. G. Thomson, a Rhodes scholar, of New Zealand. The third place is not yet filled, and in filling it we propose to take the advice of Professor David, of Sydney University, who is probably the best judge in the world of the work which remains to be done and the men who should be selected to do it.

In contemplating the continued study of the marine fauna of the Antarctic regions, I have considered it as without the province of an expedition such as ours to undertake research work in oceanic depths; such work calls for an outlay of time and ship-space which could not be afforded by the expedition. I have therefore considered that 500 fathoms is the limit at which dredging operations can be conducted, and the equipment of the ship has been arranged accordingly.

Two gentlemen have consented to accompany the expedition for this work: Mr. Nelson, from the Plymouth Biological Laboratory, will be landed with the Western party, and will be given every facility possible to conduct researches in the waters of McMurdo Sound; Mr. Lillie will remain in the ship. It is difficult to say when and where his dredges can be brought into use, but I am hopeful that at least some opportunities may be found on the southern voyage, and that after the wintering parties have been landed, on the northern voyage, and especially in the shallow waters of the Belleny [*sic*] Islands, Mr. Lillie may have a chance to glean a rich harvest of result.

The subject of meteorology makes an

ever-increasing appeal to the domains of Polar research, in view of the fact, which is now very generally accepted, that Polar conditions have a preponderating effect upon the weather of the whole world. For this reason I am most happy to have secured the services of an eminent physicist, Dr. G. Simpson, a member of the Meteorological Department of India. Conversant with all the latest methods of exploring the upper air-currents and investigating the electrical conditions of the atmosphere, Dr. Simpson is prepared to take the fullest advantage of the opportunities which will be afforded for the exceptional, as well as for the more usual, routine observations of our meteorological station. Realising the importance of this work, I have allowed him a special hut and space for a very large outfit of scientific instruments. In addition to the meteorological instruments, self-recording magnetic instruments will be taken with the object of comparing the magnetograms with those obtained by the *Discovery* expedition, and ascertaining the secular magnetic changes as well as of connecting the more irregular changes with other physical phenomena. Arrangements have also been made for gravity observations, for auroral photography, and for the study of the other branches of physical science which Dr. Simpson will undertake.

Ever since my first introduction to the Antarctic I have felt that a new and most interesting field of research was open to any one who with trained abilities would undertake a close study of ice-structure in that region. Nowhere in the world can ice-formations be found with more varied characteristics. It seemed to me that these varied ice-formations could tell their history to the initiated as clearly as the rocks of our geological formations. Recent inquiry has

shown me that more competent persons than I have pursued this line of thought, and already the structure of the glaciers of the temperate climates has been studied with a view to disclosing the nature of their origin. For this study, and for the further investigation of physical problems which lie outside the scope of Dr. Simpson's work, I have obtained the services of Mr. Wright, a native of Toronto, and a scholar of Caius College, Cambridge, as chemist of the expedition. Mr. Wright's work is not so clearly defined as is that of others, but I cannot help thinking that it is by means of it that we shall best attack those great problems of the southern glaciation, and especially of the Great Ice Barrier, which yet remain unsolved.

Although perhaps the main scientific work of the expedition will be accomplished by the members of the shore parties, observations of the greatest importance will be made by those who remain in the ship. To Lieut. Pennell, an officer of the Royal Navy, assisted by Lieut. Bowers, will be entrusted the survey or resurvey of any lands that may be seen, the task of keeping a complete and careful meteorological record, and the conduct of continual magnetic observations for variation as well as continual observation of the other elements. These naval officers, as well as those of the shore party, have been especially selected from that navigating branch of our service whose training best fits them for the work which they will have to perform.

I have left until last the mention of those officers who serve in that especially important dual capacity as medical and scientific men, being at the same time in charge of the health and well-being of the community and of important branches of the scientific work. Dr. Levick will be

landed with the Eastern party, and of that pioneer community will be the zoologist, botanist, photographer, and doctor. Dr. Atkinson, also a surgeon from the Royal Navy, will add to his medical duties the more delicate scientific work in which he has been especially trained, the study of bacteriology and parasitology. In the latter especially, a science in which great strides have been made in recent years, he looks for important results in an entirely new field.

Those individuals who will form the shore party and crew of the *Terra Nova* number fifty in all, of which twenty-four officers and men have been lent from the Royal Navy, one from the Army, and two from the public services of India; it is sufficient to add that all have been most carefully selected for the work, all have been medically examined and found fit for it, and all have already evinced that enthusiasm which is the stepping-stone to success. I am at least confident that if success does not attend our efforts, it will not be because the endeavour of my companions has failed to deserve it.

[R.F.S.]

The original of this offprint appeared at auction at Leslue Hindman Auctioneers, Chicago, on October 31, 2018, *The Adventure & Exploration Library of Steve Fossett*, Part I, Lot 178. Described as "extremely rare," it fetched \$5,500. Scott's talk was only a matter of days before *Terra Nova* departed for the Antarctic.



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