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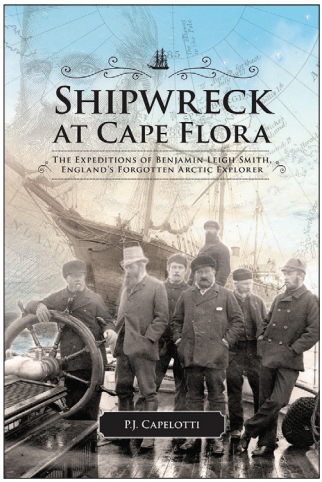

SHIPWRECK AT CAPE FLORA:
THE EXPEDITIONS OF BENJAMIN LEIGH SMITH, ENGLAND'S FORGOTTEN ARCTIC EXPLORER
P.J. Capelotti

ISBN 978-1-55238-712-2

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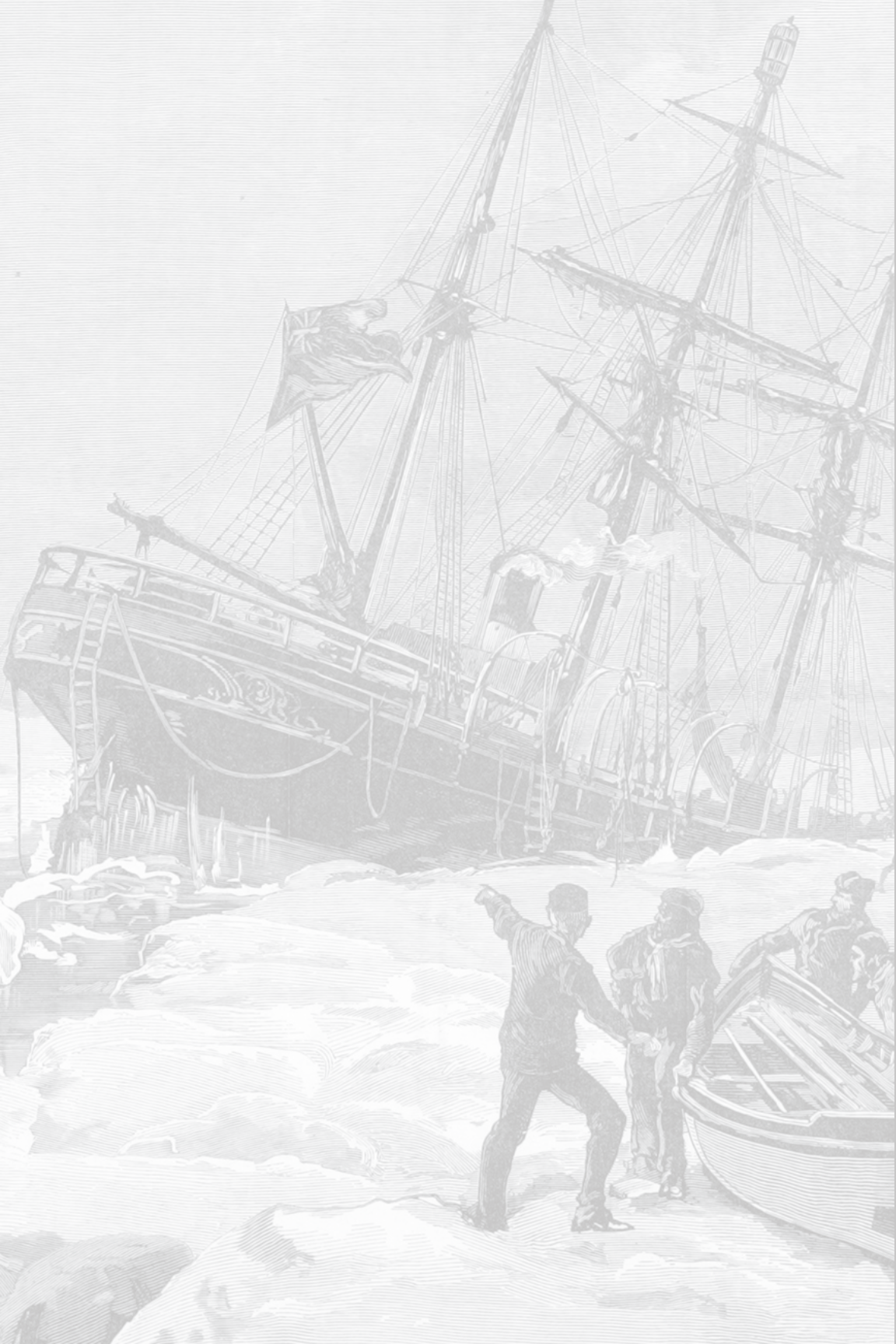

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EXPEDITION FIVE: FRANZ JOSEF LAND, 1881–1882

The results of *Eira*'s 1880 cruise likely surpassed even Leigh Smith's expectations. During the accounting of his stunning success at the Royal Geographic Society on the evening of Monday, January 17th, 1881, when he was nowhere to be found, the president of the Society, Henry Bruce, Lord Aberdare (who now had two features in Franz Josef Land named after him as a result of Leigh Smith's work) excused the explorer's absence on account of a "temporary indisposition" while noting that Leigh Smith was a man "of a singularly modest disposition, so much so that he had declined to write himself a narrative of his adventures."[1]

Sir George Nares rose after the talk to candidly admit that his own Arctic expedition had effectively closed the Smith Sound route to the pole and that Leigh Smith had very likely opened the route that would be taken in the future, via Eira Harbour in Franz Josef Land. Given the trouble encountered by Nares both in sailing and in trying to establish a secure base in the Smith Sound area, Leigh Smith's cruise to Franz Josef Land and the discovery of Eira Harbour were comparatively effortless. "The question now," Nares asked, "was, would it be possible to get there in future years."

"[I] think it [will] be," Nares answered himself. "But at the same time great caution was necessary in pronouncing judgment on other attempts. Even if Mr. Leigh Smith did not again start for that region, he was certain to have many followers in his footsteps, and if they did not prove so successful, no fault should be found with them. Ice navigation was not to be played with, and success was not always certain."[2]

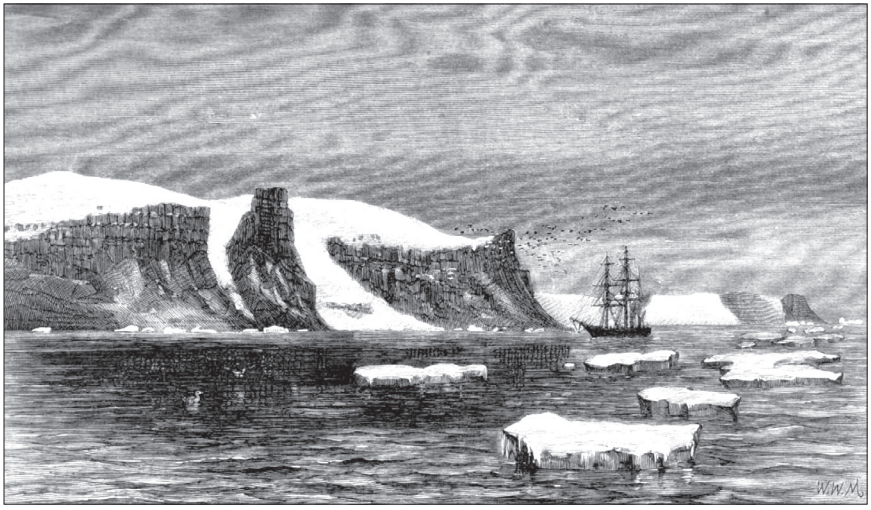

Fig. 39. Eira *at Cape Crowther. One of W. W. May's sketches to illustrate Clements Markham's talk to the RGS in 1881 (courtesy Hancox Archive).*

Even with these wise cautions, the discovery of the protected maritime shelter of Eira Harbour especially excited Nares. "If a good base could be once established, expeditions might go on in confidence."[3] Leigh Smith's report on the presence of polar bear and walrus meant ready sources of meat, furs, skins, and rope, both for expeditions exploring towards the pole as well as for explorers cut off by ice and forced to overwinter. Bears also indicated the presence of the seals they hunted, another potential source of food for both dogs and men.

Robert Etheridge, president of the RGS (and another individual now with an island in the archipelago named for him), was at that moment attempting to classify the fossil collections returned by Leigh Smith. The fossil wood collected in Franz Josef Land appeared to be a species of pine from the Cretaceous period, and as such some 100 million years old. This new fossil data connected Franz Josef Land with primitive forests that once spanned much of the northern hemisphere.

The big news of the evening, however, was passed along in the discussions by Admiral Sir Erasmus Ommanney, one of the many retired officers with Arctic experience who were regulars at meetings of the RGS.

As interested as he was in the 1880 expedition, Ommanney was equally pleased that Leigh Smith now planned another expedition to Franz Josef Land in the summer of 1881. He then paid Leigh Smith the considerable compliment of expressing his conviction "that the name of Mr. Leigh Smith would be handed down to futurity as one of the great Polar explorers of the Victorian age."[4] Albert Markham was in no doubt of it when he wrote to Leigh Smith the previous November: "I do hope you will follow up your successes of this year, by the achievement of even a greater one next year.… I should like to have a good long talk with you about Franz Josef Land, and better still be your companion in your next voyage!"[5]

By the conclusion of the meeting, the considered opinion of the RGS was that future polar exploration should thereafter be prosecuted from two different directions: from the area of Smith Sound – which even thirty years after Kane's optimistic assessment was still luring explorers into its trap and would soon see the magnificent disaster of the Greely expedition; and from Leigh Smith's newfound Arctic staging grounds of Eira Harbour. With regards to the latter place, Etheridge's concluding remark was also the evening's most prescient: "Without wintering in Franz-Josef Land, it would be impossible to determine whether that route could be followed or not."[6] In due course – but certainly not by design – Leigh Smith would provide the RGS with an answer to that question.

Almost exactly two years later, at a meeting of the society on February 12th, 1883, Clements Markham again provided the written account of a Leigh Smith expedition to the Arctic. This time, however, it was Dr. Neale who stood at the podium to read Markham's words in the place of the explorer himself, who was once again indisposed and unable to attend. The RGS president remarked on how well-known Leigh Smith was to them all – in possession as he now was of the Society's gold medal for exploration – even though several of the members present had never met him personally or had ever seen him at a meeting of the Society. The stated reason for his current absence was an incapacitating cold.

If this struck the members as a bit odd, given that Leigh Smith had just survived one of the great Arctic adventures of all time, no one let on. Perhaps this was because, this time, the expedition to Franz Josef Land that Markham documented and Neale read equaled any adventure to that point in history of polar exploration. It would rival the escape of Nansen

and Johansen in 1896 and the voyage of Shackleton and his men in the *James Caird* in 1916.

The expedition began, once again, in Peterhead. Leigh Smith boarded *Eira* at the far northeastern Scottish port on the 14th of June, 1881, along with a crew of twenty-four. His goal was to sail for Franz Josef Land, which he now knew to be a geographic maze. It was his intention to establish a formal base camp at Eira Harbour, and then to follow up the successful 1880 cruise by pushing *Eira* deeper into that maze, perhaps all the way to the North Pole.

It had been a long winter of refitting the ship at the Stephen & Forbes yard at Peterhead, with Leigh Smith supervising the operations by correspondence from London to William Baxter, his agent in the northern port. The 1880 expedition had attached Baxter's name to a bay in Alexandra Land, in between two capes named one for Stephen and the other for Forbes. A small bay further north along the coast had been named for *Eira*'s engineer, named Essen.

In the fall of 1880, Baxter found himself as stuck between these characters as was his namesake bay in Franz Josef Land. Baxter was none too pleased with the condition of *Eira* when Essen left the ship after the expedition. He also complained to Leigh Smith that Stephen & Forbes were not fulfilling their agreement to service the ship.[7] Baxter advised Leigh Smith not to pay Essen's engineer's gratuity. "The ship was left in most abominably bad order as [Captain] Lofley admits and I don't think you should throw away money to undeserving men."[8]

But Leigh Smith presumably paid off the inept and, according to Baxter, inebriated engineer. Whatever his faults, Essen had made enough of an impression to have his name attached to a bay in Franz Josef Land, and its geographic proximity just north of Baxter's own bay must have irked Baxter to no end. "Essen might have been civil when sober but he was a most careless and faithless servant to you," Baxter writes in January.[9]

Baxter went even further – and overstepped the mark – when it came to the results of the expedition. He was adamant that Leigh Smith take full credit for *Eira*'s success at the meeting of the RGS. He wrote that David Gray would even come south to London if Leigh Smith would put in an appearance at the January meeting.

> [Gray] quite agrees with me that your achievements in the *Eira* should not be allowed to fall to the ground and kept concealed unless you yourself specially desired. Had Captain [Albert] Markham done half as much he would have proclaimed from the housetops. No fear of his candle being put under a bushel and you, well excuse the liberty I take in saying you do not give yourself justice unless you are represented at the annual meeting of this Society. Everyone admits the importance of the *Eira* cruise, its real work and great results and I for one will feel disappointed if the same is not put prominently before the Public & the world through the Meeting of the Geographical next month.[10]

Baxter seems to have realized that he might have taken too many liberties with these comments. His insult of Albert Markham came at the exact moment Markham was praising Leigh Smith to the skies and Markham's influential cousin Clements was writing up the results of *Eira*'s 1880 expedition for the *Geographical Journal*, as well as readying his talk before the January meeting of the RGS.

There was no response from Leigh Smith to Baxter's plea, although the impertinent letter must have brought forth many of the reasons why Leigh Smith instinctively recoiled from public appearances. When no reply was forthcoming even weeks later, Baxter dispatched a brief note with the "hope that I said nothing displeasing to you in my letter and that your silence is not in consequence of its contents."[11]

Leigh Smith's conspicuous absence from public acclaim was again on display the following spring, when the French Geographical Society voted him a medal for his work in the Arctic. As the General writes in his diary, Leigh Smith "begged to be permitted to decline the invitation of being present on the occasion." Leigh Smith did not give a reason to the society for his wish, but the General made it crystal clear: "he dreads such public ceremonials more than ice.…"[12]

W.J.A. Grant had already sent his congratulations on the French decoration, remarking that he was "very glad that the French, at any rate, have come to the fore in the shape of a medal. I fancy the [Royal] Geographical [Society] must feel rather ashamed at letting a foreign country

be the first to show any appreciation of what you have done: anyhow they will no doubt give you the Gold Medal after next cruise, whether it be successful or not."[13] And Grant entirely sympathized with Leigh Smith's reluctance to travel to France to receive the honor personally, writing that "nothing would induce me to read a paper in English, much less in French.… It is an awful grind writing those things."[14]

Whether or not spurred on by the French award, the Royal Geographical Society hastened to award its Patron's Medal to Leigh Smith at its anniversary meeting in the hall of the University of London on May 23rd, 1881. The gold medal was awarded "for important discoveries along the south coast of Franz-Josef Land, and for previous geographical work along the north-east land of Spitzbergen."[15] The award placed Leigh Smith in select company in the polar fraternity, alongside such lights as the Rosses, Robert McClure, Elisha Kent Kane, and Leopold McClintock. It also raised him alongside his contemporaries in the discovery and exploration of Svalbard and Franz Josef Land, men who had already received a gold medal from the society: August Petermann, A.E. Nordenskiöld, and Weyprecht and Payer.

Again, Leigh Smith searched for and found reasons not to be around when a high honor was bestowed upon him. Clements Markham accepted the medal on his behalf.

Eira had been dry-docked at Peterhead in mid-November, 1880. Lofley wrote to Leigh Smith that the grounding in Norway would require repairs to the ship's false keel, a new stem plate and repairs to her ice plates.[16] When Lofley got a look at the hull, the damage was not as bad as he had feared. "The main keel was a little chafed, so we have taken a piece out and will let a piece in before the false keel is put on, as we think it will be better in two pieces then putting one piece of thick false keel on. There is no other marks about the ships Hull [*sic*]. I see she will be better with several more ice plates as the ship strikes the ice bow down."[17] In addition to these repairs, Leigh Smith asked Lofley to have another water closet constructed in the forward part of the ship.

In between these routine repairs and throughout the winter and into the spring of 1881, Leigh Smith, Baxter, Lofley, Forbes, and David Gray were in continuous discussion over the shortening of *Eira*'s masts. They were shortened gradually, cut down in stages as the handling of the ship

was tested. The bowsprit was left as it was. The final cut-downs were made and the modifications complete in late April. There was, as well, international interest in the design and construction of the *Eira*. The Dutch Royal Navy asked for the ship's specifications to see if a similar ship could be used in their Arctic work.

Throughout March and April, 1881, as Leigh Smith dodged the ceremonies that sought to decorate him, his ship was provisioned as it had been for the 1880 expedition, with hundreds of pounds of compressed beef and mutton to go with nearly half a ton of boiled beef and a ton and a half of vegetables in tins and a full complement of spirits. Besides the 200 tons of coal to be carried, there was only one more major item to load on board the ship, a custom-made storehouse. The storehouse was built by Forbes along the lines of similar huts placed in the Davis Straits by whalers in the event of a shipwreck and forced overwintering in Greenland or Baffin Island. Leigh Smith planned to erect the storehouse at Eira Harbour, the first permanent structure at a place he now clearly intended to demonstrate as the best base for all future British attempts to explore northwards from Franz Josef Land.

Part of that demonstration would revolve around the killing of as much wildlife as possible to show the riches of the new base camp. Lofley was arming *Eira* to the teeth and shared his strategy with Leigh Smith in April: "I am also getting six rockets the same as the Dundee ships uses for killing whales.… I think with the two whale boats and the two walrus boats we shall manage very well and be able to take a whale if we get the opportunity. I am getting seal clubs, and I think we should be better with another rifle or two – do you think we shall require any more Henry Cartridges there was only about two hundred used the last voyage."[18]

Baxter and Lofley also replaced Essen with a different chief engineer, an Aberdeen man by the name of William Robertson. This was a fortuitous hire on many levels, as Robertson possessed a long-held desire to visit the Arctic and when he finally returned home two years later wrote an extended account of the expedition. Though Robertson's account of the second *Eira* expedition would not see the light of day until the twenty-first century, it serves to confirm the impression of Leigh Smith as an even-tempered leader set on scientific exploration but not at the expense of the health of his crew.[19]

Robertson came on board *Eira* on June 9th, 1881, having signed for an Arctic exploration cruise of four months. He found the ship less a yacht than a kind of hybrid whaler, "a trim-built steamer of one hundred and eight tons register – fully rigged and equipped with all the boats required for whaling and walrus-hunting. It was propelled by a pair of engines of 50 NHR, with ample boiler power, a great consideration in vessels for Arctic travel."[20]

As the final preparations were made on board *Eira* in early June, and prior to his departure to meet the ship at Peterhead, Leigh Smith called on the General and his family. "He looks stout and well – but is getting grey and slightly bald," the General writes of the now-fifty-three-year-old man. He was looking for a place of peace and quiet before the expedition, so no dinner party was thrown for the suddenly well-known and decorated explorer. He stayed for two days, "full of kindness and geniality."[21] And then he was off.

On Tuesday, June 14th, *Eira* slipped from Peterhead Harbour, as Chief Engineer Robertson recalled, "amid ringing cheers from the crowds on the quays and jetties."[22] *Eira* fell in with the ice at 72°45′ N, 17°20′ E. By the end of June, the ship was off Novaya Zemlya, cruising along the edge of the ice, searching for an opening to the north. Finding no ice-free corridors, an attempt was made to pass through the Kara Straits and enter the Kara Sea, but this also failed.

Not until July 13th did an opening present itself at long. 46°08′ E, where *Eira* found some maneuvering room in an area of rotten ice. As they progressed north, the ice became thicker and many large floes were left in their wake, including a fifteen-nautical-mile-long behemoth that took the ship three hours to gain. When their passage was blocked, the crew broke out cotton gunpowder to break through.

Ten days of constant battle with the ice brought *Eira* to its destination. On July 23rd, Leigh Smith once again saw the Franz Josef Land cape he had named after the General. They had arrived back in Franz Josef Land along the southwestern shore of Alexandra Land. The coast to the west was open, so Leigh Smith wasted no time in exploring further west than he had been able to in 1880. They found that Cape Ludlow was indeed connected to Cape Lofley, the furthest point yet seen in Franz Josef Land. Between the two capes, then, was a bay about the same size as

Gray Bay. If they had been able to cruise just a few nautical miles further to the northwest, they would have reached the extreme western limits of Franz Josef Land, at a point Frederick Jackson would name Cape Mary Harmsworth during his polar expedition fifteen years later.[23]

Soon the ice floes around Cape Lofley began to hem in the ship, so Leigh Smith made for the southeast and the relative safety of Gray Bay. Inside the bay, the waters were calm and the sun was out. On shore, above the ship, a prehistoric raised beach could be seen, now nearly one hundred feet above sea level. Columns of basalt rose even higher, nearly one thousand feet above the bay. Flowers could be seen on shore. Nesting birds filled the bay-side cliffs. Neale counted thirteen separate species of birds, including Arctic terns, eider ducks, burgomeisters, kittiwakes, and a snowy owl.[24] Walrus lounged on nearby floes. It was a vision of an Arctic paradise, and the crew of *Eira* wasted no time in transforming it into a butcher shop.

As recounted by William Robertson, the walrus-hunting boats were silently launched and as silently rowed into position as near as possible to where the walrus lounged in the sun "on a piece of ice not larger than the floor of a middle-sized room.… The only vulnerable part of this animal's body, is the back of the head, and if you manage to plant a bullet there, it is instantly fatal. To attempt to shoot them, on any other part of the body or head, is only a waste of ammunition, the thickness of the skin being about an inch, besides the layer of blubber, on an average two inches."[25]

Seventeen walrus were immediately dispatched and the men began the grim work of cutting up the carcasses. The skin, blubber, and ivory tusks were removed and the remainder of the carcass left behind, hopefully to attract polar bears, which would then in turn be shot and skinned. The blubber was then removed from the skin, cut into small chunks, and stuffed into the holding tanks on board *Eira*. The skins were salted and rolled up into the hold and the tusks extracted from the skulls and boiled clean. With a brief excursion to the vicinity of nearby Cape Crowther, where another thirty-five walrus were killed, *Eira* remained in Gray Bay for over a week, until August 2nd. A visit to David Island resulted in the collection of more fossil wood.

Soon after, *Eira* left Gray Bay and steamed towards Eira Harbour, which Leigh Smith found blocked by ice. However, icebergs moving down

Nightingale Sound had cut paths through the fast ice and allowed *Eira* the maneuvering room to explore northwards. The open lanes of water soon closed, and *Eira* retreated to Bell Island on August 6th.

There, on the edges of Eira Harbour, the crew set to work erecting the large storehouse that had been specially prefabricated at the Stephen & Forbes yard in Peterhead. Christened 'Eira Lodge,' the crew celebrated its successful construction with a dinner on board its namesake ship followed by a concert and ball inside the hut itself, where "on that lone bleak spot our songs and choruses rang merrily out."[26] Dinners, concerts, and balls; Leigh Smith had successfully brought his upper-class idyll from the salons of London and the rolling countryside of East Sussex to the most remote corner of the high Arctic.

As *Eira* steamed around Mabel Island and through Bates Channel into Günther Bay on August 15th, the remarkable Victorian idyll was nearing its abrupt end. In thick weather, *Eira* steamed towards Cape Flora, which Robertson called "a better field for the collection of plants and fossils."[27] There, at 9 p.m. on the evening of the 16th, the ship was made fast to the fast ice about three nautical miles east of the cape. Strong breezes swept along the coastline and, on Wednesday, August 17th, the captain ominously notes in *Eira*'s logbook a "number of bergs in sight to the Eastward."[28]

Leigh Smith went ashore near Cape Flora, and then tried to find a path eastwards in the hope of locating any traces of the lost *Jeannette* expedition. The *Jeannette* had been crushed by the ice just as *Eira* was departing Peterhead for the 1881 expedition, and resolving the fate of the men of the *Jeannette* was very much on Leigh Smith's mind as he explored the islands of Franz Josef Land.

Finding the way blocked by ice, *Eira* continued to be moored to the fast ice east of Cape Flora, bows facing westwards, while Neale and Leigh Smith occupied several days in scouring the surrounding cliffs for fossils and plant specimens and the crew dredged the waters off the cape to bring up samples from the bottom sediments. The weather was calm, but there were definite hints of impending disaster. The captain's log on Friday, August 19th, notes the "pack ice close round the ship."[29] Apparently anticipating more of the same station-keeping, he roughed out the entries he expected to make for the 20th through the 22nd. But there were to be

Fig. 40. Eira *foundering, August 21, 1881, off Cape Flora, Franz Josef Land (courtesy Scott Polar Research Institute, University of Cambridge).*

no more entries and by the 22nd the *Eira* was at the bottom of the ocean just off Cape Flora.

On Sunday morning, August 21st, the calm and sunny weather was still holding. Over the course of several days, the fine weather and calm seas had lulled the crew into a false sense of security in their extremely exposed anchorage. When the morning tide turned, it brought with it the offshore ice. Quickly, *Eira* was pinned between the offshore ice and the fast ice to which it was moored.

The movement was so sudden that it took Lofley by surprise, and by the time he realized what was happening it was too late. As Robertson recalled, "some material part of the hull had been opened, which was beyond any pumping power we had to keep the bark afloat."[30] There was no chance to get the ship out of its trap. A grounded berg protected the hull

from more damage for a short time, but when it suddenly gave way a plank of offshore ice went straight through the hull below the foremast.

The pumps were started but, as Robertson knew immediately, they would not be able to keep up with the incoming seawater. *Eira* heeled to port as all hands turned to removing everything they could from the ship before it went down. The men used the steam winch to extract hundreds of pounds of stores from the hold before seawater drowned the boilers. "Fortunately," writes Robertson, "the lockers on the cabin floor were full of stores, the aft-hold being in a few minutes filled with water. These places were soon emptied of everything, many willing hands passing the goods along on to the ice, sufficiently clear of the ship."[31]

Ice sheared off the jib-boom as the *Eira* settled into the sea. Everyone was ordered off the ship. For a few moments, the lower yards caught on the surface of the ice and righted the ship, by holding her masts above water. Then they, too, snapped upwards with a loud crack, to be followed by the topsail and topgallant yards. But it was four hours more before *Eira* slowly settled onto the bottom in about eleven fathoms of water. The depth was not even deep enough to contain the entire ship. The fore topmasts continued to show above the surface of the sea.

Looking despondently down through the crystal-clear Arctic waters, the men could see the ship lying on the bottom, almost as if in an aquarium. From this bizarre and helpless point of view, they could see no damage to the hull. But it hardly mattered now. Instead, the profound shock of realization hit the men that their only way home was now close enough to touch the tops of the masts, yet the ship itself was gone forever. "Each man looked at his neighbor, and the strained set looks on the faces, indicated that thoughts were busy, though tongues were silent."[32] As they gathered to look down at their former home, the feelings of the crew were unanimous: "She's awa.'"[33]

And with that, the stranded expedition now faced a winter in a place where no human had ever lived before. It was now that Leigh Smith had perhaps his finest hour. With the ship gone, some of the crew considered that it was now every man for himself. Leigh Smith was having none of it. "What is all this grumbling about I can do better without you than you without me; will you act just as if you were on board ship and I will do my best for you all."[34] With that, a cheer went up from the men and it was

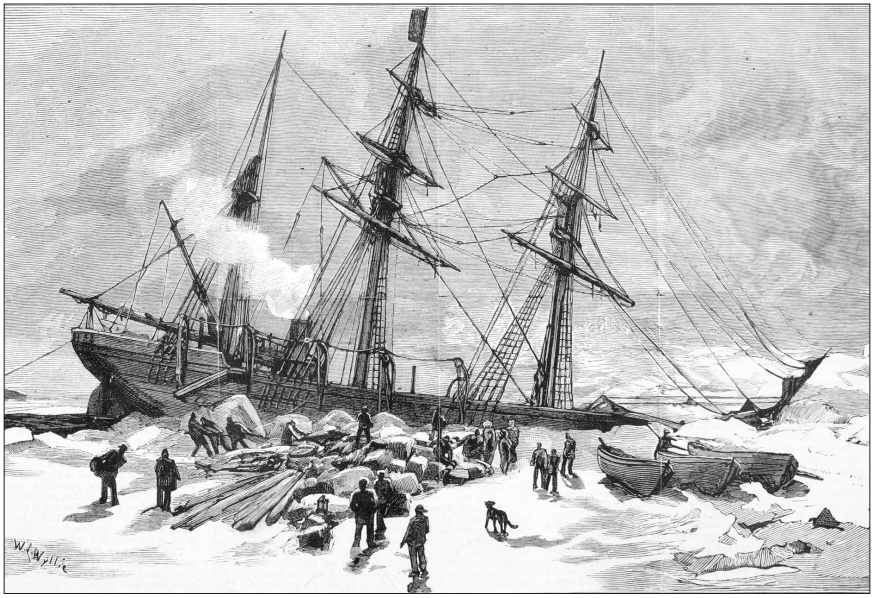

Fig. 41. The sinking of the Eira*, August 21, 1881 (courtesy Scott Polar Research Institute, University of Cambridge).*

resolved that Leigh Smith was still in charge of the expedition and that his orders would still come down to the crew through the captain.

With the paramount problem of discipline overcome, the expedition still faced long odds. If they survived the winter, they would then need to find a way to get their small boats across several hundred nautical miles of broken surface ice and then across a large stretch of open ocean if they wanted to see England again. After "a very meager dinner, and a glass of grog," a tent was put up on the ice, consisting of spars and sails hurriedly cut away from the sinking ship.[35] A floor was made from planks found floating on the surface. The men lit a fire and made tea. Leigh Smith himself sat down on the ice and, for the first time in his Arctic explorations, began to make notes. "Then after a good supper, no one having eaten anything since breakfast, all turned in except those on watch."[36]

The outlook was daunting but far from hopeless. The ship had gone down so slowly that the men had salvaged nearly everything that could be gotten off. The haul was a large one: nearly a ton of cooked and compressed

meats, over 3,000 pounds of vegetables, 288 small tins of consolidated soups, 80 pounds of biscuits and another 80 of tea, to go with a cask of sugar and a half cask of molasses, 14 pounds of corn flour, 200 tins of milk, 60 tins of cocoa milk, to go with 75 gallons of rum, 18 bottles of whiskey and another 18 of sherry, 12 bottles of gin and 12 of brandy, 60 bottles of beer and 72 bottles of champagne. Robertson notes as well that a flute, a whistle, a triangle, and a banjo were salvaged. To complete the band, someone soon made a drum.

With the exception of the cabin boy and Leigh Smith himself, all of the other twenty-three men smoked, so when a supply of tobacco was discovered that would allow each of them about a half-pound a month during the winter, there was general rejoicing. Unfortunately, the smoking pipes had gone down with the ship, so the men improvised and, as Robertson writes, "the smoker's ingenuity showed itself, and some of the pipes made were worthy of a place in a museum."[37]

Eira had been outfitted to survive two years in the Arctic. Since the wreck had occurred barely two months out of Peterhead, the ship was still stuffed with supplies. Moreover, they hadn't wrecked in a completely unknown or remote area; instead, the wreck occurred close to Cape Flora, along a shoreline they already knew well. Ice prevented the small boats from reaching the new storehouse at Eira Harbour but, all things considered, they were in comparatively good shape.

There were so many supplies lying about on the ice that Leigh Smith quickly marked all of the compressed meats, along with a quarter ton of soup and bullion, 16 gallons of rum, 12 pounds of tea, and 50 tins of milk for the sea journey they would have to make as soon as the ice began to move the following summer. To these supplies the crew added 800 pounds of cooked walrus meat. All of these would be placed in reserve and, if at all possible, none of it would be touched throughout the winter and instead saved for the escape in the small boats.[38]

The following morning, Monday, August 22nd, the crew rose early from their cold, uncomfortable berths on the ice to begin the process of transferring the tons of supplies lying about on the ice to the shore. Once everything was carried ashore using the small boats, the tent was taken down and then erected on land at a spot approximately three miles to the west and about twenty feet above sea level on the raised beach at Cape

Flora. All of the supplies had likewise to be lifted from the stony shore and carried up onto the raised beach, a back-breaking exercise.

Their new home was covered with moss and flowers. A small freshwater pond was nearby. Robertson thought the yellow flowers looked like buttercups. Two unlucky polar bears wandered past the strange scene and were promptly shot and killed and added to the survival stocks. On Tuesday, the men brought the remaining spars that could be salvaged from the ship and then proceeded to shoot as many guillemots, or looms as Leigh Smith called the ubiquitous birds, as they could.

Five boats had been saved from the wreck: two whale boats, two walrus boats, and a gig, the latter a long and narrow general work boat. On Wednesday, another attempt to reach Eira Harbour in the boats failed. There was now simply too much ice to get the small boats through. The men returned to Cape Flora and continued collecting driftwood and shooting Brünnich's guillemots.

Since the tent would not provide enough shelter to keep two dozen men alive much beyond the end of August – and in any case the wind at the exposed cape threatened to carry it off – a new hut was constructed at Cape Flora. The loose stones in the raised beach formed the walls of what Leigh Smith christened Flora Cottage. *Eira*'s spars and sails provided the frame of the roof as well as the roofing and the abundant turf could be used to chink up the walls. "Everything," writes Robertson, "was done under the personal supervision of our worthy commander, Mr. Smith."[39]

When finished, the interior of the new hut measured thirty-nine feet long by twelve feet wide by four and a half feet high. During the sixteen days required to build the hut, the men lived in the drafty, freezing tent. The winds were now so strong on the cape that in early September one of the boats was blown clear into the water, from which it was just barely rescued from being crushed in the ice. The men were accordingly extremely happy to occupy their new shelter. Eighteen of the crew moved into one end of the hut, while Leigh Smith, the doctor, and the ship's officers took over the other end. They were separated by a central kitchen that served also as the area for the polar bear watch.

As Robertson writes:

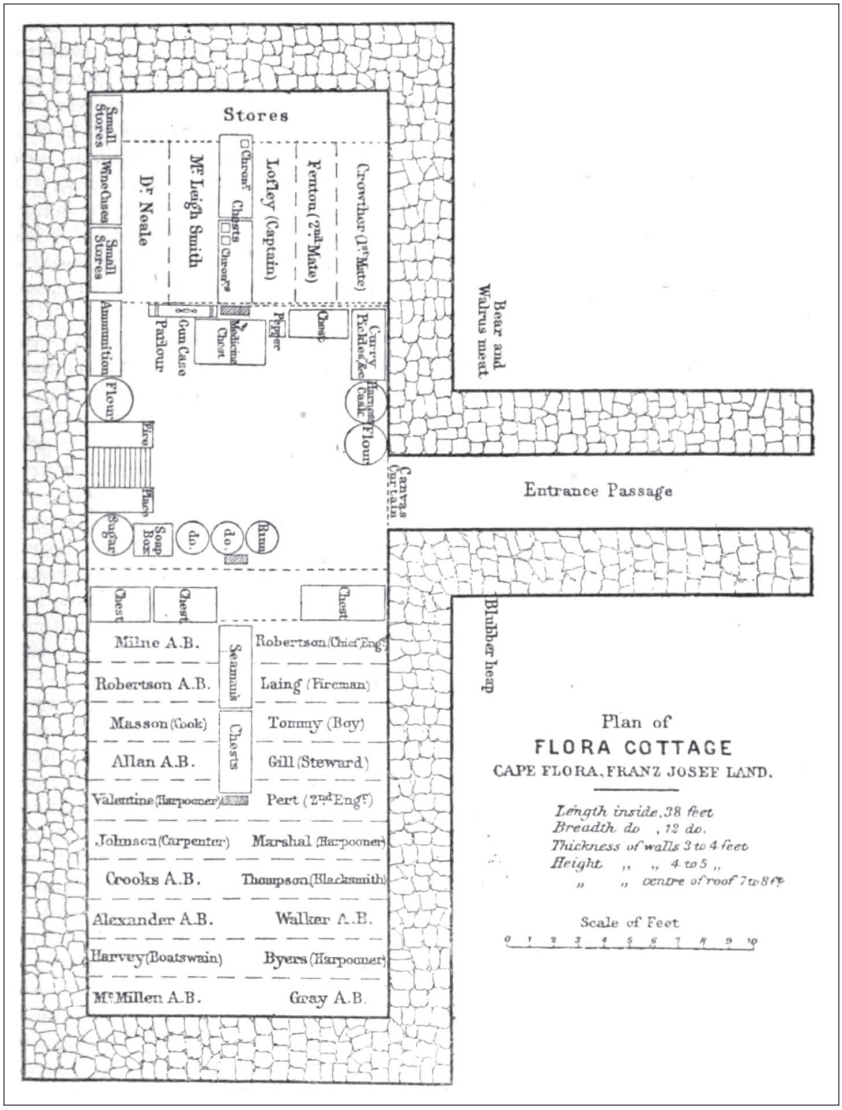

Fig. 42. A sketch of Flora Cottage (from Markham 1883).

> It was lit by a sort of lamp called an 'Ekeema,' the construction of which consisted of a tin dish filled with blubber oil, canvas wicks giving the flame. It gave a fair light, but was exceedingly dirty, and afterwards a few small lamps were made, which were more useful for reading, card playing, mending cloths, etc. As there was no seating accommodation, everything had to be done in our beds. The kitchen was about twelve feet square, not a very large place to work in. We had two or three trials of stoves for cooking, but all were failures, being too small and too smoky.[40]

The stove eventually used was constructed from stones and turf blasted from the now-frozen ground with guncotton, and then fortified with planks and sheet iron. Besides the foodstuffs and boats saved from the ship, the men had also managed to salvage virtually all of their bedding, along with three chronometers, two clocks, two sextants, a thermometer and barometer, six rifles and two guns with ammunition, and the seaman's chests and a medicine chest. Surveying his predicament in early September, Leigh Smith knew that there were much worse ways to settle in for a winter at lat. 79°56′ N.

Leigh Smith instituted a daily regime designed to keep the men both well-fed and active throughout what promised to be a long and sunless winter. His writings during this period of shipwreck and excitement are some of his rare extended words to come down to us, and they reveal a man completely free of drama, at ease with routine, and content only when everyone had a satisfying daily ration of deep-fried dough, rum, and walrus stew:

> We breakfasted at 8 A.M. and had about 10 lbs. of bear & walrus meat cut up small and made into soup with some vegetables, it was boiled for about 4 hours. Each man had about a pint of tea with sugar & milk. We dined at 12:30 and had about 15 lbs of bear & walrus meat boiled up with vegetables made into soup. Each man had a "dough boy" made with a ¼ lb of flour & boiled in the soup. Each man had a small glass of rum at 4 P.M. except on Saturdays when he had a large one at 6. We had tea at 5 P.M. which consists of 10 lbs of bear & walrus meat made into

> soup with vegetables and a pint of tea for each man. We used about 10 lbs of vegetables a day. When we could afford it we increased the quantity of bear & walrus meat. The meat was cut up and weighed or measured out in the afternoon. The water for cooking was got by melting ice or snow during the night. The ship's cook (one man, named Masson, along with a cook's mate, a boy of 16 from Peterhead "both capital fellows") did all the cooking and worked from six a.m. to six p.m. He was assisted by the cook's mate, who cut up the blubber, wood, etc. Captain Lofley made the "Dough-boys." The Doctor served out the food into 25 tins made from old provisions tins. The men's tins were handed in to them & they sat up in bed & eat their food like a lot of blackbirds in a nest. On Sunday morning at 9:30 the ship's bell rang for prayers. The Doctor officiated.[41]

The calculations here suggest that each man was taking in over a pound of stewed fresh meat and about three-quarters of a pound of vegetables a day. Combined with tea, milk, sugar, and rum, the fare was excellent and stands in stark contrast to the starvation and misery that would attend the last months of the U.S. Army's First International Polar Year expedition (1881–84). That sad episode, an attempt to reach the North Pole and conduct extensive scientific research led by U.S. Army Lieutenant Adolphus Greely, had just settled into its winter quarters on the north shore of Lady Franklin Bay on the northeastern coast of Ellesmere Island, a polar desert about two degrees further north than Cape Flora, when Leigh Smith and his companions were shipwrecked in Franz Josef Land.

The only writings from Leigh Smith himself that could be described as proper diary entries are contained in a tiny *Blackwood's Penny Pocket Book and Diary* for the year 1881.[42] It is a small daybook filled with advertisements for jewelry, hair restorer, soap, and washing machines, all evidence for the growing obsession with personal appearance and cleanliness, along with monthly mini-almanacs containing essential notations on British history, culture, and society. On June 14th, as *Eira* was readied to sail from Peterhead, Leigh Smith could be reminded that this was the same day that the Trinity law sittings began; on July 23rd, the day *Eira* made landfall in Franz Josef Land, it was the anniversary of the taking of

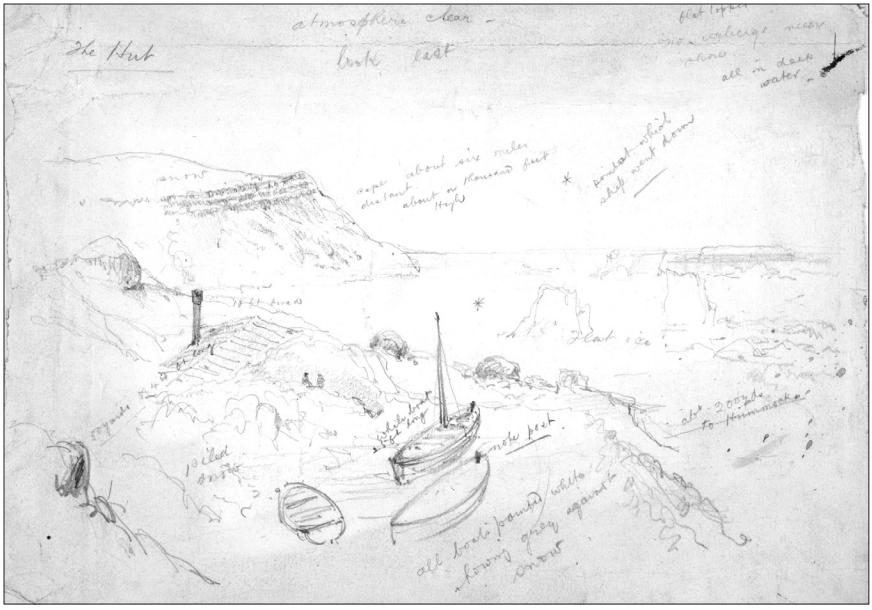

Fig. 43. 'The Hut' (Flora Cottage), one of four pencil sketches by Benjamin Leigh Smith made during the 1881–82 expedition (courtesy Scott Polar Research Institute, University of Cambridge).

'Ghuznee' [Ghazni] in 1839, during the First Anglo-Afghan War; and on August 21st, the day *Eira* was nipped by ice at Cape Flora, it was the tenth Sunday after Trinity.

Leigh Smith's own notations in the tiny book are both sparse and terse. A list of Her Majesty's Chief Officers of State shows a series of tick marks after some of the names, such as W. E. Gladstone, Lord Selborne, W. V. Harcourt, and J. G. Dodson. Leigh Smith could have been marking off people he had met, or were these people seen as possible names to be added to the nomenclature of Franz Josef Land in the event any new lands were discovered? In all the monthly almanacs, only December has a few days ticked off, these being December 12–17, the 16th being noted as the day the term ended at Leigh Smith's alma mater of Jesus College at Cambridge.

There are no notations in the daybook proper until May, when Leigh Smith writes down the occasional name and time, such as "Adamson, 7.30" on Tuesday, May 10th, or "Lady Belcher" on Wednesday, May 25th. On Tuesday, June 7th, Leigh Smith writes: "To be in Peterhead," followed by an "x" on Monday, June 13th, apparently to mark the anticipated day of sailing. There is nothing more until Friday, August 19th, when Leigh Smith writes: "Went on shore at Cape Flora with Dr. [Neale]" followed by "Went on shore with captain [Lofley] at C Flora" on Saturday and what looks to be "Ship lost" on Sunday, August 21st.

After this, Leigh Smith records the crew's progress in their winter survival in staccato phrases, for example:

August
22, Monday: "Getting things ashore. 2 bears."
23, Tuesday: "Killing looms. Bringing [indistinct] from ship."
24, Wednesday: "Killing looms. Getting fire wood."
25, Thursday: "Killing looms. Getting fire wood."
26, Friday: "Began house."
27, Saturday: "Building house."
28, Sunday: "Peat. 2 Seahorse."[43]

By the 29th, they had finished building the walls of the house, part of which had to be rebuilt during a snow storm the following day after it collapsed in the night. On September 1st, one of the small boats finally managed to thread a pathway through the ice and reach Eira Harbour, where more supplies were gathered up and brought to the new camp at Cape Flora, while the next day two other boats set out for more walrus and returned with "2 old 2 young." Four more walrus were killed on Saturday the 3rd. A two-day gale then came up from the west and north as the men gratefully moved into their new accommodations.

September
7, Wednesday: "Fine day"
8, Thursday: "Calm & Warm. 6 walrus, 1 bear. Plenty of water now to go south."
12, Monday: "Stacking wood. Flensing walrus."

The entry for Thursday the 8th carries some sentiment, with its hint of reproach that if only they still had *Eira* they would now be on their way home through excellent seas. After this, the days were noted only by the tempo of Arctic survival: when a bear was shot or ice was fetched or a new fireplace built, or whether it rained or snowed or the direction of the wind or whether the ice was in or out. Bob the dog was only allowed into the hut in the evening. As Robertson recalled, Bob would wait for Leigh Smith and Dr. Neale to retire, at which moment he would bolt to his favorite spot in the corner and sleep all night, usually with Tibs the kitten lying curled up on his back. In the morning he would be turned out once again.

On October 26th, Leigh Smith writes that the bay ice has broken up and then the next day he records that there is plenty of open water. But he did not trouble about the state of the sea at such a late date. He knew better than most that they could not have made a run for it after September. The next day, Friday, October 28th, his crew brought in five walrus killed on the edge of the ice; the following week they killed two more bears. The last bear seems to have been brought in on November 11th, and Leigh Smith's last entry is on Tuesday, November 29th, the same day his tiny daybook reminded him to "Order *Blackwood's Diary* for 1882."

Putting down his *Blackwood's*, Leigh Smith took to keeping a new 'logbook' for *Eira*. Perhaps he felt compelled to keep a faithful logbook since every time he emerged from the small hut he could see the tops of the masts of his ship sticking above the ice-covered waters, a bizarre and constant reminder of her presence as well as her absence. Captain Lofley had made the last proper journal entry on August 19th and now, three months later, Leigh Smith began what he called his "hut log." On November 28th, he recorded that the temperatures had actually risen, and were warmer than at the beginning of the month. The temperatures ranged from 17° to 51° F. The small hut with its twenty-five occupants plus a dog, a cat, and a canary suddenly felt too warm.

They were using about twelve pounds of coal each day to cook their food, and another two gallons of walrus blubber was burned to heat the hut. When the weather turned for the truly cold, the carpenter's saw had to be employed to cut the walrus and bear meat into pieces for the boiling pot. Robertson found the cold "intense. It seemed to pierce to the very

core of life, compelling us to shelter ourselves as often as possible. No amount of exercise could overcome it, the natural heat of the body gradually evaporating."[44]

They had begun by using wood to do all the cooking, but the smoke threatened to choke the crew out of the hut when the fires were lit for breakfast. The decision to switch to coal was made when the wood supply ran low in early November. Always watching the levels of his supplies, Leigh Smith noted that they began using their coal supply for cooking on November 10th and at a regular rate would exhaust it in mid-January. There was a ton of blubber still on hand, and Leigh Smith thought it might last until March when, if worse came to worst, they could collect peat from the surrounding swampy ground.

By the end of November, the stove in the hut had to be rebuilt, as it had begun to fall down and was taking down the wall behind it. Walrus blubber was now used to melt ice for drinking water. But they had shot two bears, and on the first day of December, Leigh Smith writes confidently: "All well. No one has any doubt that we shall get home all right."[45]

At home in England, however, Leigh Smith's family and friends were increasingly desperate at the lack of news from the Arctic. In mid-September, the General noted in his diary that he had just ordered half a dozen copies of Clements Markham's pamphlet on the 1880 expedition: *The Voyage of the Eira*. The next day, at a moment when *Eira* had been at the bottom of the ocean for three weeks, he noted that Leigh Smith's sisters Nannie and Barbara had been in contact over whether they should ask Markham's opinion whether their brother's ship could be successful, given the conflicting accounts of the state of ice in the Arctic that summer. By the end of the month, the General writes plaintively that: "We look in the newspaper in vain for tidings of Ben & the *Eira*."[46]

A few days later, the General writes that he was starting to get anxious. When the anniversary of Leigh Smith's 1880 arrival at Lerwick passed on October 11th, the General was certain something had gone wrong: "He has I fear met with obstruction of some sort – either from the ice or from injury to the machinery of his vessel."[47]

By the end of October, when still no word had arrived from the north, the family and its influential friends moved into action. His cousin Valentine Smith, a man who was orders of magnitude wealthier than Leigh

Smith himself, began to make inquiries. He telegraphed Baxter in Peterhead for an informed opinion as to the chances for survival of *Eira* and her crew. Sir Henry Gore-Booth, an avid explorer who was also 5th Baronet of a family of landlords in Sligo in Ireland, offered to make a search for Leigh Smith the following summer. Gore-Booth had apparently made the pledge after a dinner with Leigh Smith in the spring of 1881.

Gore-Booth was true to his word. The General writes that Gore-Booth "wanted to go with Ben on his present voyage but failing in this he built up an ice-going vessel of his own."[48] Gore-Booth telegraphed Mack Giæver, an agent in Tromsø, to ask whether any of the walrus hunters had seen *Eira* around Svalbard or Novaya Zemlya over the course of the summer.

The absence of *Eira* was also beginning to make national news. The day after Gore-Booth's offer, the General noted a story in the *Athenaeum* remarking on the non-arrival of the ship. A few days later, Baxter's reply to Valentine Smith arrived and included the thoughts of David Gray. Gray believed that a vessel loaded with provisions should be sent to *Eira*'s relief the following spring. Willie Leigh Smith left his farm the next day to confer with Valentine Smith on the best way to proceed.

In the meantime, Gore-Booth received a reply from Tromsø. The only sea hunter to have seen *Eira* that summer was Captain Isak N. Isaksen of the *jakt Proven*. On June 30th, the *Proven* had come across *Eira* off Matochkin Shar, a strait that splits the Russian archipelago of Novaya Zemlya in two. Isaksen learned that, despite the condition of the ice, Leigh Smith intended to force his way northwards. At the place where the two vessels met, the ice was lying six miles off the coast; further north, it was lying even further offshore, some fifteen to twenty miles. When he had returned to the coast of Novaya Zemyla later in the summer, in early August, the ice had moved off and the coastline was clear. On August 16th, *Proven* was twenty nautical miles north of Novaya Zemlya and saw no ice at all. On the other hand, the east coast of Novaya Zemlya was jammed solid with ice, with heavy seas running from the north-northeast. Isaksen recalled that the ice had vanished so completely that he thought the seas between Novaya Zemlya and Franz Josef Land must have been nearly free of ice in that month and into early August.

As Giæver wrote to Gore-Booth: "If the *Eyra* [*sic*] had not got into the Pakice [*sic*] so that she has got stuck fast into it in the month of July, [Isaksen] feels certain that he has reached Franz Josef Land unhindered. He nearly thought one might reach the North Pole this year."[49]

Fortunately for Leigh Smith, Gore-Booth interpreted this letter perfectly. He discounted any suggestion that *Eira* might be stuck somewhere on the east coast of Novaya Zemlya, and did not jump at the magnificent possibility that Leigh Smith might be shivering at the North Pole at that very moment. Instead, he focused on the notion that Leigh Smith was most likely wintering over somewhere in Franz Josef Land, and would be planning to make his way south via the ship-gathering spot at Matochkin Shar the following summer, probably in July when the surrounding seas would again see a large-scale break-up of the ice.

As Gore-Booth assembled the state of the geographic problem he would have to deal with the following summer, Valentine Smith, working behind the scenes, had arranged for a letter to be sent to Lord Aberdare at the RGS, urging him to push the government to send a national relief expedition in search of *Eira*. The General was thrilled: "It is the best thing that could have happened – and now we shall I think hear of Allen Young offering to take command of the relieving vessel – but of such the naval service would be jealous – which is wrong for Allen Young knows all about Arctic exploration which is not the case ordinarily with men of the R.N."[50] Allen Young, a life-long merchant mariner and a contemporary of Leigh Smith, indeed had long experience in the Arctic, having served as sailing master on board *Fox* during Leopold McClintock's expedition in 1857 that retrieved the only written record of what had happened to Franklin. He later purchased an ex-Royal Navy gunboat, *Pandora*, and used it to explore the Arctic on his own before selling it to James Gordon Bennett, Jr., who renamed it and thus sealed its fate as the *Jeannette*.

The General wrote that it was Willie Leigh Smith who persuaded Valentine Smith to go to Clements Markham and ask Markham to write the memorial for Aberdare to deliver to the government on behalf of the RGS. In order to push the government into action, Valentine Smith agreed out of his own massive fortune to guarantee the money required to effect the rescue. That sum was thought to be anywhere from £8,000 to over £14,000, the latter sum even more than the *Eira* itself had cost to build.

"The newspapers have leaders about the *Eira* and her brave crew," the General writes on the first of December. "Nothing can be known regarding them till next summer – a weary period of suspense."[51] The following day, the General wrote to Valentine Smith himself, with his view that if the government failed to come to the rescue of Leigh Smith and his crew then all the results of his 1881 expedition might be lost and with them any discoveries he had made, discoveries which might now go to the credit of some other country exploring the same area in the future.

The General's winter of suspense was not eased in late December, when word spread in the newspapers of the terrible fate of the crew of the *Jeannette*. To ease his mind of such horrors, the General wrote again to Valentine Smith and to Willie. He proposed that the rescuers send up pilot balloons and carrier pigeons. Both could carry messages that revealed the rescuers position and their progress, so that Leigh Smith and his men would not lose heart, as it appeared had happened to the men of the *Jeannette*.

The General need not have worried. On the same day he was composing this letter, Leigh Smith and the crew of *Eira* were enjoying a Christmas Eve sing-song that included liberal rations of grog to wash down a treat of hot biscuits and butter. Lamps and candles were lit in every corner of the hut. Robertson writes that Leigh Smith gave a short, cheering speech to the men. But in his own log of Christmas Day, Leigh Smith writes only two words: "Big feed."[52] Robertson writes that New Year's Eve was more of the same but with "even greater zeal … being more of a Scotch holiday."[53] They were, as James Lamont might approvingly say, surviving an Arctic winter as proper men of leisure and means.

Throughout December, as he had since the moment of the sinking, Leigh Smith continued to keep a close watch on the food supplies. The men had consumed the last of over a thousand guillemots shot over the course of the fall and into the start of the winter. The birds were now gone from the islands, but there was enough bear and walrus meat on hand to last until March. And they still had the 900 lbs. of canned meat and 800 lbs. of tinned soups being held in reserve for the escape southwards the following summer. Chief Engineer Robertson writes that these had been "carefully stowed away, and in the days to come, even when in our direst need, the idea of touching that sacred store, never entered our heads."[54]

In addition to these, there were still plenty of vegetables along with 300 lbs. of bread and 500 lbs. of flour. The animal mascots were doing equally well. The canary was hale and singing, Tibs the kitten had grown into a cat, and the retriever Bob was busy hunting Arctic foxes while judiciously avoiding polar bears. On December 6th, Leigh Smith noted that three months had passed since the men moved into the hut. "I have never been cold in bed since we have been in the hut although the temp has been down to 22, but in the tent I was very cold. Men playing and singing."[55]

On Wednesday the 21st, there was general rejoicing that the shortest day of the winter had passed and the days would now begin to lengthen. The significant events in their Arctic sojourn all seemed to be marked on the 21st of each month: the *Eira* had been lost on August 21st; the fall equinox passed on September 21st; the sun rose for the last time a month after that; and now they passed the shortest day of the year in a light snowfall. Robertson noted that there was little to do except talk and play cards and keep the doorway to the hut free of snow and ice. The whalers were the best story-tellers, with tales of narrow escapes and great hunts. Every Saturday after supper, all of the musical instruments came out and, along with a double ration of grog, a week-concluding music festival was held. "The last item, sung in chorus, was always 'Rule Britannia,' which was lustily gone through by all."[56] Sundays were given over to Dr. Neale, who led divine services, followed by a large breakfast of walrus or polar bear curry.

On January 4th, they counterintuitively observed open water as far as the horizon, in the same month as they recorded the lowest temperature of their stay at Cape Flora: −42° F. It might have been even colder, but the thermometer was not constructed to record anything below that mark. Their bodies, however, recorded the air was so cold that you could breathe out and watch your breath fall as snow.

By Saturday, January 21st, they passed five months since the loss of *Eira* and a month since the shortest day. Leigh Smith recorded "three or four hours of very good light" and, simply, "All well."[57] Robertson writes that he had never experienced such prolonged and sustained high winds as in the two months of January and February at Cape Flora. "For the greater part of these two months, we were house-prisoners. There was nothing to

invite us out, and even if there had been such, the darkness would have rendered walking dangerous."[58]

On the 25th, they killed their seventeenth polar bear since the shipwreck, their fourth bear killed in January to go with three walrus. They now had enough meat on hand to survive until the boat journey without breaking into any of the reserve supplies they would need for that long voyage.

One Saturday night during the end-of-week sing-a-long, the laughter and noise stopped as the men heard Bob engaged with a polar bear just outside the hut. When the dog retreated toward the entryway, the men dispatched the bear and dragged it through the opening where it was carved up and skinned on the spot. On another occasion, one of the men was almost killed as he emerged from the entryway and just ducked out of the way of the massive paw of a lurking bear. Robertson also recorded the time when a bear got onto the roof of the hut and the men in the crouched bunks watched the massive paws depress the canvas roof as the bear padded across it. It was soon shot and added to the larder.

Their spirits were lifted further in early February with the arrival of the first bird, which Leigh Smith recorded as a snowy owl. This lone traveler was followed ten days later by a flock of dovekies and another snowy owl. On Tuesday, February 21st, another milestone day, Leigh Smith wrote "Sun back today but the sky was cloudy & we could not see it. 6 months since the ship lost.… All well."[59] As the dim sun began to return to the north, Bob the dog silently led the men to a hummock where they found and shot three walrus, providing food and fuel for weeks. After a long day on the ice butchering the walrus, the men "spent the rest of the evening very pleasantly, our worthy commander giving us the means to spend a few jolly hours, which showed us that for a time his anxiety was at rest."[60]

It was only now, more than six months after the sinking, that Captain Lofley began to express his remorse at the loss of the *Eira*. On February 24th, Leigh Smith writes that the captain had remarked: "I never thought the ship would go or I should not have stood on the floe looking at the after stern post." A week later, Leigh Smith writes that the captain told him that the *Eira* "would have been quite safe if the berg had not given way & the ice come in from the east."[61] The captain had clearly been turning

the whole event over in his mind throughout the long winter. Yet only now did he begin to give voice to his feelings of regret and professional responsibility for the safety of a vessel anchored in as exposed a position as a ship could be.

In March, female polar bears began wandering into the encampment. All of the bears killed over the winter had been males. By March 16th, it was warm enough for one of the men to begin entertaining the others by playing a cornet. Indeed, the temperatures took a dramatic turn upwards in March. Leigh Smith had been recording the monthly means since the establishment of the hut, and they read as follows:

Oct:	+8.95
Nov:	–1.25
Dec:	+4.79
Jan:	–25.1
Feb:	–26.7
Mar:	–1.4
Apr:	–1.25

Leigh Smith recorded the sun falling warm on his face on March 19th. Two days later, the spring equinox arrived, seven months after the loss of the ship. Another snowy owl paid a visit, then another. The men put a skylight into the hut. All was well.

Throughout March and April, the men killed more and more guillemots as they began returning to the Arctic. The arrival of the birds allowed the harpooners to climb the cliffs behind the hut and scour them for birds. At the same time, there were no walrus, and the bears had become scarce and those that showed near the camp were emaciated. On April 19th, the crews' twenty-ninth bear, a very thin male, was shot and found to have canvas in its belly. By the end of the month, the men ate the last of the doughboys. With twenty-five mouths to feed, the men were going through two polar bears and an assortment of birds each week as they dutifully continued to save the tinned and preserved supplies for the boat journey.

With the first of May at hand, all eyes were on the lookout for clear water. The boats were dug out from the snow. Two of the walrus boats and two of the whale boats were now readied for a long journey through ice and open seas. None of the sails for the small boats had survived the sinking, so new sails were sewn from some table cloths – the table cloths being much lighter than the surviving canvas sails from *Eira* that had served as roofing for the hut over the winter. When the tablecloths were used up, spare shirts, bed sheets, "anything strong enough to hold wind," as Robertson writes, was pressed into service.[62] Tents were sewn from the remaining canvas to be used to cover the boats when they had to be drawn up on the ice during the boat journey.

Three of the boats were in good condition, but the fourth was worse for the attack by a walrus the previous summer. All were reconditioned by *Eira*'s carpenter, who overhauled the hulls and re-caulked the seams. "He also had to make masts and other spars out of what was handiest; the engineers and blacksmith doing everything required in the iron or brass way."[63] When the work was finished, Robertson looked at the boats and decided that "they presented a queer and motley sight."[64]

On Sunday, May 14th, Leigh Smith marked eleven months since they had departed from Peterhead. With fresh meat a constant source of concern, the men worked to make everything ready to launch the small boats at the first sign of open water channels that would lead them homewards. On the 20th, Leigh Smith noted that this was the day that the Austro-Hungarians had started for the south. He had three weeks of fresh meat left and was extremely happy when the men brought in a new bear kill, their thirty-third of the winter. On the 24th, the water was running nearer to their hut and meandering off to the southwest as far as the eye could see. It was the Queen's birthday, so the men put up flags and drank her health with champagne.

In late May, the optimism faded somewhat, as spring snow storms blanketed Cape Flora, as the open water was seen only five to ten miles offshore, and the last of the firewood was used. For the month, they had used 121 cartridges to kill three bears and 366 guillemots. By June 3rd, they were left with about two weeks of fresh meat, so they continued to scour the cliff face above the cape for more birds, shooting one hundred guillemots with thirty-one shots on Sunday, June 4th.

The following day, the captain told Leigh Smith that the boats could be launched across the ice into open water in three more days. Leigh Smith sent three men across the ice to find a path, but he was not convinced they were ready. The captain himself walked the ice in search of a road on the 6th but found no safe passage to open water. The hummocks of ice were still too rough to risk dragging the boats across them.

By the end of the week, the boats were nearly fitted out and ready to be hauled to the water. Leigh Smith hiked across to Günther Bay and found the ice there decaying rapidly. On Tuesday, the 13th, a gale blew onto the small cape, breaking up the surrounding ice. A crack in the ice appeared directly in front of the hut and the men watched as it widened to more than a mile. It was as if the door to the south was suddenly yawning open. "Now we are free," exulted Leigh Smith in the log.[65] He now planned to get underway, with admirable precision, on June 21st, another milestone day and ten months from the day of the loss of the ship.

With the ice breaking up, the harpooners were now free to bring in more walrus. Bear and walrus meat was boiled and then soldered into tins by the blacksmith. The supply of salt had run out three weeks previous, and Robertson writes that eating the unsalted walrus meat made the men nauseous.

On the 14th, a year to the day since they departed Peterhead, one of the boats was sent across to Eira Harbour to retrieve a final load from the storehouse of supplies there. It brought back a sledge and four walrus shot along the way. The boats were then stowed with the forty days' worth of provisions salvaged from the sinking *Eira*. The crew had left these alone for ten long months, even through a long winter when the temptation to sample a few treats must have been considerable. With the addition of the preserved walrus meat, Leigh Smith calculated that they had enough food to last for two whole months.

A man was now sent each day to climb the cliffs behind the hut and survey the horizon to the south. Ice was continuously breaking away from the fast ice. Belugas were observed transiting past Cape Flora. The Arctic Ocean and the skies above it were alive with life and ice in motion. The cooking pot was in continuous use boiling walrus meat for the journey south. One of the men found a 14 lb. sounding lead that had gone missing. It was melted down to make slugs for cartridges. Others climbed back to

the cliffs to collect more eggs. The whole operation, from the moment of the sinking to this day when escape was finally at hand, had been a masterful accomplishment.

The true celebration, however, waited for Sunday morning, June 18th. The previous night, a hard wind blew down from the northwest. Early in the morning, one of the men, out attending to his morning business, returned to the hut with what Robertson described as "the symptoms of having received a great shock. In broken sentences he gasped forth the joyful tidings that the sound was a sea of water, and the ice before our door was fast disappearing. 'Hurrah' after 'hurrah' ran through our dingy dwelling.…"[66]

On the appointed day, Wednesday, June 21st, the boats and the stores were taken down to the edge of the ice. Each of the small boats was christened. Leigh Smith's whale boat was named, appropriately, *Phoenix*. The other whale boat received the name *Flora*. The two walrus boats were named *Advance* and, with a nod to Leigh Smith's famous cousin, *Nightingale*. "Each boat had besides, nailed on her bow the name '*Eira*' cut out of tinplate, so that if a boat had to be abandoned, and afterwards was picked up, its identity would be known."[67]

The men sealed the hut against polar bears, leaving a few bottles of champagne inside, and on a shoreline where no humans had previously wintered, gave three cheers to the hut that had allowed them not only to survive but lay the plans for their escape. At half past nine on the evening of the 21st, Leigh Smith ordered the boats into the sea. They were 400 nautical miles or more from Matochkin Strait, the spot where Leigh Smith thought they would find the greatest chance of rescue, where the summer whalers and walrus hunters would meet to exchange information on their various courses in and out of the Arctic. A good wind was blowing, and the small fleet made off briskly away from Cape Flora.

At home in England, since the beginning of the New Year, matters had likewise not stood still. In mid-January, Valentine Smith hosted a dinner for all those concerned with the fate of *Eira* and its crew. A month later, the General noted that an acquaintance was working with the Royal Society's Francis Galton to compile lists of supplies that would be required for any rescue vessel. A few days later, he wrote despairingly that the Admiralty would not commit a single government vessel to any planned

rescue; it was only prepared to offer £5,000 towards a mission that was estimated to cost as much as £14,000. "I think that Lord Northbrook's stinginess will be attacked in Parliament by the opposition," scoffed the General.[68] Had he known it at the time, Ludlow could have added irony to injury with the fact that *Eira* had shipwrecked off the very island Leigh Smith had named for the distinguished First Lord of the Admiralty a year earlier.

By the end of February, the General along with two of Leigh Smith's surviving sisters, Barbara and Nannie, had each contributed £1,000 toward the relief expedition. By early April, Allen Young had been named its commander. He possessed of all the right qualifications: he was experienced in the Arctic, upper class, and had replaced his former vessel *Pandora* with a new vessel named *Hope*. The whole effort was given the name of "the *Eira* Search and Relief Expedition" and, with the exception of the government grant for about one-third of the cost, it would be a private affair.

On June 1st, *The Times* ran a two-column article on "The Missing Arctic Ship *Eira*," reminding its readers that Leigh Smith was still missing as he attempted to follow up his discoveries in Franz Josef Land from 1880. The note brought the public up to date with the saga, while not letting them forget the "smallness" of the government grant. For *The Times*, there were two possibilities: the *Eira* had been unable to reach Franz Josef Land and instead had been beset and carried off "into unknown space." Or, having reached the islands, the expedition had in fact reached the archipelago "and been frozen up in some bay or harbor, and compelled to pass the winter there."[69] If the ship was beset, there was every possibility that it, too, like the *Jeannette*, had been similarly crushed. "Such has been the fate of many of the early ice navigators, and, in recent times, of the *Fox*, the *Tegetthoff*, the *Jeannette*, and possibly that also of the *Eira*."[70]

If they were alive, the likeliest route for Leigh Smith and his men to escape was to take to their small boats and make for either Svalbard or Novaya Zemlya. The relief expedition would find their greatest potential for success if they waited at the edge of the ice pack for the twenty-five men to emerge from the north. The mission of the *Hope*, therefore, would be to sail for Novaya Zemlya and lay in provision depots and erect

message cairns at various points along its western coast. In all events they were to avoid the pack itself lest they fall victim to it as well.

Young would be aided by Sir Henry Gore-Booth, who along with W.J.A. Grant from the 1880 expedition, would be sailing in Gore-Booth's new yacht *Kara*. Gore-Booth had found the vessel under construction at Wivenhoe in Essex, had the planking doubled and the bows reinforced with iron, and named it after the remote sea east of Novaya Zemlya. With a crew of Scottish whalers and provisioned for as much as a year at sea, *Kara* sailed in early June, bound for its namesake waters.

In fitting out the *Hope*, Young was offered the considered opinions and suggestions of some of the best-informed Arctic hands of the time, including Nordenskiöld in Stockholm, Payer in Munich, and Commodore M. H. Jansen of the Dutch Arctic Committee. The list is noteworthy for its implicit recognition that none of the old British Arctic hands knew anything about the conditions around Franz Josef Land or Novaya Zemlya. Payer insisted that, given Leigh Smith's probable location, he would have to save himself. No ship could help him without risk to itself. Payer correctly assumed that Leigh Smith was at that moment "making preparations for leaving his ship in order to retreat to the south by means of sledges and boats."[71] Jansen, who in the survey vessel *Willem Barents* had seen the ice conditions in the area for himself in 1879, cautioned that even he did not have enough experience to know for certain what was usual and what constituted the exceptional. But from the reports of the winds and ice conditions in the fall of 1881, he did not believe that *Eira* could have reached the coast of Franz Josef Land. If it had, it had likely been grounded or crushed.

Nordenskiöld, on the other hand, having spoken directly with the Norwegian walrus hunters who operated in the area, knew that the ice west of Novaya Zemlya had largely cleared by the late summer of 1881. He was convinced that, not only had Leigh Smith made it to Franz Josef Land, but that the conditions were such that he had been able to explore much of its western coast. If *Eira* had in fact been wrecked, everything depended on exactly where that unfortunate event had taken place. If still in Franz Josef Land, Leigh Smith could try to retreat via Novaya Zemlya. If *Eira* was sunk further to the west, near the mythical Gilles Land, then the retreat would be via Svalbard, where Leigh Smith was "well acquainted

with every cove, and where he knows a large and excellent house, built for the Swedish expedition under my command, 1872–73, is to be found at Mossel Bay, latitude 79 deg. 53 min. north. This house was afterwards given by Mr. O. Dickson to the Norwegian hunters, who employ it for a common rescue depot."[72] Nordenskiöld thought it not at all impossible that the upcoming Swedish expedition to Mossel Bay would arrive to find Leigh Smith tucked up snugly in the station of his old friend. But he was equally convinced that, if *Eira* went down in Franz Josef Land, the rescuers would find Leigh Smith in Novaya Zemlya. There simply were no other escape routes.

Unbeknownst to Leigh Smith and his men as they made their final preparations for the departure from Cape Flora on the weekend of June 18–19, 1882, Allen Young was at that very moment sailing from England in the *Hope*. Henry Gore-Booth in the *Kara* had left for the Arctic as well. The General had sent a note to Young with "a few valedictory lines."[73] By July 3rd, the *Hope* had arrived safely at Hammerfest in northern Norway and procured a small sloop named *Martha* that would be used as a tender for *Hope*.

The two vessels departed Hammerfest on the 9th, coaled for two days at Tromsø, stopped at the northern telegraph station at Honningsvåg for one last communication with England, and then sailed through a gale towards the Russian Arctic. Young paused at the Russian observatory at Karmakuli on Novaya Zemlya, but when the expected officer in charge of the station still had not shown himself by July 25th, Young proceeded northwards, but not before he left behind a depot of supplies in case Leigh Smith retreated that way.

With the *Hope*, the *Martha* and the *Kara* now en route to Novaya Zemlya, it remained for Leigh Smith and his two dozen men in four small boats to navigate through several hundred nautical miles of broken pack ice and reach the edge of the ice. There they would have to cross an expanse of open ocean before picking their way through the treacherous fast ice attached to the coastline of Novaya Zemlya. And then they had to pray that someone would be there waiting for them.

On the first day out from Cape Flora on June 21st, the small fleet ran southwards for twenty hours before the pack ice forced them to stop, haul out of the boats, set up the tent, and wait for more favorable conditions.

The wait turned into more than a week until at last a narrow opening appeared in the ice. In the meantime, the bored men took out the cornet and the melodeon – a small nineteenth-century cabinet organ – and the sound of music again rang out over the ice.

By June 30th, the men were still waiting on the ice, unable to move. A rain storm drove them under their tents on one day, a gale on another. "We are all weary of this waiting," writes Leigh Smith, "and yet we can do nothing as it knocks our boats to pieces to attempt to drag them over the ice."[74] Without sledges or proper boots, any kind of serious exploring of the pack was out of the question. So they sat.

The first of July brought the first good news in more than a week. It was a bright clear morning and at 4 a.m. the boats were launched into a narrow channel in the ice and went zigzagging through the pack. The ice was nearly five feet high above the surface of the sea, and these walls often threatened to close and pinch the small boats between them. When the ice did block their way again, the men set to work cutting a passage while pushing the loose ice out of the way and, if all else failed, dragging the boats back up onto to ice to await a new lead.

On July 2nd, the men were stranded again. A survey of the boats found them much the worse for the wear of the previous day. They were banged up and leaking badly. Monday, July 3rd, dawned clear and beautiful and at 9 a.m. the men dragged the boats to a hole in the pack and began maneuvering through "very hummocky & hoary ice" before stopping for dinner.[75] Bellies full, they followed the edge of a large floe for a mile or so before pulling the boats onto the ice. July 4th was also bright and clear, but the leads in the ice were running east to west and not in the north–south direction they needed to go. Leigh Smith writes that they had "not gained much by all our labour and our boats are getting very shaky."[76]

It went on like this for another week. They would launch the boats and row and punt through narrow lanes of water between walls of ice, perhaps coming to more open water where the sails could be put to use, before the whole exercise was stopped by an impassable ice barrier. If no way could be found around or over it, they hauled out the boats, made tea, and waited. Leigh Smith's own boat hit a sharp ice edge on the July 8th and had to be hauled out onto the ice for repairs.

Fig. 44. The crew of the Eira *dragging their boats across the ice. Engraving by C. W. Whyllie from a sketch by Benjamin Leigh Smith made during the 1881–82 expedition (courtesy Scott Polar Research Institute, University of Cambridge).*

On Monday, July 10th, which Leigh Smith described as a very hot day, the fleet made its first significant progress to the south by southeast, coming into a large body of water and following it for a dozen nautical miles. But in the days that followed, this kind of progress became the exception. It was a little to the east, then the west, crabbing southwards, dodging around ice, a mile here, two miles there, and occasionally hauling one of the boats out of the water when it got too close to a floe and a plank stove in.

A heavy rain blew in on the 14th, obscuring the way ahead so that the leads could not be seen through the thick weather. The men hauled out the boats, waited around their mugs, launched, found the way blocked, hauled out again. If there was any consolation in their struggles, it was the concentrated knowledge that they could not turn back and that guiding

the small boats through the labyrinth of increasingly rotten and slushy ice was the only way forward.

On Monday, July 17th, as they approached one month out from Cape Flora, the men found good leads in the ice and large gaps of open water, only occasionally being squeezed through narrow channels or having to haul the boats over the ice. The character of the sea had changed dramatically. The ocean was now awash in tiny fragments of sea ice, or brash ice. The following day, a gale kept the men sheltered on the ice in the morning, but by late afternoon they were on the move again. They sailed past narwhals and belugas and even managed to shoot a polar bear to add to their food supply. Wednesday saw good navigation as well, the boats maneuvering down a long lane of open water. Another bear and a seal were killed.

They tried to make a start on the 20th but thick weather drove them back onto the ice. They tried again the following day, only to have the boats nearly sunk in collisions with the ice in heavy rain and poor visibility. The wind intensified during the night, with ice and spray whipping about. In bitter cold they stayed put until late at night on the 22nd, when they launched again for just two hours, the wind and seas being too high for the boats.

On Sunday, July 23rd, the waterways opened once again. It was still overcast but the men could see open pools of water reflected in the sky. They sailed and rowed all day, maneuvering first west, then south, and then southeast. Finding themselves trapped once again just after midnight, they finally hauled the boats out onto the ice at 1 a.m. on Monday morning. They were on the move again seven hours later, sailing through a light covering of ice to the southeast. As Leigh Smith writes, it was foggy at times, "but sun shining & a fair wind & we sailed along delightfully. In the afternoon ice got more open and we could feel & see the swell of the sea."[77]

They were getting close to escaping from their ice prison and they knew it. They sailed through the night and by Tuesday, July 25th, they crossed an expanse of open water until they arrived at the fast ice of Novaya Zemlya. Three times they found a lead in the ice and attempted to follow it in to the land, sailing and rowing some thirty nautical miles,

and each time the ice closed and they were forced back. They continued heading south, probing the fast ice.

By now the men were approaching their breaking points, hanging on for dear life after more than a month in the small boats. They were further depressed when Tibs, the cat, who had taken to jumping onto the ice for a walk whenever the boats were drawn up, was found missing after they had set sail and was never seen again.

They continued working inshore along the jagged edge of the fast ice, hauling the boats onto the ice each night to get some rest. A heavy swell began rolling in from the south-southwest, warping the ice on which they had to sleep each night. Their destination was close, but it was now a race between the durability of the boats, the solidity of their nightly ice encampments, and their personal hardiness.

On Monday, July 31st, the men awoke to find the ice so closely packed and grinding together that the boats could not be launched. As Leigh Smith surveyed the scene, there was not much to take heart in. "The floe on which we hauled up has been broken into pieces & the bit on which our boats are is not more than 50 feet by 100 feet."[78] When the boats finally got away, the men rowed through the night and into following day, the first day of August, 1882. They hauled out at 3:30 in the morning, but as they slept, the ice on which they rested broke in two and threatened to carry off the boats.

They quickly launched again, and the small fleet rowed continuously for nearly seven hours, before stopping for tea at five. Three hours later, they finally penetrated to fast ice and got into open water along the coast. As Chief Engineer Robertson writes: "Hard work and short rest were beginning to tell on all, and while finally retreating, we took a long semi-circular course through the much slackened ice, when quite unexpected, there appeared in the distance, an open ocean clear of ice."[79]

They cleared a point of land and rowed east for the rest of the night. When dawn came on the morning of August 2nd, they set sail through a heavy thunder storm. The seas were high and the boats were taking on water when land was sighted at three in the afternoon. As Chief Engineer Robertson remembered:

> Early on the second of August, as the weather gave every sign of being dirty, it was resolved that the two walrus boats should keep together, as they could sail much closer to the wind; the whale boats, being better sailors on a wind side only, had also to keep company, each taking their own course toward the desired haven. It was now blowing a fresh gale, and to make matters worse, a very severe thunder storm came on. The wind, rain, hail, thunder and lightning not only made us very uncomfortable, but rendered our positions extremely dangerous. The rain and water shipped made baling almost a continuous operation, and rest was out of the question. Certainly we did lie down on a heap of wet clothes every now and then, getting the full benefit of spray as it swept over our little craft. It was very cold; cramp seized all our limbs, and with no warm food to heat us, it was the very essence of misery, the storm continuing well into the afternoon. The two whale boats had not been seen since morning, they having been lost sight of during the first thunder squall.[80]

Robertson and his fellows in the walrus boats sighted land soon afterwards, eventually coming into a small bay. The whale boats arrived soon thereafter and the whole party reunited. They set about to build a fire and dry their soaked clothing, but no sooner had the flame caught before a fierce rainstorm drowned it out. The men were too exhausted to care. They slept like dead men until the sun broke through the following morning, when they finally had a chance to dry themselves and their clothes. It was while the men were engaged in this happy task that one of them chanced to look up and see a schooner coming round the point leading to their small bay and the cry went up: *"A sail! A sail!"*

Sir Allen Young, accompanied by three officers and a surgeon from the Royal Navy in the *Hope*, had arrived off Novaya Zemlya on July 26th. They were trailed by Sir Henry Gore-Booth and W.J.A. Grant in *Kara*. Near Matochkin Strait they met up with two Russian schooners and the Dutch Arctic surveying vessel *Willem Barents* and laid a series of depot along the coastline for Leigh Smith and his men.

Staying inshore with a sharp lookout for any activity they might observe on the remote shorelines, the *Hope* proceeded into Matochkin Strait and promptly struck a sunken reef. The water was high at the time, and as it ran out the *Hope* was soon fast aground. When a swell began running over the reef that evening, it pounded the ship until Young ordered the *Hope* lightened by removing the stores to the *Martha*. Gore-Booth also came alongside to take some of the burden onto the *Kara*. Not until a high tide on 27th, and only then by putting on all steam and canvas, was the ship warped off the reef. They anchored a mile to the east in a dense fog.

Surveying the damage, Young found the rudder post knocked away from the keel and hanging by some loose bolts. A jury-rigged lever on the rudder trunk allowed the ship to maneuver the following day into a small inlet, where all weight was moved forward to the bow in order to raise the stern and effect more permanent repairs. Young could be thankful that the hull had sustained no serious damage and the relief expedition could proceed without itself becoming a casualty. He still expected to sail northwards along the Novaya Zemlya coast all the way to Franz Josef Land if necessary.

At 10 a.m. on the morning of August 3rd, as he was contemplating his next move, Young saw the *Willem Barents* return to the bay with all colors hoisted. The *Barents* had just weighed anchor earlier that morning, so Young knew that good news was at hand. Soon after, a small boat from the *Barents* arrived with Leigh Smith on board. Young scarcely recognized him. Instantly he ordered all of his own four small boats away to collect the remaining men of the *Eira*, and by 3 p.m. that afternoon they were all on board. As Chief Engineer Robertson writes, the men were "met with a very hearty welcome, and everything was done for our comfort; then, and all the time we were on board. A good meal, a good wash, a change of clothes, and a sound sleep worked wonders with us. We never expected an organized relief to be sent out for us, yet needless to say we were delighted to see our own countrymen, and to be landed direct on British soil."[81]

All that remained was for *Hope* to be reballasted, take on coal from the *Martha*, resupply the fresh water, and hoist up the small boats. The fleet sailed for Scotland on the morning of August 6th. The makeshift rudder assembly performed well and the *Hope* was off the northern coast of Norway by the 9th. Fighting through south and southwest winds along

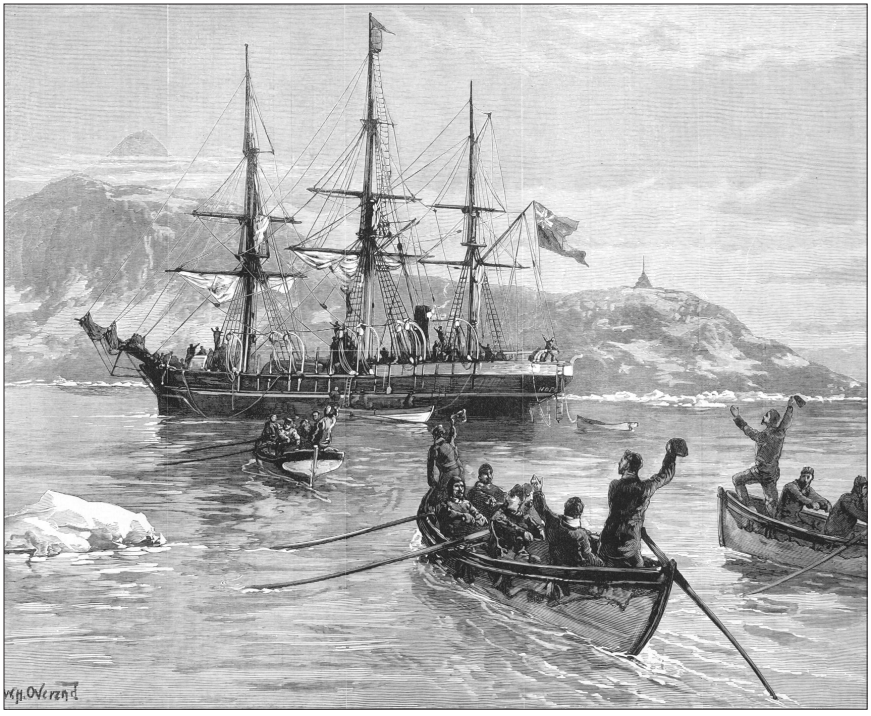

Fig. 45. Rescue of Leigh Smith and the crew in Matochkin Strait, Novaya Zemlya (courtesy Scott Polar Research Institute, University of Cambridge).

the Norwegian coast, they arrived to a tumultuous welcome at Aberdeen on August 20th.

In Aberdeen, Leigh Smith and Sir Allen took up residence at the Douglas Hotel. The crew was paid off and sent home, the Peterhead men taking a tug back to their home port and the crew members from Dundee taking a train for home. The exception was second mate Thomas Fenton, a native of Dundee, who passed away at the Aberdeen Infirmary from cancer, just four days after the return of the expedition. He was forty-four and left behind a widow and children.

Apart from the second mate, who had endured ill-health throughout the expedition, the remaining two dozen men quickly returned to their former selves. And they had a monumental story to tell. They had been

thrown ashore at Cape Flora on August 21st, 1881, with barely enough fresh meat to last for two months. By carefully marshaling the stores saved from their destroyed research vessel, they were able to make a comfortable life for themselves in an impossibly remote spot on the planet. For ten months, they foraged and hunted and butchered their way through an Arctic winter, boiling meat stew thickened with the blood of polar bears.

As Neale surveyed the men after the journey, he found them remarkably fit. "The effect of living on the meat of the country was (I am certain) that there was not the slightest symptom of scurvy among us; when the daylight returned, instead of everyone looking pale and anæmic, it was a surprise to all old wintering hands to see every one with rosy cheeks."[82] From October 1st to May 1st, every man had enjoyed an ounce of rum each day, about half of the traditional half a gill served in the Royal Navy. There had been little sickness and no severe cases of frostbite. Snow blindness affected them all with the return of the sun, but none had been permanently affected. The mate had sustained an injury to his right forearm in July of 1881, but he neglected to tell Neale until it became infected. Apart from this and second mate Fenton's cancer, they had lived as inactive hermits for nearly a year and come out largely intact.

The scientific results of the expedition, apart from Neale's notes on the Franz Josef Land wildlife, had gone to the bottom in the laboratory room on board the *Eira*. Even so, Clements Markham used Neale's notes to write twenty-three pages which, again, Sir George Nares recommended for publication in RGS's *Proceedings*.[83] And the crew had survived in such a positive way as to shame many of the larger government Arctic expeditions of the nineteenth century. Through *The Times* reporter in Aberdeen, Leigh Smith expressed the gratitude of himself and his crew for the blessing of the relief expedition. It was noted that he would travel to London, "and will then put his notes of the voyage and the sojourn on Cape Flora into permanent shape."[84]

But he never did. Leigh Smith never got around to putting his notes into any shape, permanent or otherwise. In his defense, the loss of his fine new ship and the ordeal, however well-managed, at Cape Flora, would have taken a large toll on any man. And, unlike most explorers before and since, he had no financial need to publish, and the very idea of publicity mortified him.

He was about to return to his extended family an even larger presence than when he left. But the Arctic, which had dominated his life for twelve years and afforded him a kind of self-knowledge, even as he sought to avoid the recognition that came with his successes, would now begin to fade in importance in his life. He was getting too old for the kind of immense adventures his five expeditions had brought. By the fall of 1882, his brief, brilliant career as an Arctic explorer was over.