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Bellingshausen's Antarctic Voyage

Author(s): Hugh Robert Mill

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the town, and there in the presence of the said lord ambassador and the burger masters we made rehearsall of our voyages and adventures."

This memorable and tragic expedition became famous in the annals of Dutch navigation, and is still rightly regarded as one of the glories of Holland's heroic days. Hendrik Tollens wrote a poem upon it. De Veer's account of it was widely circulated, translated into many languages, and has been frequently reprinted, twice in English during the last century. Not till the year 1870 was Novja Zemlja circumnavigated; Captain Johannesen accomplished this feat, and visited the east coast of the island, when he approached but did not find Barendsz's winter quarters. In 1871 another Norwegian, Captain Elling Carlsen, of Hammerfest, took his sloop into Barendsz's Ice haven on September 7. On the 9th he discovered the ruins of the hut (16 metres long by 10 metres broad), and brought away from it a number of relics, which had been buried and preserved under a thick accumulation of ice. Measures were successfully taken by the Dutch Government to obtain possession of these treasures. They were presented to Holland by their purchaser, Mr. Kay.\* Captain Gundersen was the next to visit Ice haven in 1875. He found and brought away some old charts and manuscript translation of the narrative of Pet and Jackman's voyage of 1580. Finally, in 1876, Mr. Charles Gardiner sailed in his yacht *Glow-worm* through Matotchkinshar to Ice haven, and made a thorough examination of the ruins of Barendsz's hut. He brought back one hundred and twelve more relics, which he generously presented to the Dutch Government.† All these objects were brought together, and form the interesting collection now exhibited in the museum at Amsterdam.

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## BELLINGSHAUSEN'S ANTARCTIC VOYAGE.‡

By HUGH ROBERT MILL, D.Sc.

EIGHTY years is a long time to wait for an authentic account of one of the most remarkable and important of antarctic voyages; yet until the publication of this slim volume, only the few students of these matters who have an intimate acquaintance with the Russian language were able

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\* J. K. J. De Jonge: *Nova Zembla: De Voorwerpen door de Nederlandsche Zeevaarders na hunne overwintering aldaar in 1597, achtergelaten en in 1871, door Kapitein Carlsen teruggevonden.* The Hague, 1873. 8vo.

† J. K. J. De Jonge: *Nova Zembla: De Voorwerpen door de Nederlandsche Zeevaarders na hunne overwintering, op Nowaja-Zemlja bij hun vertrek in 1597 achtergelaten en in 1876, door Chs. Gardiner, Esq., aldaar teruggevonden.* The Hague, 1877. 8vo.

‡ F. von Bellingshausens *Forschungsfahrten im Südlichen Eismeer 1819-1821.* Auf Grund des russischen Originalwerks herausgegeben vom Verein für Erdkunde zu Dresden. Leipzig: S. Hirzel. 1902. Pp. 204.

to get at the full details of the voyage of the two Russian corvettes in 1819-21. Unfortunately the full details have still to be sought in Russian, for the 200 octavo pages now published by the Dresden Geographical Society concentrate a narrative which spreads over 730 quarto pages of the Russian original. We greatly regret that this condensation was necessary, the more because we find in the preface that Prof. H. Gravelius, to whom the translation is due, dictated a full translation of Bellingshausen's two volumes to a shorthand-writer, which was equivalent to 640 octavo pages, and then proceeded by judicious excision and compression to bring the mass of matter within the means of the Dresden Geographical Society to publish, "the fourth redaction—and reduction—of the original translation." This is a work of no mere local or temporary interest, and we wish that it had been possible to have secured the co-operation of larger and wealthier societies, in more countries than one if that were necessary, so that the whole text might have been laid before the people of Western Europe. Perhaps it is not too late to secure a full translation; perhaps we might hope that some one of the several wealthy promoters of antarctic research might give the few hundreds required for a full translation into English, illustrated with a map—which is wanting here though the original work had one—and helped in places by notes.

Yet we do not wish to detract from the immense credit due to Prof. Gravelius and the Dresden Society, for their book is most judiciously condensed, and, as far as we can test it—that, unfortunately, is but a little way—very accurately rendered. It is certainly of engrossing interest and, despite the remote date of the voyage, of refreshing novelty. We have, in fact, no criticism to offer, except that it might have been stated whether the dates are according to new or old style; they are given as in the original, and so must follow the Russian calendar. In referring to dates in this notice, we quote from the book, and eleven days must be added to make them correspond with the dates marked on Bellingshausen's track on the map given in the 'Antarctic Manual.' The temperatures might perhaps have been reduced to a common scale—some are cited in Réaumur, others in Fahrenheit degrees; but here again the translator follows the author. Without further comment we shall summarize the main facts as to the voyage, calling special attention to those parts least noticed in the brief and unsatisfactory accounts with which we have had to be satisfied hitherto.

The Russian emperor, probably on the advice of Baron de Traversey, the head of the Russian admiralty, resolved early in 1819 to send out two expeditions of two ships each simultaneously towards the two poles. The idea was imperial in its world-embracing magnitude, and autocratic in the speed with which the four vessels were selected, equipped, manned, and despatched.

The Emperor Alexander I. visited the vessels when they were

ready to sail, and entertained the captains at the palace before their departure, impressing on them his desire that they should act in the friendliest way towards all people, civilized or savage, whom they should meet. On July 4, 1819, the four ships sailed from Kronstadt, the *Otkritie* and *Blagonamerenni* bound for the Pacific to enter Bering strait and make the north-west passage; the *Vostok* and *Mirni* for a voyage in the south supplementary to that of Captain Cook. The *Vostok* was a corvette built at St. Petersburg in 1818 of unhewn pine-wood; she was copper-bottomed, and her masts and spars cut down to fit her for heavy weather. Her dimensions are given as—length, 129 feet 10 inches; breadth, 32 feet 8 inches; and depth, 9 feet 7 inches. These figures are accurately transcribed from the original, but the important qualifying word “of hold” after “depth” is not translated; the draught of water must have been greater. The second was a vessel of 530 tons, built of the same material as the *Vostok*, and, under the name of the *Ladoga*, intended for the navigation of the Baltic; she was, however, specially strengthened. The emperor changed the name to *Mirni*, i.e. “Pacific,” and her dimensions were—length, 120 feet; breadth, 30 feet; and depth (this time probably draught of water), 15 feet. She was a much slower sailer than the *Vostok*, and the narrative is full of records of the leading ship having to shorten sail in order to allow the *Mirni* to come up with her. Captain F. von Bellingshausen (who had made a circumnavigation with Krusenstern) had received his appointment to command the expedition on board the *Vostok* on April 24 at Sebastopol; it took him a month to reach St. Petersburg, so that his time for preparation was barely six weeks. The command of the *Mirni* was given to Lieut. Lazareff, who had served in the British navy for four years as a volunteer officer, and had since commanded one of the ships which kept up communication between Russia and Alaska. The *Vostok* carried 117 souls all told, including an astronomer and an artist; none of the work of the latter, however, illustrates this work, but it appears in the atlas accompanying the original narrative. The *Mirni* had a complement of seventy-two; no chaplain is mentioned in the list of officers of either ship, but there was a priest on board the *Mirni*, who visited the *Vostok* when weather permitted, and on the two vessels parting company for a time he was transferred to the bigger ship, where he could minister to the larger congregation. Two German naturalists were engaged to join the expedition at Copenhagen, but they evidently got frightened, and refused to join, sending very transparent excuses instead, and Bellingshausen tried desperately to fill their places, but in vain. On July 29 the ships anchored in Spithead, and Bellingshausen took coach to London to buy charts, books, and instruments. He was introduced to Sir Joseph Banks, the former shipmate of Captain Cook, and then President of the Royal Society, and through him tried to find two English naturalists to take the place of the defaulting Germans, but

a week's labour was given to the search in vain. The expedition waited in the hope of finding naturalists until August 25, and then had to sail without them, to the deep regret of the captain, who keenly realized the magnitude of the opportunities which would be open to him, and of which he would be powerless to take advantage. From a passage in the translation, one might suppose that a Russian naturalist may possibly have been found after all; for we are told that in lodging "the astronomer Simanoff and the naturalist Michaeloff" in rooms opposite to those of the two captains while the ships lay in Sydney harbour, the Mayor of Paramatta jocularly observed that science and navigation should never be separated. On referring to the original, however, we find that Michaeloff is called "painter from nature," and not "naturalist."

The ships touched at Tenerife and at Rio de Janeiro, where they met the Russian arctic squadron bound for Bering strait. A snow-storm was encountered on December 15, in  $53^{\circ}$  S., and next day South Georgia was sighted. The ships sailed slowly along the south coast, meeting a boat from two British seal-ships, which lay in one of the harbours, and discovering a small off-lying island, which was named after Annenkoff, one of the lieutenants of the *Mirni*. A running survey was made of the south coast of South Georgia, which was sprinkled plentifully with Russian names. The weather was foggy, with constant showers of rain and snow, and on the 17th the ships left the coast, steering for the South Sandwich islands. Halfway across a sounding was taken in 260 fathoms with no bottom, and a temperature observation of  $31^{\circ}.75$  Fahr. at 270 fathoms is recorded. In  $56^{\circ}$  S. the first ice-island was seen rising 180 feet above the sea, and covered with penguins, to the great amazement of the Russian crews. Innumerable whales were in sight, and albatrosses accompanied the ships. On December 23 a group of three small islands lying to the north of the Sandwich group was discovered, and named collectively after Baron Traversey, the Minister of Marine, who had equipped the expedition. One of the islands, named after Savodoffski, the first lieutenant of the *Vostok*, culminated in a remarkable summit, shaped like two SS leaning against each other, a puzzling description to which the translator not unnaturally affixes a query. The crater on this island emitted a thick cloud of vapour, and when landed upon the mountain-side half-way up was found hot to the touch; the warmth and freedom from snow made it the site of a great penguin rookery. An experiment was made in the use of melted ice hewn from the floating masses for making tea, and the result proved highly satisfactory, so that henceforth the ice furnished the expedition's water-supply.

Observations were made at this point with a special deep-sea thermometer enclosed in a sheet-iron cylinder provided with valves, through which the water passed freely as it descended, but was

retained on the ascent. At 220 fathoms a temperature of  $-1^{\circ}$  R. was obtained by this instrument, the surface temperature being  $+0^{\circ}5$  R.; but Bellingshausen had not perfect confidence in the contained water retaining its temperature unchanged. He proved, however, that the water at 220 fathoms was distinctly saltier than that at the surface.

The Candlemas islands, Saunders island, and Montague island, discovered by Cook, were passed on their eastern side, and recognized; the two latter had a fine appearance, seen as they were with the sunshine glittering on their covering of snow. The weather speedily relapsed into its normal state of fog and snow-squalls, and for several days the ships tried to make their way southward through an increasing number of bergs. On January 1, 1820, a glimpse of Bristol island was obtained through the fog, but the weather continued so bad that it was impossible for the officers of the *Mirmi* to come on board the *Vostok* for a New Year's feast. Next day the land of Southern Thule was sighted, and found to be a group consisting of one large and three smaller islands, all very high and inaccessible. Bellingshausen named the largest member of the group Cook island, in honour of its discoverer. On January 3 the parallel of  $60^{\circ}$  S. was crossed for the first time, but next day it was necessary to shape a northerly course, as the ice was impenetrable to the south, and the rigging was so encumbered with snow and ice as to make it almost impossible to manœuvre the ships. Southern Thule and Bristol island were passed on their western side, the group being circumnavigated for the first time, and on the 5th the ships were back in the position occupied four days previously.

A fresh attempt was made to get south, as the weather had improved, and with a strong westerly wind a steady course east by south was steered for many hours, affording a welcome rest to the crews, wearied by the incessant tacking of the previous week. On January 8, however, in  $60^{\circ}$  S. and  $18^{\circ}$  W., solid ice appeared once more to the south, and a course was held eastward through drifting bergs. The appearance of marine animals suggested the proximity of land, but no other indications were seen. On the 11th it was possible to steer south-south-east, and a slight but distinct swell coming from the south suggested the idea that the sea towards the pole was more open and free from ice than where they were. The Russian ships were now well to the south of Cook's homeward track, and in a stretch of ocean where no other vessel had ever sailed. On January 11, about  $12^{\circ}$  W., a fresh south-westerly breeze made it possible to set a course south-east through a clear sea, and as the wind veered to north the course was gradually altered to south, until, on January 15, the antarctic circle was crossed for the first time in  $3^{\circ}$  W. long., and next day the latitude of  $69^{\circ} 21'$  S. was reached on the same meridian. It is interesting to notice that when Biscoe passed along the same track eleven years later in the same month, he coasted

the ice-pack on a track almost coinciding with Bellingshausen's. For three days the *Vostok* and *Mirni* tried to work round the projecting promontory of ice which barred the way to the south and east, and on January 19 the way to the south seemed clear; though the ships were smothered in snow and the air-temperature was below  $30^{\circ}$  Fahr., there was little ice, and whales were blowing all round. On the 21st, however, a vast icefield appeared in the south, and the ships had to turn from a position in  $69^{\circ} 25' S.$ ,  $1^{\circ} 11' W.$  to the north-east once more, the circle being crossed northwards on the 23rd. Every moonlight night, when the stars were visible, was taken advantage of for lunar observations on both ships, the resulting longitudes being apparently of very fair accuracy. The eastward route had kept about  $5^{\circ}$  to the south of Cook's outward track on his vain hunt for Bouvet island, and at last, on February 3, it was possible once more to pass the circle southwards in  $18^{\circ} E.$ , and on the 6th the latitude of  $69^{\circ} 6' S.$  was reached in  $16^{\circ} E.$  Here a sounding showed no bottom at 180 fathoms, the air-temperature was  $-4^{\circ} R.$  ( $23^{\circ}$  Fahr.), and the sea was full of pack-ice, increasing in density towards the south. Whales were playing in the lanes of open water. While the great drifting ice-islands were obviously derived from the land, Bellingshausen satisfied himself that the pack-ice was produced at sea, for with a temperature of  $23^{\circ}$  Fahr. a month after midsummer, it was evident that the cold in winter must be very severe, while the immense snowfall of those latitudes and the condensation from the atmosphere on the cold ice must at all times of the year tend to increase the volume of the floating masses. Once more it was necessary to turn back, and the circle was crossed northwards on February 8 in  $21^{\circ} E.$  The weather continued wretched—gales, snow, and a temperature always below the freezing-point.

The last attempt to get southwards led to the crossing of the circle on February 14 in  $38^{\circ} E.$ , the point where Cook had made his first attempt to enter the real antarctic. The declination of the compass was found to have increased nearly  $11^{\circ}$  westerly since Cook's time. On the 15th the worst storm of the voyage descended on the ships; decks and rigging were covered thick with snow, a terrific sea washed over the vessels, and the greatest anxiety was felt as to the result. For three days the gale lasted, the wind blowing from north and north-north-east, while the snow-showers hid the drifting bergs until the ships were almost upon them, and every rope and spar had a crust of ice  $1\frac{1}{2}$  inch thick. The only chance of safety was to beat to the northward in the hope of clearing the ice, and in the end both ships emerged still in company and both undamaged.

On February 20 the ships were in  $63^{\circ} S.$ ,  $42^{\circ} E.$ , and they held a due easterly course to  $68^{\circ} E.$ , in order to look for any land in those latitudes that might have been missed by Cook when he made his great *détour* to the north in search of Marion island. Nothing was seen except

occasional floating ice, and, gradually working further north, they crossed the parallel of  $60^{\circ}$  S. on March 5, in  $87^{\circ}$  E., close to the point where Cook had crossed it southwards on the return from his northward trip. A few days previously the hundredth day of the voyage from Rio de Janeiro had been celebrated with great satisfaction, for the health of all on board both ships was excellent; but supplies were running low, and it was becoming necessary to revisit some port where they could be replenished. On March 4 an enormous iceberg was in sight, the height of which, as measured by sextant observations from the *Vostok*, was 375 feet, and from the *Mirni* 408 feet.

Bellingshausen now resolved to part company with the *Mirni*, in order to more thoroughly explore the sea south of Australia. He accordingly arranged for a rendezvous at Royal Company island, marked on Arrowsmith's map in  $49^{\circ} 30'$  S.,  $143^{\circ} 4'$  E., towards which point the two ships should proceed on parallel courses  $8^{\circ}$  apart, the *Vostok* following the more northerly and more direct track. The *Vostok*, having taken the priest on board, and being no longer obliged to shorten sail for her slower consort, made a quick voyage to the reported position of Royal Company island, which was reached on March 22, but neither island nor *Mirni* was to be found. Two days later the coast of Van Dieman's Land came in sight, and on the 29th the *Vostok* anchored in Sydney harbour, after a voyage of 131 days. The *Mirni* had not arrived; but the arctic expedition in the *Otkritie* and *Blagonamerenni*, which sailed on the same day from Kronstadt and were left in Rio, were again encountered on their leisurely voyage to Bering strait.

At Sydney the Russians received a most hearty welcome, and Bellingshausen speaks with great cordiality of the generous kindness shown by the governor, General Macquarie. On April 7, when being shown the new lighthouse on the South Head, the Russian officers had the pleasure of seeing the *Mirni* enter the harbour, all well with the exception of one sailor, who showed some symptoms of scurvy.

The two ships lay in Sydney harbour for a month, making various repairs and taking in fresh stores, and then sailed for a long cruise in the tropical Pacific, exploring the island groups, especially the Paumotus, then scarcely known, discovering several new islands, and penetrating as far as Cook's great place of refreshment, Tahiti, where King Pomare, an independent monarch under British influence, received them with graceful hospitality. They were back in Sydney on September 8 after four months' absence, and here Bellingshausen learned from the Russian consul of the discovery of the South Shetlands by William Smith in 1819, a fact of some little moment as bearing on the credibility of the American sealer Fanning, who states that Bellingshausen believed he had made a discovery when he sighted the New Shetlands, until Captain Palmer told him what they were.

On October 31, 1820, the *Vostok* and *Mirni* left Sydney harbour for their second visit to the antarctic regions. On November 17 they were off the Macquarie islands, and experienced an earthquake shock while in more than 50 fathoms of water. On the 27th they crossed the parallel of 60° S. in 163° E., and the officers drank the health of their friends in St. Petersburg in 60° N. Next day the first iceberg was seen, a stately mass with fretted sides that looked as if they were ornamented with statues. Loose floating ice then appeared, and behind it a solid wall of ice, along which they cruised south-eastward. Some ice-islands, one nearly 5 miles in circumference, appeared beyond, and at first this was mistaken for land. The sea seemed most open to the east, and so Bellingshausen kept eastward along the edge of the solid ice, until on November 30 he almost touched 65° S. in 169° E. Then the fine weather ceased, the margin of the ice turned to a north-easterly trend, and the ships worked their way with care and difficulty through the loose pack and icebergs, of which more than a hundred were in sight at one time. The ships, Bellingshausen says, were far too weak to risk any severe pressure in the ice, a hint which shows that he had at least some wish to attempt to penetrate the pack, though he could have no idea of the great expanse of open sea along the coast of the undiscovered Victoria-land which it sealed up. For four days he had skirted the margin of the impenetrable ice, for a distance of 380 miles, and just when the end of it seemed to be reached a frightful storm came on. To add to the misery of the gale and the darkness, the wild rolling of the ship shook masses of snow and ice from the rigging, which fell on the deck and made it dangerous to move about. The birds brought from the tropics as pets were dying daily in the severe climate, but the polar birds native to the region appeared in increasing numbers, always suggesting the proximity of land.

At last, on December 13, the polar circle was reached again in 164° 34' W., and the midnight sun was seen; but next day the ships were almost beset in a field of loose floating blocks of ice not more than 5 to 7 feet thick, and recalling the familiar ice-floes of the Baltic. It was necessary, however, to retreat northwards, but the belief that behind this floating ice solid land existed seems to have been strong in the minds of the officers. The weather was a succession of gales and fogs, the edge of the ice turned the ships further and further north as they proceeded eastward, and just in the longitudes where Cook sailed for 13° within the antarctic circle Bellingshausen was forced to within a mile or two of the sixtieth parallel in order to get round the ice, yet he was a fortnight later in the season than Cook. It was observed that a bank of fog formed over the large bergs, so that they could be recognized by the cloud that capped them even when they themselves were below the horizon. On Christmas Day (Russian calendar) 244 icebergs were in sight, and the commander congratulated himself that both

crews were in excellent health, better than they had enjoyed in the tropics.

On the meridian of  $135^{\circ}$  W., where Cook had run north to refresh his exhausted crew, Bellingshausen was able to turn southwards, and on December 30 he crossed the circle, only to be turned back in  $67^{\circ} 30'$  S.,  $120^{\circ}$  W., by solid ice. Another northward bend brought the ships to the longitude where Cook had made his farthest south, but, as Bellingshausen considered it unnecessary to follow the track of his predecessor, he changed his course to south-east, crossed Cook's route, and crossed the circle for the sixth time on January 7, in  $104^{\circ}$  W. A south-easterly course led through a crowd of ice-islands, one of them about 20 miles in circumference and rising 200 feet above the water. On January 10 the farthest south point of the voyage was reached in  $69^{\circ} 53'$  S., and  $92^{\circ} 19'$  W. At 3 p.m. a dark speck appeared on the white background of ice to the east. All the telescopes in the ship were turned upon it, and various opinions were being expressed, when the sun shone out and revealed it as land without a doubt, the steep cliffs and rocks standing out black and free from snow. The land had appeared suddenly without a warning sign. It was the most southerly known land in the world, the first to be discovered within the antarctic circle. Next day a nearer view was obtained. The land proved to be an island,  $9\frac{1}{2}$  miles long and 4 miles broad, lying in  $68^{\circ} 57'$  S.,  $90^{\circ} 46'$  W., and rising to a height variously estimated at from 3961 feet to 4390 feet. It was named after Peter the Great, founder of the Russian navy. It appeared unlikely that such an island existed entirely alone, and a keen look-out soon revealed more land that seemed like a continuation of the island and then vanished in the fog. At this point in the narrative Bellingshausen brings in a long digression describing experiments made a year before on the freezing of sea-water and fresh water, with a couple of pages of speculation as to the formation of sea-ice, and a renewed declaration that the icebergs were not sea-ice, but produced from some great southern land just as the small masses of ice had been seen to detach themselves from the slopes of Peter I. island. On the 15th, still south of  $69^{\circ}$  S., with an impenetrable pack to the southward, the sea-water was observed to be discoloured, but a sounding gave no bottom at 145 fathoms. Then sea-swallows appeared, a certain sign of land according to Bellingshausen, who wrote, "the land *must* come," and on the 17th it came. It was beautiful weather, the finest day of the whole voyage before or after, and a great peak rose 40 miles to the east-south-east, approximately in  $68^{\circ} 43'$  S.,  $73^{\circ} 10'$  W., beyond a broad stretch of impenetrable ice. It was named after the originator of the expedition, Alexander I. The new discovery was called a land, not an island, for distant snow-free peaks appeared beyond that which was first seen, and its extent seemed to be considerable.

A course was now set for the South Shetlands, with the object of

approaching them from the south and ascertaining definitely whether they had any connection with the conjectural antarctic continent. On January 24 land was seen and identified as the South Shetlands. A number of small islands were named after various victories of the Russians over the French in Napoleon's campaigns. At Little Yaroslav island Bellingshausen found on the morning of January 25 eight British and American sealers lying at anchor, and, having invited Captain Palmer on board the *Vostok*, he obtained from him some particulars as to the work of the hunters. It is somewhat remarkable to find no mention made of the mainland south of the South Shetlands, to which Fanning explicitly states that Bellingshausen gave the name of Palmer land, and to find no mention of the services of Palmer as pilot, to which Fanning devotes some space. No stay appears to have been made, and the north-eastward course was resumed, a few more small islands being sighted and named on the way; the 60th parallel was passed on January 31, and after a time of severe but needless anxiety on account of the Shag rocks, which were passed in a fog, Rio was reached on February 26 and left on April 23. At last, on June 24, 1821, the two ships dropped anchor once more at Kronstadt, after an absence of 751 days, 527 of which had been passed under sail, and the whole distance travelled had been  $2\frac{1}{4}$  times the circumference of the Earth.

The voyage had been planned as a continuation of the voyage of Cook, and Bellingshausen seemed to have possessed not a little of the spirit of the great navigator whose labours he most loyally supplemented, even to the extent of foregoing the opportunity of possibly approaching nearer to the pole in order to explore the more open parts of the Southern ocean in the longitudes where Cook had got far south. It is unfortunate that this splendid voyage remained without result; for the course of subsequent explorations would have been the same had it never taken place. A timely translation into English would have facilitated the voyages of Biscoe, Balleny, Wilkes, and Ross.

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## THE SCIENTIFIC WORK OF THE SWEDISH ANTARCTIC EXPEDITION AT THE FALKLAND ISLANDS AND IN TIERRA DEL FUEGO.

By Dr. J. GUNNAR ANDERSSON.

I. *The Falkland Islands*.—After the return of the *Antarctic*, on July 4, to Port Stanley from South Georgia (see *Geo. Journal*, vol. xx. p. 405), the members of the expedition on board this ship carried on investigations in different parts of the Falkland islands until September 11. The botanist made valuable collections of marine algæ, and to some extent also of land-plants, though the season was very unfavourable