

Russian Searches for the Northwest Passage, 1820-21
Leytenant Andrei Petrovich Lazarev's account of the voyages of
Otkrytiye and Blagonamerennyy
 by William Barr

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Preface

In 1817, in an anonymous article in the *Quarterly Review* in which he was promoting the idea of the two arctic expeditions which would be mounted by the Royal Navy in the following year, namely those of Buchan and Franklin towards the North Pole in HMS *Dorothea* and HMS *Trent* respectively, and of Ross and Parry in HMS *Isabella* and HMS *Alexander* in search of the Northwest Passage, John Barrow, Second Secretary at the Admiralty, wrote that it would be 'somewhat mortifying if a naval power of but yesterday should complete a discovery in the nineteenth century, which was happily commenced by Englishmen in the sixteenth'.¹ And elsewhere in this article he wrote 'It would be something worse than indifference if, in a reign which now stands proudly pre-eminent for the spirit in which voyages of discovery have been conducted, England had quietly looked on and suffered another nation [Russia] to accomplish almost the only interesting discovery which remains to be made in geography. And one to which her old navigators were the first to open the way'.² Twenty-seven years later, in 1844, in a proposal which he submitted to Lord Haddington, First Lord of the Admiralty entitled 'Proposal for an attempt to complete the discovery of a North-West Passage', a proposal which would lead to Sir John Franklin's fatal expedition a year later, Barrow (by then Sir John) wrote: '... Lancaster Sound ... has in our time been found to lead into the Polar Sea, through which the North-West Passage will one day be

¹ Quoted in Savours, *The search*, p. 171.

² Quoted in Lloyd, *Mr. Barrow*, p. 129.

accomplished, and for the execution of which we are now contemplating and which, if left to be performed by some other power, Englishmen, by the neglect of it, after having opened the East and West doors, will be laughed at by all the world for having hesitated to cross the threshold'.³ In a private letter to Haddington dated 27 December 1844 he underscored this message: 'The Admiralty having done so much, it would be most mortifying, and not very creditable, to let another Naval Power complete what we have begun'.⁴

In each case the naval power to which Barrow was obliquely referring was Russia. Kotzebue's penetration north of Bering Strait and his exploration of Kotzebue Sound in 1816⁵ were clear proof that Barrow's fears in 1817 were not without a solid basis. The penetrations by Vasil'yev and Shishmarev in *Otkrytiye* and *Blagonamerenny* of the Imperial Russian Navy to and beyond James Cook's farthest north at Icy Cape on the coast of northwest Alaska in 1820 and 1821 which are the subject of this article, provided further proof that his fears were real. So, too did the achievement of A. F. Kashevarov of the Russian American Company who in 1838 reached Cape Lisburne in the ship *Polifem* and thereafter in a fleet of five *baidarki* (three-man kayaks) reached Dease Inlet, about 50 km east of Point Barrow, before turning back due to the hostile attitude of the local inhabitants.⁶

It should be noted that while Lazarev's Russian editor, A. I. Solov'yev is quite specific as to the objectives of the expedition led by Vasil'yev, namely 'to find a sea route from Bering Strait to the Atlantic Ocean around North America'⁷ there has been at least one competing interpretation, namely that of V. M. Pasetkiy. As he points out the instructions to Vasil'yev from the Naval Ministry dated 28 June 1819 and approved personally by Tsar Aleksandr I, specified that having passed through Bering Strait the leader 'will prosecute his searches with the greatest zeal, constancy and resolution. Directing his course to the north, if the ice permits, he will make every possible effort to resolve the great question concerning the alignment of the coasts and of a passage in this part of our globe...'⁸

In Pasetkiy's view:

'In examining the results of Vasil'yev's expedition, researchers as a rule have concentrated their attention on the fact that it did not pass through the Northwest Passage from the Pacific Ocean to the Atlantic. In doing so they are losing sight of the fact that the main task of the voyage was the resolution of the 'great question' – the search for the passage from the Pacific to the Arctic Ocean and clarification of the alignment of the coasts of America north of Bering Strait. According to the concepts of the time the probability that Asia and America were joined was not excluded, and there was a widespread opinion that from Icy Cape the American coast stretched far to the west and was even joined to Greenland'.⁹

Clearly much of the confusion would have been avoided if the 'passage' mentioned in the Naval Ministry's instructions had been identified more clearly. But there can be no doubt that the Northwest Passage was intended. See for example Vasil'yev's statement as to his intentions in 1821 on p. 115–116.

³ Quoted in: Cyriax, *Sir John Franklin's last expedition*, p. 19.

⁴ Quoted in Lloyd, *Mr. Barrow*, p. 144.

⁵ Kotzebue, *A voyage of discovery*.

⁶ Van Stone, 'A. F. Kashevarov's coastal explorations'.

⁷ Solov'yev, 'Predisoviye', pp. 4–5.

⁸ Ibid, p. 46.

⁹ Pasetkiy, 'Russkiye otkrytiya', p. 131.

While English-language translations of accounts of Kotzebue's and Kashevarov's expeditions have been published, no such published translation is available for either of the published accounts of Vasil'yev's and Shishmarev's expedition. What follows is thus the first published English-language translation of the descriptions by Leytenant Aleksey Petrovich Lazarev of the two penetrations (in 1820 and 1821) by *Otkrytiye* and *Blagonamerenny* north of the Aleutian Islands and north through Bering Strait into the Arctic Ocean.¹⁰

Since my translation of Lazarev's text covers only the voyages northwards from the Aleutian Islands in 1820 and 1821, my Introduction (pp. 3–4) sets the scene for the expedition and provides a summary of the voyage from Kronshtadt to the Aleutians. This is followed (pp. 7–43) by Lazarev's account of the 1820 voyage northwards from there, through Bering Strait into the Chukchi Sea and thus into the Arctic Ocean to where both vessels were turned back by ice. The following section (pp. 43–45) covers my summary of the winter voyage south to Sitka (Novo-Arkhangelsk), San Francisco, Hawaii, Sitka again and back to the Aleutians over the winter of 1820–21) followed by Lazarev's description of the second voyage north through Bering Strait and back south to Petropavlovsk (pp. 45–72). And finally (pp. 72–74) I have summarized the homeward voyage to Kronshtadt. I have rounded out my account by a brief set of Conclusions as to the significance of Lazarev's account.

Footnotes contributed by A. I. Solov'yev, Lazarev's Russian editor, are followed by (S). All others have been contributed by myself.

Two appendices are included: Summaries by Mikhail Nikolayevich Vasil'yev (expedition leader and captain of *Otkrytiye*) of the expedition's achievements during the summers of 1820 and 1821 respectively (pp. 77–82 and 82–87). Brief biographical sketches of the major players are also included. These are followed by a Bibliography.

Introduction

In late June 1819 four ships were lying in the roadstead at Kronshtadt, the base for the Russian Baltic Fleet, some 30 km west of St Petersburg. All were about to put to sea on round-the-world cruises but each pair of vessels had very different objectives en route. Two of them, the ship *Vostok*, commanded by Faddey Faddeyevich Bellinsgauzen and the transport *Mirnyy*, under the command of Mikhail Petrovich Lazarev, were bound for the southern hemisphere, with the aim of attaining the highest possible latitude, and of solving the mystery of the possible existence of a 'Terra Australis' at the South Pole.¹¹ The other two vessels, the ship *Otkrytiye* under the command of Mikhail Nikolayevich Vasil'yev and the transport *Blagonamerenny*, commanded by Gleb Semenovich Shishmarev, were bound for the North Pacific and Bering Strait with the aim (if possible) of reaching the Atlantic Ocean via the Northwest Passage.¹²

All four vessels were quite new. *Vostok* and *Otkrytiye* had been laid down at the Okhteyskaya yard in 1817 and launched in 1818. They were sister-ships of 900 tons displacement, 39.5 metres in length with a beam of 10 m, a mean draft of 4.4 m and a depth of hold of 5.2 m; each carried 28 guns.¹³ The transports *Mirnyy* and *Blagonamerenny* were smaller, with a displacement of 530 tons, a length of 36.5 m, beam of 9.1 m; each carried 20 guns. They had been built in 1816–1818 at the Lodeynoy yard.¹⁴ All four ships were sheathed

¹⁰ Lazarev, *Zapiski*.

¹¹ Solov'yev, 'Predisloviye,' p. 3.

¹² Ibid, pp. 4–5.

¹³ Solov'yev, 'Krugosvetnaya ekspeditsiya', p. 22.

¹⁴ Ibid, p. 25.

with copper, to protect them from the ravages of teredos (ship-worms) during their protracted periods in tropical waters.

Leader of the 'northern division' and captain of *Otkrytiye* was Kapitan-leytenant Mikhail Nikolayevich Vasil'yev.¹⁵ Gleb Semenovitch Shishmarev was the captain of *Blagonamarennyy*.¹⁶ Aleksey Petrovich Lazarev, the author of the journal from which the following extract is taken, was Second Lieutenant on board *Blagonamarennyy*.¹⁷ First Officer on board *Blagonamarennyy* during the round-the-world cruise was Ivan Nikolayevich Ignat'yev. Also serving on board *Blagonamarennyy* were two Midshipmen¹⁸; one was Nikolay Dmitriyevich Shishmarev, probably a son or young cousin of the captain; the other was Karl Karlovich Gillesem (Hillsen or Hülsen). These two young midshipmen are noteworthy as being the authors of the only other surviving accounts of the voyage.¹⁹ There were also two other officers on board, a navigating officer (or Master), Vladimir Vasil'yevich Petrov and a Staff-surgeon, Grigoriy Alekseyevich Zaozerskiy.²⁰ The ship's total complement was 83; it included 44 seamen 1st class and such standard specialists as six carpenters, two caulkers, a sailmaker and a cooper, but also a drummer, a priest, an artist, Emil'yan Korneyev, and a naturalist, Dr. Fedor N. Shteyn.²¹ Also on board were two Aleuts and three Kamchadali who had been brought to Kronshtadt the previous year by Kotzebue and were now being returned to their homes in Unalaska in the Aleutians and Kamchatka respectively.²²

On 24 June 1819 Kapitan-Leytenant M. N. Vasil'yev, as leader of the expedition, received the following order from the Kronshtadt commander, Vice-Admiral A. V. Moller: 'As your ships are ready and fully fitted out, the Naval Minister has directed me to order you to weigh anchor with the detachment of ships entrusted to you with the first favourable wind, and to proceed on your appointed voyage. And since the wind is now fair I call upon you to put to sea with the detachment of ships, *Otkrytiye* and *Blagonamarennyy* without fail on 2 July'.²³ In fact it was not until 7 p.m. on 3 July that the four ships got under way.²⁴ It was soon established that *Otkrytiye* was capable of sailing faster than *Blagonamarennyy*.²⁵

By 9 July the two ships were passing close to Bornholm.²⁶ First port-of-call on 11 July was Copenhagen,²⁷ where on the 14th the Russian Ambassador, Baron Pavel Andreyevich Nikolay invited both captains and many of the officers to dinner at his country estate.²⁸ Danish Rear-Admiral Levenorn provided the Russian vessels with pilots and charts of the Skagerrak, Kattegat and the North Sea.²⁹ Sailing again on the 20th all four ships ran through the narrowest part of the English Channel on 28 July and next day dropped anchor at Spithead, the roadstead off Portsmouth. On the morning of the 30th the Prince Regent (later King George IV) happened to sail past in his yacht; on all four Russian ships the crews manned the rigging and 21-gun salutes

¹⁵ See biographical sketch, p. 75.

¹⁶ See biographical sketch, p. 75.

¹⁷ See biographical sketch, p. 76.

¹⁸ Lazarev, *Zapiski*, p. 99.

¹⁹ Gillesem, 'Journey'; Shishmarev, 'Iz zapisok'.

²⁰ Lazarev, *Zapiski*, p. 99.

²¹ Ibid, p. 100.

²² Ibid, p. 99.

²³ Solov'yev, 'Krugosvetnaya ekspeditsiya', p.41.

²⁴ Lazarev, *Zapiski*, p. 100.

²⁵ Ibid, p. 101.

²⁶ Ibid, p. 102.

²⁷ Ibid, p. 103.

²⁸ Ibid, p. 104.

²⁹ Ibid, p. 105.

were fired. The same thing happened twice on each of 5 and 6 August and on the morning of the 8th, but at noon His Majesty passed the message that 'he thanked us for the respect shown him, but he asked that we not fire any more salutes.'³⁰ In a more practical vein on the 25th scientific instruments ordered from London were taken aboard: four sextants, a telescope, a theodolite, 3 barometers, thermometers and two chronometers. The chronometers were then rated. A range of provisions, especially antiscorbutics was also purchased.

Otkrytiye and *Blagonamerenny* put to sea again on 31 August, and passed the Lizard lighthouse in southwest Cornwall, their point of departure from Europe, next day.³¹ They picked up the Northeast Trade winds on 20 September and the first flying fish were spotted on that same day.³² When the two ships crossed the Equator on 14 October, the event was marked by the traditional 'initiation ceremonies' for 'first-timers'.³³ The higher mountains of the Brazilian coast were first sighted on 27 October, and Cabo Frio late on the 30th and soon afterwards all four ships dropped anchor off Ralos Island off Rio de Janeiro.³⁴ Over the next three weeks the officers carried out astronomical and geophysical observations on Ralos Island,³⁵ and fresh provisions, as well as rice, sugar, rum, water and firewood were purchased. The Russians were quite appalled at the conditions prevailing on board incoming slave ships,³⁶ probably encountering them for the first time in many cases.

The four Russian vessels sailed from Rio de Janeiro on 26 November. On the morning of 23 December Table Mountain at the Cape of Good Hope was in sight from *Blagomarennyy*;³⁷ the rate of the chronometers was checked but to the regret of many it was decided not to stop at Cape Town³⁸ but to run non-stop to Australia. As she crossed the southern Indian Ocean the *Blagonamarennyy* encountered some very severe weather and heavy seas, but on 16 February 1820 her lookouts spotted the lighthouse at the entrance to Port Jackson, i.e. after a run of 87 days without touching land.³⁹ The Russian ships spent three weeks in Sydney harbour, making repairs to hulls and rigging. The governor of New South Wales, Major-general Lachlan Macquarie gave permission for the establishment of a tented observatory on the north side of the harbour, where firewood could also be procured.⁴⁰ Accompanied by explorer/botanist Allan Cunningham and expedition artist Emel'iyen Korneyev over the period 8-16 March naturalist Dr. Fedor Shteyn made quite an extensive trip into the Blue Mountains.⁴¹

Putting to sea again on 15 March *Otkrytiye* and *Blagonamerenny* headed northeast.⁴² On the 26th Norfolk Island was close abeam⁴³ and after they had passed west of Fiji on 17 April the wooded islands of an uncharted coral atoll were sighted.⁴⁴ Four canoes with outriggers, crewed by a total of 16 men, came off. There were some on of the islands of Tuvalu, formerly

³⁰ Ibid, p. 110.

³¹ Ibid, p. 113.

³² Ibid, p. 116.

³³ Ibid, pp. 120–21.

³⁴ Ibid, p. 126

³⁵ Ibid, p. 128.

³⁶ Ibid, p. 132–33.

³⁷ Ibid, p. 144.

³⁸ Ibid.

³⁹ Ibid, p. 148.

⁴⁰ Ibid, p. 151.

⁴¹ Ibid, p. 150; Barratt, *The Russians...*, pp. 100–07.

⁴² Ibid, p. 155.

⁴³ Ibid, p. 158

⁴⁴ Ibid, p. 163.

The Aleutian Islands and north to the Arctic Ocean, 1820

On the 24th [May 1820] we saw a large quantity of seaweed, so-called sea cabbage, and shore birds. At 5 p.m. we cast the lead but did not reach bottom with a lead-line of 100 *sazheni*.⁴⁸ At 6, when by dead reckoning we were at SE73°, 12½ miles off the southern end of Amchitka Island,⁴⁹ we swung close-hauled on the starboard tack, and lay thus till midnight under light sails. At 1 we swung onto the port tack and lay close-hauled, heading west. At 3 a.m. (on the 25th) when the fog had cleared a little we sighted the low coast of Amchitka Island to the NWbN and identified it as the southeast side of the island⁵⁰; thereafter we headed north. Soon the island was again covered by fog but at 5.30 it cleared again and we spotted, dead ahead, no more than half a mile away, rocks and a reef running out from its northern tip for two miles to the east; there was very heavy surf breaking on it from the fairly fresh wind and waves. We immediately laid her on the port tack, and the crew was at their posts in a minute; then we swung close-hauled, heading EbS and half an hour later, having passed the reef we swung NE at a speed of 5 knots. In this case the slightest blunder or continuation of the fog would have made us pay very dearly, and if we had continued at the same speed for even just five minutes more, then our ship would certainly have been irretrievably wrecked. At 6.30 we passed the reef, on which there is a submerged rock, lying 1½ miles from the island, which was then in line with the northeast cape of the island on a bearing of NW76°, 3 miles off. Between 7 and 8 dense fog hid the island completely. We headed NNE so as to pass Semisoposhnyy Island⁵¹ 10 miles off, but since the fog continued all day, at noon we set a course of NEbN.

On the 25th the wind died away almost completely so that our speed sometimes dropped to 1 knot. At 7 p.m. when the fog had cleared a little, to the south we spotted Semisoposhnyy Island bearing SW 87°, 13 miles off, but soon it was again hidden by fog. In the evening there was a light breeze between south and east, and the fog settled in drops from the rigging. On this date we saw a large number of birds, whales,⁵² Steller's sea-lions and killer whales⁵³, playing on the surface of the sea. The dorsal fins of the latter were so large that, enlarged by refraction they appeared to be Aleuts travelling in a *baydar*.⁵⁴ This phenomenon repeatedly forced us to take a telescope and sweep the horizon. From midnight onwards the wind became west-northwesterly, and when it swung into the northwest, the overcast cleared. At 3.30 we spotted the northern part of Semisoposhnyy Island on a bearing of SW82° and at 7.30 we headed NE; at 8 Gareloi Island⁵⁵ appeared at SE70° by compass; it was covered with snow in places, indicating that it was very cold during the day. Each night as we had been approaching the Aleutian Islands the temperature

⁴⁸ *Sazhen*': a measurement of depth or length equaling 1.83 m, i.e. for all practical purposes equal to a fathom. It will be translated as 'fathom' from now onwards.

⁴⁹ Amchitka Island, the largest of the Rat Group in the Aleutian chain and the lowest of all the large islands in that chain. Its highest point is 390 m. (S).

⁵⁰ Large numbers of Steller's sea lions (*Eumetopias jubatus*) and sea otters (*Enhydra lutris*) were seen on shore; they all rushed into the water at the sight of the ship (Gillessem, 'Journey', p.70).

⁵¹ So named for its seven volcanoes (Sem' sopki in Russian), three of which smoked constantly and had recently been erupting (Gillessem 'Journey', p. 70).

⁵² Probably right whales (*Balaena glacialis*), minke whales (*Balaenoptera acutorostris*), or grey whales (*Eschrichtius robustus*) (Sale, *A complete guide*).

⁵³ *Orca orcina*.

⁵⁴ An open skin boat, covered in skins of walrus or bearded seals, up to 9 metres in length and propelled by oars or paddles; alternatively known as an umiak.

⁵⁵ Bogoslof Island according to Gillessem ('Journey', p.70) (S). This latter identification is clearly correct, since Gareloi Island had been left astern several days earlier. However Lazarev later identified the island now being discussed as Novo-Gareloi Island.

was only 3°. At this point Semisoposhnyy Island bore SW70°. Gareloi Island lay 15 miles off, which we ascribed to the impact of a current. Thereafter the wind began to freshen from the northwest and it became clearer. At 10 both Semisoposhnyy and Gareloi disappeared in the murk.

At midnight [on the 26th] the wind had freshened so much that we reached a speed of 8 knots, but it soon began to slacken. Around noon a flight of geese flew past us. At 6 we began steering NEbN. At this time the wind again freshened and hence we secured the topsails, and since the barometer was dropping steadily, in anticipation of a strong wind we took in one reef in the main topsail and two reefs in the others. Around midnight the wind began to swing into the north and slacken and hence we set the topgallants. At 12 the barometer was reading 29.22' and the thermometer 2°. At 3 the main topsail blew out and we replaced it with a new one. From noon [on the 27th] the barometer was dropping, the wind was slackening and at 5 was blowing from the NbE; hence we swung onto the port tack and steered NW½W. The fog persisted and was so thick that it was dripping from the rigging like rain. At 8 the barometer stood at 29.18'; the thermometer 2.7°, and the wind was still light. At 11 we shook out a reef from each of the topsails; the wind began to freshen and the barometer to rise. At midnight when we swung onto the starboard tack, steering NWbN the wind began to swing into the east and to freshen so that at 8 [on the 28th] we took in a second reef in the main topsail. It soon became clear, the wind freshened even more; and we took a third reef in both topsails.

On the 28th we saw gulls, puffins⁵⁶ and murre⁵⁷; soon after 8 in the evening, since the wind had dropped we shook out a reef in each of the topsails. At midnight a gentle topgallant breeze was blowing and by 5 there was almost no wind. Towards noon [on the 29th] the wind began to freshen again; we took in the upper sails and took a reef in each of the topsails. By dead reckoning, according to the Russian chart, the northern part of Atka Island with the Ognedyshashchey gory (Fire-breathing Mountains) bore SE10° from us, 81½ miles off.

From noon [on the 30th] the wind strengthened so much that we took in another two reefs in the topsails; by midnight the wind was from the northeast but it soon slackened. We began increasing sail and wore onto the starboard tack. At this time our captain, who had long been trying to shake off an illness, was suffering so badly from a cold that he was not in a condition to come on deck and was even forced to take to his bunk, but not for longer than two days. Continuing our progress with fresh winds, at 8 a.m. on 1 June we spotted Gareloi Island bearing EbN by compass, and a pinnacle to port of it. We were then steering ENE and hence, swinging two points to port, we steered NE. We were 7 or 8 miles from the island by eye. It soon became foggy, hiding the island from view.

The naturalist made the comment that during the appearance of this island there had been eruptions throughout America and in many other places.⁵⁸ To this one should add the comments of our *promyshlenniki*⁵⁹ at Unalaska that then too the summit of a volcano located on the Alaska Peninsula had been destroyed.

Kryukov,⁶⁰ who had also reported this, was on Unga Island at the time. We regretted that due to the clouds we were unable to determine properly the latitude and longitude of Gareloi [in

⁵⁶ Either the Horned puffin (*Fratercula corniculata*) or the Tufted puffin (*F. cirrhata*), both of which breed throughout the Bering Sea area (Sale, *A complete guide*, pp. 279–80).

⁵⁷ Either the Common murre (*Uria aalge*) or the Thick-billed murre (*U. lomvia*) both of which breed throughout the Bering Sea area (Sale, *A complete guide*, pp. 264–6).

⁵⁸ It had emerged from the sea during an earthquake in 1796 (Gillesem, 'Journey', p. 70).

⁵⁹ Hunters.

⁶⁰ The Russian American Company's administrator at Unalaska.

fact Bogoslof] Island. It was still not indicated on the chart, and if Unalaska and Umnak⁶¹ had been visible it would have been possible to fix it by cross bearings. For these reasons we really wanted to see it. Around 10 it cleared up somewhat and the island was totally revealed, apart from its summit which was hidden in smoke.

The naturalist asked the captain for permission to examine the island. I too was very desirous of doing so, for since its appearance not a single naturalist had been on it. There remained the sole obstacle that it might again be covered in fog, but since the barometer was rising steadily, the captain decided to send the naturalist and myself to the island to investigate it as far as possible. We headed for it by launch at 10.30 and soon lost it in fog; half an hour later the ship also disappeared. To turn back would be even worse and hence, planning to proceed to the island to explore it, I decided that if the fog did not lift for the entire day or longer, which occurs commonly here, we would sail directly to Unalaska and wait for the ship there, since the provisions in the launch were quite limited. But it did not come to this, as may be seen from the following report which I presented to Captain Shishmarev on my return to the ship.

‘Having been sent on this date with the naturalist to examine Novo-Gareloi Island, I pushed off from the ship and set a course of EbS directly for the island, but soon both it and the ship were covered in fog.⁶² Holding our course for about half an hour we spotted the island dead ahead and somewhat downwind, and hence I bore down on a course of EbN. The wind was fresh. Closing to within 75 fathoms we headed along the island; having rounded its southeastern cape with its spit, we swung upwind to where we hoped to find a landing place or at least a spot with less surf where we might land. I did not land on the island, since the naturalist saw no need, but we examined it as follows, as far as possible.

The island is about 400 feet high, and about 4 miles in circumference; its lower part is like all the Aleutian Islands, but the upper part must be volcanic since, rounding it from the leeward side we smelt the smell of sulphur. From a quarter of the way up its visible height there flowed a fairly large spring of water; the depth, 50 fathoms from shore was 9 and even 11 fathoms; the bottom a coarse yellow sand; and at 100 fathoms from shore, 16 fathoms and the same bottom.

There was no chance of laying alongside. Seeing the sharp rocks on the bottom and concluding that the island is volcanic, I suspected that the rocks all round the island must be similar; moreover there was quite a heavy surf. I proposed anchoring to a grapnel and wading ashore but I was persuaded from doing so by the large number of Steller's sea-lions, which were hauled out there with their females and pups, so that the entire visible lowland, across which we would have to walk if we wanted to go ashore, was covered with them, just like a blanket. It is well known that at this time these animals are extremely aggressive. Moreover, as the naturalist assured me that he did not need to go ashore, since he could see everything from the boat, I had no good reason to do so. As mentioned earlier, this island is volcanic, but the lowland has already cooled; proof of this is the sea-lion haul-out mentioned above. Their stench and their noise were extraordinary, even to the point that we could hear each other only with difficulty in the

⁶¹ Lying to the southeast and southwest of Bogoslof Island respectively.

⁶² Concerned that Lazarev might not be able to regain the ship, Shishmarev closed with the island, lay-to and started beating drums, ringing the ship's bell and firing guns every ten minutes, although realizing that echoes off the high cliffs would probably foil these efforts at guiding the boat back to the ship (Gillesem, ‘Journey’, p. 71). They did allow Lazarev to locate the ship, however.

launch, quite some distance away, while these animals and some walrus⁶³ swimming around the launch exhausted our patience, since they approached so close, that the seamen were hitting many of them on the heads with their fists; it seemed that they wanted to peer into the boat and the walrus were particularly dangerous, since they might hook their tusks over the side of the boat, even accidentally, and of course, if that happened they would capsize it. To scare them off I fired a blank charge from my gun, but this provided us with only a short period of relief.

The island lies NW and SE. Off its northwest side, no more than 150 fathoms from it lies a stack about 80 feet high, looking from a distance like a cutter under sail. A further 125 fathoms from it lies a small rock, and beyond it a reef continues to the NW for at least 400 fathoms. Its entire summit, as far as we could see and the lowland are strewn with ash, probably from the eruption of Umnak, rather than from the island itself, since we heard no talk of an eruption from this island from the local Aleuts. According to these same old Aleuts there was a good landing place on the southeast side, but now no trace of it remains either due to an earthquake or to the heavy surf.

Since the summit of the island was covered with smoke, and the fog had still not cleared, and since time was getting on I decided it was best to run down to the ship, setting a course of WbN, in the hope of spotting it, if the fog became even slightly thinner over the course of the next two hours. In the event that, having steered out to sea for 2½ hours and had still not spotted the ship, I intended turning and heading straight to the settlement of Illyulyuk on Unalaska. After 1¾ hours we spotted the ship dead ahead to the WbN. I have the honour to submit this report to you, at the same time presenting a view taken of the island.'

When we reached the ship at 4.15 the captain told us that our launch had been visible for about 30 minutes but then it and the island had disappeared in the fog, and they had all doubted whether we would find the latter, although we had a compass, since the current between the islands here is quite strong.

At 11 we hove-to on the starboard tack. The island, bearing SE80°, was hidden by fog. At 4.30 we hoisted in the launch and steered for Kapitanskaya Harbour.⁶⁴ At 5 we passed abeam of the island, 2 miles off to starboard, bearing ESE, and it had fully cleared of fog; it appeared as if its summit was covered with smoke; at first we were somewhat dubious about this, but later we became fully convinced, since subsequently it was very clear all around this smoke. Now, it seems, we can plot this island on the chart near Stolb Island, ¼ of a mile SE from it, since on the Admiralty Department's chart Stolb appears to be plotted very accurately; it is just a pity that throughout these nine days of sailing near the Aleutian Islands we got almost no observations and did not see the land.

At 2 a.m. as we approached Veselovskiy Cape it fell calm; during the calm several Aleuts came out to us with fish. The captain ordered that they be given tobacco, rusks and a mug of grog each, and sent one of them back to the harbour with a note for the administrator in which he informed him of our arrival and requested that at the first cannon shot from the ship he would send out all the *baydari* on hand to tow us in.

⁶³ *Odobenus rosmarus*.

⁶⁴ On Unalaska Island, close to or identical with the present-day Dutch Harbor, site of an extremely busy fishing port.

During the calm a current had been pushing us towards Cape Kalekhta and hence the captain ordered the launch and all the other ship's boats lowered to tow us, and requested the *baydari* by means of a cannon shot.⁶⁵ At 5 [on 3 June] the wind had become westerly and, casting off the tow, we got under way under sail. At 8 it again fell calm off Cape Konstantinovskiy and we again had to resort to towing. Along with the *baydari* the administrator of Unalaska, Kryuchkov (from a petty bourgeois family from Vologda Province) came out to us. Although the wind was light it was blowing straight out of the harbour, hence we secured all the sails and were towed by six boats. At 11 we got into a depth of 13 fathoms with a gravel bottom; we dropped anchor near the spit, quarter of a mile from shore. Around noon the wind began blowing from the north and hence we immediately weighed anchor and under two topsails moved to the settlement of Illyulyuk or Soglasie,⁶⁶ but we were not within 1½ miles of it when it fell calm then the wind began blowing from the south. We then again proceeded by towing.

From noon onwards we had variable light winds; it was cloudy with fog over the mountains, with the sun shining at times. At 2 we reached the present spot, in a depth of 14 fathoms, and with a bottom of silt; we dropped anchor ¾ of a mile from the settlement. On arriving in Kapitanskaya Harbour⁶⁷ we asked the Unalaska office⁶⁸ to spare as many cattle as possible for our crew and received a steer weighing 12 pud.⁶⁹ As we approached Unalaska the thermometer had been reading very low; it often read less than 2°⁷⁰ and rarely over 4°; but when we entered the harbour it rose to 5½°. Entering harbour we quickly sent the launch and the cutter ashore for fresh water, dismantled some of the spars to repair the rigging and sent the blacksmith ashore to work there.

On the 7th it became somewhat warmer and the thermometer rose to 6½° although the sun barely appeared and scarcely a day passed without fog; there was snow lying on all the mountains. At sunrise on the 9th it began to clear and for the first time we managed to take the sun's altitude around 6.30. Taking advantage of this weather, we tightened the rigging and painted the hull with soot. At Unalaska we did not find the interpreters who by the Company's instructions⁷¹ were to be waiting for us, and since this was the real purpose of our visit to this island, we did not want to stay more than a week, but it turned out otherwise. The sails we had

⁶⁵ Three *baydari* responded (Gillesem, 'Journey', p. 73).

⁶⁶ Illyulyuk or Soglasie (on modern maps more often called the settlement of Unalaska) is an ancient settlement on the eastern shore of Kapitanskaya Bay on the island of Unalaska. The settlement is located on the end of a spit between the sea and the outflow from Unalaska Lake. Illyulyuk is the main population centre of Unalaska and of the entire Aleutian chain. The first Russians settled here in 1760–70. After the sale of Alaska to the United States (1867) until the start of the Second World War, the settlement remained Aleut. Americans lived here only temporarily (officials and traders). In 1942 there were 296 people here. In July 1942 all the Aleuts were evacuated and sent to the Admiralty Islands and their dwellings were occupied by troops. The houses are wooden. On the pier at the waterfront there still stand two ancient Russian cannon on wooden carriages dating to the late 18th – early 19th centuries. The settlement was a trading centre, from the warehouses of which all the other settlements of the islands were supplied (S).

Opposite the settlement of Illyulyuk lies Amakhnak Island, which along with Expedition Island lies within the complex of the U.S. Navy's Dutch Harbor naval base. This name appeared at the end of the 19th century (S).

⁶⁷ The main harbour on Unalaska, part of the extensive Kapitanskaya Bay, separated into several parts by two islands, Amakhnak and Pig Island. On modern American maps the bay is named Unalaska Bay, which is historically incorrect (see the book *Aleutskiy ostrova* by Z.N. Zubkovaya, pp. 127–8). The name was first bestowed by Captain Sarychev (S). The latter wintered here in 1791–2 on board the *Slava Rossii*. For details of the latter's voyage see: Sarychev, *Account of a voyage*.

⁶⁸ Of the Russian American Company.

⁶⁹ Pud: a unit of weight equal to 16.38 kg.

⁷⁰ By the Réaumur scale, devised by René Antoine Ferchault de Réaumur, based on the freezing point of water being 0° and the boiling point 80°.

⁷¹ Those of the Russian American Company.

had all become torn and tattered in the tropics and needed to be thoroughly repaired; the new ones we had bent in their place were too big and hence had to be cut down. For this the captain asked for a hut where a cast-iron stove was set up; 9 sailmakers were accommodated there and worked constantly throughout our stay in Unalaska. At this point our ship was drawing 12 foot 8 inches forward and 13 foot 11 inches aft, for a differential of 1 foot 3 inches; since she had been lightened considerably we had to stow 1200 pud of rock ballast. For this we had to unload the entire hold, apart from the lower part, which we covered over. 800 pud of rock ballast was stowed in the water hold and 400 in the after hatch. Although not onerous, this work was not finished until 14 June. Throughout this period the Company sent us 6 Aleuts and 4 *baydarki*,⁷² two of them 3-hatched, one two-hatched and one single-hatched. We painted the ship, repaired the rigging, watered, checked the chronometers etc.

Kryukov, the administrator of this island, had with him his son, a young lad who had been born here and brought up in the Aleutian Islands. He had unusual talent as an artist. On spotting a portrait of the late Tsar Alexander I on board, the work of Zherard,⁷³ he hovered constantly around it and examined it, sometimes scribbling on paper, and finally copied it so successfully with dry colours, that one could not but be amazed at the rightness of the composition, the accuracy of the copy as against the original, and the disposition of the colours. Later he gave me this portrait and I keep it in my study among my curios. A few years later the young Kryukov was brought to St. Petersburg to perfect his talents but soon after his arrival he fell seriously ill with smallpox so that he could not move a single limb, or even open his mouth to take food. I saw him in this calamitous situation and every day brought a doctor to see him, but the smallpox got into his internal organs, and ended his life. Our Academy of Arts might have anticipated great successes from this lad in time.

At 3.30 a.m. on the 15th we weighed anchor and put to sea but at 6, passing North Cape of Amayunaka, we encountered a wind from the NbW and then turned back. At 8, finding ourselves $\frac{3}{4}$ of a mile off the southern tip of the spit of Amayunaka Island on a bearing of NE 42°, in a depth of 10½ fathoms with a bottom of sand with shells, we dropped anchor. Soon a strong wind got up, with gusts, and this foul weather, continuing until the morning of the 17th forced us to lie futilely for all this time⁷⁴.

At 5 a.m. [on the 17th⁷⁵] our ship weighed with a south-southwest wind and stood out safely to sea, steering a course to the northwest to St. George Island,⁷⁶ where the captain wanted to call for sea lion hides for repairing the *baydarki* and for *torbasy*,⁷⁷ of which the Aleuts with us had been issued with only one pair each. The weather was fine all day, with fog only occasionally; at 8 a.m. it started raining, with the wind blowing from the southeast.

During our sojourn at Unalaska we learned that in March of this year (1820) one spot on the northern volcanic cone of Umnak Island had collapsed. It was about 7 km long according to the Aleuts, and was completely filled with water; prior to this event there had been flames shooting up with an eruption of ash which even at Unalaska piled up to a depth of almost 14

⁷²A skin boat, identical in principle to the Inuit kayak, although as is clear from this reference, capable of holding two and even three paddlers.

⁷³The French artist François Gérard (1770–1837).

⁷⁴Gillessem presents a much more dramatic scenario; according to him the first anchor started to drag and two more anchors had to be dropped. They stopped the ship when she was only some 300 m from the sand-spit towards which she was drifting. Gillessem also reports that while lying near the spit they were entertained by watching numerous foxes hunting in the intertidal zone for sea urchins. (Gillessem 'Journey', p. 74)

⁷⁵On the 19th, according to Gillessem, ('Journey', p. 75) (S).

⁷⁶The southernmost major island of the Pribilof Islands.

⁷⁷Skin boots (S).

inches and, we were told, reached even Unimak, 30 miles away in a straight line. This was probably the reason for the snow on the mountains of Unalaska being black.

Throughout the period we were sailing around the Aleutian Islands the weather remained overcast; there were frequent strong winds and it was very cold. Our naturalist wanted very much to land on Umnak and investigate the eruption site, but since we had little time left and since to go there by sea would require good oarsmen in a *baydar* and clear weather, it was impossible to carry out his intention, since the weather was foul and the expert rowers were all engaged in hunting sea otters.⁷⁸ At least so as not to miss anything, he set off on foot to Makushin Bay⁷⁹ to a settlement (to which the captain and I proceeded, but in *baydarki*, rather than on foot) near which there are hot springs. He investigated the latter and found much that was fascinating in terms of mineralogy. According to him there are in the local mountains: copper, lead, mercury, sulphur etc., as well as coal which he found in abundance, although it was difficult to exploit it, since it was far from the settlement in the interior of the island, and therefore the inhabitants of Unalaska will always require firewood. In 1817, during the sojourn here of the brig *Ryurik*,⁸⁰ peat was found, although not in great quantities, although it was near the settlement. On Amaknak Island, they made an experiment with it, burning it to bake bread to show how it could be used by the Russian settlers, but we now learned that they had totally abandoned harvesting peat because, as they said, there was nowhere to dry it, and the foul weather prevented it from drying. It seems to me that this is due more to their laziness, and they are more willing to burn whale blubber for heat, producing a terrible stink and soot, than to occupy themselves with drying peat, which they have to harvest themselves, whereas the Aleuts hunt the whales and they acquire the blubber without any work. Our naturalist stated that trees such as birch and similar species can grow very well here. If the Company were to try cultivating them on the Aleutian Islands, what a benefit it would be to mankind!

Kryukov gave us some native amalgam,⁸¹ brought from Umnak, but only a small amount. Superb grass grows here and in sufficient quantities in all the valleys that one could rear more cattle than we had with us (six head). Garden vegetables grow here in abundance, so that the land is extremely rich; hence with decent organization one could live here in good houses and no worse than in many places in Russia itself or in Siberia. According to Kryukov in 1819 he had a crop of turnips almost the size of a plate, which could not happen on poor land. Potatoes grow well when they are sown along with cabbage; otherwise they go more to leaf, clear proof that the land is rich. The Company lays up fish for the winter for its drivers and Russian trappers, as well as for the widows and orphans of the Aleuts. In total it has to feed up to 22 people throughout the winter. For this reason, in all the settlements where there are rivers they have seine nets, with which they catch fish all summer, and Russian *promyshlenniki* are sent to supervise. Based on the Unalaska post there is a total of 17 Russians, including the administrator. Seven of these live at settlements where there are streams which have fish; the rest are either officials, such as the administrator, headman, steward, clerk etc., or *baydar* men.

⁷⁸ *Enhydra lutris* – the primary reason for the Russian colonization of the Aleutians and subsequently of the remainder of the Alaskan coast.

⁷⁹ Makushin Bay: an extensive bay on the northwest side of Unalaska Island, penetrating deep into the land. Along with the opposing Sea-Otter Bay on the east side it separates the northern part of the island from its southern expanse. On the north the bay is bounded by Cape Makushinskiy and on the south by Cape Starichkov. At the head of the inlet there are several good bays: Old Harbour, Tarasovskaya Bay, Crossing Bay (to Sea-Otter Bay), Conner's Bay and Iksyakhtakh Bay (S).

⁸⁰ Under the command of Otto von Kotzebue during his round-the-world cruise, 1815–18.

⁸¹ Native amalgam: colombianite (an amalgam of silver and mercury. One of the methods of extracting gold from ores (amalgamation) is based on the property of mercury of combining with metals (to form an amalgam) (S).

During our visit we noticed that the Russians, when going out hunting in *baydarki*, or travelling to some other place, were invariably less skilled than the Aleuts who were with them. This is scarcely surprising since an Aleut, one might say, is born in a *baydarka*, is skilled at all kinds of hunting, and is familiar from childhood with winds and currents. The sole duty performed by the Russians here consists in trapping foxes; this lasts for only a month or six weeks per year, from the middle of October through December, and since there are few of them, they hire Aleuts for this, paying them 80 to 100 roubles.

It is well known that for all the marine mammals, whales and fish harvested by the Aleuts, the Company takes half, for a very low price, and hence the Aleuts cannot get rich, under any circumstances. With the arrival of Leytenant Yanovskiy, the prices for everything were increased; for example they previously paid 5 to 10 roubles for a whale, whereas now the price is 10 to 20 roubles depending on size; for a sea otter the price was previously 5 and is now 10 roubles; for cod they now pay 5 kopeks for each fish, whereas they previously paid nothing. Along with these the prices paid for other animals have also increased.

In the meantime the weather did not smile on us for long; on the night of the 18th we had rain with gusts and we secured the topgallants, and at 5 a.m. we took a reef in each of the topsails. At 6 the wind became gentler, and we could reset the topgallants. At noon St. George Island lay 17 miles from us on a bearing of NW 30½°, but was invisible due to fog. At 1.30 p.m. it cleared; at 2.25 the captain and I were able to get the sun's altitude to determine the island's longitude; we wanted to visit it to obtain bearded seal⁸² and sea lion hides for Aleut *torbasy* and for repairing their *baydarki* etc.⁸³ But soon the wind began to swing into the west and drove us towards the NNW. At 6 the island disappeared in fog and, steering in the latter direction, we still hoped to see and visit St. Paul Island,⁸⁴ for the same purpose as we'd intended on St. George. At the time we began to approach the Pribilof Islands,⁸⁵ puffins, murres and ducks were flying around us in enormous numbers. We also saw many Steller's sea lions and whales⁸⁶. Towards 1 a.m. the wind began to freshen, and by morning, not only did it not permit us to visit St. Paul Island, but we could not even see it. For this reason we proceeded straight to St. Lawrence Island. On the way there the murres barely flew away from us so that we could shoot them in flight, since they provided us with an excellent meal when roasted, and a one-hatch *baydarka* barely managed to retrieve them all. We frequently saw sea lions playing in the water.⁸⁷

On the 21st a large number of logs drifted past the ship, as well as some large dead animal and also a tree on which there seemed to be some bags lying, filled with something. We immediately lowered the yawl and hove-to; and the naturalist and I went to examine it, but found

⁸² *Erignathus barbatus*.

⁸³ Shishmarev also hope to be able to obtain sea lions, sea otters and murres from the Aleuts to give his crew some fresh food (Gillessem, 'Journey', p. 75).

⁸⁴ The other major island of the Pribilofs.

⁸⁵ Pribilof Islands: located north of the Aleutian chain on the 170° meridian east (*sic*) of Greenwich. From here the ship proceeded to St. Lawrence Island, discovered by Bering in 1728 in the northern Bering Sea, close to the entrance to Bering Strait (S). This was during Vitus Bering's first expedition, on board *Arkhangel Gavriil* in 1728.

⁸⁶ Probably right whales (*Balaena glacialis*), minke whales (*Balaenoptera acutorostris*), or grey whales (*Eschrichtius robustus*) (Sale, *A complete guide*).

⁸⁷ On the way to St. Lawrence Island, they saw several thousand whales, some of which were seen breaching, i.e. hurling themselves out of the water. Some of them came so close to the ship that the rather unpleasant smell of their breath could be detected from on board when they blew (Gillessem, 'Journey', p. 76). From Gillessem's description i.e. having 'a sharp snout and being much smaller than the sperm whale' these were either grey whales (*Eschrichtius robustus*) or minke whales (*Balaenoptera acutorostris*). In May grey whales would have been on their way north to their feeding grounds in the northern Bering Sea and Chukchi Sea from their calving grounds in the lagoons of Baja California.

that the supposed bags were two very large growths on two sides of the tree, indicating its poor state of health.

At 9 a.m. seaman Panfilov, who had been the wardroom cook, suddenly died. He was forward in the heads⁸⁸ when he was taken with a fainting fit.⁸⁹ He was quickly taken to the sick-bay where he complained of pressure in his chest, but they had scarcely had time to put him to bed when he lost consciousness and all efforts at assisting him were in vain. Both our captain and all the officers deeply regretted seeing another man dying in this unfortunate fashion. In the course of a year we had lost three men, although they had not experienced any shortages, privations or hard or difficult work. One might think that the cause was some shortcoming in the cleanness of the air in the ship, in the food, the linen etc. but every one of us and the sailors themselves had to recognize that the captain had overlooked nothing which might contribute to the health of the crew entrusted to him. The deck where the men lived was holystoned daily; in damp weather a stove was kept alight there throughout the day; they could smoke; they enjoyed the best food that could possibly be asked for. During our stay at Unalaska we had laid in 5 barrels of horse sorrel and had pickled it like sauerkraut. The men's clothing and linen were fully adequate in amount, and we watched closely that they changed them twice per week, so that nobody went around in damp clothes, or went to bed without undressing.

At noon [on the 23rd] we obtained an observation; depth 23 fathoms, bottom silt. At 3 a.m. we spotted St. Lawrence Island to the NbW. Soon after noon we reached a spit projecting from the south of the island, with a settlement on it; we hove-to under main topsail, on the starboard tack. The captain and a few of the officers went off for the settlement in two armed boats, taking the necessary arms as a precaution. In one of these boats was transported the body of the dead sailor whom the captain wanted to bury on the island, rather than at sea. The burial service was read over the body in the boat and it was honoured by a three gun salute fired from 20 guns as it was lowered into the boat.

At this point the thermometer was reading $8\frac{1}{2}^{\circ}$ for the first time since leaving Unalaska. In general we noticed that the farther we moved north from the Aleutian Islands the warmer it was. There was almost no snow on St. Lawrence Island,⁹⁰ whereas the Unalaska mountains were almost all covered with it. However five days had passed since we left Unalaska and hence it was not surprising that it was warmer here. The spit on which the settlement is located projects east for 1 mile and has two small bars; one to the east and the other to the northeast.

As we approached the settlement we looked for the most suitable place to run ashore and spotted some inhabitants on shore; they waved their arms to indicate such a spot and we immediately put ashore there. These were six men;⁹¹ none of them had any weapons and each of them was holding something for sale: walrus tusks, fish, birds they had killed and bird skins. They were asking for tobacco for these items, constantly repeating: 'tavvakom, tavvakom'. Stepping out of the boat the captain distributed to each of them a few leaves of tobacco, without taking anything in exchange.⁹²

⁸⁸ The crew members' somewhat primitive and exposed toilet facilities in the bows.

⁸⁹ A stroke, according to Gillesem ('Journey', p. 76)

⁹⁰ Gillesem disputes this, describing the mountains as being snow-covered almost to their bases (Gillesem, 'Journey', p. 77).

⁹¹ Prior to this the remainder of the men, with all the women and children had been seen heading inland (Gillesem, 'Journey', p. 78).

⁹² According to Gillesem, they did not smoke or snuff tobacco, but ate it, swallowing it and not just chewing it (Gillesem, 'Journey', p. 79).

At first they were very happy with this gift but afterwards they constantly offered their things, asking for tobacco in exchange. They greeted us by touching noses and by stroking a hand across the face, belly and chest, first their own, then those of the person being greeted. Our naturalist quickly set off into the hills with an armed party while we began bartering articles for curios, fish for food, clothing for tobacco, needles, etc. Looking around, we spotted 10 winter yurts, dug into the ground, in which the single entrance at the top served as door, window and chimney. They were quite spacious, but extraordinarily dirty.⁹³ There were also about 20 racks for drying fish, made out of poles, very similar to our *provesy* (drying racks) on which they dry flax in our villages, and among them three summer yurts, rectangular in appearance, made of poles, with a sloping roof on one side, and all covered with walrus hides. I examined all these dwellings and equipment with great interest.

Getting to know the inhabitants we explained to them by pantomime that we wanted to bury the dead man on their land. I don't know if they understood us, but they did not obstruct us in digging a grave, lowering the dead man into it and erecting above it a cross on which had been carved the time of his death and the name of our ship.⁹⁴ On the spit we found three small lakes, the water in two of which turned out to be salt; but in the third, the largest, and the farthest from the sea the water was fresh. We tasted it and found it tasted very good but the inhabitants indicated by signs that we should not drink it. The reason for this remained unknown to us. Our captain spotted two elders among these savages, one about 60 years of age, the other about 40, and hung around each of their necks a bronze medal on a white ribbon. We explained their significance by signs, as far as we could, and so that they would understand that the medals were things of significance, the captain, on approaching them, also gave each of the officers a medal to hang around their necks while he himself put on two; we did not remove these medals for the entire length of our stay here.

We wanted very much to examine the inhabitants' summer yurts, but they tried by every possible means to divert us from this but finally, after strenuous persuasion, they agreed to let the captain and myself enter, but insisting that the others did not enter. Two old men were our guides. We found nothing there apart from a few bladders full of fat, a great deal of filth and an awful smell, and hence we soon departed. Thereafter, on visiting a winter yurt I found an old woman who was extremely frightened by my appearance; not only did she not say a word, but she would not even look at me, from which one may conclude that these inhabitants are jealous. I gave her a needle, tobacco, and a mirror and immediately departed, since some unpleasantness might have arisen if the men had found me there. One had to assume that on seeing our boats approach they had sent their women and children into the interior of the island, as all the inhabitants of this region usually do. Possibly the Chukchi or Americans had attacked them and abducted their women and they had expected the same from us.

We had been on the island for an hour when another six men appeared on the other side of the spit, but were apparently afraid to approach; when we explained to our friends that they should call over their comrades, since we would give them tobacco too, they immediately began shouting and invited them over. We quickly presented them with a few leaves of tobacco, and they began giving us fish, evidently recently caught. One of them was elderly and, it appeared,

⁹³ And unbearably foul-smelling (ibid, p. 79).

⁹⁴ The task of digging the grave was not as easy as Lazarev suggests. The grave-diggers hit permafrost at a depth of about 70 cm, and they had to use crowbars to excavate the grave to a depth of 1.8 m in the frozen ground (Gillessem, 'Journey', p. 78). By sign language they indicated to the local people that if the grave and cross were not left in peace the dead man would haunt them.

greatly respected by them. The elders, indicating that he too was a leader, asked that we give him a medal too, and this was done. In the meantime it was getting on towards evening; the elders began explaining to us that we should go home, repeating the words: 'tagoma anayman', which meant 'be off, friend.' and pointing to our boats and the ship. And indeed it was time for us to leave, but we were waiting for the naturalist; when he returned, without wasting any time, we returned aboard.

When we had pushed off about 5 fathoms from shore, all the inhabitants began hurling stones into the water; fortunately none of them hit any of us, but they fell like hail alongside the boat. We could not understand the significance of this and were totally amazed; if the inhabitants had wanted to hit us they could have done so without any difficulty, since we were still close to them; moreover they could throw stones very accurately, especially from slings, which we later saw several times. Moreover we had given no occasion for this attack. On Captain Billings's⁹⁵ journey it is reported that when he approached one settlement in Mechiginskaya Guba, the headman of which was with him, the Chukchi threw rocks into the water as a sign of friendship. On 'frisking' some of the inhabitants our sailors found large knives in the left sleeves of their parkas. They were probably all armed with these weapons, as a precaution, just as we were.

On returning to the ship around 6 p.m. we got under way and steered ENE; the depth by the lead was 10 fathoms with a grey, sandy bottom. Since the north side of St. Lawrence Island had not been seen by anybody from close-up, we proposed surveying it. Continuing our voyage, we spotted close ice ahead; however it was not fast ice, or, as Captain Cook called it, ice fields or ice islands, but probably ice which had broken away from the shore from the wind and accumulated around St. Lawrence Island. We determined this from the fact that water was visible beyond the ice in some places and, apparently there was even totally ice-free water. We did not want to enter the ice, afraid that we would strip the copper sheathing off the ship to no advantage, and hence laid a course along it. The weather was very pleasant, and the ice edge lay no more than half a mile from us, to leeward. At midnight the sun was shining very brightly, and the horizon was extremely clear. At 2 a.m. we saw a large number of walrus which, it seemed, were involved in copulation since they were swimming one on top of another, in large clumps, with a terrible roaring and wheezing.⁹⁶ From the crosstrees ice was visible somewhat to starboard of our course, and hence we swung onto the port tack and headed south. Towards evening [of the 24th] we noted a compass variation to the east of $24^{\circ}56'$, similar to the observations of Sarychev and Kotzebue. At 8 we sighted the coast of America, in the form of two pointed hills and farther to starboard a few small hillocks, to the NbE at a distance, by calculation, of about 54 miles. We felt it was Ayaks Island. That night it fell calm, and we began to drift towards the ice, but when a light wind arose we managed to edge away from it.

At noon [on the 25th] a gentle breeze was blowing from the southeast and there was no ice in sight at all, probably because a current had carried it north. Although we were fully aware that there was still ice towards the American coast, and that not much of it could have been

⁹⁵ Captain Billings was the leader of the Russian Geographical and Astronomical Expedition to study the north-eastern part of Siberia, and the Arctic Ocean and Pacific oceans from 1785 to 1793. Billings himself did not publish anything. His secretary and translator, Martin Sauer, kept records and published an account of the voyage in 1802 in London, in English (and also in French and German in that same year).

During his voyage Billings spent time in Mechiginskaya Guba. It is located on the west side of Bering Strait at $65^{\circ}30'N$ and extends deep into the land, with a narrow entrance between two spits. On the spits were located the Chukchi settlements of Iguyak and Mechigm. A participant in Billings' expedition was G.A. Sarychev, later a famous Admiral and head of the Admiralty (S). The English translation of Sauer's book is: (Sauer, *An account...*).

⁹⁶ Attempts were made at shooting some of them but Gillesem ('Journey,' p. 81) reported that even at close range the bullets bounced off their thick hides; this seems improbable; the animals were probably wounded but not fatally.

carried away in one day, the hope of finding a passage to Bering Strait inspired in us the desire to head into the ice again. On the basis of his experience the captain declared that we should not head north until the ice melted or drifted off into the Arctic Ocean, and hence we set a course of NEbN. At 1.30 we again sighted Ayaks Island to the NE and to starboard of it, about two points, many mountains. Soon afterwards they spotted from the crosstrees that ahead of our bows and to starboard, in front of the coast, there was ice, whereas to port there was none to be seen and hence we steered first NNE, then N, NNW and finally NWbN. At 4 the thermometer was reading 7°; the depth was 19½ fathoms and the bottom silt with sand. At 7 there was ice visible to port and starboard but ahead of the ship, to the NWbN, there were only pieces of ice drifting, some of them up to 20 fathoms in circumference. By this time we were already sailing among them and were examining the closest ice through the telescope to determine whether it were possible to continue on our course, but from a distance there turned out to be so much ice that, not wanting to expose the ship to danger to no benefit, the captain ordered her close-hauled on the port tack, steering away from the ice. We had established that it was impossible to push through the ice in safety, and since farther north towards Bering Strait the coasts were converging and the passage between them narrower, the ice, driven north by the wind and current must be closer-packed. Hence, running away from the ice, we adopted our earlier intention, to examine the north side of St. Lawrence Island, and began beating in that direction. Today, after dinner we exercised the crew at target shooting, using wooden bullets, and one lead bullet per man.

Constant dense fogs hid the coast from us for two days, so that we despaired of any success in our undertaking but fortunately, at noon on the 28th, it cleared and we could begin our survey. The depths ran: 16, 15, 14 and 13½ fathoms; the bottom was grey sand with shells. At first the coast was studded with mountains, between which lay large valleys; there were scarcely any lowlands visible. In general, from a distance, e.g. from about 20 or 15 miles, St. Lawrence Island seems to consist of a large number of high islands, separated by straits, but as one approaches to within 7 miles, one can see that all these uplands are joined by a low-lying coast. In many places there was still snow lying on the mountains; straight ahead we could see a high coast, but three points to port there was no land visible, and hence we steered WbS until from the quarterdeck we sighted a lowland, joining a coast which was completely level and low and extending for 15 miles. Then we steered WNW and soon, to the NW spotted three stacks, separate from the coast; the largest of them was much higher than the Unalaska one, the others lower than it. All of them, it seemed, resembled ships under sail from a distance. As we approached we steered west since from Zagoristiy Cape the coast also swung in that direction; it was very level, only to the WbS½W was a mountain visible in the distance.

When we came abeam of the stacks, the wind began to blow more strongly from the WSW; it began to rain and we encountered thick fog which totally hid the coast. We were forced to postpone our survey to another more favourable time and, heading into Bering Strait at 7.20 p.m. we steered NbW straight for the Gvozdeviye Ostrova.⁹⁷ We wanted to pass on the west side of them, in order to see and check the position of Ostrov Ratmanova, seen in 1816 and also named by Leytenant Kotzebue. There was a strong wind, so that we took reefs in the topsails; we were making 8 knots and there was frequently heavy rain. Towards midnight it became calmer and we could shake out the reefs. The rain ceased at 2 a.m. but the fog continued; the thermometer was reading 2½°. At 8 a.m. [on the 29th⁹⁸] when it became somewhat clearer, we

⁹⁷ The Diomed Islands, here named after Mikhail Gvozdev who, along with Ivan Fedorov, in the *Sv Gavriil* sighted these islands in 1732, and subsequently saw the Alaskan coast in the vicinity of Cape Prince of Wales, the first Russians to see North America (Belov, *Istoriya*, pp. 260–62).

⁹⁸ On the 30th according to Gillessem ('Journey', p. 81) (S),

spotted a coast to the NNW; this appeared to be three islands, while another, mountainous one lay to the NE. Judging by our calculations we could not believe that these were the Gvozdeviye Ostrova but as we closed with them, we became completely convinced that these were they, while the coast visible to the northeast was Cape Prince of Wales. Around noon they were all hidden by fog, and although we did not have an observation for latitude, almost at noon we managed to take bearings on all three of the Gvozdeviye Ostrova⁹⁹ and on Cape Prince of Wales, which then bore from us EbN, 25 miles; the most westerly of the Gvozdeviye Ostrova NW6°, 7½ miles. From these bearings, our latitude according to the chart was 65°40'N; longitude 190°48'E¹⁰⁰; the current over 4 days set NE 46°37', 31½ miles; from this we had absolutely no doubt that these were indeed the Gvozdeviye Ostrova. Steering NNW or N by compass, on this course, according to Sarychev's chart, we ought to pass along the east side of Ostrov Ratmanova,¹⁰¹ and according to Kotzebue's, two miles east of it, and hence we hoped to be able to confirm its existence.

At 1 p.m. there was really thick fog and the wind began to freshen. The depth was 26 fathoms. The bottom was rock with shells. We reduced sail, so that we would not run into the island at speed, if indeed it existed, and steered due north by compass until 3 o'clock. Thus, from noon we covered 18 miles, and the depth was still not decreasing. According to the map we were already north of Ostrov Ratmanova and had passed very close to its easternmost tip. Hence there was no point in heading farther north, and we set a northeast course straight for Kotzebue Sound,¹⁰² where our rendezvous with *Otkrytiye* had been prearranged. Since the fog had prevented us from confirming whether the above-named island actually exists, it was decided to investigate it on our return trip, if circumstances permitted.

⁹⁹ It is usually considered that there are only two Diomed Islands: the western one, Ostrov Ratmanova is Russian and the eastern one, Little Diomed Island is part of Alaska; they are also separated by the International Date Line. For a possible explanation of Lazarev's count of three islands, see footnote 102 below.

¹⁰⁰ 169°12'W. Lazarev expresses his longitudes as from 0° to 360°E east from Greenwich throughout, rather than the modern convention of 0° to 180°E and 0° to 180°W.

¹⁰¹ At its narrowest part Bering Strait is 48 nautical miles (89 km) wide. The Gvozdev, or Diomed Islands group is located in the middle of the strait in this narrowest part. One of the islands was discovered by Bering in 1728. There are three islands altogether: 1) the western one, Ratmanova, is otherwise known as Greater Diomed, and was earlier known as Imaklit. It is 5 km long, 11.75 km wide and 536 m high; 2) the middle island, Little Diomed, or Krusenstern Island, is only one third of that size; 3) the small Fairway Rock, located 18 km south of Krusenstern Island; in Eskimo it is known as Ugiyak. The islands were first seen by S. Dezhnev, and he may have landed on them. In 1778 they were noted by J. Cook, but he did not give them names. In 1791 they were examined by Sarychev and he described them in the second part of his remarkable work (see note 146). Then the islands were described by Kotzebue in 1816 as numbering four; in poor visibility he had mistaken the eastern cape of Asia as an island. The incomplete information on the islands, the vagueness as to their number and the doubts as to the accuracy of their depiction on the charts dictated that Shishmarev should head for Ostrov Ratmanova, beyond which Kotzebue had mistaken the Asiatic coast for an island (S).

¹⁰² Kotzebue Sound; the extensive inlet, extending into Alaska from the west, north of Bering Strait, in latitudes 66–67°. It extends southeast for 140 km. It was discovered and explored by O. Ye. Kotzebue in 1816. Bounded by Capes Espenberg and Krusenstern, it ends in the interior of the continent in four bays: Goodhope, Spafar'yev, Eshscholtz and Hotham. Kotzebue explored the inlet and its shores, gave names to its main geographical elements, largely the names of participants in his voyage (S). For details of Kotzebue's voyage see Kotzebue, *A voyage*.



Map 2. From St. Matthew Island north to and beyond Icy Cape

On entering Bering Strait we were greatly amazed on finding no ice, such as that around St. Lawrence Island, which we had left only four days before. Was it possible that the ice could have melted in such a short time, while the sun had peeped out only very rarely and we had achieved no observations during those four days. Admittedly the wind had remained constantly southerly, and hence the ice must have been driven north, whereby the current we had found had also been north-flowing.¹⁰³ But the ice we had seen around St. Lawrence Island had extended over a very great distance, and towards the strait the coasts converged, and hence the ice itself must become more compact. Its elimination could be ascribed only to the fact that part of it had been eroded away by the previous strong winds, another part had been carried into the Arctic Ocean by the winds and the current, and the remainder had been scattered along the coasts.

When we headed northeast the wind strengthened so much that we had to take reefs in the topsails. This was a reefed-topsail wind with gusts from the southeast, but sometimes it blew fairly gently, probably from the mountains on Cape Prince of Wales. Towards evening, when it became calmer and a little clearer we spotted a hill to the EbN½E, consisting of three hillocks. From Leytenant Kotzebue's description it had to be located on the south side of Shishmarev Inlet,¹⁰⁴ but there was no sign of the coast anywhere; the depth was 22 fathoms and the bottom silt and black earth; at 10 the depth was 15 fathoms and the bottom silt. At 10.30 [on the 30th] by dead reckoning we were at lat. 66°19'N and long. 193°00' E.¹⁰⁵ We shook out the reefs in the topsails and at 12.30 we spotted Cape Lowenstern to the east-northeast, to the northwest of which large numbers of ice floes were drifting. The depth at this point was 14 fathoms; the bottom grey sand, and at 2 o'clock 7½ fathoms and the same bottom. The wind was blowing very gently from the east-southeast. Although the coast was not visible at this point, the ice, extending along it, was no more than 2 miles from us, and probably stretched in to the coast. Around noon it fell calm and although it had cleared up somewhat we did not get any observations.

At noon we saw a mountain on shore, but very indistinctly and hence we were unable to get any bearings. Judging by the chart provided by the State Admiralty Department, the closest coast was 7½ miles from us, but due to the murk it remained invisible. Soon after noon a dead animal drifted past us, very similar to a pig; its hair had fallen out completely and its ears were visible. We were bewildered as to where a pig could have come from, since it is well known that animals of this species are not raised in these parts of Asia or America.

As we thus sailed past ice and amongst it at times, as the fog cleared somewhat the coast was visible, completely covered in snow. At 4 we spotted a coast through the fog to the north-northwest; we took it to be Cape Krusenstern,¹⁰⁶ i.e. for the northerly cape of Kotzebue Sound. At 6 we headed NEbN into this inlet but, having progressed somewhat we spotted close ice and at 10 ran down to the NNW towards Cape Krusenstern, where we also encountered ice, in such quantities that there was no possibility of entering the Sound.

¹⁰³ In summer the winds here are mainly southerly and hence the current is always north-flowing (S).

¹⁰⁴ Shishmarev Inlet was discovered by Kotzebue in 1816. It is located northeast of Cape Prince of Wales, near the Arctic Circle. Off its entrance lies Sarychev Island, also discovered by Kotzebue (Kotzebue, *A voyage*) (S).

¹⁰⁵ 167° 00'W

¹⁰⁶ Cape Krusenstern: a low spit with low hills and many lakes, projecting out to sea, bounding Kotzebue Sound on the north. Its latitude is about 67°10'N. The cape was discovered and surveyed by O. Ye. Kotzebue in August 1816 and was named by him in honour of the first Russian circumnavigator, I. F. Krusenstern (S). For details of the latter's voyage see Ivashintsov, *Russian round-the-world voyages*, pp. 1–10.

If it were not that we were supposed to wait for *Otkrytiye* at this spot, we could have run farther north to survey the coast. Another reason that would not permit us to do this, was the constant south wind, whereby we could not have quickly beaten up here again to the Sound (to come back to the rendezvous if we went north) and thereby we would have delayed *Otkrytiye*. The latter, not seeing us at the prearranged spot, might assume, in all probability, that we had not yet arrived from Unalaska, and hence would not push on. Finally, since the ice would not allow us to approach close to shore, and since the coast itself was all covered with snow, and there were no conspicuous points to plot on the chart, sometimes we might have mistaken the ice for land, and sometimes the reverse. Admittedly there were a few mountains ahead but they were almost constantly covered in fog. These were the reasons which convinced us to remain off the entrance to the Sound until more ice were carried in, or until we made rendez-vous with *Otkrytiye*. The depths were 16, 15 and 13 fathoms and the bottom green silt. From midnight onwards we had a light rain and we hoped very much that it would become heavier and break up the ice. At midnight, in continuing rain and heavy fog, we were only 60 fathoms from the ice and could hear the surf breaking on it. Judging by the Admiralty Department's chart we were right in by the coast at the second settlement to the southwest from Cape Espenberg,¹⁰⁷ but judging by the depth and by the alleged latitude, we were 12 miles farther north. The barometer was reading 29.71 inches and the thermometer 4°.

The current swung our ship in every direction and carried it to the northwest. It was probably the ebb tide at this time, with the current running out of Kotzebue Sound, off the entrance to which we were lying. The depth was 14½ fathoms; the bottom sticky silt. At 7.30 p.m. [on 1 July], due to the heavy fog we furled all sails and dropped anchor in a depth of 13½ fathoms on a silty bottom. The current was flowing northwest by compass at half a knot. From midnight onwards ice was drifting around us in fairly large quantities and in large floes. At 1.45 the current changed to southeastward at a quarter of a knot. At 10 a.m. [on the 2nd] the rain ceased. Towards noon the ice became heavier, it began to clear and Cape Krusenstern started to appear.

At noon a large quantity of floes was drifting down on us; some of them were up to 20 fathoms long and they were all drifting out of Kotzebue Sound. Afraid that they might cause the ship some damage or might snap the cable, we weighed anchor and headed for the Gvozdeviye Ostrova on a course of WbS, in order to investigate Ostrov Ratmanova¹⁰⁸ since we had some free time. At 6 p.m. there appeared to be a passage free of ice around Cape Espenberg and we quickly ran straight down the Sound. There was ice in sight on both sides, but ahead it appeared to be completely clear. But having made some progress we realized that here too it was impossible to sail further because of the ice which had accumulated and hence, turning back again, we began beating back. It was a calm, clear night and until full daylight we stayed in the entrance to the Sound, 20 miles offshore.

At noon on 3 July, exactly a year after we sailed from Kronshtadt, we found ourselves almost in the middle of the entrance to Kotzebue Sound, with Cape Krusenstern bearing NE 28°, 20 miles away. Taking advantage of the calm, we lowered a yawl and inspected whether the copper sheathing had been abraded by the ice, but found no damage, apart from the fact that some of the nail heads had been torn off; these were immediately replaced with new ones. At

¹⁰⁷ Cape Espenberg: a hilly headland projecting to the east of Shishmarev Inlet. It bounds Kotzebue Sound on the south. The cape was discovered by Kotzebue in 1816 and was named by him after his friend Espenberg, a doctor, who sailed round the world with Krusenstern (S).

¹⁰⁸ The reference is to the land mistakenly identified by Kotzebue, not the present Ostrov Ratmanova, the western island of the Diomedes. See footnote 102.

midnight we again set a course for Ostrov Ratmanova but at 7.30 a.m. [on the 4th], having covered 17 miles, we sighted ice to the south and swinging onto the other tack we began beating towards our prearranged rendezvous with *Otkrytiye*. In the meantime the wind was blowing from the northeast and we hoped that the force of the wind would break up the ice and carry it out of the Sound.

At noon Cape Krusenstern still bore NE 28° from us, 28 miles away. At 4 p.m., having closed to 14 miles from it, we spotted thickening ice from WSW round through N and E to SE; it occupied the entire area one could see from the crosstrees. In view of the total impossibility of entering the Sound we again ran down towards Ostrov Ratmanova and on this watch the captain, the master and I obtained observations for longitude from the sun and the moon. We were making 7 knots.

At noon [on the 5th] the three-peaked hill in Shishmarev Inlet bore SE 80° by compass, and the hills on Cape Prince of Wales bore S. From these bearings, according to Kotzebue's chart, Ostrov Ratmanova lay 47 miles away on a bearing of SW 7°. Soon it became extremely overcast, it started to rain; and the wind strengthened from the southeast to the point that it forced us to take in all the reefs in the topsails and send down the royal yard. To our delight this wind did not persist for long and at 9.30 p.m. we shook out the reefs and at 4 p.m. set the topgallants. At 8 a.m. [on the 6th] we spotted Cape Prince of Wales bearing SE 48° by compass; taking a bearing on another mountain we noticed that during the night we had been carried a long way to the northwest.

With a fresh southeast wind we sailed southeast straight towards the Gvozdeviye Ostrova. At 8 p.m. we had Cape Prince of Wales 6 miles off, bearing E 11°; the depth went from 10 to 6 fathoms then began to increase; by midnight it was already 27 fathoms, the bottom grey sand with small stones. Soon after 2 a.m. we spotted the western of the Gvozdeviye Ostrova bearing SbW½W by compass, and at 3.30 by visual estimate we were 8 miles from it; we then steered WSW straight for the northern tip of Ostrov Ratmanova. We soon encountered fog, which we found very annoying, since without this, we might have seen both coasts and all the Gvozdeviye Ostrova and hence Ostrov Ratmanova also could not have hidden from us; but at 8 it cleared up. Heading on the above-cited course, we should have run across this island, but again we did not see it, whereas, judging by its size it could not escape our notice since the visibility all around us extended to 3 miles. Although both times we had tried to examine this island there had been fog, nonetheless one could conclude that it does not exist or, at least, is not located at this position. Very probably Kotzebue mistook a fog bank for an island; not a surprising circumstance in these seas, by any means.¹⁰⁹

Towards noon [on the 7th] it cleared up and straight ahead we spotted the eastern cape of Asia; right at noon it bore SW 65° by compass, 7 miles away; we found its latitude to be 66°7'18"N.

Our calculations today revealed that we had run not across Ostrov Ratmanova, as we had thought, but 6 miles north of it, and hence there was still some hope of finding it. But when it cleared at 3 p.m. to the extent that we could see the Gvozdeviye Ostrova, East and West, as well as Mys Vostochniy¹¹⁰ and Cape Prince of Wales, we could not see Ostrov Ratmanova; hence there could be no doubt that it did not exist, and setting a course of SbW we ran straight down towards it. Having covered 11 miles on this course, at 5 p.m. we found the northern part of the

¹⁰⁹ Gillesem, however, suggests that Kotzebue may have been deceived by a mirage ('Journey', p. 82).

¹¹⁰ Mys Dezhneva, the easternmost point of Asia.

Mys Vostochniy of Asia bore NW 79°42' by compass, 14 miles away. According to this the latitude of this location was 66°7'37" N; the average of many calculations was 66°6'15" N; and the latitude of the cape itself was 66°4'37"N. At the same time the western of the Gvozdeviye Ostrova bore NE 70°, 12 miles from us and 6 miles from Ostrov Ratmanova, but this latter was nowhere to be seen, although the Gvozdeviye Ostrova, lying 6 miles farther away, were very clearly visible; our range of visibility was not less than 20 miles. Thus our three attempts at locating Ostrov Ratmanova, although all fruitless, at least produced the benefit that we could positively disprove its existence.¹¹¹ At 5 we headed NE towards Kotzebue Sound, where we hoped to find *Otkrytiye*. At midnight there was fog with rain, but an hour later the fog had cleared somewhat and the rain had ceased completely, and to the east we sighted mountains lying southwest of Shishmarev Inlet. Continuing to sail with these winds amongst ice and approaching closer to Cape Espenberg on the evening of 9 July we met some American natives from the western settlement at Cape Espenberg.¹¹² They came out to us, 48 men in 5 *baydari* and wanted to barter their furs, but we did not take them; instead we made them gifts of tobacco and other trifling things. These savages came right alongside our ship without any prevarication but none of them decided to come aboard, no matter how much we persuaded them. They were dressed in ground-squirrel¹¹³ or muskrat parkas, very neatly sewn, and almost all of them had holes cut in their lower lip at the corners of their mouth, into which were inserted large blue beads, set with bone or stones of various colours. Apparently, one may recognize their headmen from these decorations, since in some cases the beads were of larger size and better workmanship than in others. Around their ears and nose and across their entire faces various designs were tattooed, and at any time and in any place they are ready to make a new hole in their faces in order to thread through it a string of worthless beads, especially preferring blue ones. We wanted to trade weapons with them, but instead of that they tried to pass off fox skins, for each of which they asked an axe or a large knife,¹¹⁴ but since as a trade item this was of no use to us in assembling a collection of curios, we simply made them a gift of tobacco, to which they paid almost no attention. For each trifle they asked a very high price, attempting to exchange each item traded for a worse one, e.g. a marten for a dog's tail, etc.

From bearings on 10 July we determined that our position by compass was between Cape Espenberg and the high land of Cape Krusenstern on a bearing of N and S by compass, 29 miles. On 10 July and for the subsequent day-and-a-half we were cruising around Chamisso Island,¹¹⁵ waiting for *Otkrytiye*. On the 11th, due to a calm, we lay at anchor 7 miles north of Chamisso Island and sent the ship's master to survey the southern channel.¹¹⁶ At 2 p.m. on the 12th we weighed and ran along the south side of that island, where Leytenant Kotzebue had not gone, since we wanted to survey this entrance into the bay [Eschscholtz Bay]. If it was of adequate

¹¹¹ Ostrov Ratmanova is the name now applied to the largest (in area) of the three Gvozdev or Diomed Islands. Kotzebue applied the name to the island for which he mistook the coast of the Asiatic continent, thinking there were four islands in the Diomed group. Shishmarev, in *Blagonamerenny* thus searched unsuccessfully for Ostrov Ratmanova. The name Ratmanov was later assigned to the westernmost of the islands of the Diomed group (S).

¹¹² For Shishmarev's account of this encounter see Bockstoe, *Furs and frontiers*, p. 26.

¹¹³ Arctic ground squirrel (*Citellus parryi*).

¹¹⁴ According to Gillesem they also asked for guns, powder and lead, which would indicate that they already were familiar with firearms. These requests were refused (Gillesem, 'Journey', p. 83).

¹¹⁵ Chamisso Island was discovered by Kotzebue and named after the naturalist Adalbert Chamisso, a Frenchman by origin, who sailed with Kotzebue; he is better known as a romantic poet. The island is located in Kotzebue Sound. There is a brief description of it in Kotzebue, *A voyage* (S). It lies at the entrance to Eschscholtz Bay just south of Choris Peninsula.

¹¹⁶ In the meantime the Aleuts who had been taken aboard at Unalaska set off in their three *baydarki* to hunt murre and puffins, returning in the evening with a full load of birds which they had killed using bows and five-pointed bird arrows (Gillesem, 'Journey', p. 84).

depth, it clearly was preferable to the more northerly one in terms of its dimensions, but the current prevented us from doing this and, turning back, our ship was forced to use the northern channel. At 4 p.m. we dropped anchor in a depth of 4 fathoms, bottom silt with sand, having the spit of Chamisso Island bearing SW 42° 1½ miles away. At 8 next morning we took the sun's altitude to determine the longitude from our chronometers, and so as not to waste time in idleness, we decided to run into the eastern end of Eshscholz Bay,¹¹⁷ with the intention of examining the Icy Mountains, so named by Kotzebue, and lying 20 miles east of our anchorage. But since we were sailing with a very fresh southeasterly wind, we reached our goal in no more than ¾ hours. The party included the ship's commander and some of the officers. We set off at 9 a.m. [on the 13th] in a launch, armed with 4 falconets,¹¹⁸ and with 15 armed sailors; in case of shoals we took a three-man *baydarka* and two Aleuts with provisions for 6 days. The depth steadily decreased up the length of the bay; the coast was shoal and hence the launch grounded ¾ of a mile from shore. In this bay one can go alongside at only one spot on its south side, right at the eastern cape, where there is a small lowland, but even here the launch could not get right in to shore, but only to within 75 fathoms of it. As we approached this lowland, we spotted a large number of *baydari* and tents, a crowd of people¹¹⁹ gathered near the settlement and a pack of dogs. Our curiosity to meet the natives drove us to put ashore on the lowland near the settlement where, as it turned out later, there was the deepest spot, but even then we could not get within 50 fathoms of shore. I was wearing long Aleut *torbasy* [boots] and waded ashore first, with small pocket pistols, loaded with bullets, concealed in my sleeves. The inhabitants immediately met me, but with great mistrust, especially their headman, who held his ground midway between me and the crowd of natives, 100 paces from me. The natives tried their utmost to prevent me from getting close, although I showed them that I had nothing in my hands; the headman responded with the same gestures. When I showed them some tobacco and other things, all their mistrust apparently disappeared; the headman summoned some others and they all ran straight towards me. Making friends with them was the work of a minute. Sitting down on the ground in a semicircle the American natives planted me in the middle in front of them and began greeting me, blowing their noses and smearing the snot across their faces; to which I responded in the same fashion. Many of them were armed with wooden spears with stone points inserted at one end and appeared to comprise a guard. Soon the *baydar* came ashore, to which the captain and the naturalist had transferred to negotiate the shallows, and brought my gun. When they came ashore I attempted, as far as I could, to explain to my new friends who the captain was, apparently with success, since all the natives greeted him very affectionately and quickly offered to barter their furs.¹²⁰ The captain provided them all with tobacco, without exception, even the women and children, of whom there was a large number. The Americans accepted these gifts very readily, yet they were not so pleased with them as on St. Lawrence Island. When we showed them needles and demonstrated how to use them, all the women importunately asked for them, constantly shouting 'titita, titita'; the men begged for beads.

¹¹⁷ Eschscholtz Bay: one of the inlets in which the extensive Kotzebue Sound ends on the east. Discovered and explored by Kotzebue in August 1816 and named after the doctor and naturalist Ivan Fridrikhovich Eshschol'ts, who was sailing aboard *Ryurik* and drew attention to the massive ground ice on the shores of this bay. Eshschol'ts was later a professor of anatomy at Tartu University and sailed again with Kotzebue around the world in *Predpriyatiye* (S). For some detail on the latter voyage see Ivashintsov, *Russian round-the-world voyages*, pp. 74-78.

¹¹⁸ Light cannon, firing either small round shot or grapeshot.

¹¹⁹ Numbering 150 people, of whom the men were armed with spears, bows and even a few long rifles (Gillesem, 'Journey', p. 85).

¹²⁰ They demanded knives, hatchets, needles, scissors, cast-iron kettles and, like the group encountered earlier, especially powder and lead (Gillesem, 'Journey', p. 86).

Posting guards around the launch, on which the falconets were loaded with grape-shot, and having ordered the crew to cook dinner, four of us set off along the coast towards the ice hills,¹²¹ taking with us an axe, spades, etc. At first practically all the natives accompanied us, but little by little they began to drop behind; as we passed through their settlement a man armed with a spear stood outside every yurt. The natives asked that we turn back, like them, but seeing that we wouldn't listen, they quickly left us, and we soon reached our goal. During the period that the natives were accompanying us, I was surrounded more than the others; this is probably because they saw more gold on my uniform and cap and, treating me fairly freely as their first friend, they began to twist the buttons off my uniform. Wishing to stop them, I threatened them and they desisted, but a few minutes later again started at the same task. Then, turning on them, I stamped my foot and struck the one who had twisted a button off so violently in the chest that I knocked him back from the row of comrades who were with him. He departed quite coolly and dropped well behind us, but the rest accompanied us right to the settlement. It is well known from experience that although one should have friendly relations with all natives, precautions should be taken in good time and one should not permit impertinence or boldness of any sort.

When we reached the above-mentioned hills, the coast appeared to be composed of ice and had the appearance of ice cliffs, apparently up to 15 feet high, with earth about 28' thick spread on top, and mixed with clay beneath. Climbing to the top we ordered the men to blow up the earth and to dig down three feet into the ice, which turned out to be fairly clean. The earth covering it consisted of moss, which made walking across it difficult.¹²² It is quite natural that water, penetrating down farther and farther through the permeable moss, freezes completely in

¹²¹ Coastal exposures of massive ground ice, exposed by wave action, i.e. thermal abrasion.

¹²² Gillesem was also a member of this shore party and he describes the phenomenon as follows:

These mountains begin where the sandspit ends. They stand back from the shore about three or more fathoms. This expanse consists of sandy, oozy ground, which results from the melting ice forming constant small streams. The front of the ice cliffs rises vertically 20 or more feet, and when the sun's rays reflect from this wall as from a polished surface, one must avert one's eyes, so blinding is the glare. The flat top of this ice mass slopes gradually towards the interior of the land and is covered with a layer of earth about two feet thick as tested with a drill. This layer is overgrown with moss and other northern bog plants. The continual rotting of these grasses creates a pungent swampy odour (Gillesem, 'Journey', p. 87).

These 'icy hills' had earlier been examined by a landing party, under Captain Kotzebue, from *Ryurik* on 8 August 1816. The captain's description reads as follows:

...The doctor, who had extended his excursions, found part of the bank broken down, and saw, to his astonishment, that the interior of the mountain consisted of pure ice. At this news, we all went, provided with shovels and crowbars, to examine the phenomenon more closely, and soon arrived at a place where the bank rises almost perpendicularly out of the sea, to the height of an hundred feet, and is under a cover of moss and grass; and could not have been produced, but by some terrible revolution. The place which, by some accident, had fallen in, and is now exposed to the sun and air, melts away, and a good deal of water flows into the sea. An indisputable proof of what we saw was real ice, is the quantity of mammoth's tusks and bones, which were exposed to view by the melting, and among which I myself found a very fine tusk. We could not assign any reason for a strong smell, like that of burnt horn, which we perceived in this place. The covering of these mountains, on which the most luxuriant grass grows to a certain height, is only half a foot thick, and consists of a mixture of clay, sand and earth; below which the ice gradually melts away, the green cover sinks with it, and continues to grow; and thus it may be foreseen, that over a long period of years, the mountain will vanish, and a green valley be formed in its stead (Kotzebue, *A voyage*, pp. 219–20) (S).

Both descriptions portray very clearly the phenomenon of thermal abrasion in permafrost, namely the impact of relatively warm sea water on a body of massive ground ice which has been exposed by coastal erosion. Once exposed by wave action the ice face will retreat landwards under the influence of the sun's warmth. The thin layer of overburden, with the vegetation rooted in it, may survive as an overhang for a while, but ultimately will collapse to add to the morass of mud and vegetation beneath the ice face, and ultimately to be removed by wave action.

winter, and cannot melt in summer, being protected from the sun's rays by the moss. Moreover in these regions the summer is neither warm nor long and the sun does not shine very often. Indeed at many other places, far from these ice cliffs, we tried blowing up the moss and everywhere found ice, even on Chamisso Island later. In general, in these areas, if the ground is permeable or consists of moss, one can safely assume that there is ice beneath it. In 1816 the naturalists on board the brig *Ryurik* concluded that the ice just described is alluvial from a long time ago, washed with sand and overgrown with moss. It is difficult to believe that such enormous masses could float in a shallow area, and could comprise possibly half of America. It seems to me that the opinion of Shteyn, the naturalist aboard our ship, presented previously, is more plausible.

Having examined the icy hills, we returned to the launch to have dinner. Passing through the settlement we found the natives taking the same precautions, i.e. by each yurt and each *baydarka* stood an armed man, and all the *baydarki* were ready to be launched. The natives again followed us and would not leave, being very desirous and even begging insistently, that we trade with them. Captain Shishmarev, spotting a headman among them, took off one of his own medals and hung it on him, attempting to explain the significance of the portrait on it. We attempted, as far as we could, to convince him as to our friendliness towards his countrymen and taught him to pronounce the name Aleksandr.¹²³ Thereafter we invited him to join us for dinner in a tent pitched on the shore. For a long time the native would not agree to this, and although he afterwards entered the tent, he was in a great state of fear; in the meantime his cautious comrades, having armed themselves just in case, surrounded the tent. The headman was amazed at everything, but did not eat anything himself and when we offered him a drink, he attempted to deceive us, pouring it out behind his parka then wiping his mouth, thinking thereby to convince us that he had actually drunk it. We pretended that we had not noticed his ruse. He mistook white hardtack for a rock, since he called it by that name. But despite this, on parting from us he begged some hardtack from us. While he was with us, he constantly chatted with his comrades, who surrounded us to the number of 200 men and, apparently, told them what we were doing.

On finishing dinner the captain permitted us all to start trading with the natives; something the latter had been persistently demanding. But none of us had much success in this trading, since the Americans greatly overpriced what they had to offer; for every item they asked for an axe or a large knife, things we did not have with us. They evidently did not wish at all to trade their weapons, and we were unable to get anything from them except a few bows, quivers and arrows. They were dressed in parkas of reindeer skin, muskrat, ground-squirrel and a few even in marten¹²⁴ parkas, and changed several times per day to show us their wealth, or to change their clothes as the weather changed. They also wore reindeer pants and *torbasy* (boots), which were sewn together. In the case of the women the pants were wider than the men's and the parkas more attractive, with various designs. At the bottom some were cut rounded, others straight, with a heart-shaped design at the sides, probably for decoration. The men do not tattoo their faces at all, but some paint lines across their faces and under their eyes with blue paint, lightly rubbed in with a finger. By contrast almost all the women have several blue lines tattooed on their chins; their ears, just like those of the men are pierced and adorned with stones or beads, which both sexes also wear on their heads; they particularly prefer blue and red beads, and large beads to small ones. Their main adornment consists of two small articles like large buttons, made from bone or green stone and inserted into a wide cut beneath the lower lip, and even more often from

¹²³ I.e. that of the reigning Tsar, Aleksandr I.

¹²⁴ The American marten *Martes Americana*; Lazarev's apparent surprise at the use of this fur for their own clothing is probably due to his awareness that this fur was in great demand in the fur trade (Bockstoe, *Furs and frontiers*, p. 322).

large blue beads set in bone and also inserted at the corners of the mouth.¹²⁵ Decorations of these two types, however, we saw only in the case of a headman; the others simply had bone decorations; the women did not wear them at all. The men wear their hair in a fringe around the head, like some Catholic monks; the women gather it in braids at their temples.

The natives of both sexes are of medium height, and one rarely finds an unusually large or small specimen amongst them although Cook writes that they are 'rather low of stature. But plump and well shaped'.¹²⁶ Their faces are not bad-looking and their cheek-bones are somewhat prominent as in many Asiatic peoples and even the Chukchi and Aleuts; the colour of their skin is yellowish and somewhat darker than that of the latter. The authority of their leader appears to be greater than at other locations in the area, for when we asked him to show us their dancing, he immediately addressed himself to some women and they immediately obeyed. When they had finished their dances, the captain handed the headman gifts for them, which the latter distributed to the dancers right on the spot, without retaining even the smallest trifle for himself. As is well known, the above-mentioned dance consists of posturing with the whole body and of swinging the arms on both sides, shouting out to keep time occasionally. It has nothing pleasant or expressive about it. At the same time I feel that it is not redundant to mention another entertainment of this people, namely the following: Placing a small child in a walrus hide which several men hold in their hands, they throw him high into the air, keeping time by singing. The lad, falling haphazardly onto the tautly stretched hide, rebounds from it again due to its elasticity, then falls back again, and thus this agonizing dance continues, until it reaches a state of total exhaustion.¹²⁷

Having thus spent several hours among the natives, at 5 p.m. we decided to return. Although there was a strong wind from the west we hoped with the help of a following current to reach the ship before midnight and hence we pushed off. We certainly did not want to stay to spend the night among the natives since we would be mutually a burden on each other. But things transpired differently from our wishes.

Saying goodbye to the natives, who were reluctant to part from us, we returned to the launch and pushed off from shore. Having made two tacks we were gaining some ground, although very little, and in the meantime all of us and our weapons were completely soaked.¹²⁸ Then, since we could see little benefit in our tacking, we ran back to shore, and tried to put ashore at two other locations farther from the settlement, but due to the heavy surf and the absolute shoal conditions, we were unsuccessful and again had to land near our friends. On spotting our return they almost all came out to greet us, waving fox skins as a sign of their delight. One had to confess that at this point our situation was very unpleasant. Our weapons, muskets, pistols and even the falconets were completely soaked, so that they needed to be unloaded, wiped dry and cleaned. For defence we were left only with a few lances and cutlasses. The Americans, as we saw later, each had several knives; one in his left sleeve, another in his right boot, and a third, about 14' in length behind his back between his shoulder blades in a wooden sheath.

¹²⁵ In other words labrets.

¹²⁶ Beaglehole, *The journals*, p. 459 (S). This description is based on Cook's observations during his voyage to and beyond Bering Strait in August 1778.

¹²⁷ Is this the earliest description of the blanket-toss? Still a very popular competitive sport among most Inuit groups.

¹²⁸ As Gillesem tells it, the situation was more drastic than this: namely both masts of the boat were broken in a squall (Gillesem, 'Journey', p. 89).

Putting ashore, we again began fraternizing with the natives; we set about overhauling and cleaning our weapons while the natives watched with close attention and, it seemed, fully understood what we were doing. But they made not the slightest attempt to do us any mischief and thereby demonstrated that they possessed good qualities.¹²⁹ Seeing the disproportion in both our numbers and our strength as compared to them, I got the notion of instilling a timely scare in them. For this I pulled my gun, the only one which remained dry, out of its case and firing at a gull which flew past, I killed it. At first the natives were thrown into a panic by this; they all shouted out in fear, but when they saw that all that had resulted was the death of one bird, they began to laugh loudly and one of them, picking up a rock, also killed a gull which was flying past quite high up, with it, after which he explained to us that the effect of both weapons was the same. Thereafter others of his comrades demonstrated their skill at throwing stones, hitting a target at 50 paces, and even further using a sling. Their accuracy amazed us: two of them each killed a crow (raven?) at 150 paces.

Having pitched a tent and distributed our guards into three watches, each of 5 men, we posted them in a chain around the tent 25 paces from it and in an attempt to warm ourselves against the damp and cold we began brewing tea which we also shared with the crew members with us. The first guards initially stood guard with soaked weapons, but over the course of an hour the remaining 10 men managed to dismantle theirs, clean them, and reload, so that the second watch began their watch in excellent condition. The first watch, having had some tea, quickly made their weapons ready for defence. It was already about 10 p.m. and since we wanted to rest, we attempted by every means to convince the natives to leave us. For a long time they could not understand us, and possibly did not want to obey. Seeing that they continued to surround the tent, one of the Aleuts with us, who knew a few words of the Alagakhmut language, using it and some pantomime, explained our wishes to them. After which he ran out very quickly and began tracing a line on the ground around the tent near the sentries, explaining that during the night nobody should cross it.¹³⁰ Some of the natives still stood around us and watched this process, but when the circle was about to be closed they all rushed headlong outside it as if fearing some witchcraft. After standing near the circle for some time, they drew one precisely the same of their own, 5 paces outside our one, and showed the guards by pantomime that they should not cross this one. After this, for half an hour they postured, laughed and finally dispersed to the settlement and did not come back that night. Seeing the natives dispersing we went to bed and spent quite a peaceful night, although remaining on the alert, inspecting the guards very frequently, and supervising their reliefs ourselves, at which point we gave them the necessary orders. By midnight all the soaked weapons were completely overhauled and were ready to fire in case of an attack, for which, however, we did not give the slightest cause, dealing very pleasantly with the natives and giving them various things as gifts.

At 3 a.m. when it was just starting to grow light, the natives began gradually to gather around the circles and after 15 minutes they were all near them with their fox skins, but the guards did not allow them to come closer. This evidently offended the Americans and they explained to our sailors that they could not cross to them either; they made fun of them and some of them even began to push through them, brandishing their large knives menacingly. The guards shouted to us to alert us. Everyone sleeping in the tent was awakened by this noise, and we were afraid that there might be unfortunate consequences. I emerged first and began greeting the

¹²⁹ Gillesem, however reports that they stole a cover from a large copper kettle and a long kitchen knife ('Journey', p. 89).

¹³⁰ According to Gillesem it was the Master, V.V. Petrov, who was responsible for this manoeuvre, accompanying it with mumbling in a low voice and spitting from time to time in the direction of the tents ('Journey' p. 90).

natives; soon after me the captain appeared and, treating them in friendly fashion, ordered our guards to come to the tent, indicating to the natives that they could follow us there. This re-established tranquillity, and some trading began, although just as unprofitable for us as the day before, since they demanded an axe or a knife for every smallest article. The captain had wanted to buy a one-man *baydarka*, and the deal was settled when suddenly the axe which had been offered for it, was no longer acceptable to the seller, since there was some rust on it.

During this trading I was pacing between our men and the Americans, watching that nothing unpleasant occurred between them, as indeed happened, and might have had very nasty consequences if I had not anticipated them with presents. As I have already mentioned, this bartering proceeded on the persistent insistence of the natives, and we were obliged, though reluctantly, to buy whatever they offered, even if it was totally useless to us. In this situation it happened that one of the sailors, who had bought one ermine¹³¹ of two which were fastened together, began cutting them apart with his knife and accidentally cut the seller, who was still holding the two furs, in the hand. Grumbling and shouting quickly started and if I had not made a gift to the wounded man, all his comrades might have rioted and then we, totalling 15 men, would have had difficulty in settling accounts with 200, each of whom had 3 knives and could skilfully handle slings and other weapons.¹³² Soon afterwards I entered the tent and spotted a native American there, a powerful man, examining a pistol I had left on a table. It was loaded with a bullet, and was already at half-cock, and the American was handling it quite carelessly and was looking straight down the barrel. Alarmed at the consequences which might arise from this, I went up to him, took the pistol and pointing the muzzle away from him attempted to explain by signs that the pistol might discharge and kill him. The native probably interpreted me differently, i.e. that for touching the pistol I would kill him; in an instant he flew into a rage and with flashing eyes struck me on the left side, near the belly, with his spear. Fortunately it only penetrated the warm overcoat, waistcoat and pants I was wearing, and stopped after scratching the skin. I didn't have time to reflect when he drew his long knife from behind his back and raised it at me, while the spear remained with its shaft on the floor and its stone tip in me. Seeing the native's savagery and his eyes flashing with malice, as it were, and besides, afraid of being the cause of further arguments between our men and the Americans and as a result, of course, responsible many for deaths, I stayed silent, waving my hand and showing that I was not afraid of his threat. Fortunately, just at this point one of the seamen, Sal'nikov, came into the tent, soon followed by another. The American, seeing them, with an extremely cold-blooded look slipped the knife back into its scabbard, pulled out his spear, and very calmly left the tent.¹³³ The seaman, suspicious from what he had seen, and even more so from my discomposure, that some unpleasant incident had occurred between me and the native, asked as to the cause, but I reassured him and concealed the cause, since I was afraid that our men would not hesitate to avenge their officer, and thereby produce a bloodbath. I promised to give a *chervonets*¹³⁴ to whichever of the two seamen managed to barter for the spear which had wounded me with the American. The seamen rushed off to overtake the native and a few minutes later brought me the spear, having traded it for two knives and a mirror. On receiving it, I carefully preserved it and ever since have saved it as a souvenir in my collection of curios among the other weapons.

¹³¹ Ermine skins according to Gillessem ('Journey', p. 90).

¹³² Gillessem reported that the injured Eskimo pulled out a knife and was about to attack the careless seaman when another of the Russian sailors, Ivan Sal'nikov, knocked the Eskimo to the ground and tore his knife away from him (Gillessem, 'Journey', p. 91).

¹³³ Gillessem's version is significantly different. He reports that Lazarev fired a blank cartridge in his assailant's face at close range, inflicting a serious wound; the latter then ran off, followed by all his companions. (Gillessem, 'Journey', p. 91).

¹³⁴ A gold coin worth (at different times) 2, 5 or 10 roubles.

Having mentioned earlier the clothing and some of the amusements of these Americans I have not yet talked of their customs and habitations. As far as we could see they are extremely honest in trade; it happened that one of them, wanting to purchase from us an article which he liked, took it to the settlement to consult with his wife or relatives, and if she did not approve, he would quickly bring it back, having tracked down the seller. As concerns their style of living, from all we could see they must be nomadic. This is indicated by the fact that there were no permanent yurts in the settlement, but just small huts made of poles in a cone-shape and covered with walrus hides. And our captain, during his sojourn in these areas in 1816 on board the brig *Ryurik*, saw no settlement here. The natives, as far as we could understand from their words and explanations, had arrived there from the interior, although the large number of *baydarki* proved that they must be a maritime people. I suspect that if they spend time in the interior it is solely for European wares which they trade, probably, from the Hudson's Bay Company,¹³⁵ for when we asked them from where they got the large knives, they pointed to the east.

The one-man *baydarki* of these Americans are different from those of the Aleuts; they are smaller, with a sharper bow; they are totally flat and the deck is greatly raised in the middle so that a man could clamber inside. They also had a large number of sledge dogs, of a breed similar to those of Kamchatka.

At the invitation of the headman the captain and I crawled into his hut where two covered women were sitting. The interior was piled with fish, blubber, intestines and all sorts of filth. The owner showed us his wealth, consisting of knives, cutlasses and other iron articles of very fine manufacture, which he received, as he explained from the Hudson's Bay Company¹³⁶.

The weapons of this people consist of bows and arrows, which are kept in sewn leather quivers and are tipped with sharp, worked flints; their lances are also of simple wood, mostly, apparently, made from driftwood, with worked flint at the tip. As we saw their food includes walrus, seal and whale meat and blubber, small fish which they simply roast by throwing them onto the coals, and birds which are roasted in the same fashion. Around each hut there were no less than four dogs. In terms of furs they have red fox, river beaver, arctic fox and polar bear skins.

When we again walked around the settlement two men with lances were again standing outside each hut.

Having given the headman various glass items we returned to the launch and at 11 a.m. [on the 13th], when the ebb current had begun, we headed out to the ship,¹³⁷ to which we also invited the Americans, promising to give them axes and other gifts.

¹³⁵ Hudson's Bay Company: a British fur-trading company, organized with the aim of seizing and colonizing the territory located around Hudson Bay, and also of searching for the Northwest Passage from the Atlantic Ocean to the Pacific, and the organization of transport. Lazarev, like Kotzebue (see: 'Voyage round the world, p. 95) assumed, apparently that agents of the Hudson's Bay Company had penetrated to close to Kotzebue Sound, which in fact was not the case. The Hudson's Bay Company still exists (S). At that time the closest post of the Hudson's Bay Company was Fort Good Hope on the lower Mackenzie River. If indeed these goods had come from that source it would have been via the well-established indigenous trading system, described in detail by Bockstoe (Bockstoe, *Furs and frontiers*) rather than directly.

¹³⁶ But see note 135.

¹³⁷ Gillessem's description of the Russians' departure from shore is much more dramatic. In his version the Eskimos fired a volley of arrows after them as they pulled away, followed by several gun shots. Shishmarev then ordered a falconet ball be fired over their heads. This quietened the Eskimos briefly, but then the arrows and bullets started flying again, and they began launching several *baidari*. At this the captain ordered one of the falconets fired at one of the *baidari*; it ripped out the side of the *baidar* and wounded one man; at this point the Eskimos broke off their attack (Gillessem, 'Journey', p. 92).

At 6 p.m. we reached the ship safely and learned that on the previous day a vicious west wind had driven her almost three miles to the southeast. In the morning we sent the launch with sailors to Chamisso Island to cut firewood from the driftwood, of which they brought up to 10 fathoms; on the same date they brought a dozen brooms, cut from willows and alders. These trees, growing on the above-named island, although only in small numbers, serve as proof that the climate there is not very severe.¹³⁸ A few days previously we had seen large quantities of snow on shore, but now the trees were in blossom, and there were large numbers of cloudberryes,¹³⁹ although still unripe. On this stretch of coast Labrador tea¹⁴⁰ grows, which the natives mix with tobacco, in order to get intoxicated faster. The local Americans have a terrible addiction to tobacco. Having filled a pipe, made from wood, with it, and having mixed it with Labrador tea, and when they don't have that, they satisfy themselves with any old weeds, when they smoke they draw all the smoke into their lungs and hold it for at least five minutes, until they become intoxicated and totally lose consciousness. In this situation they begin vomiting, which goes on for over 15 minutes, until they regain consciousness. When they stand up after this, one might think, judging by their faces, that they had a severe hangover. We saw this repeatedly among the Americans living in the settlement in Eschscholtz Bay.

On the morning of the 14th, in fine weather, the captain, the master and I again took the sun's altitude to check the chronometers, whose ratings had changed somewhat when we left Unalaska; in the evening the ship moved closer to Chamisso Island, along its southeast side and anchored in 8¼ fathoms with a silty bottom; the barometer was reading 29.00 and the thermometer 10½°.

Next day the captain intended going in the launch to make a detailed examination of Spafarief Bay,¹⁴¹ which Kotzebue had not surveyed. If thereafter *Otkrytiye* had still not arrived, he proposed taking the ship to Goodhope Bay.¹⁴² There he planned to lie at such a distance from shore that he would see the expedition leader arriving and in the meantime send the launch for an accurate survey of the small strait which, in his opinion, might link up with Shishmarev Inlet.

Next day, when we arrived from the coast, we looked around Chamisso Island and found signs that the natives had migrated. Their huts had been abandoned, just as we had left them; only the hides covering them had been removed. In many places their fires were still smouldering, small fish etc. lay spread about. That same day we were hunting with two Aleuts both on the island and near it in *baydari* and killed up to 100 puffins, murrees and pigeon guillemots,¹⁴³ which were taken aboard ship. Some were used in our mess and others were issued to the crew.

In the meantime, as we were preparing to survey Spafarief Bay, at 8 a.m. [on 14 July], in overcast, rainy weather, the ship *Otkrytiye* appeared, approaching the north shore near Chamisso Island. Immediately our captain ordered the launch made ready and he and I went across to our newly-arrived colleagues. Need I describe the joy we felt at their appearance, since it meant we

¹³⁸ This landing party also filled barrels with water from a spring (Gillesem, 'Journey,' p. 92).

¹³⁹ *Rubus chamaemorus*, known in Newfoundland as bake-apples.

¹⁴⁰ *Ledum groenlandicum*.

¹⁴¹ Spafarief Bay: a small bay opening from Kotzebue Sound, located between Eschscholtz Bay and Goodhope Bay (S).

¹⁴² Goodhope Bay: the most westerly of the three bays opening from the head of Kotzebue Sound. On the southeast it is separated by Cape Deceit from Spafarief Bay; and on the northwest it is bounded by Cape Espenberg. It is about 65 km wide. The south shore of the bay is steep, with rocky, slaty Cape Gullhead. In the distance, inland lies Devil Mountain (S).

¹⁴³ *Cephus columba*.

would receive absorbing news from Kamchatka and letters from our friends and relatives. We were most delighted of all that we could now head north; this was a very opportune time for this, and the weather was almost constantly favourable. Without *Otkrytiye* we could not do anything, apart from examining Spafarief Bay and Good Hope Bay since, having received orders only to wait for her in Kotzebue Sound, we had no further instructions.

On board *Otkrytiye* they were also delighted at the reunion of the two ships, and we did not notice the time passing until 8 p.m. Then we returned to our own vessel, having received from the expedition leader the information that next day he intended weighing anchor and heading north.

At 9 a.m. [on the 15th] taking advantage of a fair wind, we weighed anchor and cruised along the south side of Chamisso Island, 3 miles off. The depth was 6 fathoms, then half a mile further, 5. The southern channel, it turns out, is greatly preferable to the north one.

Having rounded the island, we swung towards *Otkrytiye* which was still lying at anchor. Seeing that she was not weighing, we also dropped anchor near her in a depth of 7 fathoms, with a sticky silt bottom with sand; Chamisso Island bore SE 89° by compass, 4 miles away.

After finishing the noon observations and calculations the expedition leader and *Otkrytiye*'s officers came aboard us to dine, and at 2 a brig approached from seaward flying the flag of the United States of America and having dropped anchor between our ships, fired a 7-gun salute, to which *Otkrytiye* replied with a 5-gun salute, according to the rules of Emperor Peter I.

At 7 in the evening Clark, the former supercargo or salesman to our consul Dobrel in Manila came aboard our ship from the American brig. He told us the name of this brig was *Pedlar*. The owner of the cargo was Pigot and the captain John Meek; there were 30 men on board and that they had come here to trade furs with the natives for leather, sabres, arms, powder, etc.¹⁴⁴ One has to confess that the enlightened Americans are enterprising at trade; they scarcely hear of some new discovery before they appear there with their goods. While passing St. Lawrence Island en route to Kotzebue Sound Captain Vasil'yev had seen the brig and had spoken to her. Clark brought us a gift of several pineapples. A great rarity among the polar ice and snows.

When *Otkrytiye* had been at Kamchatka that summer, the governor, Rikord,¹⁴⁵ told Captain Vasil'yev that a year previously the American Gray,¹⁴⁶ also aboard a ship belonging to Pigot allegedly had gone, on orders from Count Nikolay Petrovich Rumyantsev, to check the discoveries made by Kotzebue in the north.¹⁴⁷ On his return to Petropavlovsk in the fall he, Gray, had told the governor of Kamchatka that having penetrated beyond Bering Strait he had stopped at Shishmarev Inlet, from where he had explored the entire area as far as Kotzebue Sound and the Sound itself, and had sailed around the entire coast in a launch, sounding with a pole.

¹⁴⁴ Shishmarev warned Clark against landing on Chamisso Island, and to take every precaution before allowing any of the local inhabitants on board, outlining his own experience (Gillessem, 'Journey', p. 93).

¹⁴⁵ Captain (later Rear-Admiral) Petr Ivanovich Rikord: a celebrated Russian seafarer. In 1807–09 he participated in the round-the-world voyage on board *Diana* under the command of V.M. Golovnin. After Golovnin was captured and imprisoned by the Japanese Rikord continued the hydrographic work in the Sea of Okhotsk and petitioned for Golovnin's release from prison. In 1810, along with navigation officer Khlebnikov he surveyed the Alaskan coast (Shelikov Strait etc.). Then for several years he governed Kamchatka; in the 1820s he took part in naval operations in the Mediterranean with the rank of Rear-Admiral (S).

¹⁴⁶ This was in fact Captain Eliab Grimes, whose name Lazarev had misunderstood (Bockstoe, *Furs and frontiers*, p. 33).

¹⁴⁷ The ship was the *Sylph*, owned by John Jacob Astor, not by Pigot. For further details of its activities see Ray, *Ethnohistory*, pp. 55–65.

According to him this area had been plotted very inaccurately on the chart, and certainly not properly. Finally, with regard to the strait from Good Hope Bay, as Kotzebue had named it, he had expected from the name that this strait led north as Kotzebue had asserted. 'From these stories,' said Captain Rikord, 'it is clear that Gray was a man who had not got to grips with the task.'

In fact, how could one measure the depth in the Sound with a pole, when in places it reaches 15 fathoms.

Gray also said that next year, i.e. in 1820, either he or another ship would come to explore farther, and the brig we had encountered confirmed this statement.

Curiosity forced Captain Shishmarev to go aboard the American brig, having invited me to join him, to see the chart compiled by Gray, the more so since he himself had participated in plotting the shores of the Sound on Kotzebue's map. On reaching the brig we spotted that the chart in question was nothing but a crude copy of Kotzebue's chart, on very thin transparent paper, and one could see that the American gentlemen had not had time to transfer it to good paper. A few insignificant changes had been made as regards capes and mountains; instead of the strait in Good Hope Bay a lake was marked.

Showing us this chart the Americans tried by every effort to convince us of its accuracy, confirming Gray's story that he had sounded all the places near the coast with a pole, and that although he had cruised along the shore he had not seen a strait. When Shishmarev told him that he himself had been there and had spent a night there, he immediately changed the subject and began talking about the natives, asking us where we had seen them.

Captain Rikord had given Gray a seaman as an interpreter, who was now aboard *Otkrytiye*. He said that the Americans had indeed stopped off Shishmarev Inlet, but had not gone any farther, and although they had gone off in a launch, it had not been for a sufficiently long time to sail around the entire area from the bay in question and Kotzebue Sound. I don't suppose the merchant would have taken it into his head to sail around this distance, amounting to about 200 versts in a launch, when he could have travelled by ship, and to no avail in any case. Hence one may justifiably agree with Rikord's opinion that the goal of the Americans was not exploration but trade with the natives, in which, so as to eliminate any obstacles in the way of our captain or of our expedition, he had elicited orders from Count Rumyantsev. In addition, the American merchant did not try to accumulate great expenses, since he could not see any advantage in so doing.

Although our captain was convinced of the error of indicating a lake instead of a strait, the circumstances merited a very accurate investigation, in order to verify everything the Americans had falsely invented, wrongly taking advantage of Count Rumyantsev's trust.

At 7 a.m. [on the 17th], following *Otkrytiye* we began weighing anchor, but for a long time were unable to hoist it up and suspected that it had fouled on a rock. An hour later we hoisted it aboard, and realized the opposite: the bottom was so viscous that the anchor had been entirely swallowed up, and along with it we had dredged up as much as 50 *pud*¹⁴⁸ of the marine clay which covered not only the flukes, but the entire stock, despite the fact that we had lain here no more than 24 hours. The weather was clear; the wind was from the southeast, and we steered SSW.

¹⁴⁸ 820 kg.

At 12 we spotted land east of Cape Deceit, bearing SW 22°, and in that direction smoke and people. Then, following *Otkrytiye* we reduced sail and headed close-hauled on the starboard tack, and at 5.30 headed northwest straight for Cape Krusenstern.

At 1.30 p.m. that cape bore NE 20°, 6 miles away and we began our survey, arranging things such that the master hove the lead and noted the time, while the captain and I took bearings and measured angles to port and starboard. We occupied ourselves with this work almost until midnight of the 19th, although we were interrupted by fog at times; at one point we spotted a settlement of 30 yurts but did not approach it.

As we were completing our survey *Otkrytiye* frequently vanished in the fog, and at 9 a.m. on the 19th, was so far separated from us that, unable to see her, we were obliged to begin firing guns. At 11.30 we heard gun shots to the east; we replied and they were repeated at noon. Two and a half hours later, when we were at latitude 68°32'30"N, longitude 193°13"E¹⁴⁹, from northeast through east there appeared a precipitous, even coast, covered with snow in places; near it drifted small numbers of ice floes. At 3 o'clock, when we were 2 miles off this spot we spotted a waterfall about 150 feet high descending the mountain. At this point murre, puffins and other small birds were flying around us in small flocks. Assuming that *Otkrytiye* had probably headed north, we steered that same course, cruising along a low coast, which appeared ahead of us at this time. At 8 a.m. [on the 21st] the ice became much heavier and, suspecting that we should be looking for *Otkrytiye* to the south rather than the north, swung close-hauled and began beating back south; since we now encountered thick fog we fired a gun every half hour. On this route, we spotted three floes up to 30 fathoms long and about 8 fathoms high,¹⁵⁰ floating on the surface of the water; they were covered with snow and we saw sea lions on one of them.

During his third voyage Captain Cook wrote that in latitude 70°33' and longitude 197°41'¹⁵¹ by observation, he noticed on the horizon a gleam similar to that produced by the reflection off ice, which he certainly had not expected to encounter so early.¹⁵² In contrast to this, we found ice in latitude 68°30', i.e. 2 degrees farther south. The only difference was that Cook had spotted the ice on 6 August, and we almost two weeks earlier.

At 2 a.m. [on the 22nd] as the sun rose it cleared up; at 4 Cape Lisburne¹⁵³ bore EbN½E, 9 miles away. It soon became cloudy again and by 9 we had thick fog, which prevented us from getting any observations. We were beating south the whole time, expecting to find *Otkrytiye* near the spot where we had parted from her, but since there was a very strong north-flowing current we made little progress with our tacking. At 6 a.m. on the 22nd the wind freshened from the south-southeast so we reefed the topsails and under these sails continued to tack south as before, but were making little or no forward progress. The truncated Cape Lisburne and the mountainous coast of America were frequently visible but there was no sign of *Otkrytiye*. On both these days many trees floated past, as well as a flock of ducks, which had probably flown here from the south.

At noon we were in latitude 68°51'48"N by dead reckoning, and longitude 193°24'22"E¹⁵⁴, and at 8 o'clock were near a low cape, projecting about 10 miles towards the southwest from

¹⁴⁹ 166°47'W.

¹⁵⁰ These ice masses were icebergs, fragments of glaciers, drifting with the currents or driven by the wind (S).

¹⁵¹ 68°19'W.

¹⁵² Beaglehole, *The journals*, p. 416.

¹⁵³ Cape Lisburne is located north of Kotzebue Sound at latitude 69°5'N. It consists of two headlands, of limestone and slate, which project separately into the sea. Discovered and named by Cook in 1778. (S). The latitude, more precisely, is 68°52'2"N and Cook discovered and named it on 21 August 1778 (Beaglehole, *The journals*, p. 423).

¹⁵⁴ 166°35'38"W.

the coast.¹⁵⁵ On this cape, close to its tip, was a very large settlement,¹⁵⁶ and a mile farther on, another one. Judging by the size of the one we saw in Kotzebue Sound, where the natives of both sexes totalled about 200, these two settlements must have totalled at least 600 souls. One could not conceive that the natives remain here all winter, since this cape is open to every wind that blows at this time of year, mainly from the north, and as a result it must be extremely, bitterly cold. Hence one must assume that the Americans come here in summer to fish and hunt marine mammals.

From midnight onwards we had a fine drizzle, and a variable wind prevented us from holding our course along the coast. We began tacking, but in the morning we noticed that our tacking had achieved no southwards progress. From this one must conclude that here, with southerly winds, the current is always north-flowing. At 9 a.m. [on the 25th] the wind freshened, and we tacked, having furled the topgallant sails which we had set at 4 p.m. in overcast and at times rainy weather, but in the morning we realized that we had again been carried somewhat north. As we approached the coast the last time we saw two waterfalls, about 5 or 6 miles apart, and apparently about 200 feet high.

On the 26th the weather was overcast all day and there was fog on the horizon. But we could see for a distance of 10 miles around us. At 6 in the evening we were 3 miles off the settlement which we had approached on the 24th. Thus, after beating for two days, we had come back again to the same spot. To our satisfaction an hour later the wind swung into the south-southeast, and hence we steered south, then at midnight south-southeast, since we wanted to round the spit, beyond which the coast swung towards the southeast. At 9 a.m. [on the 27th] we ran down to the east, in order to close with the coast and to run along it in search of *Otkrytiye*. At this point there were many trees and stumps floating past us; there were also very large numbers of murre.

In the meantime the fog began gradually to disperse and at 10.30, when we were steering ENE, it cleared up so much that we were hoping to achieve an observation, which in our situation was very essential, since we had noticed that the current was still north-flowing, and hence the divergence between our observed and calculated latitude had to be about one degree or even more.

Unfortunately, just around noon we encountered dense fog clouds, and although it soon cleared along the horizon, the sky did not clear. At 9 p.m. we were approaching the cape where we had parted from *Otkrytiye*. The horizon was totally clear, and from the crosstrees we could see for at least 20 miles, if not more, in any direction, but there was no sign of the ship. From this we concluded that she had headed north, and in view of this, heading on the other tack, we also laid our course in that direction as soon as possible. At 9 p.m., we swung west, noticeably assisted by the current. The wind gradually swung into the north and east-northeast, as a steady topgallant wind. At midnight the low coast east of Cape Golovin¹⁵⁷ bore NNW, 10 miles from us by compass. In the morning it was clear weather but the sun did not appear. We were within sight of Cape Lisburne, beyond which we could see ice, and near which we had been beating south for two days, and hence we hoped that we were close to a rendez-vous with *Otkrytiye*, if only the clear weather held. But unfortunately at 10 p.m. the wind freshened so much that at 11 in a heavy overcast and rain we were forced to take all reefs in the topsails and lower sails and

¹⁵⁵ Point Hope.

¹⁵⁶ This village (Point Hope, or Tikigaq) is still there with a 2010 population of 674.

¹⁵⁷ Cape Golovin would be named by M.N. Vasil'yev in July 1821. It lies north of Cape Krusenstern; from Vasil'yev's determinations in latitude 68°21'15" N and longitude 166°40'00" W (S).

send down the topgallant yards. At 6 the wind gradually began to swing into the north, but it was still violent. The barometer [which only shortly before had read] 29.85, now read 29.38 and the thermometer, which had earlier read $6\frac{3}{4}^{\circ}$, now read $7\frac{1}{2}^{\circ}$.

Although that night the barometer began to rise fairly quickly, the weather did not change, and the wind gusts were so strong that we continued to lie under just the reefed sails. At 10 a.m. [on the 29th] the sun appeared through the snow and murk, but was again hidden by clouds. At 1 p.m. a coast appeared, which on careful examination was identified as Lisburne again, but now covered with snow, which had probably only just fallen. Judging by this, we had not only not drifted with the wind, but apparently had again been carried north by the strong current from the south. At 6 p.m. the wind slackened somewhat. When we swung onto the other tack 5 or 6 miles from the aforesaid cape, large, dry snowflakes were falling, followed by hail. But all this time the thermometer did not rise above $1\frac{1}{2}^{\circ}$; and at night recorded only 1° . At 9 a.m. [on the 30th] we sent up the topgallant yards and shook out all three reefs in the topsails. The sun peeked out and allowed us to get a few altitudes but it soon disappeared again; it snowed again with some hail and the wind became north-northwesterly.

Around 9 in the evening, when the overcast had cleared a little, to our general delight we spotted *Otkrytiye* 12 miles to the NbE and soon discerned that she was running down straight towards us. 10 days had passed since we had parted from her.

Falling in astern of *Otkrytiye* and following her, around 9 a.m. [on the 31st] we dropped anchor since it was calm. Our commander and our officers went across to *Otkrytiye* where, as one might imagine, we were all delighted to see each other. There we learned that they had been north, and were now returning; they had reached latitude $71^{\circ}6'N$, and hence 25 miles beyond the latitude reached by Captain Cook.¹⁵⁸ They had not seen Icy Cape, and had been unable to approach it because of the large amount of ice. When they were at their farthest north, among the ice, they had experienced two degrees of frost.

At noon, for the first time after leaving Kotzebue Sound, we achieved an observed latitude, namely $69^{\circ}1'$. *Otkrytiye* had been luckier than us, since among the ice they had got observations on three days. At 2 p.m. both ships weighed anchor and headed south along the coast with a north-northwest wind. The weather was overcast; before midnight we had snow and after midnight the wind freshened and we had squalls; the thermometer was at the freezing point. At 8 a.m. [on 1 August] it cleared and, closing with the coast, we steered along it and 53 minutes later we began our survey; by dead reckoning we were at $68^{\circ}36'8''N$, $193^{\circ}44'4''E$ ¹⁵⁹, with Cape Lisburne bearing NE, 9 miles off, in a depth of 18 fathoms, with a sand bottom. At 10, when we were off a high coast, strewn with bays, 16 miles south-southeast of Lisburne, we spotted smoke. *Otkrytiye* made a signal that she wanted to examine the coast and ordered us to make boats ready; hence we sent over an armed yawl under the command of an officer; it returned to us at noon on 1 August. We continued our survey until 9 p.m.; then the coast disappeared in the overcast and a freshening wind forced us to take three reefs in the topsails.¹⁶⁰

From the survey we made, the trend of the American coast from Cape Lisburne to the start of the projecting lowland was determined by compass to be south for 26 miles. From the cape itself for more than half of this distance the coast is high, steep and precipitous, with small lowlands at the shore in places, but against the slope of the mountains which run in ranges along

¹⁵⁸ Cook had reached $70^{\circ}44'N$, to the north of Icy Cape on 18 August 1778 (Beaglehole, *The journals*, p. 417).

¹⁵⁹ $166^{\circ}15'56''W$.

¹⁶⁰ It was at about this point that Gillesem reported that scurvy had broken out among the crew (Gillesem, 'Journey', pp. 96–7).

this coast; the second half of the coast begins in a steep, cliffed headland which gradually descends for 6 miles; from it there extends a lowland which after another 6 miles assumes a direction of WbS¼W by compass for a distance of 10¼ miles. From its start for three quarters of its length, this lowland runs for half a mile almost without a break and in the middle, apparently, there is a shallow lake with a small islet in the middle. This lake, apparently, evolved from the sea, since at the start of the lowland we noticed a narrow, shallow strait, giving access to it. The remaining quarter of the lowland, right to its tip, is up to half a mile wide. On this area, covered with fine sand and gravel, was located a large native settlement. The tip of the aforesaid lowland was later named Cape Golovin by our expedition leader, and from the captain's and my determinations, it lies at latitude 68°23'40", longitude by chronometer 193°30'33"E¹⁶¹ from Greenwich. On the other side of the lowland the coast runs SE¼E for 14 miles; along the shore it is low and in places there are low, long slopes and beyond them, in the interior, chains of mountains. From the start of the projecting lowland, judging from the alignment of the coast, 4 miles long, there is a lake which at its northwest end appears to be three quarters of a mile wide, and then gradually narrows. Beyond it the coastal cliffs are a little lower than Cape Lisburne; they are 6½ miles long and run SE and WNW. Its southern part, lying according to our determinations in latitude 68°2'41" and longitude by chronometer 194°36'57"E¹⁶², was later named Mys Rikord by Vasil'yev.

While we were sailing on a west-northwesterly course, having been forced to finish our survey, the wind was strengthening steadily and at 8 a.m. [on 2 August] forced us to take the last reefs in the topsails and in the lower sails and to send down the topgallant yards. Towards evening it began to slacken and we had some fine rain which ended an hour before midnight. That night, following *Otkrytiye* we began to make sail and by morning we were under topgallant sails.

At midnight [on the 3rd] it was raining; it had begun at 9 a.m. and ceased at 4 p.m. Many trees drifted past us. In an attempt to retrieve some of them, *Otkrytiye* hove to, and we followed her example. Remarkably, no matter how much of this timber we picked up at this location, and in the Arctic and Kamchatka seas in general, it was always American spruce; hence one must assume that it has drifted from the shores of North America. Along with *Otkrytiye* we beat eastwards all night and in the morning managed to get some altitudes for longitude from the chronometers.

Throughout the day on the 4th we beat towards the coast and somewhat after noon we saw mountains lying near Cape Mulgrave. It rained and stopped again several times and at 6 p.m. it fell calm.

At noon [on the 5th] the coast between Capes Rikord and Cape Mulgrave ¹⁶³ appeared, and we began surveying it, but around 10 p.m. had to desist because of fog. After midnight it again began to clear and at 4 we again closed with the coast, with a view to continuing the survey. At noon on the 6th, in clear weather, it fell calm and we were set noticeably towards the northwest hence, following *Otkrytiye*'s lead, we dropped anchor. Soon afterwards a light breeze began blowing from the northwest; we immediately weighed, but not an hour had passed before

¹⁶¹ 166°29'27"W.

¹⁶² 165°23'03"W.

¹⁶³ Cape Rikord and Cape Mulgrave were located on the north coast of Seward Peninsula. Both project far out to sea. Cape Rikord was discovered by M.N. Vasil'yev in July 1821. It rises steeply above a narrow, low-lying foreshore. According to Vasil'yev's determinations its latitude is 68°1'00" N. Cape Mulgrave (67° 45'N) is low-lying; well back from the coast rise hills, also named Mulgrave (S). Neither of these names has survived.

it again fell calm and we again had recourse to anchoring. Then the captain, some other officers and I went aboard *Otkrytiye*.

Lying at anchor right from noon almost until midnight, we noticed that throughout this period the current was flowing W½W at ¾ and sometimes ½ a knot. It was strange that it flowed in just one direction for such a long time. In the evening our anchor was dragging. Although we had paid out 50 fathoms of cable, we had dropped anchor in a depth of 10 fathoms, and it held; an hour before midnight, with a breeze which had begun blowing from the northeast, following *Otkrytiye* we weighed and steered SEbS. From midnight the wind began to freshen to the point that we took a reef in all the topsails, and a second one before noon. In the meantime it began to rain. As we approached the coast of North America the depth decreased, the bottom being a fine grey sand. At 9 p.m. in view of the wind strength we took a third reef in all the topsails and one reef in each of the lower sails. Around 12 it became calmer and we sighted the mountains lying near Cape Prince of Wales¹⁶⁴ to the south-southeast. From midnight there was a topgallant wind blowing from the east, and hence we shook out the reefs from the lower sails, and then from the topsails and set the topgallants. Despite the fact that the wind had slackened greatly the barometer was dropping all night and in the morning when we were under topgallants it stood at 29.48. Admittedly it had become foggy then, but it was not very thick. At 4 a.m. we spotted Cape Prince of Wales and its lowland at not more than three miles from the latter in a depth of 5 fathoms, from which we headed west-northwest; soon the depth increased to 18 fathoms. At 10 we saw the Gvozdevye Ostrova clearly, and at noon the Mys Vostochniy of Asia¹⁶⁵ appeared out of the fog bearing W 24 miles on the same latitude as our ship; near it were some ice floes. The question was whether the latter had been carried to the cape by a current from the north or whether they had survived there all summer?

We steered SW into Zaliv Lavrentiya, and at 5.30 p.m. we sighted the northern cape at its entrance, 10 miles away.¹⁶⁶ Then we swung up to SWbW and due to the strong wind took a reef in all the topsails; the depth was 13 and 11 fathoms, and the bottom black rock with silt. Entering the inlet we spotted close packed large floes across the inlet and off both capes, but beyond them, farther into the inlet, open water. Moreover, along the south shore, as seen from the crosstrees a channel appeared between the shore and the ice, although it was very narrow. This ice could not have come from the south but certainly had been carried from the north by the strong northeast winds which we had experienced several times since 1 August.

The captain recalled that in 1816 the brig *Ryurik*¹⁶⁷ had reached Zaliv Lavrentiya a day earlier than us and had lain there for 10 days, but had not seen even the smallest piece of ice. One should also note that then the wind from the northern quarters had begun much later than this year; on her homeward route from Bering Strait *Ryurik* had had to tack to the eastern cape with southerly winds and the northerly winds had caught her in Zaliv Lavrentiya, and hence about the

¹⁶⁴ Cape Prince of Wales: the westernmost point of Alaska, is located opposite Mys Dezhneva; between them lies the narrowest part of Bering Strait, in which lie the Diomedé (Gvozdev) Islands. James Cook discovered this cape in August 1778. He described it as follows: 'Under this hill lies some low land stretching out towards the NW the extreme point of which bore NEbE about 3 miles distant, over and beyond it some high land was seen supposed to be a continuation of the continent. This point of land which I named Cape Prince of Wales, is the more remarkable by being the western extremity of all America hitherto known; it is situated in the Latitude of 65°46'N, Longitude 168°15'W' (Beaglehole, *The journals*, p. 409).

¹⁶⁵ Mys Dezhneva; Gillessem reports that the noise of the surf on its cliffs could be heard for 32 km or more down-wind (Gillessem, 'Journey', p. 98).

¹⁶⁶ Both captains were hoping to buy reindeer from the Chukchi to supply their crews with fresh meat (Gillessem, 'Journey', p. 98).

¹⁶⁷ During Kotzebue's circumnavigation.

middle of August. By contrast this year they began blowing at the start of the month, from which one must conclude that winter this year was more severe in this region than when *Ryurik* was here. From the beginning of August the current in the strait had not always been north-flowing, but sometimes was south-flowing and very weak, and hence strong northerly winds could have carried the ice here. In this connection one should note that in the Arctic Ocean and Bering Strait the winds in summer blow more from the south, and in fall from the north and that the current behaves in accordance to the wind.

On closing with the ice, both ships hove-to. Soon the wind freshened to the point that we took in another reef in the topsails; at night the wind was blowing with gusts, some of them very strong. In the morning, with light rain, following *Otkrytiye* we ran down to the ESE and since after noon, it became quieter, we set all sails and thus kept up with *Otkrytiye* at a speed of 7 knots. On this run we saw shore birds similar to cranes, flying southeast.¹⁶⁸ At 9 a.m. *Otkrytiye* was hidden by thick fog and hence we first burned flares, but at 10 it cleared, giving way to superb weather and we spotted at a very great distance through the fog the east part of St. Lawrence Island. *Otkrytiye* made a signal that we should complete the survey of the north side of the island, while she surveyed the coast of America. Our rendezvous point was Unalaska Island. Then the two ships parted. *Otkrytiye* headed east while we steered SWbW and at noon switched to NWbW to round the northeast end of the island, which is quite striking in its low-lying character; on it, close to the sea, are two small hills, of which the one farthest from the sea resembles a haystack, very pointed, while on its slopes, especially on the south side, there is a large number of small tors. The other hill, lower than the first and closer to the sea, greatly resembles some dilapidated building; as a result, if I am not mistaken, this cape is very conspicuous, but on the other hand it is visible for not more than 15 miles; the lowland itself is not visible, but just the pointed hill. Rounding the low north-east cape at a distance of 2 miles, we wanted to check our earlier survey, then the fog hid the island completely, and the wind became fresher and hence we secured the topgallant sails. At 10 p.m. it strengthened even more, but the barometer rose somewhat; however at midnight we turned and took in three reefs in the topsails.

From noon [on the 11th] the wind began to freshen again and the barometer to drop. At 3 we were not more than 8 miles off the coast, lying close-hauled to the W; we were not more than 12 miles from the tors. There was a full moon on this date, and hence we considered it dangerous to remain on the north side of the island, given the strong north wind blowing straight on shore while at the same time the barometer was dropping and hence the wind must inevitably become even stronger.¹⁶⁹ For these reasons we swung onto the port tack and at 9 ran down to the south side of St. Lawrence Island, with a view to surveying it, at least. At 2 we headed south; at 4, rounding the east side of the island, we swung west close-hauled on the starboard tack and due to the strength of the wind took in the last reefs in the topsails and the lower sails. At 9 a.m. [on the 12th] we secured the mizzen course and the fore topsail. At this point the drift was up to 3½ points and hence we were carried rapidly south, while the current was also setting us steadily in that direction.

Since with the northerly winds there was always overcast weather, we had no hope of soon approaching the south side of the island and hence, seeing the depths increasing at 10

¹⁶⁸ Sandhill cranes (*Grus Canadensis*) whose range in Siberia extends westwards only to the Kolyma; these birds on migration cross the Bering Sea to join American birds heading for the southern United States (Sale, *A complete guide*, p. 166).

¹⁶⁹ That night, set significantly southward by an unexpected current, *Blagonamerenny* came close to running ashore in the dark, saved only by the sound of breakers to leeward (Gillesem, 'Journey', p. 100).

o'clock, a sign that we were being drifted offshore, we ran down towards Unalaska, so as to see St. Matthew Island en route. Subsequent events showed that we had acted prudently, by running in to the south side of the island; otherwise, given the strong wind which was blowing we could not have tacked offshore and our ship would inevitably have been driven ashore.

From what has been described above it follows that one absolutely must survey the coasts in summer, when southerly winds prevail and currents are quite weak. With strong northerly winds which begin here in August, it is almost impossible to survey the coasts since apart from the fact that it is dangerous to approach them, in these winds it is impossible to maintain a specific course, and hence the survey will be inaccurate since the position of the coast as plotted depends on the ship's course. Moreover, with northerly winds the current also flows from the north. After noon on the 12th the wind started to drop; by evening we had only a single reef in the topsails and our course was straight for the middle of St. Matthew Island.

From midnight on we had drizzling rain; in the morning the fog cleared up somewhat, and at 5 St. Matthew Island appeared to the south-southwest, its south cape lying about 35 miles away¹⁷⁰. This latter ends in a high, forked cliff, with a depression in the middle, with the shape of a saddle. As we approached the island from the east side this cape appeared to consist of three cliffs, connected by a lowland. There was absolutely no snow on it. The island is aligned SE-NW and a mountain range of moderate height runs in the same direction, and amongst it are some barely discernible lowlands. The grass was not showing green at all and, apparently, had already withered. At 8 a.m. we took some altitude shots to determine the island's longitude.

Continuing to head south with almost constant southwest winds, at times so strong that we had to take all the reefs in the topsails, around noon on the 17th we sighted St. George Island, bearing SbW by compass, about 23 miles and, on the morning of the 18th Unalaska, Akun and Akutan, but only indistinctly due to the overcast weather and we soon lost sight of them. Finally, at 5 a.m. on the 20th we sighted the first and third of these islands very clearly; the sun's rays were playing on the snow of Makushinskaya volcano and we steered SEbS, straight for Amaknakh. At 8, according to our bearings, we were still 14 miles from the harbour, but at 9 a dense fog enveloped the coast, so that Capes Veselovskiy and Petryakov disappeared completely although Kelekhta was somewhat visible.

At noon [on the 22nd] a northeast wind dispersed the fog and superb weather set in. We entered Kapitanskaya Harbour¹⁷¹ at the settlement of Illyulyuk and dropped anchor close to *Otkrytiye* which had arrived three days before us. Our captain said that he had now called at Unalaska five times, but this was the first time he had done this so easily; previously he had either had to tack against a strong wind or had had to be towed in, stopping off the Amaknakh Spit, but this time we had sailed right into the harbour. And indeed, this time we were very fortunate, since we had scarcely managed to make harbour when the wind began to swing into the east and that night became a southeasterly and fairly fresh; the barometer also dropped.

When we dropped anchor, we found on inspection that the differential was only two inches to the stern, despite the fact that during our two month voyage, much of it had been among ice. The expedition leader had called here really only for interpreters, who were supposed to be here, having been sent from Sitka or Kodiak, but we were disappointed in this hope. They had not arrived, although in our absence two ships of the Russian American Company had

¹⁷⁰ On 14 August. At noon Shishmarev determined his position to be 60°13'48"N; 187°45'48"E (Gillesem, 'Journey', p. 102).

¹⁷¹ Escorted by three single-hatch *baydarki* which outdistanced the ship, which was making 7½ knots (Gillesem, 'Journey', p. 103).

arrived at the American harbour from Sitka: one for furs, to be transported to Sitka and the other, commanded by Benzheman, one of the Company's best seamen, was bound on some expedition to the north. We heard two versions of its intentions; some suggested that it was heading to survey the American coast, and others, that it was to pursue trade with its inhabitants. This latter opinion seemed more probable to us; the Company had long been mandated to pursue this aim. Implementation of the former, i.e. surveying the coast, was totally inappropriate for Company ships, which apart from chronometers had no decent instruments, no charts, nor even good magnetic compasses; in addition their seamen were neither dressed nor shod, nor did they receive appropriate food, that they could endure a difficult voyage in high northern latitudes while surveying the coast, and in the ice, and sometimes being obliged to resist native attacks. Moreover their number was usually not such that they could attempt to have dealings with the latter. An example of this was provided by Benzheman's ship, where officers and men totalled only 18 men. Hence there was nothing left for us to do but, having watered, to head for Sitka, where it was proposed that we would unload the decked boat, assemble it and prepare it for a voyage next summer.

Over the course of five days, in overcast and largely rainy weather, we were occupied with watering using barrels, transshipping to *Otkrytiye* provisions we had been carrying for her, overhauling the spars and rigging, stocking up with firewood etc.,¹⁷² and on the morning of the 27th, having hoisted in the launch, we were ready to set sail. I should mention here, that during this visit to Unalaska we managed to pick and pickle five barrels of horse sorrel, which provided us with a tasty, healthy and antiscorbutic food. Our naturalist travelled by sea along the north side of the island and climbed to the top of a volcano lying near Makushinskaya, where he collected several pieces of native sulphur and pyrites.¹⁷³

Nor was our priest idle; on orders from Vasil'yev the expedition leader, he married both previously wed and newly-wed couples and christened very mature Russians and Aleuts; in this connection I was so fortunate as to become the godfather or proxy parent of almost half the inhabitants of Unalaska.

At 6 a.m. on 27 August,¹⁷⁴ with a gentle breeze between south and west, following *Otkrytiye's* example, we began weighing anchor, and with the help of boats towing, we started to head out to sea, hoping to find a stronger wind there. But we barely finished weighing anchor, when a breeze sprang up from between north and east; it then became a north wind, which forced both ships to drop anchor again. At 1 p.m. we both weighed again when the wind swung into the SbW, and we sailed out of the harbour at 5 knots. When we had passed Amaknakh Island, the wind began to slacken, but then the wind began blowing from the northwest; during this time, because of the mountains, it had been from various directions within the harbour, sometimes even from the south. For these reasons entering Kapitanskaya Harbour and leaving it are associated with major inconvenience and difficulties, and often with danger.

¹⁷² Gillesem reports that the crew were very successful at fishing for cod; they caught enough fish to be able to serve it to the crew daily and to salt down 8 barrels; they were also given some excellent salmon (Gillesem, 'Journey', pp. 104–5).

¹⁷³ On the 25th, accompanied by some off-duty officers the naturalist, Shteyn, had visited a hot spring at the entrance to the harbour, reputed to shoot water 70 cm into the air; but they found just a poor remnant of this spring, choked by the volcanic ash from an eruption on Umnak Island in 1819 (Gillesem, 'Journey', p. 104).

¹⁷⁴ On the 29th according to Gillesem ('Journey', p. 108).

South to Sitka, San Francisco and Hawaii and back to the Aleutians

After a false start due to a heavy northwesterly swell, both ships got under way again at 6 a.m. on 28 August.¹⁷⁵ On the 31st, at 53°22'15"N; 197°6'57"E¹⁷⁶ a coast was spotted dead ahead, but when they had got much closer, to within an estimated 15 miles, with a clear horizon, there was no land in sight. *Blagonamerenny* parted from *Otkrytiye* on the night of 5 September but rejoined her on the 13th within sight of Mt. Edgecumbe on Baranov Island.¹⁷⁷ But due to a spell of foul weather, with rain and hail, it was not until the morning of the 21st, with the help of a pilot, Leshinskiy of the Russian American Company and the schooner *Baranov* that they reached Sitka harbor with the boats ahead towing.¹⁷⁸ One of the first tasks on board *Blagonamerenny* was to unload the disassembled decked boat which had been hauled all the way from Kronshtadt; it weighed about 32 tons, so this was quite a major operation. Some components had rotted or become warped and had to be replaced; a wood-cutting party was sent ashore to obtain the necessary timber. Leytenant Ignat'yev was in charge of assembling the boat.¹⁷⁹ An equivalent weight of rock ballast had then to be collected and stowed to compensate for the removal of the boat's components; this operation required the assignment of 40 men and an officer.¹⁸⁰ Despite all this activity, by 25 October both ships were ready to put to sea again.

In the meantime the American trading vessel *Pedlar* and the Russian American Company's vessel *Borodino* arrived, to make the anchorage quite busy. The crew of the latter ship had developed cholera, picked up in Manila and 30 of her crew had died.¹⁸¹ Fortunately none of the crew members of *Blagonamerenny* or *Otkrytiye* caught the disease.

Despite the fact that it rained almost daily during their visit the officers in particular enjoyed their visit to Sitka, entertained by the Governor, Kapitan-leytenant Matvey Ivanovich Murav'yev. On 24 October both vessels weighed anchor and started towing out to the open sea but it was not until the following day that they managed to get clear of the rather tortuous approach to Sitka.

With *Blagonamerenny* being a slower sailer, *Otkrytiye* soon disappeared ahead; San Francisco had been identified as the next rendez-vous. Although some very severe weather was encountered the Farallon Islands off the entrance to San Francisco Bay were sighted from *Blagonamerenny* on the morning of 6 November but due to calms it was not until the morning of the 10th that she was carried through the Golden Gate into San Francisco Bay by the inflowing tide. The Spanish flag was hoisted in welcome on the Presidio, the fortress on the south side of the entrance. Once *Blagonamerenny* had dropped anchor she saluted the fort with nine guns; it responded with the same number. *Otkrytiye* arrived next day. Tented observatories were set up on shore and an oven was built against the wall of the Presidio for baking hardtack, eight men having been assigned as bakers. Meanwhile a general overhaul of the ships was undertaken. Between 16 and 23 January 1821 Shishmarev took the launch and surveyed San Pablo Bay and the lower Sacramento River while *Otkrytiye*'s Master, Rydalev, surveyed the remainder of San Francisco Bay.

¹⁷⁵ Ibid, p. 230. They left the Bering Sea via the Unimak Pass on the 30th (Gillesem, 'Journey', p. 108).

¹⁷⁶ 168°53'03"W

¹⁷⁷ Lazarev, *Zapiski*, p. 230.

¹⁷⁸ Ibid.

¹⁷⁹ Ibid, p. 232.

¹⁸⁰ Ibid, p. 233.

¹⁸¹ Gillesem, 'Journey', p. 113.

Both ships weighed anchor on the morning of 10 February but with a fresh wind from the west-southwest and an inflowing tide through the Golden Gate they were forced to drop anchor again. But next morning, with a wind from NEbN they managed to negotiate the narrows and head out to sea, passing abeam of the Farallon Islands by 4 p.m.¹⁸² They were now bound for the Sandwich (Hawaiian) Islands. On the morning of 15 March the mountains of Mauna Loa and Mauna Kea on Hawaii (the Big Island) were spotted, their upper slopes snow-covered.¹⁸³ The first port-of-call was Kealahou Bay on the west side of Hawaii. Here they learned that King Kamehameha II was living on Oahu and therefore both vessels next headed for that island. They dropped anchor off Honolulu on the morning of 20 March.¹⁸⁴ They had been escorted for their final approach by a large number of Hawaiians in canoes or swimming. Large numbers of young women also came out to the ships but according to Lazarev they were not allowed on board.

It emerged that the King was visiting Maui, but he returned on the 21st, his yacht accompanied by a small fleet of other vessels. All the officers from both Russian vessels were received by King Kamehameha II in his hut on shore on the morning of the 22nd.¹⁸⁵ He then invited them all aboard his yacht where they also met his Queen. In return on the 24th the King visited both Russian ships. On the 25th Lazarev and other officers visited the American missionary Hiram Bingham who, with his wife, had reached Oahu only the previous spring.¹⁸⁶ Next day the King again visited *Otkrytiye* to watch a fireworks display specially arranged for him. More practically the Russians purchased substantial amounts of fresh provisions from the Hawaiians, including 19 pigs, three goats, chickens, eggs, cabbages, onions, water melons and pumpkins. They also took the opportunity to water the ships, although this was a slow and tedious process; the river from which the water was obtained was so shallow that the water had to be carried in casks for a distance of about 1 km to where the boats had landed, where it was then transferred to barrels.¹⁸⁷

At 9 a.m. on 5 April both Russian ships were towed out of the harbour and set sail, bound for Sitka. Mt. Edgecumbe was sighted from *Blagonamerenny* at 2 a.m. on 12 May¹⁸⁸ and she dropped anchor off Sitka that afternoon. *Otkrytiye* arrived on the evening of the 16th. By this time the decked boat had been completed by Ignat'yev and his party and it was launched on the 17th.¹⁸⁹

On the morning of 29 May *Blagonamerenny* was towed out of the harbour,¹⁹⁰ followed by *Otkrytiye* and the decked boat, the latter commanded by Lieutenant Avinov. As the fog cleared on the morning of 13 June, land was sighted and identified as the islands of Akun and Akutan in the Aleutians, just to the east of Unalaska Island. Despite fog and difficult currents both ships managed to negotiate the Unimak Pass¹⁹¹ and then to head westward to Unalaska Island.

¹⁸² Lazarev, *Zapiski*, p. 248.

¹⁸³ Ibid, p. 250

¹⁸⁴ Ibid, p. 252.

¹⁸⁵ Ibid, p. 256.

¹⁸⁶ Ibid, p. 260.

¹⁸⁷ Ibid, p. 265.

¹⁸⁸ Ibid, p. 279.

¹⁸⁹ Ibid, p. 280.

¹⁹⁰ Ibid, p. 285.

¹⁹¹ Ibid, p. 286.

North to the Arctic Ocean again, 1821

At noon [on 20 June] the shores of Konstantinovskaya Bay¹⁹² and Amaknak appeared very clearly and finding ourselves right in the entrance, with a following wind we headed straight into the harbour towards the settlement of Illyulyuk, which we reached two hours later and dropped anchor in a depth of 14 fathoms with a bottom of silt. As we were passing Amaknak Island the coasts began to clear of fog; the wind swung into the north and we saw that *Otkrytiye* was running in astern of us.

As we approached the settlement of Illyulyuk it saluted us with 7 guns, to which we replied with the same number; lying at anchor we drew 14 feet 4 inches aft and 13 feet 8 inches forward, for a differential of 8 inches. At 2.30 *Otkrytiye* arrived and dropped anchor near us. The decked boat proceeded to the settlement and anchored between it and some rocks. The needs of our ship consisted simply of water and changing our fore crosstrees¹⁹³; *Otkrytiye* also did not need much work and hence the expedition leader planned to spend no more than four days in Unalaska.

Having watered and made our repairs in two days we used the remaining time to collect horse sorrel,¹⁹⁴ with which we filled four barrels, and pickled it as we had done last year. Strangely, our countrymen living at Unalaska despise this useful plant; they make little use of it in summer and do not preserve it for winter at all. Of course this occurs out of prejudice as to the name, horse sorrel, but I suspect that the main reason is laziness. The Aleuts eat this green vegetable very avidly in summer, but do not preserve it for the winter out of lack of knowledge and lack of possessing the necessary receptacles. The Russians ought to teach them this, but they themselves do not have the knowledge.

In addition to these supplies Captain Vasil'yev acquired from the Company two steers for the voyage, for the crews of both ships, each weighing 6 pud [98 kg]; throughout our sojourn in Kapitanskaya Harbour the crews received two types of fish for breakfast from the governor of Unalaska: cod and pink salmon.

We learned from Kryukov that the past winter had been very warm at Unalaska; but from February until we arrived it had been cold and the winds had been blowing almost constantly out of the northern quarter.

On the 25th [June], before we put to sea Vasil'yev determined which officers were to be engaged in what duties during the impending voyage; he himself was to undertake a survey of the shoals and coasts from Bristol Bay to Norton Sound and from there he planned to proceed to the Arctic Ocean to locate a passage around the American coast, for which the decked boat was detailed to go with him. We were instructed to check whether the following islands existed: Anderson,¹⁹⁵ Preobrazheniye¹⁹⁶ and one seen by Leytenant Sindt¹⁹⁷ to the north

¹⁹² Konstantinovskaya Bay: a small inlet on the east shore of Illyulyuk Bay (which in turn forms part of Kapitanskaya Bay). The Russian American Company's ship *Konstantin* had been wrecked on its shores, and it was named after that vessel (S).

¹⁹³ And repairing the fore topmast (Gillesem, 'Journey', p. 183).

¹⁹⁴ The species *Rumex domesticus* (or common sorrel) widespread in northern countries (S), and being collected here as an antiscorbutic.

¹⁹⁵ This was in reality part of St. Lawrence Island, seen by Cook on 3 August 1778 and named after the *Resolution*'s surgeon, William Anderson, who died of consumption (i.e. tuberculosis) on that same day (Beaglehole, *The journals*, p. 406, 406 n2, 444 n2). But see note 206 below for Solov'yev's opinion.

¹⁹⁶ Preobrazheniye Island was plotted on the chart at 58°48'N and 175°36'W on the basis of hunters' accounts. Careful searches by M. N. Vasil'yev and especially G. S. Shishmarev established that the island does not exist (S).

¹⁹⁷ Leytenant Ivan Sindt, in *Sv. Yekaterina*, in early September 1766 (Belov, *Istoriya*, p. 420).

of St. Matthew Island; to determine the northern tip of this latter island and the little island lying northwest of it, and to finish the survey of St. Lawrence Island. For all of this we were allocated the period until 6 July, on which date we were to pass through Bering Strait and search for an open passage along the Asiatic coast, which we were also to survey. Having thus been allocated our tasks, we were completely prepared to leave Unalaska and at 4 a.m. on that date [the 25th], with a gentle southeast wind, along with *Otkrytiye* and the decked boat we weighed anchor and set a course of WNW directly towards Preobrazheniye Island.¹⁹⁸ Our ships remained within sight of each other until noon, but at that point *Otkrytiye* disappeared due to rain and overcast. The wind swung into the east-southeast; the barometer was reading 29.8' and the thermometer 50°; and carrying all possible sail, we soon lost sight of Unalaska. Later the wind began to swing into the north and northeast and by 9 a.m. it was blowing very strongly from the north-northeast.

We plotted our course on the chart provided by the Admiralty Department as being the most reliable of all those we had.

At noon, according to this chart St. George Island bore NW 7° 52 miles from us; there was a fresh wind blowing; the sky was covered with clouds; there was a constant fine rain; and we saw large numbers of murre, gulls, albatrosses¹⁹⁹ and other sea birds. Towards evening it became a little calmer and clearer and the rain stopped.

Next day [the 28th] we did not see a single bird and the sea water, which was brownish-green when we left Unalaska, had gradually changed colour, and by this stage was dark blue, proof that the depth had increased and hence we did not cast the lead. The wind was still northerly; there was frequently fog, and the sun broke through extremely rarely. The 29th was just the same; at noon Preobrazheniye Island [allegedly] bore NE 45° 54½ miles away. The water again assumed a greenish colour and hence we cast the lead, but got no bottom with 70 fathoms. From midnight onwards we had very unpleasant weather, with dense fog and sleet, but soon the barometer began to rise, presaging clear weather, essential for us to investigate Preobrazheniye Island, if indeed it existed. And indeed, from noon on the 30th the fog began to clear and birds appeared, mainly gulls.

After midday on 1 July, with a gentle wind from the northwest and with the sun shining, we set a course for Preobrazheniye Island which ought to bear NE 49°, 33 miles from us. At 10 in the evening, when it ought to be 6 miles from us, we still could not see it, although we had visibility of 10 miles all around. We sounded but got no bottom with 100 fathoms. At 11.30 p.m. we were in latitude 58°48'N; longitude 184°24'E²⁰⁰, at exactly the spot where the island we were searching for was supposed to be, but there was no sign of land nearby. Thus we concluded that if it indeed exists, it is a long way from where it is shown on the chart. To locate it one would need to search for several miles east and northwest, which time did not allow since, obliged by our orders to hurry to Bering Strait by the 7th of the month, we still had to examine various locations en route, as mentioned earlier, and hence we decided not to stop to search for Preobrazheniye Island but to sail to St. Matthew Island, to locate the island noted by Leytenant Sindt, 70 miles from St. Matthew.²⁰¹ Although the

¹⁹⁸ At this point Leytenant Zelenyy transferred from the *Otkrytiye* to the *Blagonamerenny* (Gillesem, 'Journey', p. 186.

¹⁹⁹ The Laysan albatross (*Phoebastria immutabilis*), with a wing-span of 195 to 203 cm, ranges north into the southern Bering Sea in summer.

²⁰⁰ 175°36'W.

²⁰¹ The island noted by Leytenant Sindt was plotted on the chart 70 miles from St. Matthew Island. It was not seen at this position by G. Sarychev on his earlier passage to Unalaska, nor later by many other seafarers. Sind probably

weather was overcast, we had visibility of 10 miles in all directions. Murres, gulls and also small birds like sea swallows (terns?) appeared in large numbers, but there were only a few puffins.

At noon when, according to the Admiralty Department's chart the southern end of St. Matthew Island bore SW 60° 90½ miles from us, our visibility again extended to 10 miles all around, but again there were no signs of land nearby.²⁰² At 3 we were 70 miles southwest of Cape Upright²⁰³ and hence could have seen the island seen by Sindt, if indeed it existed, or at least close to that position, but now, too, the horizon was clear in every direction.

From Sarychev's course²⁰⁴ from Zaliv Lavrentiya to Unalaska, as marked on that Admiral's chart, it is clear that he sailed close to the position where Sindt found an island, and hence he too would have been able to see it, but the depth marked by Sarychev shows that there couldn't possibly be an island there, since towards St. Matthew Island the depth decreases and from it, the depth increases with distance.

At 8 p.m. when we were 17 miles from Pinnacle Island²⁰⁵ on a bearing of SW 21°, we set a course of NNW straight for the northern tip of St. Matthew Island, which ought to have taken us very close to the island in question. After holding this course for an hour we were 8 miles from that island but due to the overcast which had developed we did not see it. In the meantime the wind had strengthened, and the darkness did not allow us to approach the island; moreover, due to the overcast we were unable to determine the position of its northern tip. With this weather we could not anticipate any success on the following day either, and if we hove to until morning we would only be wasting time and a fair wind; hence, wasting no further time, at 9 p.m. we decided to leave St. Matthew Island and proceed to Anderson Island²⁰⁶ and beyond, in order to fulfil our instructions, according to which we still had much to do, and very little time. Hence we set a course of ENEbE along the island to its southern tip.

At 4 a.m. a coast appeared through the fog and hence as a precaution we steered between NNE and NE, although by dead reckoning we were 20 miles offshore; but having steered this course for 12 hours, we swung back onto our previous course again. The weather during this time was overcast and foggy and it soon began to rain.

On the night of 3 July we saw gulls, puffins and murres for the first time since Unalaska in the case of the latter; we also saw wood drifting past.

At 9 a.m., with a clear sky and a very clear horizon, we were 8 miles SE 13° by compass from Anderson Island by dead reckoning, but could not see it, and hence we ran mistook a fog bank for an island (S).

²⁰² Gillesem, however, reports that the mountain tops of St Matthew Island were visible, projecting above the fog, but it was decided not to wait for the fog to lift to allow survey work (Gillesem, 'Journey' p. 187).

²⁰³ The southeastern tip of St. Matthew Island.

²⁰⁴ Leytenant Gavriil Andreyevich Sarychev, a member of Joseph Billings's expedition, but now acting independently, sailed from Zaliv Lavrentiya on board *Slava Rossii* on 14 August 1791, and, having arrived at Unalaska on the 29th, wintered there along with Leytenant Robert Hall and his crew who arrived from Petropavlovsk on board *Chernyy Orel* shortly afterwards (Sarychev, *Account of a voyage*, Vol. 2, pp. 52-4).

²⁰⁵ A very small island located 15 km due south of St Matthew Island.

²⁰⁶ Anderson Island was named by James Cook who saw the coast of Alaska at 62°34'N; 168°W from Greenwich on 3 August 1778. Thinking that it was an island Cook gave it the name of his surgeon, Anderson, who had died on board the ship on that day (S).

close-hauled to the NWbW. On this course we ought to pass within three miles to the west of that island. And indeed, before noon we spotted a coast bearing SEbE by compass; it lay a great distance away and was covered in snow in places. At this point, by dead reckoning we were no closer than 180 to 200 miles from the American coast on that bearing, but this coast, apparently, was no more than 70 miles away. Since we still did not know our position very well, we waited until noon, so that by determining our latitude and longitude by observation, we could reach some decision about the coast we could see. From this determination of our noon position by observation (latitude 62°32'8"N; longitude 193°11'32"E²⁰⁷) Anderson Island at this point ought to lie on a bearing of NW 30° 37 miles away, but it had still not appeared, although the horizon was totally clear all around. The coast we could see extended from SEbE to ESEbE and consisted of a large number of snow-covered mountains whose summits were hidden in clouds. We estimated the distance to this coast as not more than 70 miles, although some of the officers felt it was not less than that distance. The shoal coast of America lying between Capes Stephens²⁰⁸ and Cape Newenham²⁰⁹ had not been seen by Cook because of the shoals extending far out to sea; we sighted the coast in a depth of 14 fathoms. In this case we had to conclude that this coast was either the American coast, projecting so far to the west between the above-mentioned capes, or a new island.²¹⁰ Be that as it may, we still had not seen all of it, and hence we decided to sacrifice a few hours, in order to approach it closer and determine its position more accurately; moreover the wind was foul for sailing to Anderson or St. Lawrence islands. Hence we ran down to the SEbE having set all sail; we cast the lead every half hour and the depths ran: 15, 15, 15, 15, 14½, 13, 11, 6, 5 and 5½ fathoms, with a bottom of grey sand with shells. After noon we were approaching the coast from this last sounding, but from a distance of 15 miles it looked just the same as at noon, only clearer; the horizon was clear but since we could see no possibility of approaching the coast, and further investigations would consume a lot of time, and since in addition we knew that *Otkrytiye* ought to pass close to this coast and hence should see it, we turned away from it and set a course via Anderson island to St. Lawrence Island. As we left the coast the depth increased; soon fog began to appear from the southeast, hiding the coast and it fell calm. At 2 a.m. a breeze began blowing from the NEbN.

At 6 a.m. on the 5th a coast appeared to the EbS and hence we assumed that we had been set to the south, if this were the same coast we had seen yesterday. But since we had noticed yesterday that we were being set northwards then this land must be a new one, or else a fog bank had been mistaken for land, which commonly occurs in these seas.

In the morning the wind strengthened and forced us to take in reefs in the topsails and the lower sails; soon after noon it suddenly fell calm but half an hour later it began blowing with the same force as earlier but by evening it had fallen calm again. From midnight on we could see St. Lawrence Island to the east-northeast but it soon disappeared.

We had been ordered to pass through Bering Strait on this date, but since the foul wind which had begun blowing on the 4th prevented us from heading north we now had to

²⁰⁷ 166°48'28"W.

²⁰⁸ Opposite Stuart Island, about 3 km from the community of Stebbins (possibly a corruption of the name) and 15 km northwest of St. Michael.

²⁰⁹ On encountering north of Cape Newenham 'a sandy, stony bank, which was already visible above water at half tide' Cook named its northern end Cape Shoal and held a course farther out to sea. The shoals are formed here by the sediments brought down by the Kuskokwim River, the mouth of which lies in the bay of the same name (S).

²¹⁰ This was almost certainly the discovery of Nunivak Island. Vasil'yev later landed on the island, mapped it and named it after his ship (see p. below).

abandon our survey of St. Lawrence Island, to make a brief visit to Zaliv Lavrentiya to gather information from the Chukchi for our forthcoming expedition northwards.

At 8 a.m. the weather was superb, a rarity in this area, and we took advantage of it to bring the men's bedding and clothes on deck to air them.

At noon on the 7th we had a superb observation of the sun's altitude giving our latitude by observation as 62°30'42" and our longitude 188°3'27" E²¹¹ by chronometer; the current was setting SW 37°43' at 1¼ miles per day; the barometer was reading 30.02 inches and the thermometer 47°. At this point the southwest cape of St. Lawrence Island bore NE 5°, 54 miles away. The wind was blowing gently from the west-northwest, but from midnight onwards it became lighter. We could clearly see several of the hills of St. Lawrence Island to the NbE and although the horizon was obscured by fog in the morning, the weather soon became absolutely superb and we brought the men's bedding on deck. That night the sea was calm and we again saw the hills of St. Lawrence Island to the NbE, but at 8 we again had dense fog. A very gentle breeze swung into the northwest and by noon had died away.

At noon the depth was 28 fathoms with a bottom of sand with silt and the fog had again given way to the most magnificent weather. From midnight onwards a very gentle topgallant wind blew from the WSW and the moon was shining with its full brilliance, but by 3 a.m. we were again in thick fog and hence we swung away from the island which lay 9 miles from us on a bearing of NE 8°. Towards noon on the 9th it began to clear and at noon we had an excellent observation; latitude 63°9'39", longitude by chronometer 187°59'12"E²¹²; current running to NE 43° 7' at ¾ miles per day. This was the first time we had noticed a current to the northwest since leaving Unalaska and much later than in 1820. Whereas then the winds had been mainly southerly, now they were northerly; there had been less snow on the coast of St. Lawrence Island as against the present situation and hence we concluded that this year summer was starting later than last year and that we were not late in heading north.

At 2.30 the wind began to swing to the south and St. Lawrence Island appeared so close and so clearly that we could start surveying its western part. At 5 p.m. 10 boats or *baydari* appeared, heading towards us from the southwestern cape.²¹³ Being in a hurry to get to Bering Strait, we did not want to lose time and hence did not shorten sail; but since the ship was travelling only slowly the natives soon caught up with us. Closing with us, they stopped but came alongside only at the word of invitation 'taroma' or 'taggoma' which in their language means 'hello' or 'goodbye'. We also repeated the word 'anaymakh' ('friend') and 'amaut' ('come alongside' or 'come here'). When the natives had laid alongside the captain ordered the Chukchi interpreter we had on board to ask them who was their headman. They understood the question fully and one of them, a middle-aged man, placed his hand on his head, thereby indicating that he was the chief. Then Shishmarev ordered that he be given tobacco, for which he gave him three small dead birds. The interpreter explained that he was being given the tobacco not for the birds but as a sign of friendship and asked that he sell us some of his implements, but it seemed that the chief could not understand this explanation due to the loud noise being made by the natives, offering their things for sale, or, like his companions, wanted to sell his worst goods first. We had just sent a seaman down into their boat to indicate what we wanted, but he had scarcely reached it when all the natives, without exception, pushed off. Shishmarev ordered the interpreter to explain to them that they should

²¹¹ 171°56'33"W.

²¹² 172°00'48"W.

²¹³ Their crews totaled about 80 members, including about 10 women (Shishmarev, 'Information', p. 209).

not be afraid of us, that we were friends and would give them tobacco. The natives all heard and understood, especially the latter part, which particularly pleased them, but said that they were afraid of our ship which, with its great speed, might carry them a long way away. To reassure them on this head we shortened sail and they immediately came alongside, each offering his things for trade and asking for tobacco; the result was a terrible din. The natives, concerned only about selling their things as soon as possible, paid not the slightest attention to our words, or rather those of our interpreter, and no matter how much we tried to persuade them to come aboard, it was all in vain. As a result Captain Shishmarev, abandoning all hope of developing a conversation with them, allowed all of us to trade our things²¹⁴ with them just as we wanted. Initially the islanders offered for sale walrus tusks and teeth and various trifling walrus bone artefacts; then they shifted to birds such as dovebies, pigeon guillemots, and finally to the weapons they use²¹⁵. They liked all our trifles, especially tobacco, which they valued to such a degree that when even the smallest leaf of tobacco fell into the water they threw themselves after it, trying to catch it.

The inhabitants of St. Lawrence Island are of middle height; they have black hair, cut close on top of the head, but left long all around, like a wreath; their faces are somewhat flattish, with slightly projecting cheekbones, a short nose, small and oblong eyes. These are the general features of these natives. The women are very similar to the men, but with somewhat more delicate faces, of slighter build; they have one or two straight lines tattooed from the lower lip down across the chin; some have these tattooed lines across and along the nose, and in a similar fashion they have oval patterns tattooed on their cheeks, and almost all of them wear European beads in their ears. The men have none of these adornments. In general both sexes of this people are similar to the Americans living near Bering Strait. Their clothing consists of bird-skin parkas, over which they wear *kamleyki*, sealskin pants and *torbasy* made from the skins of various animals. Some of those who visited us, but only a very few, wore reindeer-skin parkas, from which we concluded that they did not have reindeer themselves, but buy the reindeer skin parkas from the Chukchi. Their *baydari* are the same as those of the other peoples inhabiting the shores of Bering Strait; their weapons consist of bows and arrows as well as wooden spears with bone tips.

The natives who visited us traded large numbers of birds, which provided the crew with meat for a whole day instead of salt meat, while the soup made from them was very tasty and nutritious. Around 8 p.m. the islanders of whom about 80 visited us, having traded almost all their articles, left us and, filling our sails, we ran towards Zaliv Lavrentiya.

Of the capes on this island the southwest one is high, steep and in places cliffed. Above it lie several flat mountains, the easternmost of which has a gentle slope to the east; the part of the island starting from here appears from a distance to be four interconnected islands. The northern cape on the west side is just as high, steep and rocky, and since a low coast runs away from it to the south on both sides, from a distance it appears as a high, flat island. The entire area of this part of the island between the above-mentioned capes, is occupied by an upland, whose slopes extend right down to the sea, and in the midst of which are two tors. The natives who visited us came from a settlement located on the southwest cape of the island.

While our survey was proceeding, the sky became covered with clouds; the horizon was hidden by gloomy storm clouds; it began to rain; as a result of the resultant gloom we

²¹⁴ Knives, scissors, axes and tobacco (Gillesem, 'Journey', p. 188).

²¹⁵ Also reindeer-skin parkas and *kamleiky* (seal-gut rain jackets) (Gillesem, 'Journey', p. 188).

were forced to discontinue the survey at 1.05 a.m. At this point the depth beneath us was 20 fathoms, and farther north 23 fathoms; and at 5 o'clock when we spotted the Asiatic coast somewhat north of Chukotskiy Nos through the thinning fog, lying 20 miles from us, it was becoming gradually deeper and we could not reach bottom with 30 fathoms.

The continual torrential rain ceased only at 6 a.m. Then, through the lingering overcast a coast appeared, that extending from Zaliv Lavrentiya to Mechiginskaya Guba, and soon the north shore of the former appeared to the NWbW; near its northern cape we spotted a large number of pieces of ice, although elsewhere it was ice-free. The depths were progressively 10, 14 and 19 fathoms.

From midnight it fell calm; fog lay over the coast and along the horizon; the coast was visible in places, and we were perceptibly set into the inlet by the current, but at one o'clock we again began to drift out of it, and we dropped anchor in a depth of 22 fathoms, with a bottom of black, sticky silt. Due to the calm we lay thus until 7 a.m. At that point a breeze arose from the east-southeast; the ice began to drift into the inlet, and we spotted a sand-spit extending into Zaliv Lavrentiya and bearing NWbN, 3 or 4 miles away. We therefore weighed and headed for it. Having rounded it and having made 3 tacks towards the shore, right at noon we dropped anchor in a depth of 8 fathoms with a bottom of silt, at a distance of $\frac{3}{4}$ of a mile from a camp of Sedentary Chukchi.²¹⁶

The weather was superb with a light breeze between south and east. The coast was still covered with snow in many places, especially the peaks of the highest mountains, and the current was carrying ice into the narrow strait between the spit and the north shore of Zaliv Lavrentiya.

According to the expedition leader's orders, we were supposed to pass through Bering Strait by 6 July but foul winds and calms had delayed us past that time. We could now proceed straight to the strait but, carrying out those same orders, we were to call at Zaliv Lavrentiya to gather information by which we might be guided on our upcoming voyage. At the same time, from the early incidence of ice one could judge that navigation in the higher latitudes would not yet be ice-free, and the ice would probably be driven against the Asiatic coast by the northerly winds which were now blowing; as a result the air was very cold. It was for these reasons that we had called here, but with a view to quickly weighing after we had questioned the Chukchi, and hurrying to Bering Strait. We had barely dropped anchor when the Chukchi came out to us and at our invitation came aboard the ship without hesitation. They understood the interpreter we had on board better than the Aleut who spoke the Kad'yak and the Unalakhmut languages, and hence one may assume that the residents of St. Lawrence Island crossed from America rather than from Asia.²¹⁷ Knowing the inclination of these natives for stealing tempting and (to them) valuable items, we posted guards at all points, so to say, but all the same the Chukchi broke two of our leaden gun covers. One of these thefts went unobserved, but when our guards spotted the other one, they scolded the man responsible, threw him off the ship and did not permit him back aboard. When we told the chiefs about this, they appeared only to regret that the thief had been unsuccessful. However the Chukchi behaved in very friendly fashion towards us and took their weapons out of their *baydari* only to trade them, and in this they acted honestly. Apparently they hoped most for knives, of which they each always carry two or three; one in a sleeve, another in the side of

²¹⁶ Sedentary Chukchi: settled, rather than nomadic (S).

²¹⁷ This hypothesis is incorrect. It has now been shown that the residents of St. Lawrence Island, like those of Alaska itself, have migrated from Asia (S).

their pants, and a third, large one behind their backs under their parkas; we saw this latter knife in only a few cases, although they all invariably carry it. This sort of behaviour serves as proof that the Chukchi who came to visit us had no evil intentions and were confident in our peaceful attitude towards them. They traded all kinds of artefacts and weapons but they valued their furs very highly, and hence we did not buy any from them. The ship's commander asked all the chiefs to sell us reindeer, promising to pay well for them, but they replied that the reindeer were very far away in the interior²¹⁸ and it would take a very long time to go for them.

Some of the elders who had received medals from Leytenant Kotzebue²¹⁹ and who came aboard, always had them with them and tried to demonstrate their zeal and friendship; for this our captain for his part also gave medals to three elders. It appeared that there was no better way to demonstrate our attitude to them than by these medals of which, clearly, they realized the value; distribution of them was also an assurance of our friendship, whereby they expected to be well received on any Russian ship.

As we rounded the emerged spit, we saw many tree stumps on it, apparently thrown up by the sea. Wanting to verify this we sent a boat to pick them up, but it soon returned on finding that these stumps were simply whale bones. At this point the Chukchi left us to go ashore to their settlement; Captain Shishmarev and I followed them in an armed launch.

On running ashore we saw two settlements, one on a lowland near the shore, named Ingnyagmyu,²²⁰ consisting of 7 yurts, which definitely was not here during *Ryurik's* visit in 1816; the other, consisting of 5 yurts was located on a hill, and was much more populous. Part of it had probably moved to the lowland since our captain saw four men there who previously had lived on the hill. We were welcomed in friendly fashion in these settlements. The Chukchi were unarmed and allowed us to enter some of their yurts; as we walked around the settlement we were escorted by elders. In this connection we noticed that here on land the Chukchi were less keen to trade items with us than on board ship.

Having inspected the settlement, just before 5 we returned aboard ship, to which the Chukchi soon came again to sell their things²²¹; many of them were from distant settlements, among them one elder from the south shore of Zaliv Lavrentiya, Paygdau or Pil'gaygym by name, who understood our Chukchi interpreter quite well; from him we received all the information incorporated at the end of this chapter. Other Chukchi could also understand him but he, it seemed was more intelligent than all the others. Hoping to obtain some useful information from him our captain decided to remain at this location until morning.

The night was calm and in the morning we sent a boat ashore for water, which could be obtained very conveniently from a stream; although it was snow water it was very good. Along with it we sent a boat to sound the narrow strait located between the dry bank and a spit, but the depth turned out to be quite insufficient for this vessel, namely 2-2½ feet. In the meantime the elder Paygdau came aboard and gave us various information which we recorded.

²¹⁸ Because of a lack of good grazings (*Cladonia* lichens) near the coast (Gillesem, 'Journey', p. 189).

²¹⁹ During the latter's visits on board *Ryurik* in 1816 (Kotzebue, *A voyage of discovery*).

²²⁰ The settlement of Ingnyagmyu (now Nunyagmyu) is located on the coast at Mys Serry (S).

²²¹ Fox furs, weapons and clothing, in exchange for kettles, axes, knives, scissors, needles and tobacco (Gillesem, 'Journey' p. 190).

At noon [on 12 July] we hoisted in the boats, weighed anchor with a gentle wind from the east-southeast, and rounding the dry bank by no more than 30 fathoms, we touched a shoal but, throwing the sails aback, we got off safely and began tacking out to sea. At 8 p.m. it fell completely calm, and since we were being set into the inlet by the current, having taken all sail off her, we dropped anchor in 29 fathoms with a bottom of black, sticky clay. At this point the Chukchi again came out to us; the old man Paygdau, who stayed to spend the night with us, and also some reindeer Chukchi in two *baydari*, whose chief was named Petagagiu. On coming aboard he crossed himself in Russian style and gave us a piece of paper from which we learned that he had been baptized by the priest and preacher Aleksandr Trigonov and named Simion on 10 March 1821.

Petagagiu told us that he had been many times to the Kolyma²²² and the Izhiga²²³ and paid *yasak*²²⁴ of 10 foxes, probably for his entire family. On learning that we wanted reindeer he promised to bring us some next morning. Captain Shishmarev, for his part, gave him presents and gave his word that he would pay very generously for reindeer, but said that he could not wait any longer than next morning. With this this elder received a medal and wanting to demonstrate his liking for us, he quickly went ashore to get the reindeer. That night it was calm again and at noon [on the 13th], in clear weather, we got a good observation: latitude 65°37'24"N, longitude by chronometer 188°59'51"E²²⁵, compass variation 25° E; the current ran to the southwest at half a knot. We lay at anchor all that day. At 9 a.m. [on the 14th] a gentle breeze began blowing from the east and hence we weighed and began tacking seawards. As we steered towards the south shore, the depth suddenly decreased from 19½ fathoms to 9, hence we swung away from the coast when not more than 12 miles from it. Then the Chukchi came aboard with the assurance that they had brought the reindeer; others, newcomers, said that they had already been killed and would soon bring them off, but we did not want to wait since time was valuable, and with a light breeze between south and east we continued to beat to seaward.

In order to satisfy himself as to whether the reindeer had been brought according to the Chukchi, Captain Shishmarev sent Lieutenant Zelenyy ashore to enquire about this and, in the event that they had been brought, to hurry the Chukchi in delivering them on board. This officer returned an hour later, and reported that there was no sign of the reindeer and that, according to the statements of all the inhabitants, immediately after Petagagui had made his promise, he had left for another settlement; they knew nothing more about it and were amazed at this deception, but they themselves insisted that the reindeer had already been killed; probably in order that we would stay longer, providing an opportunity for them to acquire something from us.

In the evening it fell completely calm, and we had fog at times, and hence we were obliged to anchor for the night in a depth of 24 fathoms, with a bottom of black silt.

At 1 a.m. the reindeer Chukchi chief Ley-gay-gu from Mechiginskaya Guba arrived alongside in one of two Chukchi *baydari*. On receiving an invitation from the Captain to come aboard, he immediately climbed aboard and on learning that he was speaking to our

²²² To the major annual trade fair at Ostrovnoye on the Malyy Anyuy River, just east of the Kolyma (Gillessem, 'Journey', p. 194). For details see Bockstoe, *Furs and frontiers*, pp. 92–102.

²²³ Izhiga was the name they gave to a settlement on the northwestern shores of the Sea of Okhotsk, in Gizhiginskaya Guba, south of Poluostrov Taygonos, now Gizhiginsk. The route to 'Izhiga' was a long one, across mountain ranges, down the Penzhina River and onward to the shores of the Sea of Okhotsk (S).

²²⁴ Tribute paid to the Russian government.

²²⁵ 171°00'09"W.

leader, he greeted Shishmarev in Russian, embracing him with an arm around his neck and kissing him on both cheeks. His wife and son came aboard the ship with him. He understood our interpreter just as well as the Sedentary Chukchi, and they also pronounced precisely the words of the latter which we had recorded, and hence one must assume that the languages of the Reindeer and Sedentary Chukchi are one and the same. The only difference is in the pronunciation of a few words, just as in Russia between different provinces. The chief Ley-gay-gu had three medals around his neck: a gold one given by Billings to his father, Im-le-rate, now dead, who had escorted Billings to the Kolyma; a second, bronze medal, sent by Kapitan Rikord, and a third, made of tin, of which we had seen very many in San Francisco harbour in California, and which Ley-gay-gu had received in 1820 from the captain of the ship *Pedlar*. Of the Chukchi who had come out in the *baydari* with this chief not one decided to trade without his permission, and he only gave it after he had sought the approval of our captain. Shishmarev presented gifts to him, and to his wife and son, and greatly regretted that he could not satisfy Ley-gay-gu's desire, which was for bells, since we had none. When we told him that Petagagui had deceived us, having promised to bring reindeer, he said that this could not be so, since it would take at least three days to deliver the reindeer. He also greatly regretted that we were leaving and that he had not known of our requirements earlier.

At 1.30 a.m. the wind began blowing from the northwest and hence, not wanting to waste time, we weighed anchor and proceeded to the eastern cape of Bering Strait, but first we had to avoid some ice, which had drifted about 3 miles out to sea from the northern cape of Zaliv Lavrentiya. When our ship picked up speed Ley-gay-gu headed home. We were very sorry to let him go, since we had hoped to acquire from him more and more reliable information, but we could not miss the wind; moreover the time prearranged for us to be in the strait, had long passed. Thus, having weighed anchor, we steered northeast and, having avoided the ice, headed east. It soon fell calm and we were set north-northeast by the current. At 6 a.m. we spotted the two large Gvozdeviye Ostrova bearing NE 40° by compass; the refraction was so severe that their appearance was constantly changing. But before proceeding to a description of our further voyage, I shall end this chapter by notes on the Chukchi which I collected in Zaliv Lavrentiya and by information on this people which we obtained from the chief Paygdau.²²⁶

Dwellings. We did not see the winter yurts of the Chukchi; they are made fairly circular in plan, with a diameter of 2½ to 4 fathoms, and convex at the top, due to which they resemble haystacks from a distance. They are constructed as follows: first a framework of whale ribs, baleen and thin poles is set up, then this is covered with walrus and seal skins sewn together, leaving no hole at the top for the smoke to escape; with time, when the hides become old and crack, it seeps through the cracks. Later, at Mechigmenskaya Guba we saw a hole left in the middle of a yurt for the smoke to escape, and beneath it a kettle for cooking food. But at Zaliv Lavrentiya, apparently, the food is cooked in the open air, and we saw the location for this. At one side of the yurt an area for sleeping is partitioned off with stakes; and is hung on all sides with reindeer and dog skins. We were told that the Chukchi live in these yurts in winter; we did not believe this at first, but they insisted that it is not cold in them in winter. And in fact the area partitioned off for sleeping, is like a yurt inside a yurt, as it were²²⁷; it is hung around with skins on all sides and is kept constantly hot; as a result it is so warm there that the Chukchi sit naked.

²²⁶ The content of these notes about the Chukchi is almost identical to that of Shishmarev's comments (Shishmarev, Information, pp. 211–19). It is not clear as to which of them was the original author.

²²⁷ Known as a *polog*.

Boats. The Chukchi's boats are the same as those of all the inhabitants of both sides of Bering Strait and hence are quite well known. They are almost all of an identical size, and have 8 paddlers in each; a ninth person steers with an oar at the stern, whereby they all sit facing the bow.

Weapons. Their weapons consist of spears and bows and arrows. The former are made of wood, tipped at both ends with ivory, so that one end is intended for use against people and the other against animals. When we were there the Chukchi already had iron spears, obtained by them on the Kolyma and hence they traded the ivory ones to us very willingly. Their bows are made curved, and to prevent them from breaking they are backed on the outer side with sinew; their wooden arrows have an ivory tip or one made of black, glassy rock, and feathers at the other end; so that on the release of the arrow the bowstring would not injure the hand, a curved plate of bone or iron is worn on it for this purpose. For carrying the arrows superb quivers are sewn from reindeer skin, beautifully and tastefully embroidered and painted. The main weapon of the Chukchi is a large knife an *arshin*²²⁸ in length which they always carry with them, encased in a beautifully embroidered scabbard; in addition to this they always carry with them one or two small knives in their trousers, in a trouser pocket, or in their sleeves. In the case of one Chukchi we saw two muskets of British manufacture, probably acquired from the Americans who had been here in Bering Strait in 1820, since on the Kolyma they were not allowed to sell firearms to the natives.

Artwork. The men carve images of men and of all the animals and birds known to them, out of walrus ivory, but fairly coarsely. They make wooden boards in the shape of a man, from which they produce fire by friction. Appropriately to their gender the women sew clothing and embroider quivers, gloves and other items but in this work they fall far behind the Aleuts.

Lifestyle. Although we were told that the Chukchi always live in one spot, by every yurt we saw large numbers of sleds of different types, and hence one may probably conclude that they may migrate anywhere with their entire families. And since we did not see any winter yurts, they probably move away from the coast into the interior for the winter, where they possibly build their winter yurts, then return to the same dwellings for the summer to hunt walrus, seals, whales²²⁹, fish and birds; these provide their food at this season, and they stock up on them somewhat for the winter too, for we had occasion to see meat buried in pits. In every yurt we noticed kettles -- copper, iron, cast iron or clay; the latter, apparently, they make themselves judging by the coarse workmanship. It follows from this that the Chukchi cook their food when they can, but in their *baydari*, where they have occasion to travel for long periods and where there is nowhere to cook, they eat their food raw; we once had occasion to see the Chukchi assembled on shore at their chief's yurt, eating raw, scarcely aired (air-dried) small fish, similar to our smelts.

Clothing. The clothing of both sexes consists of parkas, trousers and *torbasy*, with the sole difference that the women's pants are cut very wide and short and their *torbasy* come only to their knees; the men's *torbasy* are short but the trousers are long and narrow. In both sexes the parkas are of reindeer skin, as are the trousers; the women's are worn with the hair side out; and in the case of the men's they are also made from sealskin. During the cold season they wear on their heads hats of young reindeer skin, cut like skull-caps. On their hands they

²²⁸ 71 cm.

²²⁹ Most probably bowhead whales (*Balaena mysticetus*) (Sale, *A complete guide*).

wear gloves of reindeer skin, beautifully embroidered with the wool of that animal, whereby one glove is made with five fingers and the other with three or four.

In damp or rainy weather the Chukchi wear over their parkas *kamleyki*²³⁰ which are of two kinds: of walrus and seal intestines; the former belong to the men and are embroidered across the body; the latter are worn by the women and are embroidered along the body.

External appearance and bodily adornment. All the Chukchi we saw were of middle height, fairly thickset; some are very tall, and there are few small men; they are quite well-proportioned but with very high cheekbones and are dark-complexioned; their eyes are small and not very oblong; their gaze is bold and quick, but not savage. They do not grease, decorate or tattoo their faces at all; they shave their beards with knives obtained from the Europeans; they cut off their hair almost completely, leaving the hair only in a wreath all around, like Catholic monks; and the women braid their long hair into braids on each side of their heads. They are short and in general uglier than the men, excluding the young women, some of whom are white-skinned and with superb faces. They tattoo their cheeks with oval patterns, and also have lines tattooed across the forehead, and two lines along the nose and down the chin, as well as 6 or 7 lines from the lower lip across the chin; they also have oval patterns tattooed on their hands. Some of them tattoo one cheek and one hand, others both hands. Both sexes wear beads and ear-rings in their ears, obtained from the Russians.

Dialect or language. Both from the vocabulary we had compiled, checked against that of Captain Billings, and from the fact that the Chukchi understood better the former seaman from Kamchatka whom we had aboard as Chukchi interpreter, and whose mother was a Koryak and who spoke Koryak, than the other Aleut who spoke the Kodiak and Ugolakhmut languages, one must conclude that we were dealing with Nomadic or Reindeer Chukchi, whose dialect resembles that of the Reindeer Koryaks. Everything I have described above relates to the Reindeer Chukchi. As regards the Sedentary Chukchi we may say the following: one *baydar*, in which there were 8 men, came out to us, along with others and we noticed that their language was peculiar; they understood tolerably well our Aleut, speaking Kodiak but the other interpreter not at all. Hence their language resembled the Kodiak language, and hence I think these were Sedentary Chukchi. The external appearance of these people was no different from that of the others, apart from the fact that some of them had two lines drawn with black pencil across their foreheads; however their haircuts and clothes were exactly like the Reindeer Chukchi; their weapons and *baydari* were just the same. Only their clothing indicated that they must be poorer than the latter. The essential difference lay in the language which, according to our Aleut was similar to that of the inhabitants of Kodiak and St. Lawrence islands.

The Chukchi called these people Yuuut, but I am not convinced that this name applies to the entire people, but possibly to only the settlement from which they came or to only one such generation. We were unable to clarify this through our interpreters.

The Chukchi believe that God, whom they call Keyr'geyg'ya, created the universe and the first woman near the Vorvarken River (marked on the map as flowing into the Arctic Ocean near Shelag'skiy Nos), and that a whale threw up a man there, from whom the Chukchi clan began; multiplying there, they moved to their present home.

The Chukchi recognize Keyr'geyg'ya as a supreme being, the invisible, immortal, ubiquitous creator of the world, but not controlling it; for that they propose another being

²³⁰ Waterproof jackets made of walrus or seal intestines.

whom they call Kaman, who is also invisible and immortal. The former they believe to be good, and the latter evil and hence they make sacrifices only to the latter, afraid that for disobedience or evil living Kaman will punish them with death; as a result when a man dies, they say: 'Kaman has taken him.'

In ancient times they sacrificed people of both sexes to Kaman, but only old people and always their own people rather than prisoners. Those selected as sacrifices were buried in the ground, from which the foxes and wolves later exhumed the corpses and ate them.

Human sacrifices were abandoned very long ago and are only known from legends.

The Chukchi have never been cannibals; this is also based on tradition.

As regards present sacrifices we were unable to learn anything in detail; we only saw at the settlement of Kunayem, or a short distance from it, two whale jawbones and two noses placed in a rectangle in the ground, and in the middle, between them, two whale heads and one whale rib. We went there and in our presence the chief of the settlement, who was with us, stuck on each of these components a small leaf of tobacco which he had received from us, with *vosgri*.²³¹ When we asked what this meant he replied that it was a sacrifice. But we were unable to learn from him whether it was made to the whale or to Kaman. They say that part of every hunt is also offered here, and hence one can assume that these sacrifices are made to Kaman. These sacrifice sites are located in every settlement.

In Martin Sauer's book about Captain Joseph Billings's expedition (1785-1793)²³² he describes a major sacrifice by the Reindeer Chukchi, for which 450 reindeer were killed. It is possible that this sacrifice related more to divination as for example, when Shishmarev was on *Ryurik* in 1816. The Chukchi killed the reindeer sold by them in the same manner, but did not smoke them, and at the completion of the ceremony said: 'Everything augurs that you have come to us with good intentions'. Elsewhere Sauer writes 'They made a fire from small boards carved in the likeness of the human figure, signifying their divinity.'²³³ We saw such boards among the Chukchi, lying around a yurt and asked whether they represented some sort of god. They replied 'no'. But precisely the same carvings are made for chessmen; also human likenesses carved from ivory were readily traded to us. We tried specifically several times to ask our headman Paygdau about this, and he assured us that they do not have idols.

The Chukchi have shamans or sorcerers of both sexes. A male shaman is called Eengan and a female Neutkat-eugen-Gulen.

Eengan, on being summoned, tells fortunes using water, by making faces and gazing into the water; he can summon Kaman and knows the future.

The old man Paygdau told us that Eengan, by fortune-telling like this, had predicted our arrival amongst the Chukchi and that our ship had been visible in the water in which the fortune-telling was carried out.

Neutkat-eugen-Gulen is summoned only by women when they are ill. She does not use water for fortune-telling, but simply makes faces and beats on a tambourine, summoning Kaman, after which she begins the treatment, giving the sick woman warm water or water

²³¹ Nasal mucus, i.e. snot.

²³² Billings did not publish anything about his expedition. Sauer was Billings's secretary and interpreter (Billings being English); see Sauer, *An account*, pp. 12–13. Further details about the expedition may be found in Sarychev, *Account*.

²³³ Sauer, *An account*, p. 12.

infused with something to drink and rubs her with her hands, especially the sore place. In families they do not call upon the shaman to carry out the duties of midwife; the mother herself fulfils this function, whereby the baby is not swaddled. In neither sex are the shamans distinguished in any way from any other class of people either in terms of bodily decoration, or of dress.

In the case of neither birth nor death is Kaman summoned.

The corpses of the dead are cremated; some item of the deceased's equipment is placed on the cremation site, and the relatives often go there to mourn; this, they assured us, continues for from two to four years.

Paygdau, all of whose sons had died long ago, said that he and his wife had been mourning them all this time, and as a result had sore eyes. Not a false sign of love for one's relatives.

The Chukchi have as many wives as they can support, but generally just one. A fiancé, having selected a bride, must ask her father for permission to marry and haggles with him over the price; on completion of this he takes his wife without any ceremony. But a respected Chukchi or a chief respected by the others, selects the bridegroom for his daughter himself and does not take any payment from him; in return the chosen bridegroom cannot refuse the bride, without offending the father. As far as we could see the Chukchi appear to love their wives; they always consult with them and they appear not to be so enslaved as among other peoples.

The rights of the shamans are not inherited from father to son; the shaman selects a talented child, brings him up and trains him in his profession, which he assumes on the death of his mentor²³⁴.

The Reindeer Chukchi call both themselves and the Sedentary Chukchi by the common name of Gaugu; the latter sometimes call themselves this, but this possibly may have been only in our presence, in attempting to identify themselves. When speaking to others they do not call themselves this and do not advertise their true name. They call the Russians Mel'gi-tangi-man'-inunat.

The Chukchi hunt whales²³⁵, walrus and seals with their ivory-tipped lances and catch fish with nets and lines. For birds they make special arrows with two or four ivory tips, secured to a single shaft. We did not see any *cherepokozhniye*²³⁶ among them. They hunt all kinds of foxes and also arctic foxes and wolves; they use the skins of the latter for the *pologi* in their yurts and for trim for their parkas, but they sell the fox skins on the Kolyma or the Izhiga. The Chukchi keep many dogs for hauling sleds, as well as reindeer; the latter supply their main source of food throughout the entire winter.

The Chukchi travel along the Asiatic coast north and south from Zaliv Lavrentiya. The old man Paygdau told us that he had travelled north beyond Ostrov Kolyuchina²³⁷ as far as the Amylik River, which according to him lay between 69½ and 70°, not far from Shalatskiy

²³⁴ All the beliefs and customs of the Chukchi described by Lazarev were long abandoned by the Soviet period, as were some local types of clothing, replaced by cloth garments (S).

²³⁵ Most probably bowhead whales (*Balaena mysticetus*) (Sale, *A complete guide*).

²³⁶ Their name for molluscs (S).

²³⁷ Located on the west side of the entrance to Kolyuchinskaya Guba. There is no large river Amylik near Mys Shelagskiy. As Lazarev notes later, it is a small stream 'from melting snow' (S).

Nos,²³⁸ and had not seen any ice. They call that cape Chabaka, and the people living near it Chavaki, who make slits in their lips into which they insert a bone or a bead made from ivory, similar to that worn by the inhabitants of the American coast lying opposite. These Chavaki visit the Amylik River and trade with the Chukchi who come there. This is a small river, fed by melting snow.

The Chavaki say that ice persists permanently off Shalatskiy Nos, so that it is impassable by *baydar*, although sometimes in summer there is one day when one may round it in a *baydar*. They use reindeer for driving and *baydari* for hunting animals and fishing.

To trade the Chukchi travel across to the American coast opposite and to the Gvozdevye Ostrova, to which the Americans also travel.

Southwards the Chukchi travel as far as Chukotskiy Nos, and from there cross to St. Lawrence Island, which they call Eoybug'yen, and with the inhabitants of which they trade. During the crossing they try not to lose sight of land so that if fog descends, which occurs frequently, they will not get lost. They told us that earlier some Chukchi had travelled to Tigil' (a town in Kamchatka),²³⁹ but that now they no longer go there but only to the Izhiga and Kolyma to trade.

Heading farther north, at noon on 15 July we were at latitude 65°33'12"N; longitude 183°23'55"E²⁴⁰ and to the northeast spotted Cape Prince of Wales, which appeared as two hills like a saddle. The wind was blowing gently from the north-northeast; the sun appeared from behind the clouds at times; at times it disappeared behind them, and we made progress by tacking. Towards nightfall the wind became fresher and more northerly, and in addition to the above-named cape we had in sight the Ostrova Gvozdevye²⁴¹ and the coast of Asia. The depth beneath our keel at this point was 25 fathoms and the bottom a coarse grey sand. In the strait itself and towards the Asiatic shore the depth decreased, but towards the American shore and the Gvozdeviye Ostrova it gradually increased, so that 3 miles from the larger of them it was 30 fathoms. The Gvozdevye Ostrova are of moderate height and precipitous; the middle of the large island is convex and rugged; the middle one is all level and both have cliffed coasts; the third one²⁴² rises from the water like a cylinder. We saw snow on them in many places. In the morning [of the 16th] the wind began to freshen and at 6 we took three reefs in each of the topsails. Tacking under reefed topsails it appeared as if we were losing ground, but the current was setting us north. This current had been noted by Captains Cook and Clerke²⁴³ in 1778 and 1779. Soon the weather became overcast and it started to rain; at noon, when Mys Vostochniy²⁴⁴ bore NW 15°, 12½ miles from us, the wind fell calm, but just as we emerged beyond that cape it again began to blow just as strongly as before. That night it died again.

After noon [on the 17th] when Mys Vostochniy had appeared, we saw just as much snow on it as on the mountains around Zaliv Lavrentiya. The air was cold, and we had to anticipate that the ice was not far away. At midnight there was a very gentle breeze; the sky was cloudy;

²³⁸ Shelagskiy Nos (S).

²³⁹ A settlement on the west coast of Kamchatka on the Tigil' River (S).

²⁴⁰ 166°36'05"W

²⁴¹ Diomed Islands.

²⁴² Fairway Rock.

²⁴³ Captain Charles Clerke (captain of the *Discovery*) assumed command of the expedition after Cook's death in Hawaii on 14 February 1779.

²⁴⁴ Mys Dezhneva.

and there was fog along the horizon. At this point we crossed the Arctic Circle in longitude 190°55'E.²⁴⁵ We soon ran into dense fog and the wind became fresher.

At noon on the 18th the sun was shining through the fog and we saw many walrus. At 6 p.m. it cleared and Mys Vostochniy appeared at SE 13°; from it the coast extends towards SW 25° and at 9, as we approached somewhat closer to the coast we could see it as far as WbS. That night it seemed to us that near it and farther north, ice was drifting. But later it turned out that this was fog lying very low over the water. At this point we again saw large numbers of whales²⁴⁶ and walrus.

At 3 a.m. [on the 19th], when Mys Serdtse-Kamen' bore southwest from us, we spotted ice extending from northwest to west-southwest. It consisted of large and small floes, packed very closely, so that there was no passage between them. Being then in latitude 67°6'N, longitude 188°42'E,²⁴⁷ we steered along the coast towards the ice, which continually occupied the entire area between the coast and us, and swinging south. Finally, still heading along the ice, we found ourselves completely surrounded by it, as if we were in a lake; the only passage remaining was to the northeast, and this is where we headed. Walrus were lying on the ice in large numbers, with as many on each floe as it could accommodate, to the point that the ice appeared black. As we approached the walrus dived into the water, but the ice retained its black colour, although, it would seem that walrus, constantly swimming in water, ought to be clean. Perhaps, when they dive to the bottom they dig up the seabed with their tusks and then, hauling out on the ice they soil the ice with the mud. Of course, these animals haul out on the ice to sleep, since when we approached many of them they did not wake up. In every such herd one walrus was on guard and roared with all its might; as a result the noise was terrible.

While we were among the ice the thermometer recorded only 34°, but when we left it, it rose to 37°.²⁴⁸ We saw gulls and birds called ancient murrelets,²⁴⁹ and at 8 a.m. [on the 20th] emerged from the ice completely, and saw no more of it either to the north or the south.

The wind was blowing fresh from the north and west and we might have lain close-hauled to the north-northeast, but, of course, would have made little progress to the north; hence we took advantage of this opportunity not to waste any time but to lay in a supply of firewood, of which we were in need, since in these cold northern climates we had to keep the stoves burning constantly between decks, both for cleaning and drying the air and for drying the men's wet clothes. Knowing that if one happens to find timber cast ashore on the Asiatic coast, it will probably be only a small amount, whereas on the American coast it is everywhere plentiful,²⁵⁰ we headed northeast, and set more sail, so that we could hurry to reach the American coast using this fresh wind.

Thus continuing our voyage very easily, next day we approached to within 1½ miles of the American coast and, having dropped anchor, we lost no time in lowering the launch and two boats, in which our captain and some of the officers went ashore out of curiosity. They took with them 20 men with saws and axes to cut firewood which lay along the shore in large quantities.

²⁴⁵ 69°05'W.

²⁴⁶ Most probably bowhead whales (*Balaena mysticetus*) (Sale, *A complete guide*).

²⁴⁷ 172°18' W.

²⁴⁸ Fahrenheit (S).

²⁴⁹ *Synthliborramphus antiquus*; possibly a misidentification by Lazarev since the range of that species normally does not extend much farther north than the Aleutians (Sale, *Arctic wildlife*, p. 272).

²⁵⁰ There is more driftwood on the American coast, because large amounts are carried to the sea by large rivers flowing from the forested zone, and the system of ocean currents off the Alaskan coast is such that the floating wood is pushed shorewards by the currents and is cast ashore by the waves (S).

As we approached the shore there appeared to be almost no surf and that we would be able to run straight ashore; but as we ran ashore we realized the opposite was the case. The surf was quite heavy and the launch began to pound. We immediately leaped out and in a moment hauled it ashore; we ordered the boats to heave out grapnels and, relying on them, to wade ashore, leaving only two men in each boat.²⁵¹

There was so much timber along the shore that it would have been possible to load one ship in a day, had it not been for the surf which prevented us from loading it straight into the boats; instead we had to haul it out to the boats with ropes. We led out a grapnel for the launch and dropped it into the water; we loaded the other boats right to the gunwales very quickly, without the slightest hitch. But we had to get out to them through the surf, in doing which we all found ourselves waist-deep in water and anyone who set off without waiting for a smaller wave, was totally immersed; others were even swept right off their feet by the surf. But in a short time we all got out to the boats safely, if totally soaked. We returned to the ship at 4, bringing about 4 fathom of firewood.

The wind was still blowing from the northwest, and hence we could not approach the Asiatic coast, and decided to lie at anchor for the night. We judged that if the wind dropped or changed to an offshore wind, there would be no surf and in a few hours we could load as much firewood as was convenient.

The coast off which we lay was low-lying, gradually rising from the water and consisting of sand with very fine water-washed gravel. On the elevations which had not been reached by the waves for a long time, there was a grass cover and beyond we could see a lake, probably of fresh water, fed from the mountains. Beyond the lake the land gradually rose inland to the mountains; when there is no surf it is a very convenient shore to put into; there are large amounts of driftwood and we saw some trees far beyond the lake. Undoubtedly they had been carried there by the fierce wind and the waves, since the high tide is quite limited here and these trees were about 40 feet above sea level.²⁵² On shore we gathered some wild onions, sorrel, wild peas and wormwood and we also found other plants and flowers. As regards birds we saw many murrens and gulls and shot three small grey birds. There are evidently natives on shore here, since we found several recently burned logs. We saw snow only in a few places on the mountains which extend higher in the interior; in general the American coast is lower and slopes more gently to the water than the Asiatic coast; as a result it is colder there and warmer here.²⁵³ Hence we could not hope to penetrate farther north along the Asiatic coast than along the American coast, just as Captain Cook had experienced in 1778 and Captain Clerke in 1779.

The latitude of our anchorage by observation was 67°34'16"N; longitude by chronometer 195°51'37"E; ²⁵⁴ from midnight onwards the barometer was dropping and hence we could expect a strong wind from the northwest, whereby it would be dangerous to linger off this coast, and hence at 8 we weighed and headed for the Asiatic coast, steering a course of WSW.

²⁵¹ Gillessem, however reports that all three boats were cast ashore. Everyone got soaked, but a fire was quickly lit and they sat around the fire drying their clothes. While the men were cutting up driftwood and loading it into the boats, the officers made a brief reconnaissance trip inland. They even managed to shoot some geese on some lakes near the coast (Gillessem, 'Journey' pp. 196–8).

²⁵² Lazarev's description is incorrect. Neither high tides (which are quite low here) nor waves could hurl tree trunks to such a height (about 13 m) on this coast. The driftwood was lying on a coastal terrace, just as at many places on the coasts of Siberia and the arctic islands. The presence of driftwood on coastal terraces, sometimes at even greater heights, far from the sea, provides proof, as do the terraces themselves, of the very recent uplift of the coast (S).

²⁵³ This explanation is correct to a degree. But differences in climate depend not only on the nature of the coast but also on many other controls: latitude, sea currents, ice, etc. Lazarev mentions the influence of ice later (S).

²⁵⁴ 164°08'33"W.

At noon [on the 22nd] the wind began to strengthen from the northwest, so that at 6 p.m. we had to take three reefs in all the topsails, and towards nightfall furled them completely; we continued to hold the WSW course, to maintain a good speed. The wind was blowing in strong gusts; although it was calm at times, it raised a very heavy sea. We were delighted at this wind, thinking it would remove large amounts of ice and clear the way for us to the north.

From midnight onwards the gusts became less powerful; it became more overcast with rain at times, and sometimes snow. As long as the wind was blowing the barometer did not drop below 29.6' and the thermometer below 40°. The pressure began to rise when the wind was still blowing with full force.

Towards midnight, due to the light winds we set topgallants and soon after 3 a.m. [on the 23rd] we spotted the Asiatic coast bearing SSW½W, and Mys Vostochniy²⁵⁵ bearing S½E; we reckoned the latter to be 80 miles away. Towards evening the winds became light and later it fell completely calm. Then we noticed from the lead that we were being set to the SWbS at ½ a knot or less; the depth was 28 fathoms with a bottom of grey sand. At 3 a.m. it began to clear up and to the SWbW the Asiatic coast appeared; this had to be near Mys Serdtse-Kamen'; we also sighted Mys Vostochniy bearing SE18°. There were many birds flying around us, and walrus swimming around. They appeared to be copulating at this time, and there were large numbers off the Asiatic coast, although we had seen none at all off the American coast. In the meantime the thermometer had dropped to 34° and hence we suspected the ice was not far away; moreover the walrus were appearing in large numbers. In the morning, at latitude 66°56'50"N, longitude 190°18'52"E²⁵⁶ Mys Serdtse-Kamen' appeared, and to the right of it some other land, ending in a low cape. The depth was 27 fathoms and the bottom grey sand. There was an easterly breeze blowing with clear weather and a clear horizon and we steered WSW towards the land.

At noon [on the 24th] the most prominent capes of Asia were clearly visible, and it was 37 miles to the nearest land. At 2 p.m., dead ahead of us to the WSW and also somewhat to starboard and port, we sighted ice, and hence we swung to the WNW where it appeared to be clear; but after holding this course for 3 hours we swung back to WSW and steered along the ice changing course, depending on its position, from WSW to NbE from noon until 10 p.m., when we began to encounter fog and there was ice visible on all sides; as a result we began tacking among the ice towards the southeast. To the northwest from Mys Serdtse-Kamen' we could see a small island, which we considered to be Ostrov Kolyuchina, since it should have been visible in terms of latitude, although, in terms of longitude, it still should not have been in sight according to our chart. At 10 a large floe, 20 feet high, with snow and hummocks on it, drifted past our ship. The fog cleared at times and we found ourselves surrounded on all sides by large and small floes, amongst which we lay as if in the middle of a lake. There were large numbers of walrus lying on the ice.

From midnight onwards a topgallant wind²⁵⁷ was blowing from the ENE, with dense fog; all night long we were sailing among ice, turning and changing course in a vain attempt to find an escape route; if one existed we were unable to see it due to the fog.

We always detected the direction or proximity of the ice from the bellowing of the walrus; we shot one, possibly a yearling, and tried the meat, which, though black, was tolerable. Many people were unable to try it due to prejudice. With its skin it weighed 4 *pud*²⁵⁸; it still had

²⁵⁵ Mys Dezhneva.

²⁵⁶ 169°41'08"W.

²⁵⁷ A wind which would permit hoisting the topgallant sails.

²⁵⁸ 65.5 kg.

no traces of tusks or teeth,²⁵⁹ and since the walrus we saw on the ice always had calves with them, one must assume that they give birth in the spring.

The fog was still continuing and the wind barely filled the sails. We were tacking among the ice, trying to find a way out but without success. The depth varied between 25 and 27 fathoms, with a silty bottom.

At noon [on the 25th] Mys Serdtse-Kamen' bore SW15° from us, 22½ miles away. Soon, in the afternoon, it appeared that to the east, beyond the ice surrounding us, there was clear water and hence we began tacking towards the ice, in the hope of working through it into the open area, but before we could succeed in this, we collided with three large floes, although without any damage, although the impacts could be heard below the waterline.²⁶⁰ At 4 p.m. we got free of the ice; there was a swell from the north-northwest, the depth was 25 fathoms, the bottom was green silt, and the ice was drifting to the southwest, as we noted. At 9 in the evening we heard the bellowing of walrus, and hence we concluded that there was ice near us to the east-southeast; and indeed it soon began to appear. Then we turned and steered north; in the meantime the ice was drifting faster but holding the same course, we soon outran it. That night it was foggy, although it began to clear in the morning, and it was soon completely clear. With neither ice nor land in sight, we bore NWbN and, holding that course, we spotted ice to port.

At noon [on the 26th] we had a north-flowing current and steered west-southwest. According to the Admiralty chart²⁶¹ Ostrov Kolyuchina bore SW 62°, 60 miles from us; and according to the Arrowsmith chart²⁶² SW 74°, 70 miles away. Neither of these charts agrees with Captain Cook's chart. Ice lay along the entire coast starting at Mys Serdtse-Kamen' and extending northwards, and did not allow us to approach closer than 20 miles from the coast.

At 1 p.m., in order to approach the coast we steered west; the wind began to freshen and our speed rose to 6 knots. At 7 p.m. we sighted ice packed tightly against the cape and extending from WbS northwards, as far as the eye could see; at 9 o'clock, closing with it, we ran north-northwestwards along it, and spotted part of the Asiatic coast from the crosstrees to the S½W, but only dimly.

At 1 a.m. the sea appeared to be clear of ice to the NW, and hence we steered in that direction, but having held it for two hours, we again had to swing back to a NNWerly course because of ice and at 3 a.m. swung close-hauled on the starboard tack towards the NE, since we could see ice in all directions apart from the southeast, to which we began to tack.

Towards the east and southeast, the ice appeared not to be tightly packed; there were large floes only in places, but they were closer-packed and larger than those we had seen to the south.

In the morning [of the 27th], at latitude 68°56'N, longitude 185°48'E,²⁶³ we saw murre, gulls and one hawk. The wind soon fell, but at 8 a.m. a breeze began blowing from WSW; we steered ESE, but at 8.30 when there appeared to be open water to the ENE we headed on that course and, emerging from the ice, began to head north. At noon we were running close-hauled

²⁵⁹ According to Gillesem (who claims that it was he who shot this walrus) it weighed 18 pud (335 kg) and had tusks 7.5 cm long. Its blubber was rendered down and used as oil for lamps (Gillesem, 'Journey' p. 200).

²⁶⁰ Gillesem, however, reports that the ship, caught in this nip, was heeled over to 45° to port (Gillesem, 'Journey' p. 201).

²⁶¹ Produced by the Russian Admiralty.

²⁶² Produced by one of the Arrowsmith family of British cartographers, either Aaron (1755–1823) or John (1790–1873).

²⁶³ 174°12'W.

on that course. At 4 a.m. [on the 28th] we swung onto the starboard tack and headed west and in the morning we picked up a small spruce tree. The wind began backing, allowing us to run up to the NbW and at 10 we got a sun altitude, but soon it was obscured by fog and at noon we could not get an observation. At this point some small floes appeared, drifting far apart, and at 12.30, through the fog we spotted close-packed ice dead ahead of us; because of this we swung round and hove-to to wait until the fog cleared so that we could see in which direction we might proceed.

Thus, now escaping from the ice for a short time, now becoming embroiled in it again, we continued this slow, tedious progress, which was not marked by anything noteworthy, until 8 August.²⁶⁴ We were frustrated by fog almost all this time; a very cold north wind blew almost the whole time; and sometimes the coast of Asia would appear but only briefly. We attained our farthest point, at 70°13'N on 1 August.

At noon on 8 August we were in latitude 66°38'50"N, longitude 190°41'16"E²⁶⁵ and at 7 a.m. we were south of Mys Serdtse-Kamen', 20 or 30 miles offshore; we began to survey the coast but at 8.30 there was a heavy fall of snow, which concealed every object from us. But soon we renewed our survey work and the farther south we went, the less ice there was along the shore and we gradually approached the coast until we reached Mys Vostochniy, which was totally clear of ice; however there was snow on shore and a massive ice-foot.

From the spot where we began our survey to Mys Vostochniy the coast generally slants southeastwards. It consists of a range of low hills, linked by gently sloping valleys; a few capes with sheer rocks 500 feet high, although some are lower, project out to sea. Between these cliffed headlands a low coastline, somewhat projecting, forms small bays; the coast has no trees and not even grasses show green on it. By comparison with the opposite American shore this coast is much wilder and its climate more severe, which of course is due to the ice which permanently lies off it. In places large settlements were visible and we very much wanted to visit them but this was impossible due to the ice; hence we decided to locate settlements on the south side of Mys Vostochniy. The latter projects farther out to sea than the other capes and consists of a high, rugged mountain ending on the seaward side in precipitous cliffs, on which there are tors. Inland this cape gradually slopes down and forms a low isthmus separating the Kamchatka Sea²⁶⁶ from the Arctic Ocean. There was a settlement on this isthmus but we were unable to go ashore due to the ice and a fresh north wind and hence, having rounded Mys Vostochniy, we ran close inshore.

At 5 p.m. [on the 9th] the wind had strengthened so much that it obliged us to take in all reefs even in the lower sails. At this point we were on the south side of the isthmus; although we could not see the settlement on it, we spotted two others on the back slope of Mys Vostochniy, close to the sea. Due to the strength of the wind and the great depths (23 fathoms) and a bad, rocky bottom, however, we were unable to anchor; it would also have been impossible to take a boat in to these settlements.

In the meantime the barometer was still dropping, hence we decided to wait off Mys Vostochniy, and when the wind dropped or changed, to go ashore to the Chukchi settlement, then proceed north along the coast, as far as the ice permitted, and thereafter to retreat from the Arctic Ocean, since the winds were starting to blow strongly, the weather was becoming cold

²⁶⁴ At some point during this week, however, a polar bear swam right up to the ship; it was pursued in a boat and several shots were fired at it. It dove and did not reappear (Gillessem, 'Journey', p. 202).

²⁶⁵ 169°18'44"W.

²⁶⁶ The western Bering Sea.

and the nights long. Hence at this season it was dangerous to ply near ice. From longitude 190°E²⁶⁷ and latitude 69°41'N as far as Mys Vostochniy it seemed that we had been travelling along the ice edge, following all its sinuosities, never letting it out of our sight, and attempting to reach the highest possible latitude yet to get close inshore, but all our efforts had been fruitless.

In the meantime the wind was becoming stronger by the hour and blew constantly from the west-northwest; encountering small pieces of ice we noticed that the constantly falling snow was welding the ice floes together. The thermometer stood almost at 32°, and dropped to 31° at night²⁶⁸ and thus our intention to examine the settlement on the east shore of the cape remained unfulfilled. Our undertaking of pushing north would have been totally pointless and simply would have entailed a loss of time since we could scarcely have escaped from there; we could see ice all along the coast. It was hopeless to hope for good weather since summer had already left the area. Thus we had decided to abandon our voyage in the Arctic Ocean, and to hasten to fulfil other points in our orders relating to St. Lawrence and St. Matthew islands, when, between 1 and 2 we sighted *Otkrytiye* to the NNE; we immediately ran down to her and hoisted our flag. On closing with her we asked for permission to go aboard. On receiving that permission we immediately lowered the launch and our captain and all the officers including myself and excepting the officer of the watch, went aboard *Otkrytiye*, all very delighted at this meeting.

Shishmarev showed the expedition leader our journal and chart, on which our course from Unalaska had been plotted and also the part of the Asiatic coast we had surveyed, and he in his turn told us about his voyage and, among other things he mentioned that he had discovered an island off the shoal American coast at around 60° N.²⁶⁹ The Company ship *Golovnin* had seen an island around this position, only somewhat farther south and a little more to the east.²⁷⁰ However, it may be that the island they saw are one and the same as the one we saw on 4 July; it was located at latitude 62°32'28"N by observation, longitude by chronometer 193°11'32"E.²⁷¹ We saw it from the north side, *Otkrytiye* from the west, and *Golovnin* from the south. Vasil'yev was now heading for Norton Sound to rendez-vous with the decked boat which he had left there to survey this shoal coast, and he ordered us to proceed on our earlier assignment.

At 8 p.m. [on the 10th] we parted from *Otkrytiye*. She headed southeast while we, after hoisting in the launch, ran down to the SSW to Mechigmentskaya Guba where we wanted to call specifically to see whether we could obtain some reindeer, since our men had had nothing fresh for a long time,²⁷² and this bay was on our way to St. Lawrence Island. Apart from this we hoped to have an opportunity to survey the whole of Mechigmentskaya Guba which had been surveyed only by navigation officer Batakov when he visited it.²⁷³ According to the Chukchi it extended for 30 miles into the interior.

²⁶⁷ 170°W.

²⁶⁸ These are Fahrenheit temperatures.

²⁶⁹ Nunivak Island.

²⁷⁰ This island is now known as Nunivak Island. Its northern tip lies in latitude 60°32'N and longitude 194°30'W. It is 70 miles long and 35 miles wide. It may possibly have also been seen earlier by the *sotnik* Ivan Kobelev one of the 'persistent seekers of the New World' (Markov, *Letopisi Alyaski*, 1948, p. 43). In any event M. I. Vasil'yev was undoubtedly the first to survey this island (S). Captain Vasilii Stepanovich Khromchenko in the Russian American Company's ship *Golovnin*, spotted the island on 16-17 July 1821 (Tikhmenev, *A history*, 1978, pp. 176-77). He returned the following year and surveyed parts of its coasts and made contact with the inhabitants (Van Stone, ed., 'V. S. Khromchenko's coastal explorations', 1973).

²⁷¹ 166°48'28"W.

²⁷² According to Gillesem, most of the crew were showing signs of scurvy, three being very sick and one man hopelessly so (Gillesem, 'Journey', p. 205).

²⁷³ Anton Batakov led a small detachment, an offshoot of Joseph Billings's expedition, which surveyed the inlet in 1791 (Belov, *Arkticheskoye moreplavaniye*, p. 434).

At 8.50, when the northwest cape of Mechiginskaya Guba bore due north by compass, we shot the sun to determine its longitude; it turned out to be $188^{\circ}59'57''\text{E}$.²⁷⁴ The Chukchi call it Yandagay.

Soon some Chukchi came out in three *baydari* from the settlement of Lyugren' with the headman Tel'muurgin. They were exactly the same as those we had seen in Zaliv Lavrentiya; they had brought nothing with them and appeared to be hunting whales.²⁷⁵ On spotting us they approached but soon headed home, promising to bring us reindeer which, they declared, were very close.

After noon [on the 11th] it became totally calm; the depth was 11 fathoms and the bottom sand with rocks, and by 4 o'clock we were running into the entrance to Mechiginskaya Guba. The depth was gradually decreasing and by 8.30 it had dropped to $5\frac{1}{2}$ fathoms; hence we swung onto the other tack and laid along the coast to the NE and ENE. At first the depth increased to $6\frac{1}{2}$ fathoms but then decreased again to 6, at which point we dropped anchor; the bottom was a black sand. At 9.30 the settlement of Lyugren' bore NE 32° , while to the northeast the cape which the Chukchi call Yandagay²⁷⁶ bore NE 64° . .

At 7 p.m. the carpenter Stepan Naumov, who had developed scurvy on the decked boat during the voyage from Sitka to Unalaska, died. From Unalaska he had daily been receiving soup made from British meat with bouillon, beer and citric acid, but, of course, he grew worse by the hour due to the cold and bad air in the Arctic Ocean; all attempts to preserve his life were fruitless.

At 7 in the morning the Chukchi came off to trade their weapons etc. with us; the headman Tel'muurgin asserted that they had gone off for the reindeer the previous day and that they ought to arrive soon.

At 1 p.m. [on the 12th] the captain, a few other officers and myself went to the settlement of Lyugren' which was not more than a quarter mile from the shore, and, as it turned out, $4\frac{1}{2}$ miles from the ship. The coast consisted of sand and fine gravel and since there was no swell, it was very convenient to run the boats ashore. The settlement, built on a hill, consisted of two sections separated by a slope; beyond it in the interior was a bog and several salt water lakes. In the settlement itself there were up to 40 yurts, both summer and winter. The former were exactly the same as those at Zaliv Lavrentiya, but more spacious; the latter were half dug into the ground while the upper part was covered with turf and strewn with earth. Inside the cross-pieces and supports to support the roof were made from driftwood and whale ribs; part of the floor was covered with boards; the entrance was at the top, and was equipped with a hatchway. Here we saw very many sacrificial sites just as at Zaliv Lavrentiya.

The Chukchi readily invited us into their yurts and asked us to sit on the skins spread on their sleeping places. In his yurt the headman Tel'muurgin showed us Chukchi dances, by both men and women; the latter made gestures with their hands, twisting their entire bodies and faces, while the former, in addition, hopped somewhat in time to the singing, similar to the Aleuts. The

²⁷⁴ $171^{\circ}00'03''\text{W}$.

²⁷⁵ Most probably bowhead whales (*Balaena mysticetus*) (Sale, *A complete guide*).

²⁷⁶ Mys Yandagay delimits the entrance of Mechiginskaya Guba, on the north; the latter is a narrow, deep inlet south of Zaliv Lavrentiya, separated from the latter by Mys Kerleutgun, while on the south its wide seaward part is bounded by Mys Nygchigan. On the north shore of Mechiginskaya Guba there now exists the settlement of Lyugren' and on the south shore the settlement of Michigma (S).

music of these Chukchi also consisted of drums on which they beat with a small stick of whale baleen or wood. We also saw some children's dances which did not differ at all from that practised among the Americans in Kotzebue Sound and which I have already described earlier.

With respect to the reindeer the headman again asserted he would bring them tomorrow at daybreak. After we had spent two hours on shore we noticed that the wind was blowing from the southwest and was starting to freshen and hence we headed back aboard, but first we went along shore, towing, and then rowing, and reached the ship at 8.30 having left the settlement at 5.

In the morning [of the 13th] we buried the body of the dead man on the nearby coast, 1½ miles from the ship with the usual ceremony. We erected a wooden cross over the grave, inscribed with the dead man's name, the ship, and the date of his death, having obtained from the chief an assurance that the grave would not be disturbed.

At 7 the chief Ley-gay-gu came out to us with two *baydari* and we immediately began asking him about reindeer hoping that he, with his familiarity with Russians would probably supply them. When we told him, among other things, that the chief Tel'muugrin had promised to bring us some today, he smiled and said: 'Tel'muugrin is a crafty devil.' These words were not much consolation for us, and when soon afterwards Tel'muugrin arrived alone without any reindeer we reprimanded him for his deception and declared that we had wanted to give him many gifts but now, seeing that he was a bad man we wanted nothing more to do with him. In the meantime Ley-gay-gu promised to bring us 10 reindeer, asking only a period of two days, saying that he did not want to deceive us and that he could not fulfil our needs any earlier. For a long time our captain would not agree to wait so long, for fear that this Chukchi would trick us too but Ley-gay-gu, who was told this, agreed to remain aboard the ship until such time as the reindeer were delivered, as a pledge of reliability, and asked to see the things we intended giving him in payment. Thereupon, seeing that this was not a false promise to provide us with fresh food, the captain agreed to wait for two days, and hence we immediately sent the two *baydari* ashore for the reindeer. Ley-gay-gu kept his wife, daughter and nephew to spend the night with him on the ship.

At 9 a.m. when we were not expecting the reindeer at all, since there was still a whole day until the deadline, they suddenly brought out six reindeer to us, killed and dressed, and weighing 10 *pud* 34 pounds [180kg]. Although we, especially the captain, were inwardly delighted by this, yet we expressed our dissatisfaction in that, relying on Ley-gay-gu, we now saw that he too had deceived us, by not keeping his word that he would bring us ten reindeer, instead of which he had supplied us with only six, and small ones at that. He understood this reproach perfectly well and, without trying to justify himself, said that his reindeer were far away, and these he had borrowed from somebody else, and this was all he could get, but he would try to persuade his people to bring four large ones. And indeed, he persuaded the old chief, named Tilkiley of this, who remained to spend the night with us along with Ley-gay-gu.

The Chukchi kept their word and at 6 a.m. on the 14th they brought the promised four reindeer, weighing 9 *pud* 37 pounds [164 kg]. Shishmarev paid for them very generously with gifts²⁷⁷ so that the Chukchi did not even ask for any additional payment, but simply repeated constantly the word 'mechin'ka', meaning 'good', 'excellent' etc. As a sign of Russian friendship, for the Chukchis' diligence the captain gave the headmen medals: a silver one to Ley-gay-gu, and a bronze one to Tilkiley, and they parted from us the best of friends. Apparently the Chukchi were reluctant to undertake to bring us reindeer because they did not expect to receive

²⁷⁷ The price paid included 2 cast-iron kettles, an axe, tobacco and beads (Gillesem, 'Journey' p. 205).

decent payment for them, but when they were assured of this, they sold them with pleasure; moreover we convinced them that any ship calling here would require fresh meat and they could confidently bring reindeer for which they would always receive good payment.

At 9 a.m. [on the 15th] we weighed anchor and headed for St. Lawrence Island to survey it and, en route, to pass the little island seen by Captain Clerke off the north side of St. Lawrence Island, 19 miles offshore, and hence we steered ESE.

At 8 p.m. a breeze began blowing from the NbE and allowed us to steer our desired course. We spotted something which showed black in the water, and closing with it realized that it was a dead whale, quite large; it was lying on its side with half of its bulk above water.

Now, before continuing with the description of our voyage, I will relay some of the information we obtained from the headman Ley-gay-gu who, probably as a precaution, told us very little.

The Sedentary Chukchi, or the residents of the coasts of the Kamchatka Sea²⁷⁸ and the Arctic Ocean are called various names such as: Emnunka, Kamyaingyr', Plirlyaut, Univen' etc. The same groups who live farther north along the shores of the Arctic Ocean and have slits in their lips, in which they insert ivory or beads made from ivory, are similar to the residents of the opposite American coast and are known by the name of Eglyunak.

All these peoples speak various languages both among themselves and with the Reindeer Chukchi, but there are no other differences, apart from those mentioned above, either between themselves or between them and the latter groups.

The lifestyle of these peoples differs from the Reindeer Chukchi by the fact that, not having reindeer, they do not migrate from place to place but live permanently along the sea coast, from which they subsist on the food they harvest from it, and hence they are much poorer than the Reindeer Chukchi, from whom they have to purchase reindeer skins for their clothing. Ley-Gay-gu spoke of their poverty with regret.

At noon on the 16th, it was revealed by observation that we had almost sailed across the island seen by Captain Clerke, but had not seen it, although the visibility was not less than 20 miles throughout, and Captain Clerke wrote that due to fog he saw it only once.

From this one may assume that this island does not exist. At noon we set a course to the SSW straight for the middle of St. Lawrence Island, to the spot where we had discontinued our survey the previous year.

Shortly after 1 o'clock the mountains on the island began to appear in places to the SbE and soon the coast appeared dead ahead, covered with snow. It was not more than 12 miles away, but due to the overcast it was difficult to see and sometimes it disappeared. The wind, from the north, strengthened; and hence it was dangerous to approach close to the coast to survey it. Therefore at 4 we swung close-hauled on the starboard tack and took two reefs in each of the topsails due to the wind strength. In the evening we were in latitude 63°48'10"N, longitude 190°9'17"E,²⁷⁹ in a depth of 20 fathoms and with a bottom of sand. There was a strong, gusty wind blowing, but we carried more sail, so that we might clear the coast.

²⁷⁸ By which Lazarev is referring to the western Bering Sea.

²⁷⁹ 69°50'43"W.

That night we sometimes saw the higher parts of St. Lawrence Island and at 9 a.m. [on the 17th] Mys Chukotskiy. We obtained observations at noon, when we were almost midway between these two points.

When the wind had slackened somewhat, at sunrise, at 4 a.m. we spotted the northwest cape of St. Lawrence Island and ran down to it; at 7 we headed along the coast and began a survey from the northwest cape to the eastern one.

The first of these capes is fairly high, running out seaward in a cliffed peninsula; beyond this the land slopes down to the coast and is linked to the cape by a lowland and hence from a distance it appears as an island. To the east of this a low headland projects forming a bay extending to another high cape jutting northwards; beyond it comes another lowland forming a bay, beyond which begins a range of low hills lying close to the coast, crowded together and aligned northwest and southeast. The depths off the low coasts are less than off the high ones; the bottom everywhere is sand with rocks or gravel; the depths are 8½, 8½, 11, 14, 14, 13, 10, and 12 fathoms from 2 to 4 miles offshore. In places along the shore we saw settlements, from which the inhabitants came off to us and traded walrus tusks but did not stay long, so that they would not be carried far from their homes, to which they invited us.

After noon [on the 18th] some natives came out to us in three *baydari*, but again only for a short time. We noticed that their weapons, clothing, *baydari*, etc. were the same as those of the Chukchi, but of coarser workmanship, and the natives themselves were much poorer than the Chukchi. The men wear their hair, and the women tattoo their faces and hands just like the Chukchi; but their dialects are different, although they understood our Koryak but not very well; he could not understand them at all. When they talked among themselves the Aleut who had been with us from Sitka appeared to be able to talk with them but unfortunately he had been insane for several days.

At 7 p.m. a fresh wind from the south-southwest began to blow, allowing us to complete our survey as far as where we had ended it the previous year, i.e. to the tors, before dark. At 9 we were struck by an unexpected event. The Aleut Antip Shashkido, who had gone insane, went into the heads and threw himself into the sea before the eyes of three or four men. We immediately brought the ship up into the wind, threw over a cask, and lowered the yawl, but were unable to find the Aleut, who evidently had injured himself in his fall. He was a man of good character and was well-behaved and hence was liked by everyone. He often said that he was eating our bread to no purpose, since, though he had been brought as an interpreter, he could not speak to the Chukchi and had requested that he be sent away to the Kuskakhantsy,²⁸⁰ with whom he could easily converse. In his madness he told everyone that he had gone as interpreter to this people with the *promyshlenniky* Krasnovskiy and Kal'mikov.

In the meantime a south wind was blowing, whereby we could just as easily sail past the east or west end of St. Lawrence Island; we chose the latter for it was more convenient for us to survey the south side of the island from west to east since the winds blew largely from the north and northwest. Having made this decision we began tacking between Mys Chukotskiy and St. Lawrence Island in overcast weather with rain and a strong south wind.

On the 19th the barometer was rising constantly, and hence it was necessary to wait until the wind slackened, but it was still blowing strongly and only towards evening did it drop somewhat. At 11 the coast of St. Lawrence Island appeared 3 or 4 miles away, with snow clearly visible on it.

²⁸⁰ Kuskakhantsy: an Alaskan people living in the Kuskokwim basin (S).

On the 20th the wind was even gentler and hence we increased sail and sailed to within sight of St. Lawrence Island. It is noteworthy that at this late season the south winds were blowing for so long, namely three days in a row.

At noon the northwest cape of St. Lawrence Island bore SW 55°, 5¼ miles away.

Soon natives came out in *baydari* from a settlement located on a spit jutting out one mile west of the northwestern cape of the island,²⁸¹ but due to our speed were unable to overtake us; we, however, were in a hurry to reach the south side to survey it. But when the wind slackened somewhat, the islanders came alongside in three *baydari* and traded walrus tusks and baleen but soon, when a wind got up from the east which increased our speed, they headed home. Having passed the southwest cape of the island, so as not to get too far away from it, we hove-to for the night, intending to start our survey of its south side in the morning, if the wind permitted; in the meantime the barometer was dropping very rapidly.

From midnight onwards a topsail wind was blowing from NEbN with gusts, and the coast was not visible due to the overcast. Soon it started to rain and the wind strengthened to the point that we reduced sail and in the morning the wind backed into the northwest.

This weather deprived us of any hope of surveying the south coast of St. Lawrence Island since the wind fell for only a short time, during which it was impossible to approach the coast. But we decided to wait for a few days for this opportunity. Moreover the south side had been seen and surveyed by Captain Sarychev in 1791.²⁸²

On the 22nd a strong wind blew all day with overcast and rain and began to slacken only at 4 a.m. Then we swung back towards shore, increased sail and at 8 [on the 23rd] we were not more than three miles from the closest part of the lowlands of St. Lawrence Island, almost midway between its southeast and southwest capes. The depth was 8½ fathoms and the bottom rocks. Soon the wind changed and began blowing from the northeast and hence we changed course, steering NW along the coast; here there were settlements in places on the lowland, from which the residents came off to us to trade. We stayed within soundings of 6½ to 10 fathoms and began our survey. After noon, as we continued the survey the depths ran as follows: 7, 6½, 7, 8, 8, 8½, 10 and 9 fathoms with a bottom of fine gravel. On the south side of the island the coast is much lower than on the north; only towards the western cape does it gradually rise, and as a result that cape is high and sheer. Close off it, to the southwest there are a few emergent rocks. Towards evening a fresh wind began blowing from the east and at 6.30 we finished our survey at the southwestern cape. It was our intention to lie close-hauled for the night then in the morning to run in to the coast of St. Lawrence Island and finish our survey, in the hope that this wind would not persist long. But since it began to strengthen with gusts, we were set to the west during the night.

We had noticed that after strong winds had been blowing, fair, calm weather lasts only a few hours, and moreover, prior to heading for Kamchatka it still remained for us to call at St. Matthew Island to fix its northern tip; hence, so as to waste no time, we steered SbE towards the latter island.

All that night and for the following two days the weather was very unpleasant: rain, fog, sleet and a strong, gusty wind. The steady drop in the barometer gave promise that all of these would persist, and hence, having decided to abandon our intention of proceeding to St. Matthew

²⁸¹ The present settlement of Gambell, or its predecessor.

²⁸² Sarychev, *Account of a voyage*, Vol. 2, p.53.

Island, since it would be impossible to fix its northern tip and that of the island lying off it by observation, we headed southwest straight for Petropavlovsk harbour.

On the 26th from midnight onwards the wind gradually backed to northwest and west and, taking advantage of it, by morning we might have run down to and closed to within sight of St. Matthew Island, but the dense murk and rain did not permit this and hence we continued to steer southwest past that island towards Kamchatka; along the way we saw large numbers of murre and horned puffins.

Towards noon it began to clear; the wind blew gently from the west-southwest. Noting this change, and that the weather was improving, we again headed for St. Matthew Island, and at noon steered SEbS $\frac{1}{2}$ E. At that point the island bore SEbS $\frac{1}{2}$ E, 27 miles from us. At noon we spotted the islet lying off it,²⁸³ bearing SE 25°, but soon everything was hidden by fog; the wind swung into the south and hence at midnight we swung onto the other tack, steering west and southwest. We beat towards the east all night and at midnight took bearings on the islet, whose northern end lay in latitude 60°49'34"N, longitude 187°0'4"E.²⁸⁴ After our arrival in Kamchatka, where we were able to make corrections to this longitude, we found the corrected version to be 186°53'45"E.²⁸⁵ This islet is fairly high and steep on the north and west sides, which we could see; in the middle it rises gently and has a rounded shape. At noon it bore due south from us by compass, 11 miles away by cross bearings. We beat south towards St. Matthew Island all day, with a light, variable wind between south and south-southwest, and at midnight we were heading into the strait between it and its offlying islet. The depths ran as follows: 30, 30, 28 and 25 fathoms. We hove to at this last sounding until dawn, and at 5 a.m., as the sun rose, ran down into the strait. We soon encountered dense clouds, through which the coast appeared at times; the wind began freshening from the SEbS. The strait is aligned towards the south-southwest. Its narrowest width is 1½ miles and the depth halfway through is from 20 to 14 fathoms with a rocky bottom. The shores on both sides are sheer, with many projecting capes. Right in the strait, close to St. Matthew Island, there is a rock with the appearance of three pillars of which the middle one is lower than the others. This islet descends towards the southeast, ending at the strait in a low, narrow cape; towards the western side it rises gradually and drops sheer to the sea. South of it, about a mile offshore, there are two small emergent rocks.

We had barely had time to run through the strait and to head SWbW having taken a round of angles in it, when the wind swung into the SbE and freshened even more.

The captain named this strait Proliv Sarycheva in honour of our admiral G.A. Sarychev, who was the first to pass through it, and to make a good map of it.²⁸⁶

At 2 p.m. the wind swung into the southwest and blew even more strongly, and hence we swung onto the other tack and took two reefs in each of the topsails, and towards evening a third reef.

From midnight onwards the wind was blowing strongly with gusts and sometimes with rain and the weather was overcast. But after noon, with the wind slackening we increased sail; soon after 3 the wind backed into the south and began to freshen again, and the rain began.

This weather continued for nine days and was the cause of the number of sick increasing to eight. Towards the morning of 1 September the wind dropped and hence we increased sail, but

²⁸³ Hall Island.

²⁸⁴ 172°59'56"W.

²⁸⁵ 173°06'15"W.

²⁸⁶ Sarychev, *Account of a voyage*, p. 41.

the overcast and rain had still not passed, and we had hail at times. On this leg we sometimes saw birds, mainly gulls, and one shore bird which we caught.

On the 9th the weather became clear, but the wind strengthened again and forced us to proceed for days on end under reefed topsails.

From the 10th to the 12th we encountered nothing noteworthy and sailed towards Kamchatka with moderate winds from the western quarter. At dawn on the 14th Kronotskaya volcano appeared to the NWbN, and soon afterwards others, and then the actual coasts of Kamchatka. At noon the following day when we were in latitude 53°25'30"N, longitude 161°34'59"E, Kronotskaya bore NW 22°, Strelochnaya NW 85° and Shipunskiy Mys SW 72°.

Hour by hour the coast became more visible and on the 17th we were heading straight into the entrance to Avachinskaya Guba, which we entered safely on the morning of the 20th. We were unable to enter the harbour itself due to a foul wind and hence, before reaching it, we dropped anchor off the signal cape and, while still under sail, fired a gun salute for the fortress, to which they replied with the same number of guns. Having dropped anchor we immediately lowered the launch in which the captain, myself and other officers quickly headed for *Otkrytiye* which had arrived on 9 September.

Homeward – Petropavlovsk to Kronshtadt

On their arrival at Petropavlovsk on 21 September the officers and men of *Otkrytiye* and *Blagonamerenny* found the decked boat, commanded by Leytenant Avinov waiting there, having arrived on 19 August.²⁸⁷ His mandate had been to survey the eastern shore of the Bering Sea from Cape Newenham north to Cape Darby, including the intricacies of Kuskokwim Bay, the Kuskokwim and Yukon deltas and Norton Sound, close inshore, but, due to prolonged cold, wet weather and an outbreak of scurvy among his crew he had been forced to cut short his mission,²⁸⁸ and to head for Petropavlovsk. This voyage, across the Bering Sea and south along the Kamchatka coast in a relatively small vessel, was an impressive accomplishment.

Over the following few weeks captains Vasil'yev and Shishmarev carried out some much-needed repairs to their ships, stocked up on provisions, firewood and water and generally made them ready for the long homeward voyage. On 5 October the decked boat, now named *Aleksandr*, was handed over to Governor Rikord. On 15 October both vessels weighed anchor and put to sea, bound first for Hawaii.²⁸⁹ Two days later they survived probably the worst storm of the entire voyage, during which, unfortunately one of *Blagonamerenny's* crew members, Ivan Lazarev died of 'brain fever'. The two ships also lost sight of each other during this storm. The first sign that *Blagonamerenny* was getting into warmer waters, was the sighting of a flying fish, on 12 November, and on the 22nd the northern tip of Oahu was spotted. Running through the Kaiwi Channel between Oahu and Molokai, Shishmarev then beat up around Diamond Head to Honolulu, and on the 25th his ship was towed by boats into Honolulu harbour to be welcomed by a seven-gun salute. *Otkrytiye* arrived on the following day.²⁹⁰

²⁸⁷ Lazarev, *Zapiski*, p. 332.

²⁸⁸ See Appendix 2, p. 86.

²⁸⁹ Ibid, p. 334.

²⁹⁰ Ibid, p. 338.

Much of the caulking in *Blagonamerennyi*'s hull had worked loose during the Pacific storms, and hence recaulking most of the hull was a high priority during the sojourn at Honolulu, and of course the ship had to be re-provisioned. 27 pigs and 6 goats were purchased and also cabbage (8 barrels were pickled), sweet potatoes etc. The King, who had been visiting Hawaii, returned on the 28th – and donated a further 10 pigs to *Blagonamerennyi*.²⁹¹ One wonders where this total of 37 pigs was housed!

Both Russian ships were towed out of the harbour on 18 December, then got under way, bound for Rio de Janeiro by way of Cape Horn. They crossed the Equator, southward-bound, on 28 January 1822 and despite some fierce gales rounded Cape Horn on 17 February in a snowstorm. At noon on 9 March *Otkrytiye* signaled that *Blagonamerennyi* should adjust the day and date so that they would not be one day ahead of Rio de Janeiro and, ultimately Kronshtadt by the time they arrived there.²⁹² On the 11th the Brazilian coast was sighted and next morning Ilha Rasa, off the entrance to Rio harbour was in sight. Both captains wanted to repair the copper sheathing and to overhaul the rigging of their vessels, as well as reprovisioning for the homeward run. By noon on the 13th they had anchored in the lee of Ilha das Cobras. In response to Vasilevskiy's request both crews were housed in the ship *Vasco da Gama* which anchored nearby, while major repairs were made to their own vessels; an observatory was also set up on Ilha das Cobras. Unfortunately the incidence of sickness among both crews was very high – involving fevers and diarrhea – most likely malaria and dysentery. One man from *Blagonamerennyi*'s crew, Mark Rybolovlev died, as did one of *Otkrytiye*'s officers, Midshipman Gall.²⁹³

The two Russian vessels sailed from Rio on 3 May, and crossed the Equator northward-bound late on the 27th. Having picked up pilots off the Scilly Isles, they sighted the lighthouse on the Lizard, 40 km east of Land's End, on the morning of 6 June and the Dungeness Lighthouse on the morning of the 10th.²⁹⁴ Soon thereafter the Russian vessels ran through the narrowest part of the English Channel. But then at 8 a.m. on the 11th *Blagonamerennyi* collided with a single-masted British vessel, which refused to give way; it lost its mast from the impact. On orders from Vasil'yev Shishmarev took the disabled vessel in tow. Having rounded Skagen at the northern tip of Denmark, the three vessels were passing abeam of the Kullens Lighthouse in Sweden at 6 a.m. on the 15th and soon afterwards they were exchanging gun salutes with Kronborg Castle at Elsinore. Further gun salutes were exchanged with the Crown Battery in Copenhagen once the Russian vessels had dropped anchor there. The main reason for calling at Copenhagen was to renew the supplies of fresh water. They put to sea again on the 23rd and at 3 p.m. on 1 August they dropped anchor in the anchorage off Kronshtadt, and were finally towed into the harbour on 17 June 1823.²⁹⁵

Conclusions

In terms of the expedition's stated aim of a transit of the Northwest Passage from the Pacific Ocean to the Atlantic, it clearly must be assessed as a failure. Vasil'yev, in *Otkrytiye* was

²⁹¹ Ibid.

²⁹² While the International Date Line (at which this adjustment is now made by convention by all planes and ships crossing it) was not established until 1884, the Russian captains were well aware that such an adjustment was necessary on a round-the-world voyage.

²⁹³ Lazarev, *Zapiski*, p. 343.

²⁹⁴ Ibid, p. 345.

²⁹⁵ Ibid, p. 347.

turned back by impassable ice in the Arctic Ocean off the Alaskan coast at 71°06'N on 29 July 1820²⁹⁶ and at 70°40'N; 161°27'56"E during a second attempt on 3 August 1821,²⁹⁷ in each case only a few tens of kilometres north of Icy Cape where James Cook had similarly been blocked by ice on 18 August 1778.²⁹⁸ Shishmarev, in *Blagonamerenny* had no greater success. In 1820 he penetrated no further north than Point Hope on the Alaskan coast²⁹⁹ while in 1821, having pushed west along the Chukotka coast to Mys Serdtse- Kamen' and to within sight of Ostrov Kolyuchina he then fought his way north, following the ice edge, but only to 70°13'N on 28 July 1821.³⁰⁰

Nonetheless the expedition made major contributions in terms of surveying the coasts of both Chukotka and Alaska which they were able to reach, as well as those of various offlying islands. Off the Alaskan coast Shishmarev was the first European to definitely see and to roughly survey Nunivak Island in July 1821,³⁰¹ while Vasil'yev (who named it Ostrov Otkrytiye) also saw it and produced a detailed survey, also in July 1821.³⁰² Between the two ships they also made substantial improvements to the maps of the Bering Sea coast of mainland Alaska, to that of Kotzebue Sound, especially Eschscholts Bay and Chamisso Island, and to the Alaskan coast north from Cape Lisburne to Icy Cape. On the coast of Chukotka Shishmarev especially made detailed surveys of Zaliv Lavrentiya and Mechiginskaya Guba, while he was the first to produce detailed surveys of both coasts of Saint Lawrence Island.

A further important contribution was that made by *Otkrytiye* and *Blagonamerenny* to the removal of non-existent islands, reported earlier, from the map. An example was Anderson Island (most likely part of Saint Lawrence Island), reported by Cook on 3 August 1778, but whose non-existence was confirmed by Shishmarev on 3 July 1821. Similarly the non-existence of Preobrazheniye Ostrov, alleged to lie in the southeastern part of the Bering Sea, was confirmed by Shishmarev on 1 July 1821, while an island reported by Lieutenant Ivan Sindt to lie 70 miles north of St. Matthew Island, was eliminated from the charts by Shishmarev on 2 July 1821. Finally Ostrov Ratmanova (not the westernmost of the Diomed Islands), reported by Kotzebue in 1816 (probably a mistaken identification of a misplaced Mys Dezhneva) was proven not to exist by Shishmarev on 7 July 1820.

Of even greater value are Lazarev's descriptions of the various indigenous groups encountered by the *Blagonamerenny*. While his descriptions of the encounters with the Inupiat of Cape Espenberg and Chamisso Island in Kotzebue Sound were quoted at some length by Bockstoe³⁰³ Lazarev's full text reveals even more about this group. Equally detailed and valuable are Lazarev's descriptions of the Sedentary Chukchi of Zaliv Lavrentiya and Mechiginskaya Guba and the Yupik of Saint Lawrence Island.

²⁹⁶ Lazarev, *Zapiski*, p. 384.

²⁹⁷ Ibid, p. 397.

²⁹⁸ Beaglehole, *The journals*, p. 417.

²⁹⁹ See p. .

³⁰⁰ See p. .

³⁰¹ See p. .

³⁰² Lazarev, *Zapiski*, p. 396.

³⁰³ Bockstoe, *Furs and frontiers*, pp. 26–32.

Biographical sketches

Mikhail Nikolayevich Vasil'yev graduated from the Naval Cadet Corps as a *gardemarin* (naval cadet) in 1794. For two years he served on various vessels in the Gulf of Finland and then in 1796 was promoted to *michman* (midshipman) and was transferred to the Black Sea Fleet. Over the next few years, on board the brig *Aleksandr* he took part in a range of operations in the Mediterranean during the war with France. Transferred back to the Baltic in 1801 he served in various ships until 1805, by which time he had been promoted Lieutenant. Then came two shore postings: first to Kaluzhskaya Province to oversee naval recruitment, and then to Rybinsk to organize the supply of timber for the St. Petersburg shipyards. Then from 1809 he was back at sea again, taking part in naval operations. In 1814 he was in charge of land batteries during the siege of Danzig; then from 1815 until 1818 he was once again at sea, based at Kronshtadt. In 1819 he was appointed captain of *Otkrytiye* and also commander of the northern round-the-world expedition, accompanied by *Blagonamerennyy*. Back in Kronshtadt in 1823, he was promoted Captain First-grade and for three years commanded the 13th Naval Crew at Kronshtadt before being transferred to the command of the 18th Naval Crew at Arkhangel'sk for one year. Thereafter he was put in command of the Naval Cadet Corps in St. Petersburg. In 1827, having been made Rear-Admiral he was appointed Captain of the port of Kronshtadt, and then, in 1831, Quarter-master General of Kronshtadt. Having been promoted Vice-Admiral in 1835, he died in 1847.³⁰⁴



Gleb Semenovich Shishmarev entered the Naval Cadet Corps in 1794, the year in which Vasil'yev graduated from it. He graduated as a *gardemarin* in 1801 and until 1808 he sailed aboard various vessels in the Gulf of Finland. He was made *michman* in 1804. In 1805 he was in command of the transport *Domkrat* when it was wrecked on the island of Biorka, but a court found him not responsible for the accident. Promoted Lieutenant early in 1810, for the following four years he commanded a range of vessels in the Gulf of Finland and the Baltic.

Then in 1815 Shishmarev was selected as First Officer on board Otto von Kotzebue's *Ryurik* on its round-the-world cruise (1815-1818).

Promoted Captain-lieutenant on his return to Kronshtadt, Shishmarev (pictured right) was therefore a natural

³⁰⁴ Solov'yev, 'Krugosvetnaya ekspeditsiya', pp. 27–9.

choice to command *Blagonamerenny* in support of Vasil'yev's *Otkrytiye*, on what was his second round-the-world voyage, including his second visits to Bering Strait and Kotzebue Sound. From 1824 until 1826 he commanded the 27th and 11th Naval Crews at Kronshtadt and St. Petersburg. Then, promoted Captain First-grade he commanded the new ship *Imperator Aleksandr* until 1829. Made Rear-Admiral in 1829, from 1830 until 1834 he commanded squadrons, first on board *Sv. Georgiy* and then *Knyaz' Varshavskiy* in the Baltic. He died after a serious illness in October 1835.³⁰⁵

Aleksey Petrovich Lazarev, like his brothers Mikhail Petrovich (who would command *Mirnyy* on Bellingsgauzen's round-the-world voyage in 1819–21) and Andrey Petrovich, was enrolled in the Naval Cadet Corps in February 1800. Aleksey graduated as a *gardemarin* in 1806 and for several years served on board various vessels in the Aegean and Adriatic. Promoted *michman* in 1810 in 1810 he served on board the bomb-vessel *Perun* in the Adriatic, before travelling overland from Trieste to St. Peterburg. In 1812–13 he served on board *Severnaya Zvezda* in Admiral Tet's squadron off the coasts of Britain. Early in 1814 he was transferred to the Reserve Guards' Crew and was made Lieutenant. In 1815 he made an overland journey from St. Petersburg to Vilnius. On his return, until 1819 he commanded Grand Duke Konstantin's yacht *Torneo* and the yachts *Tserera* and *Neva* owned by members of the court. In terms of his naval career this was not an advantageous development; while his brothers were gaining sea-time and experience as naval officers, Aleksey Petrovich was stuck in the suffocating atmosphere of the court. Evidently wishing to remedy the situation, when he heard that his close friend Gleb Semenovich Shishmarev was to command the *Blagonamerenny* on its round-the-world voyage with *Otkrytiye*, he transferred back from the Guards' Crew to the Navy, and managed to attain the position of First Officer on board that vessel.

On his return from the round-the-world voyage in 1823 he briefly remained in the Navy, taking a new frigate to Iceland. But in the following year, through his involvement in preparing the ship for a cruise by the Imperial family, he was again side-tracked from the Navy into court life. Early in 1825 he was transferred to the Army as a Lieutenant in the Izmaylovskiy Regiment and was appointed aide-de-camp to Grand Duke Nikolay, who became Tsar Nikolay on 14/26 December 1825. But Lazarev's role as aide-de-camp to the new Tsar lasted only a few months. Solov'yev hypothesized that his 'fall from grace' may have been connected with his involvement, however remotely, with the Decembrist revolt, with the timing of which it certainly coincides.³⁰⁶ In 1826 he was inspecting the Black Sea and Caspian ports and in 1827 was surveying the forests in Olenekskaya Province with a view to supplying timber for the Navy at St. Petersburg. But in 1828 he was back at sea again in the Black Sea and the Aegean and in 1829 was promoted Captain, 2nd class.

In 1833 he became commander of the 26th Fleet Crew and in 1834 that of the 12th Fleet Crew and of the ship *Pamyat' Azov*, but in 1835 he was back ashore in a teaching position at the Naval Cadet Corps. In 1839 he was promoted Rear-Admiral but with the somewhat obscure appointment of Commander of Astrakhan and of the Caspian Fleet. He retired from the Navy in 1842, but in 1848 rejoined it in command of a vessel in the Black Sea Fleet under the command of his brother Mikhail Petrovich, who had evidently pulled strings for him.

³⁰⁵ Ibid, pp. 29–30.

³⁰⁶ Ibid, p. 34.

Soon after the latter's death in 1851 Aleksey Petrovich retired finally from the Navy. In short his was a very mixed career with a steady decline and ultimate obscurity.³⁰⁷

Appendix 1.³⁰⁸

From the journals of *Otkrytiye* and *Blagonamerenny*, 27 June until 25 October 1820.

On 27 June, along with *Blagonamerenny* we left the harbour of Petr and Pavel, and on the 28th put to sea from Avachinskaya Guba; a light north wind delayed us abeam of Shipunskiy Mys for three days. On the 29th we encountered our naval transport *Dionisiy*; her commander Leytenant Zakharin was bound from Nizhnaya Kamchatka with timber for building a new church at Petropavlovsk. On 1 July we received a fresh southerly wind which, with clear weather was favourable for reaching Saint Lawrence Island; there, however northerly winds with overcast skies again forced us to tack off the west end of that island. We spotted an American merchant brig at anchor³⁰⁹. Hoping to have news of the *Blagonamerenny*, which I had detached to Unalaska for interpreters, I tried to close with it, but fog rolled in and hid it from us. After noon we saw the same brig under sail. On questioning it we learned that it was bound from the Sandwich Islands to trade in these waters. They had not seen *Blagonamerenny*. On 14 July we passed through Bering Strait. Fair weather. When not more than 5 nautical miles from Cape Prince of Wales we could see the Ostrova Gvozdeviye³¹⁰ and the Mys Vostochniy of Chukotka.³¹¹ From Cape Prince of Wales we set a northerly course along the American coast; we were travelling in depths of 6, 7 and 8 fathoms, never losing sight of the land. We reached Kotzebue Sound on the 16th and rendez-vous'd with *Blagonamerenny* off Chamisso Island.

On parting from us on 13 May Kapitany-leytenant Shishmarev had set a course for Unalaska in the Aleutians, and had arrived there on 3 June. According to arrangements with the directors of the [Russian] American Company he was to obtain from their Unalaska post some Aleuts who knew the language of the Americans living to the north, beyond Bering Strait, but at the post they responded that the Aleuts did not understand the language of the American natives. Shishmarev took six Aleuts to paddle *baydarki* and four *baydarki*. Having made his vessel ready for sea, he departed from Unalaska. On 19 June, passing along the east side of Saint Lawrence Island he spotted ice to the northeast. He passed through Bering Strait on 1 July and continued to Kotzebue Sound, where I had arranged to meet him. He found the entrance to the Sound covered with ice; assuming that we had not arrived there, he proceeded back to Bering Strait to examine Ostrov Ratmanova, seen by Kotzebue, in clear weather; he sailed across the area where this island was marked on the map, but could not find it. On reaching Vostochniy Mys³¹² he returned to Kotzebue Sound; the ice had moved out and he reached the rendez-vous on 11 July.

Having made rendez-vous with *Blagonamerenny*, and supplied her with firewood which we had brought for her from Kamchatka, on 18 July we departed from the Sound, bound for Cape Krusenstern from which I intended following the American coast northwards. We spotted Cape Krusenstern on the morning of the 19th; the wind was variable and light but then thick, wet fog rolled in, hiding the coasts. On the next day, the 20th we could hear the breakers on shore, but the coast was invisible due to the murk; we turned away in a depth of 8 fathoms and headed

³⁰⁷ Ibid, pp.31–4.

³⁰⁸ Lazarev, *Zapiski*, pp 383–9.

³⁰⁹ The brig *Pedlar*, Captain John Meek. See p 46.

³¹⁰ Diomed Islands.

³¹¹ Mys Dezhneva.

³¹² Mys Dezhneva.

west. The fog started to clear somewhat and we spotted the coast and the hills on a barren coast , continuing north from Cape Krusenstern, and we again headed along the coast. Around noon on the 21st the fog hid the coast we had seen. Being in a depth of 9 fathoms, by sounding we were able to hug the coast. In this murk we separated from *Blagonamerenny*; we fired several gun shots to indicate our position but received no reply. It is extremely difficult for two ships to keep company in the Arctic Ocean in view of the constant fogs and variable winds, while heading on different courses due to circumstances. Towards evening we spotted the first ice to the northwest; it appeared to have moved off from shore since some earth could be seen on it; the wind was allowing us to proceed north but ice extending from east to north forced us to change course to the west. When the ice became looser we resumed our northward course, but soon were forced to turn back due to the closeness of the ice. Around noon on the 22nd the sky cleared somewhat so that we were able to take the sun's altitude through the cloud; this revealed that we were at 69°11'N. After noon the fog became thick; we could hear gun shots from *Blagonamerenny* to the east, and we replied to them. It is possible that we were close to each other at times, but could not see each other due to the fog. Towards evening the sound of breakers could be heard to the east, waves breaking on the ice, so we headed northwest. On the morning of the 23rd with a northeast wind and a depth of 28 fathoms, we swung towards the coast; the horizon cleared of fog before noon but we could not see *Blagonamerenny*, the coast, or any ice. In the afternoon ice appeared from northeast to northwest and the wind swung into the east-southeast; we headed south as the fog became thinner and the ice extended from north to west. After midnight the wind became southeasterly and we headed northeast towards the coast. On the morning of the 24th we were passing close past ice to windward, but then we also spotted ice to the east-northeast and we swung away from it to the southwest. On the 25th the wind was southeasterly and very light, then it veered to the east-northeast and we headed southeast-by-south; at 9 a.m. ice could be seen from the crosstrees from north to east; as we closed with this ice it turned out to be close and extended from northwest-by-west to southeast-by-east. The coast was visible through the fog but we were unable to examine it, since it then became hidden in thick fog. At noon, at a depth of 14 fathoms we turned and headed north. The sun appeared through the fog at times; by a noon altitude we calculated that we were at 69°5'N. With a northeasterly wind we ran east-southeast towards the coast; it was foggy and wet. After midnight on the 26th the wind swung into the east-northeast and we headed north. By morning the fog had cleared and we spotted the coast; judging by our latitude what we were seeing was Cape Lisburne; on both sides of it the coast was steep while the cape itself ended in a sheer drop; northwards from it the coast ran first to the northeast then it angled somewhat to the east; it continued as a lowland and as far as we could see from the crosstrees, disappeared into the ice. The sky cleared before noon; from two sun's altitudes, measured around noon our latitude was 69°16'. The wind had become easterly and the weather was overcast with rain. We headed north-northeast and towards evening spotted ice extending from the coast, from east-northeast to north-northwest, forming a continuous mass. Soon fog rolled in and hid the coast from us and, on approaching the ice, we swung back. On the 27th, the fog having cleared the weather was quite fair in the morning; we were not more than 6 nautical miles offshore in depths of 14 and 12 fathoms. The coast north of Cape Lisburne was clearly visible and, from the crosstrees, ice was visible offshore. I sent an officer in an oared boat to check whether the ice had moved offshore and to sound the depths, but with fog moving in he was forced to return to the ship. The wind was out of the south and very light We continued to head along the coast to the northeast-by-east but soon ran into thick fog; several floes drifted past us and we could hear the noise of breakers on the ice. The wind died and the current was pushing us towards the ice; we towed the ship away from it to the west with oared boats. On the 28th the fog cleared somewhat and we spotted

ice to the west; a light breeze arose between north and west and we headed north-northeast. The sun was visible and from a noon altitude we were at $69^{\circ} 37'N$. With a light breeze from the west we headed north in cloudy weather; there was ice in sight from north to southeast but from the crosstrees water could be seen beyond it; towards evening we turned; the wind was variable; by the morning of the 29th the wind had settled in the northeast and had become a topsail wind; we headed northwest-by-north with a clear horizon; the weather was fairly good, although it snowed at times, while the Réamur thermometer was at the freezing point. By noon observations we were at $71^{\circ} 1' 54''N$, on the basis of six observations; according to a chronometer reading at noon our longitude was $166^{\circ} 8'$ west from Greenwich. We soon spotted ice ahead and by 2 p.m. we had reached the ice; it occupied the area from east through north to west-by-north. And as far as we could see from the crosstrees there was nothing but close ice extending to the horizon; we were then at $71^{\circ} 06'N$. It was possible to proceed west along the ice but since we were 35 nautical miles beyond Icy Cape, identified by Cook, but up to 41° further west, it was desirable to examine Icy Cape itself. From a depth of $24\frac{1}{2}$ fathoms, we turned towards the east-southeast; the wind picked up to a reefed-topsail wind and started to swing into the north; the weather was overcast with snow and the temperature had dropped to -2° (R). On the morning of the 30th we sighted ice through the overcast ahead; seeing that it was impossible to examine the coast we turned and headed west-northwest, hoping to proceed further north but due to the strong wind could not attain our earlier latitude. By noon it had cleared up; by observation we were at $70^{\circ} 36'N$. Our longitude was almost the same as on the previous noon, but there was no ice at all on the horizon; the sky was overcast at times and it was snowing. Throughout the day the thermometer was recording between $\frac{1}{2}^{\circ}$ and $2\frac{1}{2}^{\circ}$ below freezing. The rigging was icing up and with this wind it was impossible to push any further north. On the 31st we ran back south and when we spotted ice from southwest to south in the morning, we turned along it; as we approached it our artist made several views. Washed by the waves the ice presented various figures; some of them rose up to 15 feet out of the water; from our observations this ice ended at $70^{\circ}N$, but more ice was visible beyond it. In the morning the weather was fair, but then it became overcast and it started snowing; we set a course for Cape Lisburne; the wind was northerly but somewhat lighter than previously. By 8 a.m. with the murk clearing we spotted Cape Lisburne and ice extending from it from east-northeast to north-northeast, towards the coast. Today the temperature rose from the freezing point to $2\frac{1}{2}^{\circ}$. I cannot say that the ice we saw northwards from Cape Lisburne along the coast was fast ice. But from 22 July until the day when we saw only the coast north of Lisburne, with various winds we always encountered ice off it. It was too dangerous to send an oared boat for a detailed examination; we had 4-oared and 6-oared yawls and an 8-oared cutter. The sea-bed near the coast was fine gravel – unsuitable for anchoring. The weather remained fair and the horizon was clear, but sometimes it became overcast or foggy within an hour and the winds were variable and it was impossible to hold the ship in one location. At 10 p.m. we sighted *Blagonamerenny* to the southwest-by-south, and made rendezvous with her. We set a course for Cape Lisburne. We reached the coast on 1 August. The weather was clear; the north wind had started to slacken and by noon it was calm and the current was pushing us towards the cape; we anchored in $12\frac{1}{2}$ fathoms with a bottom of fine sand. By several observations on this date and earlier we found the latitude of Cape Lisburne to be $68^{\circ} 55' 42''N$; longitude $166^{\circ} 4' 20''$ W from Greenwich. After noon the wind became northwest-by-north; we weighed anchor and headed south along the coast. On that day and the following one, the 2nd, taking advantage of the fine weather we surveyed the coast; towards night the wind strengthened and swung into the north; this continued on the next day, the 3rd, and we could carry only reefed topsails, as we raced west. From midnight on the 4th the wind dropped; the weather changed to overcast with rain; then the wind was variable with fog at times and until the 6th we

were unable to approach the coast due to the fog; but on that date with clear weather a gentle wind from the west allowed us to survey the coast towards the south; at night we moved offshore. On the next day, the 7th we continued to survey the coast; the weather was fine and the wind very light and then it fell calm. We anchored in 8½ fathoms; the bottom fine sand at a distance of not more than 4 nautical miles from shore. Towards evening the wind became northeasterly; we weighed anchor and sailed west. The wind swung into the south and strengthened to a reefed-topsail wind; the weather was overcast, it was raining and the horizon and the coast disappeared; we set a southerly course. On the 8th the weather was somewhat better and the wind gentler but due to the murk the coast was invisible. On the morning of the 9th we reached Cape Prince of Wales and left the Arctic Ocean, having spent 26 days in it. From Cape Lisburne to Cape Krusenstern we had examined the coast quite well; by contrast we were unable to see Cape Mulgrave itself due to the fog nor could we fix Cape Krusenstern by observation. From 69° to 67° on the American coast there are no inlets, nor did we see any rivers flowing into the sea; in some places water could be seen beyond a low coast but I went ashore at 67°52'N where it looked quite curious; the lake we had seen at this point turned out to be a small expanse of water at a low spot beyond the coast, probably having been driven inland by strong winds; the water was just as saline as the sea water. In the Arctic Ocean we observed the current to be from northeast to southwest at up to half a knot; near the coast its direction changed somewhat and was faster; the compass variation was found to be 26°00' at Cape Prince of Wales, 29°10' in Kotzebue Sound, 35°00' closer to Cape Lisburne and 35°45'00" at our highest latitude. We took the azimuths with several compasses. Proceeding north from Cape Krusenstern we found the maximum dip of the compass needle to be 82°; at 71°N it was 78°30'; throughout the entire period which we spent north of Bering Strait the barometer ranged between 30.08' and 29.6'. The Réaumur thermometer recorded up to a maximum of 11½°; it dropped to -2½° at our highest latitude but generally it recorded between 5 and 6°; the depths close inshore were 5 to 7 fathoms with a bottom of fine gravel; farther out – to 15 fathoms, fine sand and at 20 fathoms and deeper the bottom was silt; we found no depths greater than 30 fathoms, having moved offshore to the west by about 80 nautical miles. The land is barren; moss grows in some places in valleys. There is no living timber but there are large amounts of driftwood along the coasts, poplar and spruce – large trees complete with roots. Coming from the north we saw the first natives and their semi-subterranean huts at 68°30'N; at places along the coast they had made drying racks; from a distance they resemble masts with yards. Farther south we saw natives engaged in trapping. There are no suitable anchorages off the coast and sometimes the weather was foul; not having interpreters we had no contact with the natives.

From Cape Prince of Wales I set a course for the eastern cape of Chukotka; the weather was overcast but it cleared at times with a northerly wind. In Bering Strait we saw both Gvozdeviye Ostrova and a third small one to the south; we passed then 10 nautical miles off but did not find the Ostrov Ratmanova seen by Kotzebue although we passed within 3 miles of it according to the map. Right at noon we were off Vostochniy Mys and from there set a course along the coast to Guba Svyatogo Lavrentiya, Towards evening we spotted ice along the shore; it was blocking the entire mouth of the bay, and a long spit extended out. This ice must have been carried out of the Arctic Ocean by the northeast wind; water was visible in the bay beyond this ice. Seeing that it was impossible to enter the bay we hove-to. On the morning of 10 August the weather was overcast with rain and a fresh wind out of the north; we set a course for the eastern tip of Saint Lawrence Island; we passed close to the place where on their voyage Cook and Clerke saw an island 19 miles north of Saint Lawrence Island, but we could not see it. On the morning of the 11th in clear weather and a light northerly wind we spotted the hills on Saint Lawrence Island; taking advantage of the good weather I instructed Shishmarev to complete his

survey of the north coast of Saint Lawrence Island which he had begun; when he headed to Bering Strait from Unalaska, we headed east to the American coast between Norton Sound and Bristol Bay. From the eastern end of Saint Lawrence Island the depth gradually decreased from 17 fathoms; next morning, the 12th, from a depth of 10 fathoms the colour of the water changed from what it had been; there was no swell; having reached a depth of 8½ fathoms we, apparently, were closed in by banks, for with a fresh northerly wind there were no waves. We were then 58 nautical miles off shore according to the Departmental map and there was no coast in sight; from this depth we swung west and having reached depths of 12 fathoms we swung south; soon the depth started to again decrease perceptibly and we swung west; on reaching a depth of 12 fathoms we set a course for St Paul and St George islands. On 15 August we sighted St. Paul Island; at noon we found our latitude to be the same as that marked on the Departmental map; in terms of longitude it appeared to be plotted 10 miles further east; St George Island in reality lay 9 minutes further north and 16 miles further east than plotted on the map. From these islands we set a course for Unalaska which we reached on 19 August; arrived on the 22nd and returned the Aleuts and *baydarki* which hadn't been used at all, to the Unalaska post. We put to sea from that harbour on 30 August and on the 31st passed through the Aleutian chain between Akun and Unimak islands.

While in the Arctic Ocean I had seen the need for a small sailing vessel, which could stay close inshore and also so that the interpreters could make contact with the natives. The Admiralty in St. Petersburg had placed the components of a disassembled boat on board *Blagonamerenny*, but since they were lying right at the bottom of the ship's hold, which had a cargo of 600 tonnes, at least a month would be needed to assemble this boat where it was needed, and to prepare the ship for sea, and there was not more than that length of time left suitable for sailing.

Having passed through the Aleutian chain I set a course for Sitka where I hoped to obtain interpreters for the following summer from the head of the American settlement, and to assemble the boat over the winter. We had good weather and fair winds as far as the longitude of Kodiak. On 5 September the wind became strong, out of the east, with overcast weather with rain; at that time we parted from *Blagonamerenny*. From that date we saw no more fair weather, just overcast with rain while we were accompanied by fog every day.

We reached Sitka on 10 September but were unable to enter the bay until the 15th due to thick fog. *Blagonamerenny* arrived seven days after us. The disassembled boat and all the materials appertaining to it were unloaded from the *Blagonamerenny* at Novo-Arkhangel'sk. I gave orders to Leytenant Ignat'yev to assemble it over the winter and left eight workmen with him, while we prepared the ships for sea by 25 October. I intended to proceed from there to California to stock up on hardtack; we had taken enough for two years when we started from Russia, but of that amount 300 *pud* had become totally unusable from the damp in the hold and the bread-room; we needed to stock up with at least a certain amount for the coming summer. Then I set off to execute the duties entrusted to me according to my instructions.

Kapitan-leutenant Mikhail Nikolayevich Vasil'yev. *TsGA VMF, f. 166, d. 660, ch. II, ll. 259-65.*

Appendix 2.³¹³

From the journals of Otkrytiye and Blagonamerenny in the Pacific and Arctic oceans from 12 February to 14 October 1821.

We sailed from the port of San Francisco on 12 February. Until the arrival of a suitable season for heading north I intended sailing to a western area, little visited by seafarers. We arranged with *Blagonamerenny* to stay on each other's beam at a distance such that we could clearly see signals. Winds blowing constantly between NW and SW, generally strong. The protracted nights in winter make voyages for discovery very difficult. Maria Lazara Island is located in latitude 30° on Arrowmith's charts by which we are plotting our voyage, but it is plotted at around 28°N, 139°26'W of Greenwich on the Spanish charts, while Maria Lagorta Island is marked on Captain Cook's chart in the same latitude but at 149°12'W longitude. Wishing to examine it, we set a course for Lazara Island. A southerly wind allowed us to sail along the parallel. In clear weather and with a clear horizon we traversed the areas where these islands were plotted from longitude 132°30' to 150°26'. Each ship had a visual range of 30 nautical miles, but we did not find these islands and we noted no signs of land. By 15 March it was still too early to go north, so we set a course for the Sandwich Islands to stock up on fresh provisions, since we had no prospects of other ports for this purpose in the north. We reached Oahu on 25 March. The climate of the Sandwich Islands is superb: there we found in abundance everything necessary to refresh a seafarer in short order.

We left Oahu on 7 April and headed for Sitka, passing close to the locations where some seafarers have found signs of land between latitudes 33° and 43°, but we did not see land.

On 8 May, in overcast weather and a strong wind we parted company from *Blagonamerenny*; she reached Novoarkhangel'sk on the 14th and we on the 18th May. The seagoing boat was already complete; having made her ready for sea, we stocked up on firewood and water, and having received from the Governor in Chief, Kapitan-leytenant and Knight Murav'yev interpreters for the northern natives of America, on 30 May we sailed from Sitka. The seagoing boat could not keep up with the ships and it was taken in tow by *Otkrytiye*. As we approached the Aleutian chain we had strong winds and persistent cold weather; we passed through the Aleutian chain via through Unimak Pass.

The seagoing boat needed some repairs before proceeding and hence we set a course for Unalaska, which we reached on 22 June. The season for suitable sailing in the Arctic Ocean is short and hence for this summer I deemed it best to separate from *Blagonamerenny*, so as to each concentrate on a particular objective. On sailing from Unalaska I ordered Kapitan-leytenant Shishmarev to head through Bering Strait and proceed along the northeast coast of Asia, and try to find a passage into the Northern Sea; if he encountered any obstacles he was to head north, and if he found that impossible he was to survey the coast of Chukotskaya Zemlya to whatever latitude he could reach.

I kept the seagoing boat with me, proposing a plan of surveying the coast between Bristol Bay and Norton Sound, then proceeding into the Arctic Ocean along the northwest coast of America, to locate a passage to the Atlantic Ocean. We sailed from Unalaska on 27 June. Following her own course *Blagonamerenny* disappeared from sight; we set a course for St. George Island; as in the previous summer we found that it is plotted incorrectly on the Department's map and tried to fix its position. At 6 next morning, by dead reckoning we were at the northeasterly cape of St. George Island according to the chart, but no land was seen.

³¹³ Lazarev, *Zapiski*, pp. 394–400.

On the 30th, when the haze cleared we sighted St. George Island and fixed the position of the southwest tip of the high coast, the same one we had seen the previous summer. According to our observations it lies at latitude $56^{\circ}36'17.8''\text{N}$, longitude $169^{\circ}41'42.8''\text{W}$ from Greenwich. On that date, as we wound the Arnold chronometers at noon as usual, chronometer N. 506 stopped. From St. George Island we set a course for Cape Newenham; on 6 July we were approaching its southern side and dropped anchor. I appointed Leytenant Avinov to the seagoing boat and ordered him to survey the American coast from Cape Newenham to Cape Darby, in Norton Sound. I set 20 July as the date for him to rendezvous with the ship at Cape Darby, or at Stuart Island. In the event that he found that by that time he would not be able to examine the entire coast, he was to remain until 15 August to finish the job; after that date if we had not met up in Norton Sound, I proposed that he select winter quarters at Unalaska or in Kamchatka. Having equipped the boat with everything necessary for surveying, I appointed Michman Hall and Second master Korguyev to assist Avinov. That evening we weighed anchor, as did the seagoing boat; she set a course for Cape Newenham and disappeared into the night.

Throughout the 7th, 8th and 9th we were beating to the northwest; I wanted to avoid the shoals lying between Cape Newenham and Cape Stephens, and to rendezvous with the boat in Norton Sound by the shortest route, but also to proceed through a new area. On the 10th we had a light east-southeasterly wind, with dense fog and we steered northwest. At 6 a.m. on the 11th the depth was 16 fathoms; half an hour later it turned out to be 8. We immediately steered west, but since the colour of the water did not change at all I assumed that we were near some exposed banks which the fog was preventing us from seeing; the depth began to increase. On reaching 15 fathoms we again began to hold northwest. At 10 a.m. the fog cleared somewhat. We spotted snow to starboard and soon a high coast, along which we were sailing, not more than 10 nautical miles off. The fog cleared off completely. We ran in towards the coast and reached a depth of 8 fathoms with a bottom of sand. We dropped anchor 3 nautical miles offshore. While we were readying boats to go ashore we spotted a single American approaching in a *baydarka*. Through the interpreter we learned from him that the coast we could see was an island called Nunivak, and that it was inhabited. In clear weather, from its east side one could see the highlands and snow patches of the mainland coast. It lies between the Kuskokhan [Kuskokwim] and Kuyukht-pak [Yukon] rivers; until now not a single ship had reached it, and no Europeans had visited it. This summer some Kuskokhan people had come to visit from the mainland and for the first time had shown them the use of iron, probably traded in Bristol Bay where a post of the [Russian] American Company has now been established.

At noon we established the position of our anchorage by observation: $59^{\circ}54'57''\text{N}$, longitude from Greenwich $193^{\circ}17'2''\text{E}$ ³¹⁴ according to chronometer No. 953; compass variation 23°E . A current of $\frac{3}{4}$ of a knot, east by compass was recorded; the tidal range appeared to be small. After noon I and the off-duty officers went ashore; the American escorted us to his dwelling. Since the island had not previously been found by any Europeans we named it Ostrov Otkrytiye after our ship. It is aligned northwest-southeast, 40 nautical miles in length and according to the inhabitants about half that in width. In general the coast is of moderate height; it has no sheltered anchorages; occasionally one sees small trees growing. The islanders live in earth houses, scattered at various places along the coast; they hunt reindeer, foxes, whales³¹⁵ and fish. Having presented gifts to those whom we saw on shore, we headed back to the ship and that

³¹⁴ $167^{\circ}42'58''\text{E}$,

³¹⁵ Probably right whales (*Balaena glacialis*) or minke whales (*Balaenoptera acutorostris*) (Sale, *A complete guide*).

evening weighed anchor and headed northwest. In honour of the ship's first lieutenant I named the southern cape of the island Ignat'yev and the northern cape after Leytenant Boyl'.

At noon on the 12th we lost sight of the island; we were then 28 nautical miles from it. We set a course for Norton Sound, and in clear weather sailed over the location where Cook saw an island which he named Anderson Island, but we did not see it. We reached Cape Darby on 19 July and on the 20th we lay at anchor; not finding the boat on the 21st we weighed and headed north into the Arctic Ocean. After noon we encountered the brig *Golovnin*, belonging to the [Russian] American Company, heading for Norton Sound. From her commander, Michman Khromchenko, we learned that on 15 July Leytenant Avinov had sailed from Goodnews Bay along with the brig, and that they had separated on the morning of the 15th. Khromchenko said that on that date he had found a low, forest-covered island, aligned NE and SW, $18\frac{1}{4}$ nautical miles long; he placed it in latitude $59^{\circ}28'38''\text{N}$, longitude $164^{\circ}56'3''\text{W}$ from Greenwich.

On the 25th we passed through Bering Strait and set a course along the American coast; taking advantage of the clear weather which prevailed at times, we surveyed the coast from Cape Krusenstern northwards, which we had not managed to see the previous summer. In latitude $68^{\circ}1'00''\text{N}$, longitude $165^{\circ}28'00''\text{W}$ from Greenwich, and in latitude $68^{\circ}21'15''\text{N}$, longitude $166^{\circ}40'00''\text{W}$ from Greenwich two conspicuous capes project, which captains Cook and Clerke did not see; I named the first Mys Rikorda in honour of Rikord the governor of Kamchatka oblast', and the other after Captain Golovnin who has made two voyages in these northern seas.

On 31 July we reached Cape Lisburne; from it the coast trends east, but from the crosstrees it was clear that it then swung north. Fog, changeable winds and calms prevented us from approaching closer; we could see only the highest points in places. On the morning of 2 August we encountered some floes, on which lay many walruses. The wind became southerly. We set a course for Icy Cape. Although the ice became closer we were still able to push north. At noon on 3 August, by observation we were at latitude $70^{\circ}40'\text{N}$, longitude $161^{\circ}27'56''\text{W}$ from Greenwich; the depth increased from 13 to 21 fathoms; judging by our latitude we had passed Icy Cape. There was close ice visible from north to west; from north to east it was looser, and to the south there was no ice. Wanting to see the coast we began tacking southwards. The wind swung into the southwest from west and set us onto a floe to which there was no end visible from the crosstrees. A fresh topsail wind without any waves and the good qualities of our ship allowed us to make some turns and to avoid it on the south side; by nightfall we could see it to leeward astern of us. At 9 a.m. on 4 August we sighted land to the east; it appeared to be a projecting cape covered with snow in many places; it was of moderate height and level, with talus running down to the water in places and with ice alongshore. A few floes drifted past us with the wind towards shore. By observation at noon we were at latitude $70^{\circ}27'26''\text{N}$, longitude by chronometer $161^{\circ}9'29''\text{W}$ from Greenwich. During this 24 hours the current set us east by 25 nautical miles. According to our observations the northern tip of this cape is located in latitude $70^{\circ}23'40''\text{N}$, longitude $160^{\circ}50'41''\text{W}$ from Greenwich; I assume it is the same one that Cook called Icy Cape since we could not see the coast farther north. On the 6th and from noon on 7 August the wind continued from the southwest, swinging somewhat to the west and sometimes to the south; it was a reefed-topsail wind. Lying close-hauled we made one tack towards shore; we turned away at depths of 9 and 8 fathoms; and made another tack towards the close ice extending from west to north and east, to depths of 20 fathoms; only to windward was there no ice. According to our measurements the current was setting us east at 1 knot, and we were almost unable to beat against it. After noon on the 7th it fell calm, then a gentle breeze began blowing from the north; we steered south-southwest towards Cape Lisburne. Soon we spotted ice ahead;

the persistent southwest winds had undoubtedly driven it from the Asiatic coast. The wind became fresher; the weather overcast with rain; ice was drifting past us on both sides. At first it was scattered, but then we had to avoid it, falling off from one floe and running up into the wind to avoid another. By 11 a.m. there was ice all around the horizon. Shortening sail we were left under just reefed topsails. To the north, to windward, the ice appeared to be somewhat lighter. We turned close-hauled on the port tack. At 11.30 we were blocked by ice; we secured the topsails. The starboard side of the ship was jammed against the ice; we lowered boards, hatches and any small spars, lining the entire ship's side with them so that the ice would not damage the sheathing. The men were used to fend off the ice as far as possible, and to lessen the impacts; but some of them were so severe that three-inch boards were smashed. Some of the floes appeared quite small at the water surface, but were very long beneath the water. The wind had strengthened to a reefed topsail wind; the constant rain soaked everything completely; with the wind the ice became slacker. In the hope that it would be carried to leeward, we dropped an anchor with an iron cable in a depth of 21 fathoms, but the ice was drifting eastwards with the current, and we were nipped by it more than ever. It was impossible to heave up the anchor; we were forced to pay out the cable to 64 fathoms and this eased things somewhat, giving the ice a chance to swing the ship round in its own direction; we drove with the fore staysail and the mizzen. At 4 a.m. on 8 August the ice to leeward became slacker, and at 5.30 a.m. having set the fore topsail and reefed the mizzen course, we escaped from the closest ice. Avoiding any floes we encountered, we were unable to get to windward of one of them; and it struck us below the waterline at a speed of 6 knots; it was a severe impact but it was the last one. More ice was sighted ahead; in the murk it appeared to be close, but from the crosstrees leads could be seen, and we steered for them. The wind strengthened to an extraordinary degree; and wet snow was falling. We secured the fore topsail and the mizzen course; we set the main topsail, with all reefs taken in, leaving her with this and the two fore storm staysails. An hour later we were entirely clear of the ice; we had damaged the copper in places; we had crumpled the sheathing; but the ship was not leaking at all. The weather began to clear; the Réaumur thermometer was reading $\frac{3}{4}^{\circ}$ below freezing point. After the wet weather the cold was sensible. The rigging and sails were icing up; the wind was dropping; before noon the sun appeared. By observation at noon we were in latitude $70^{\circ}18'15''$, longitude by chronometer $163^{\circ}27'17''$. On August 9 there was a reefed-topsail northerly; it was overcast at times, with snow. At 4 a.m. we sighted Cape Lisburne, covered with snow. At noon, by observation we were in latitude $68^{\circ}55'30''N$, longitude $167^{\circ}9'54''W$; we were 23 nautical miles from Cape Lisburne; we set a course for Mys Vostochniy³¹⁶. During the morning that day the Réaumur thermometer dropped to $2\frac{1}{2}^{\circ}$ below freezing point, but in the fine weather the cold was not so sensible. At 7 a.m. on 10 August we sighted the Asiatic coast of Chukotskaya Zemlya. At noon we were $10\frac{3}{4}$ nautical miles from Mys Vostochniy; we noticed that along this coast the current to the northwest was stronger than in the other direction. On this date we emerged from the Arctic Ocean. After noon we spotted *Blagonamerenny* to the south. Kapitan-leytenant Shishmarev reported to me that, having passed through Bering Strait, on 16 July he had set a course along the visible Asiatic coast. In latitude $67^{\circ}8'$ the ice had prevented him from sailing near the coast; he steered north but at $70^{\circ}13'$ was stopped by close ice; he attempted to approach the coast in various directions, but always found it impossible due to the ice. He had left the Arctic Ocean on 9 August.

According to the orders I had given him, he still had to survey St. Lawrence Island. We set a course for Cape Prince of Wales, leaving him to execute his task. At 4 on the morning of the 11th we reached the actual coast. A north wind and clear weather allowed us to survey the

³¹⁶ Mys Dezhneva.

American coast in the direction of Norton Sound. Before one reaches Cape Darby, to the west there is an inlet which is not marked on the charts, and a river flows into this inlet, called the Ikatervik by the natives; at its mouth it is shallow, but further up it is more extensive than the two rivers lying east of it, flowing into Norton Sound from the north.

Towards evening on 13 August we reached Cape Darby and learned from the natives that the seagoing boat had not arrived. Next day, on 14 August we headed for Stuart Island; and by nightfall had reached that island; the wind was from the northeast, then swung into the north and became a reefed topsail wind. For the night we hove-to close-hauled, and spent the whole night under light canvas. On the 15th we ran down to Stuart Island; on reaching a depth of 8 fathoms we dropped anchor, on a bottom of silt with sand. I sent Leytenant Boyl in an armed launch to enquire about our seagoing boat. Returning on the morning of the 16th Leytenant Boyl reported to me that on Stuart Island he had found Americans who had come from Cape Stephens to hunt. They said that no strange ship had visited them and they had never seen foreigners. He learned from them that south of Cape Stephens a large river debouches into the sea, called the Kukhyut-tak,³¹⁷ from which shoals extend far out to sea; on not finding the boat, we weighed anchor and set a westerly course until we reached depths of 7 and 8 fathoms; avoiding the shoals we set a course for the east side of Saint Lawrence Island; we passed along the north side of St. Matthew Island then between Ostrov Beringa and Attu. On 8 September we reached Petropavlovsk harbour in Kamchatka, where we found the seagoing boat. Leytenant Aninov reported that on July 6, he had left Bristol Bay in the seagoing boat which had been entrusted to him and set a course for Cape Newenham. On the 8th the wind strengthened from the northwest and a heavy sea rose; unable to handle it, he ran into the shelter of Cape Newenham and dropped anchor in Hagemeister Bay. Having made necessary repairs to the boat on the 10th he emerged from the bay. Taking advantage of fair weather he surveyed the coast as far as Cape Newenham and northwards from it. He reached Goodnews Bay. According to the 10th point of the orders I had given him he collected reliable information from the local natives that, as far as they knew, only one people lived along the American coast to the north. Reports from a coastal expedition undertaken by the American Company from Kodiak in 1818-1819, which was in this area, that some European people lived along the mainland coast north of the Kuskokwim River, turned out to be totally false. On 13 July he left Goodnews Bay, sounding the depths along his course as he headed north; and in many places found shallow banks, some of which must dry out at low water. While in Goodnews Bay he noticed a range of 13 feet between high and low water. On the 15th the wind was a strong easterly, which then swung into the south; the weather was overcast with rain, and a heavy sea got up. They lay at anchor between the shoals throughout the 16th and 17th, since it would have been dangerous to try to work between the shoals. The boat drew 4 feet; with winds on the beam and easy seas she could not sail close to the wind. The bottom was unsuitable for anchoring in the open sea. Due to the wet weather and the cramped conditions in the boat the men started to show signs of scurvy. To avoid worse consequences on the 18th they decided to abandon the survey. He set a course for Kamchatka and reached Petropavlovsk on 19 August.

We repaired the ship by heeling her; we replaced as many copper plates as we had in reserve and below the waterline we saw that the copper sheathing was damaged in places, for which we would have to careen her. But since the ship was not leaking and since there was absolutely no copper for sheathing in port, I postponed this work.

³¹⁷ Yukon River.

Blagonamerenny reached Petropavlovsk on 19 September. While she was on her way to Mechigmenskaya Guba, the carpenter Stepan Naumov, afflicted by scurvy, died on 11 August; Staff-surgeon Zaozerskiy had three men of the lower ranks on the sick-list, two with scurvy and one with chronic consumption.

Over the period of a month, taking advantage of the shore air and fresh food, the majority of the scurvy cases recovered, and the others improved, apart from Staff-surgeon Zaozerskiy. Due to his illness he was unable to continue our cruise; he remained at Kamchatka to convalesce. In his place the Kamchatka Governor Captain first-grade Rikord appointed a surgeon, Lyubarskiy. By 14 October the ships were ready to put to sea.

Kapitan-leytenant Mikhail Nikolayevich Vasil'yev. *TsGA VMF (State Naval Archives, f. 213, d. 352, pp. 9-17.*

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