

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

ISBN 978-1-55238-712-2

**THIS BOOK IS AN OPEN ACCESS E-BOOK.** It is an electronic version of a book that can be purchased in physical form through any bookseller or on-line retailer, or from our distributors. Please support this open access publication by requesting that your university purchase a print copy of this book, or by purchasing a copy yourself. If you have any questions, please contact us at [ucpress@ucalgary.ca](mailto:ucpress@ucalgary.ca)

**Cover Art:** The artwork on the cover of this book is not open access and falls under traditional copyright provisions; it cannot be reproduced in any way without written permission of the artists and their agents. The cover can be displayed as a complete cover image for the purposes of publicizing this work, but the artwork cannot be extracted from the context of the cover of this specific work without breaching the artist's copyright.

**COPYRIGHT NOTICE:** This open-access work is published under a Creative Commons licence.

This means that you are free to copy, distribute, display or perform the work as long as you clearly attribute the work to its authors and publisher, that you do not use this work for any commercial gain in any form, and that you in no way alter, transform, or build on the work outside of its use in normal academic scholarship without our express permission. If you want to reuse or distribute the work, you must inform its new audience of the licence terms of this work. For more information, see details of the Creative Commons licence at: <http://creativecommons.org/licenses/by-nc-nd/3.0/>

**UNDER THE CREATIVE COMMONS LICENCE YOU MAY:**

- read and store this document free of charge;
- distribute it for personal use free of charge;
- print sections of the work for personal use;
- read or perform parts of the work in a context where no financial transactions take place.

**UNDER THE CREATIVE COMMONS LICENCE YOU MAY NOT:**

- gain financially from the work in any way;
- sell the work or seek monies in relation to the distribution of the work;
- use the work in any commercial activity of any kind;
- profit a third party indirectly via use or distribution of the work;
- distribute in or through a commercial body (with the exception of academic usage within educational institutions such as schools and universities);
- reproduce, distribute, or store the cover image outside of its function as a cover of this work;
- alter or build on the work outside of normal academic scholarship.

---

## EXPEDITION FOUR: FRANZ JOSEF LAND, 1880

---



Clements Markham, as secretary of the Royal Geographic Society, had aptly described Leigh Smith's approach to Arctic exploration at a meeting of the society on the evening of January 17, 1881. Leigh Smith, Markham intoned, had always believed that "discoveries are to be made, in the icy seas, by perseverance, and by watching for and promptly seizing opportunities."<sup>1</sup>

In the summer of 1880, this meant a plan to steam and sail across a wide swath of the northern seas while observing where openings in the ice might present themselves, and then trying to exploit these. It was the method Leigh Smith had used since the first voyage to Svalbard in 1871. Now, as a result of the vessel that took shape in a Peterhead shipyard over the winter of 1879/1880, he could realize his vision of scientific reconnaissance in the Arctic. Leigh Smith would finally have the Arctic exploration platform he had always desired.

North of Aberdeen, at the easternmost Scottish fishing port of Peterhead, he contracted with the firm of Stephen & Forbes to build a robust exploring vessel. The port had been a major shipbuilding area for the first half of the nineteenth century but by the time of Leigh Smith's order both whaling and the shipbuilding that enabled it were in permanent decline. In 1850, more than five hundred local carpenters had been employed in building ships for the one thousand men working the Greenland whaling grounds. David Gray's whaler *Active* had been built at Peterhead in 1853. By the time of Leigh Smith's first expedition to Svalbard, however, the Peterhead fleet that counted more than thirty vessels in 1857 was down to just eleven.<sup>2</sup>



*Fig. 29. Clements Markham, ca. 1870s (courtesy of the Royal Geographic Society (RGS-IBG)).*

A few sea hunters like John and David Gray and others tried to survive by pioneering the use of steam engines on their vessels and focusing their efforts on seal populations. The *Windward*, a three-masted vessel that would serve as supply vessel for the Jackson-Harmsworth in Franz Josef Land in the 1890s, was launched from the yard of Stephen & Forbes

in Peterhead in 1860 and that very same summer killed over 5,000 seals off the coast of Greenland<sup>3</sup>

*Windward* was 118 feet long and constructed from oak, teak, and greenheart, its bows reinforced with iron. Steam engines that generated 30 horsepower to drive a single screw propeller were installed in 1866. In its general configuration, *Windward* can be seen as an early version of *Eira*, the three-masted, steam-equipped screw barquentine Stephen & Forbes built for Leigh Smith in the winter of 1879–80.<sup>4</sup>

At 360 tons and 125 feet, *Eira* was forty tons larger and about a bit longer than *Windward* but otherwise a very close copy. David Gray helped Leigh Smith draw up the specifications for *Eira* and likely acted as Leigh Smith's eyes at the Stephen & Forbes yard during the winter months when Leigh Smith was not present for the construction. The hull of the new ship was three feet thick, with the bows built out to an astonishing thickness of eight feet.

By early May, 1880, *Eira* was launched at Peterhead and towed to Aberdeen to have a 50 hp steam engine installed. David Gray's daughter did the honors of christening the new ship.<sup>5</sup> Using Buchan's estimate of the value of *Windward*, the cost of *Eira* would have been in the area of £10,000, or more than £780,000 in 2010 currency.<sup>6</sup> An 1881 note from Leigh Smith's agent in Peterhead, William Baxter, placed the fire insurance policy on *Eira* at £8,000.<sup>7</sup>

At the same time, according to the General, who lunched with him in London on May 4th, Leigh Smith was looking fit and had regained almost the full use of his injured hand.<sup>8</sup> And, as the General's diary makes plain, he was acting much as one might expect from a fifty-one-year-old man about to embark on a risky adventure. After the lunch in London, he gave the General a bottle of White Hermitage. He then handed his collection of *Wellington's Despatches* to his eighteen-year-old nephew Harry.<sup>9</sup> He gave to his brother Willy a rowboat that he had in Portsmouth, apparently expecting Willy to go to Portsmouth and row it back to Hastings.<sup>10</sup> He spoke of selling his estate at Glottenham; he was losing £2,000 a year by not having the value of the estate invested in the markets – a figure that must have stuck in a man who just spent £10,000 on his own research vessel.<sup>11</sup> He thought about breaking up his property at Scalands and selling it off piecemeal.<sup>12</sup>

By the end of May, preparations to get *Eira* underway were in full swing. Provisions were loaded for a voyage that was anticipated to last more than two years. On June 11th, 1880, Leigh Smith left London for Margate with W.J.A. Grant, a photographer with previous exploring experience who was tapped to record the expedition. At Margate, they boarded *Dobhbran*, his cousin Valentine Smith's luxury steam yacht, and sailed for a rendezvous with *Eira* in Peterhead.

The day after their departure, his niece Mabel began a portrait of Leigh Smith, for a gallery of Arctic explorers being assembled by a relative of Lady Franklin's.<sup>13</sup> Another niece, twelve-year-old Milicent, sent her uncle a parting message that read: "I hope you will find the north pole, if there is such a place, for I don't quite see how anybody can know as nobody ever seems to have been there; and bring back the old man with the lantern who sits upon it for us to see."<sup>14</sup>

Leigh Smith and Grant found *Eira* "in a rather backward state ... carpenters and painters were still hard at work."<sup>15</sup> Grant did not think they could be away in less than a month, but in the end they were on their way on June 19th. As for their ultimate destination, Grant writes that he had no idea: "no one on board knew – not even Leigh Smith himself, for he wisely determined to be guided entirely by circumstances, and if the ice prevented him from getting far north, or finding anything fresh to do in one direction, he could then try somewhere else."<sup>16</sup>

*Eira* was launched from Peterhead with a crew of twenty-one. Besides Leigh Smith and Grant, there was William Neale, who joined the complement as surgeon. He would go on to act as a kind of colleague and majordomo for Leigh Smith for the rest of his life. Forty-two-year-old Captain William Lofley of Hull was *Eira's* ice master and it was Lofley who hand-picked most of the crew, which included two mates, two engineers, and seventeen men. On June 20th, the ship called at Lerwick and took on board four Shetlanders who would be responsible for hunting as many whales on the voyage as possible.

The announced goal, as mentioned in a brief notice in *The Times* on June 23rd, was a voyage to Svalbard. First, Leigh Smith shaped a course toward Jan Mayen, which the expedition missed on account of fog. Continuing north by west, *Eira* attempted to close on the coast of Northeast Greenland but found the way blocked by a loose fringe of ice. From

Leigh Smith's notes, Markham estimated that *Eira* had steamed some 140 nautical miles through the ice for ten days without getting more than seventy nautical miles closer to the Greenland coast itself. Giving up the attempt to force a passage, the ship was veered off toward the northeast and Svalbard.

On July 11th, *Eira* met with two other vessels from Peterhead: David Gray's steam whaler *Eclipse* and John Gray's steam whaler *Hope*. The brothers related to Leigh Smith that ice was pressing down hard on the north coast of Svalbard and he would be well advised to explore in another direction. It was during this brief encounter that a photograph taken by Grant on the quarterdeck of *Eira* shows the cohort of owner/captains, David Gray, Leigh Smith, and John Gray, along with Neale. Then, standing somewhat awkwardly between Leigh Smith and John Gray, is a twenty-one-year-old medical student from the University of Edinburgh by the name of Arthur Conan Doyle. In the last year of his studies, Conan Doyle was serving that summer as surgeon on board the *Hope*. Within three years, Doyle would use his Arctic sailing experiences as the basis for a novel, *The Captain of the Polestar*, and in short order his medical practice would be overtaken by a new career as a writer.

Taking leave of his Peterhead colleagues, Leigh Smith directed *Eira* towards the northwest corner of Svalbard to have a look at the ice for himself. Going ashore at Smeerenburg on Amsterdamøya, he confirmed for himself what the Grays had told him: there would be little chance of exploring the northern coast of Svalbard in the summer of 1880. He and his companions walked over to a collection of whaler's graves and found the hallowed site in a state of disarray. Grant found the graves "in a most dismal appearance, for bones and skulls were strewn about in all directions, nearly all the coffins having been broken open."<sup>17</sup> But even in 1880, the centuries-old site had already gained a measure of historical recognition. Grant noted a granite historical marker brought to the site two years earlier by the Dutch exploring schooner *Willem Barents*, "and here it now stands in memory of the gallant men who had discovered Spitzbergen in 1596, and others who had died on this very spot."<sup>18</sup>

After a few days spent anchored in Magdalenefjorden, *Eira* moved off towards the south, rounding Sørkapp on July 31st. From here, Leigh Smith had a couple of options. He could have followed Lamont in hunting his





*Fig. 30. On July 11, 1880, Eira meets up with the Gray brothers. Front row: David Gray (at helm), Leigh Smith, John Gray, and Dr. Neale leaning against the stay. Between Leigh Smith and John Gray is twenty-one-year-old University of Edinburgh medical student Arthur Conan Doyle (courtesy Hancox Archive).*

way around Storfforden or sailing directly east towards Novaya Zemlya. Instead he made a daring decision to follow the Austro-Hungarians, and see how *Eira*, a true steamship, would fare in an attempt to reach the new islands of Franz Josef Land.

After the experiences of Weyprecht and Payer, three other expeditions had attempted to reach the new lands they had discovered. In the summers of 1878 and 1879, a Dutch expedition in the *Willem Barents* and led by an officer named A. De Bruyne, had sailed across the Barents Sea towards the archipelago, getting close enough to sight it in the latter year. Albert Markham, sailing with Sir Henry Gore-Booth in the Norwegian schooner *Isbjörn*, got close enough to the islands to convince himself that a steam vessel could reach Franz Josef Land nearly every year, if the attempt was made late in the season, when a steamship would be able to



*Fig. 31. Leigh Smith ashore at what appears to be Smeerenburgfjorden, Svalbard, in 1880. An apparently abandoned and pillaged small boat lies in the foreground (courtesy Hancox Archive).*

penetrate the loose pack ice. *Eira* would be the first such vessel to test this proposition.

On August 6th, *Eira* met the ice again at about 77°10' N, 40° E and commenced steaming along the edge of the pack. Two days later, the ship was made fast near an iceberg grounded in forty-eight fathoms. The soundings showed them that they were close to the coastal shelf of the new land. Leigh Smith attempted to force a way north, but a storm soon pushed the *Eira* southwards. It wasn't until early in the morning of the 14th, after the weather had moderated and *Eira* was steaming northeastwards at about six knots in the 54th meridian east of Greenwich, that Leigh Smith saw Franz Josef Land for the first time.

It turned out to be a small island, and *Eira* was maneuvered in towards it. Their position was well west of the furthest western spot explored by the Austro-Hungarians, so the men knew that they were seeing entirely unknown lands for the very first time. That same afternoon, the ship was





Fig. 32. *Eira* working through the ice, 1880 (courtesy Hancox Archive).

made fast to coastal ice fixed to the island, which was later named after a Royal Navy officer and watercolor artist by the name of Captain Walter Waller May (1830–1896). W. W. May had served on two Franklin search expeditions before retiring from active service soon thereafter to take up painting full-time. He published a series of sketches from his Arctic expeditions and made a living illustrating the accounts of other explorers.<sup>19</sup> He did the same for Leigh Smith, producing some fine sketches of *Eira* maneuvering in and around the ice of Franz Josef Land for Clements Markham's account of the expedition in the *Proceedings of the Royal Geographical Society*. Markham, who was given over to habitual enthusiasm whenever a potential new route to the North Pole presented itself, was exultant: "Franz-Josef Land was reached! The problem was solved, and



Fig. 33. Skinning walrus off May Island, 1880 (courtesy Hancox Archive).

the route was proved to be easily navigable, which will surely lead future explorers to new and important discoveries in the far north.”<sup>20</sup>

Leigh Smith and his crew had entered a world of huge, flat table bergs twice as tall as *Eira*’s masts. W.J.A. Grant, along with one of the Shetlanders, landed on the basalt rock of May Island and, picking their way around the driftwood on shore and the nests of ivory gulls on the cliffs, made the brief climb to its 61 m/200’ summit. From this vantage point, Grant had a view of *Eira* moored to the fast ice (ice formed along the shoreline) while, nearby, Leigh Smith, Captain Lofley, and Dr. Neale in the small boats maneuvered for clear shots at walrus.

More vitally, to the north, across a strait strewn with loose ice, lay another unknown island. This was later named for Sir Joseph Dalton Hooker (1817–1911), the director of the Royal Botanic Gardens at Kew and the closest confidante of Charles Darwin. Hooker, a fellow of the Royal

Society, had been the youngest crew member of the *Erebus* and *Terror* expedition to Antarctica in 1839–43 and, for the twenty years after 1865, director at Kew. After the expedition, it was Hooker who examined and classified the specimens of flora returned to London by the expedition.

Grant and his companion trapped seven of the cliffside gulls in hopes of returning them alive to the Zoological Gardens in London (only one survived the voyage), while Leigh Smith and his party killed seventeen walrus.

The following day, the loose ice closed in around the ship so Lofley quickly retreated ten nautical miles south in order to moor to a massive ice floe that was so large the spotter in the crow's nest could not see over the top of it. When conditions improved, *Eira* returned to the area of May Island, where another, longer island was discovered and named after Robert Etheridge (1819–1903), a paleontologist who had made a career out of identifying fossils from a succession of British expeditions and who became the president of the Geological Society of London the following year. The geological specimens returned by the expedition were turned over to Etheridge for analysis.

Leigh Smith, along with Grant, Neale, and a boatswain, landed on the island and climbed its summit, where they left a record of their arrival. Descending to the shore, the party watched as their small boat was carried away by the ice. They saw a way to intercept the boat by running along the edge of another floe. Hurrying along the ice, they caught the boat just as they were about to be stranded.

A snow squall blowing strongly from the east obscured visibility that night, but the following morning the skies cleared and the crew witnessed a berg being flipped over after a collision with an ice floe. It was a sharp reminder of the treacherous waters in which they were sailing. As Grant writes, at 4 a.m. they had to “shift our position to avoid being smashed up by a large flat berg against which our floe was driving.”<sup>21</sup> At 10 a.m., *Eira* steamed around Etheridge Island and made for a point to the west that had been seen by the Dutch on September 7th during the previous summer and named Barents Hook (now Cape Barents).

*Eira* reached Barents Hook that same evening. From this point westwards, they would be sailing where no other expedition had ever explored. Pausing offshore, Leigh Smith and Grant left the ship and went ashore on



Northbrook Island, walking westwards in a landscape of thousand-foot cliffs towering over low swampy land holding just enough soil to support a carpet of grasses and moss. Stopped by a glacial wall, the two returned to *Eira* and continued exploring westwards under sail. During this, the men on board ship were dredging the sea bottom, making collections of marine animals for the British Museum which would be studied by Albert Günther.

They came to the western end of the land at a point Leigh Smith named Cape Flora. Despite the presence of “luxuriant vegetation” in the form of grass and Arctic flowers, this spot is almost certainly named not for its greenery but after Leigh Smith’s cousin Flora Smith, the sister of the extremely wealthy and generous Valentine Smith, though the possibility cannot be dismissed that the landscape and his cousin’s name made for a happy coincidence.<sup>22</sup>

The same can also be posited for the small island with a hill on it that *Eira* passed on the 18th. The hill reminded the men of a bell, and afterwards it was so named, but it can also be seen as a play on the name of Leigh Smith’s sister Bella.<sup>23</sup> Rounding the corner of Bell Island, *Eira* entered a fjord that Leigh Smith named Nightingale Sound after his famous cousin Florence. Further north on the western side of Nightingale Sound lay an enormous glacier which Leigh Smith named for “Uncle Joe” Gratton. On the back side of Bell Island he found a small harbor framed by Bell and a second small island named Mabel Island after his favored niece Amabel, daughter of the General and Bella. His discoveries in Franz Josef Land were becoming a true family affair.

They were at 80°4′ N, 48°40′ E, in a spot never before seen by human eyes. On the north side were high cliffs that formed a kind of natural amphitheater, and below this lay a wide flat plain more than a mile long. On the east was the dramatic visual landmark of high basaltic peaks, “running up like needles,” the only peaks of their kind seen on the whole cruise from May and Etheridge islands.<sup>24</sup> There were plants growing in the soil accumulations at the bases of the cliffs and the cliffs themselves were full of nesting little auks. With a good holding ground in five to seven fathoms, it was a rare protected anchorage in a landscape especially hostile to ships. Leigh Smith named it Eira Harbour.





*Fig. 35. In Leigh Smith's papers, this dramatic feature on Mabel Island was named 'Cathedral Point' (courtesy Hancox Archive).*

From the deck of the harbor's namesake on the morning of the 20th, the men spied a mother polar bear with two cubs sniffing around a box that had been left on shore. Leigh Smith deployed one of the small boats to land a party to kill the mother while a second small boat waited offshore in case any of the bears escaped the first party. As the first group approached, the bears made it to the water where the mother was shot and, as Clements Markham writes, "her two children were [doomed] to an aimless life of inactivity at the Zoological Gardens."<sup>25</sup> The mother was shot through the head and the small bears lassoed and towed by the small boats back to the ship. There they were imprisoned in casks and in retribution howled for the remainder of the expedition until being offloaded at Peterhead.

The following day, *Eira* got underway to explore north from Eira Harbour along Nightingale Sound. The chart of Franz Josef Land based on Leigh Smith's 1880 cruise and published with Clements Markham's article shows that north of Mabel Island they found another island. This was later named Bruce Island, likely after Henry Bruce, 1st Baron of Aberdare (1815–1895), who in 1881 was elected president of the RGS.

(The waterway separating McClintock and Brady islands was also named Aberdare Channel – Clements Markham was apparently taking no chances in his tributes to the hierarchy of the RGS.) Mabel and Bruce islands were separated by a waterway named Bates Channel, likely after the estimable English naturalist Henry Walter Bates (1825–1892).<sup>26</sup>

Rounding the northern point of Bruce Island, they found another channel, this one north of the land Leigh Smith had walked with Grant a week earlier. That land was now found to be an island and named for the 1st Earl of Northbrook, Thomas Baring (1826–1904).<sup>27</sup> Northbrook had previously served as president of the RGS and in 1881 was First Lord of the Admiralty. The channel north of Northbrook Island was named after the Dutchman De Bruyne, since this sound flowed southward towards Cape Barents, the point seen by De Bruyne's expedition a year earlier. A small island in De Bruyne Sound was named for Leigh Smith's old comrade from the 1873 expedition to Svalbard, the Reverend Alfred Edwin Eaton. A bay north of Cape Flora was named for the biologist Albert Günther.

To the north was Markham Sound, so named by the Austro-Hungarians seven years earlier. Markham Sound at the moment they reached it was impenetrable on account of ice, and Leigh Smith named the headlands on either side of the ice front after the home ports of many of his sailors: Dundee Point and, cleverly, Peter Head. Dundee Point was seen as the corner of Hooker Island, so they had now come in a circle from where they had started their explorations of the western reaches of Franz Josef Land.

While cruising off Gratton Glacier, an attempt was made to capture a young walrus for the zoological collections of England, but this failed when the mother attacked the small boat coming for her offspring. The mother was killed and the offspring dove to safety. The damaged small boat was sinking by the time it made its return to *Eira*.

The ship returned to Eira Harbour by sailing back down Nightingale Sound. The large territory to *Eira*'s starboard, the northern segment of which was dominated by Gratton Glacier, was named Alexandra Land after the Princess of Wales, Alexandra of Denmark (1844–1925). *Eira* tried to reach this land west of Eira Harbour but the ship was soon stopped by ice. The whole coastline was dominated by a series of glaciers flowing down

to the sea. At regular intervals, these glaciers were split by headlands of black basalt. These headlands were successively named after the Peterhead shipyard that had built *Eira*, as Leigh Smith added Cape Stephen and Cape Forbes to the map. These in turn were separated by two bays, Essen and Baxter, the former named for *Eira*'s chief engineer and the latter for Leigh Smith's agent in Peterhead, William Baxter. As Markham writes, the landscape was "wild and desolate in the extreme."<sup>28</sup>

Returning to Eira Harbour, W.J.A. Grant went ashore on the 22nd to make a collection of plants. The day, as he described it, was dull and misty, calm and warm.<sup>29</sup> He found nine species of flowering plants, mostly varieties of saxifrage, two grasses, and a lichen. None were new to the Arctic: all had been found in Greenland during previous expeditions and all but one seen in Novaya Zemlya. Grant also found a length of a ship's spar along a shoreline full of natural driftwood and, nearby, the vertebrae and jawbones of two whales. Climbing to the highest point above the harbor, at an altitude of over 305 m/1,000', Grant took photographs of *Eira* anchored down in its namesake waters. On the 23rd, Leigh Smith circumnavigated the two islands that formed his natural harbor.

Returning to sea level, Grant collected samples of Cretaceous petrified wood and fossilized plants and, lying beneath these, 175-million-year-old fossils of extinct marine cephalopods of the Jurassic period called belemnites. From his vantage point, Grant had seen pack ice lying heavy to the south and southwest but none in the immediate area of the harbor. Leigh Smith took this as a chance to take *Eira* around the land to the west of Eira Harbour and attempt to define the western limits of Franz Josef Land, just as in 1871 he had discovered the eastern limits of Svalbard. *Eira* departed on the 24th and rounded a cape to the west and opposite of Bell Island that was named for Grant.<sup>30</sup>

From Cape Grant, *Eira* put on full steam westwards, with every nautical mile a new addition to the geography of the Arctic. Pushing aside a belt of loose ice, they gained a second headland that was named for John Crowther of Peterhead, *Eira*'s first mate.<sup>31</sup> Following along this coastline northwest for another twelve nautical miles, they came upon a third headland and named this for Dr. Neale.<sup>32</sup>

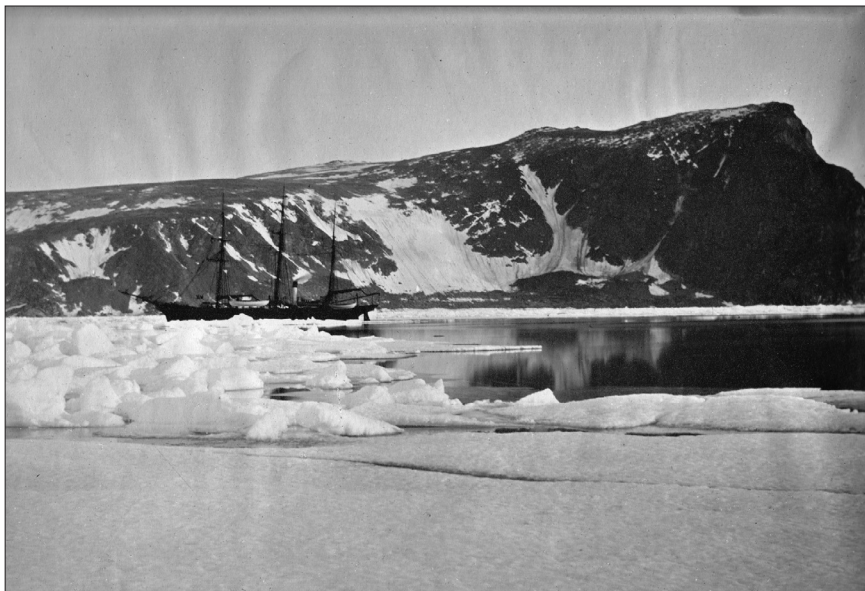
*Eira* was eventually stopped by ice late in the evening of the 24th, off a headland Leigh Smith named Cape Ludlow after his brother-in-law,



*Fig. 36. Eira, in likely the only photograph taken in its namesake harbor. The unmistakable Bell Island is to the left (courtesy Hancox Archive).*

the General. A distant headland, seen some forty nautical miles off to the northwest, was named for his captain and ice master, William Lofley.<sup>33</sup> They were at  $80^{\circ}19' \text{ N}$ ,  $44^{\circ}52' \text{ E}$ . Sounding, they found no bottom at 175 fathoms. Unable to proceed further, Leigh Smith had come very close to linking his explorations in Nordaustlandet in 1871 with his new discoveries in the extreme west of Franz Josef Land in 1880. From Cape Barents, the spot seen by the Dutch under De Bruyne in 1879, Leigh Smith had come 110 nautical miles further westward along previously unknown territory. From the decks of *Eira*, he had seen another forty nautical miles further west, virtually the limit of the archipelago. It was a remarkably daring reconnaissance.

Soon after spotting Cape Lofley in the distance, the weather closed in, with driving snow and mist. Icebergs lay close nearby as the ship was moored to a floe drifting southwards. Early on the 25th, *Eira* was cast out



*Fig. 37. Eira in Franz Josef Land, 1880. This image shows the ice conditions encountered near the limits of Eira's exploration of the western reaches of Franz Josef Land (courtesy Hancox Archive).*

from the floe and maneuvered on a return course eastwards. En route they entered a large bay with a small island in it. In another of Leigh Smith's plays on familiar names, the island was named 'David' and the bay 'Gray' in tribute to his friend and colleague, the whaling master from Peterhead. *Eira* was moored to a land floe at the head of the newly discovered bay. Walrus and seals were in the waters, and Arctic fox and ivory gulls ashore. In the end, they would kill more than two dozen walrus and thirteen polar bears.

In Gray Bay, *Eira* was surrounded on all sides by glaciers, one of which, two miles off, suddenly split in a deafening series of cracks and thunderous booms. The whole bay became a mass of rolling waves of ice as *Eira* clung to her mooring at the head of the bay. This was followed by a two-day gale that blew in from the northwest, pinning the ship in Gray Bay. As soon as it lessened on the 28th, *Eira* steamed out of the bay, past



two Greenland whales, and then eastwards towards the comparative safety of Eira Harbour.

Their 'home' harbor, however, was now full of ice, so they continued on to a small bay on the exposed southern coast of Northbrook Island where they could anchor and ride out the lingering storm. As soon as the gale subsided the following morning, they weighed anchor and continued eastwards to May and Etheridge islands and the larger McClintock Island, all of which were surrounded by ice. They reached Cape Tegetthoff on the morning of the 30th, and found their way to the east blocked by ice.

At Wilczek Island, where the *Tegetthoff* had been abandoned, Leigh Smith went ashore and searched for any trace of the abandoned Austro-Hungarian ship, but found only a can on the ground.<sup>34</sup> There was, on the other hand, open water, and with fresh thoughts of the *Tegetthoff* disaster in his mind, Leigh Smith took this as an omen. He ordered *Eira* out of Franz Josef Land waters so that they might make an attempt to reach Kong Karls Land in Svalbard before the rapidly changing weather forced them south for good.

Beginning on September 1st, *Eira* sailed south and west along the edge of the ice in hopes of finding a break in the pack ice where an approach to Kong Karls Land could be effected. By the 10th they were off Hopen, where the weather was "extreme fine and calm" as Grant noted. "Next morning we steamed round the south-west corner of the island, and then steered a northerly and afterwards a north-easterly course" but no opening beyond small bights in the ice could be found.<sup>35</sup>

The weather also made a turn for the worse, and so Leigh Smith shaped a course for Storfjorden, anchoring in Lamont's old Ginevra Bay on the 17th. Climbing a nearby hill, he spied Kong Karls Land in the distance, separated from them by a relatively ice-free sea. But the season was now too far advanced to make another attempt, so as soon as the weather cleared Leigh Smith decided to head for home.

*Eira* departed from Svalbard on the 22nd and two days later, in a heavy sea, anchored in Hammerfest in northern Norway. The bad weather forced the *Eira* aground, damaging her false keel. She was refloated with some difficulty and only after a passing Norwegian steamer, the *Nordstjerne*, pulled her free. From Hammerfest, Leigh Smith sent a telegram to Clements Markham at the RGS: "Reached Franz Josef Land Aug. 14.



Fig. 38. *Eira* aground near Hammerfest, Norway, after the 1880 expedition (courtesy Hancox Archive).

Explored land to the west as far as  $45^{\circ}$  E and  $80^{\circ}20'$  N and sighted land from that point, about 40 miles N.W.”<sup>36</sup> Markham was ebullient. “This is extremely satisfactory, quite confirming Captain [Albert] Markham’s view that, with a good steamer, a very advanced position might be reached in that direction, and that it is the best route for future polar exploration.”<sup>37</sup>

After temporary repairs at Hammerfest, *Eira* dropped anchor a few days later in Bodø, before leaving Norwegian waters altogether. The expedition arrived in the Shetlands on October 11th, where the Shetland contingent of the crew was discharged at Lerwick. The following day, *Eira* was back at Peterhead, where, *The Times* noted, it would remain until the new year, when Leigh Smith would again take up his explorations of the Arctic.<sup>38</sup>

Clements Markham was appropriately effusive. *Eira*’s first expedition was “the most important summer cruise that has ever been made in the

Arctic Regions. [It will] form a fresh starting-point for future Polar discovery....”<sup>39</sup> This was a radical shift in thinking for the influential Markham, long a champion of large, government-sponsored polar expeditions. Markham even drafted a confidential memorandum for the RGS Council, in which he argued that, with the success of the *Eira* expedition, the Council was now in a position “to advocate the despatch of a suitably equipped expedition for the purpose of reaching an advanced base near the north-western extremity of the Franz-Josef Archipelago.”<sup>40</sup>

The massive extent of the glaciers indicated that Franz Josef Land was possibly even larger than suspected by Payer. The marine invertebrates collected in Franz Josef Land were sent to the British Museum. When they were studied and published by Edward J. Miers at the Natural History Museum, he announced a new species of sea spiders, *Pycnogonida*. Miers named it *Anomorhynchus Smithii* after its discoverer. Similar sea spiders had been found in other waters, but Leigh Smith had discovered one that was unique to the seas around Franz Josef Land.

W.J.A. Grant had made the first photographic record of the islands. These Leigh Smith had reproduced into albums to be given as gifts to the senior personnel of the expedition as well as to close family like the General, who made a note in his diary a week after *Eira*’s return to Peterhead. “Ben ... brought a dog to 64 [Gower Street]. 2 bears & a snowbird [ivory gulls captured by the expedition] arr’d on the 15th at the Zoo. Dr. N[eale] says they had a very happy time of it on the ice.”<sup>41</sup>

Two days later, under the headline ‘Mr. Leigh Smith’s Arctic Expedition,’ *The Times* carried a column that recapitulated the expedition and mentioned the delivery of the bird and the bears to the Zoological Gardens. The column also noted that Leigh Smith had discovered seven new small islands, along with four large islands, adding to the dozens of new Arctic places and place names he had discovered in Svalbard in 1871. “They are all covered with glaciers and snowfields, with bluff, black headlands on the southern exposures, whereon was vegetation.”<sup>42</sup>

The evening of August 24th, 1880, when he stood on *Eira*’s deck and spied the western limits of Franz Josef Land, marked the high point of Leigh Smith’s career as an explorer and, perhaps, of his life as well. Dodging the ice rather than confronting it, he had successfully explored further north and east in his new oceanographic research vessel than any other

vessel in history. He had opened the door for further exploration northwards from his newly discovered natural harbors in Franz Josef Land.

Albert Markham was ecstatic. "I have only this moment heard of your grand success, and hasten to send you my most sincere and hearty congratulations on the result of your cruise." Markham was the only other Englishman who knew the challenges and risks of taking a vessel into Franz Josef Land waters. "It has quite confirmed my own views on the subject, namely that two years out of three a steamer may, with comparative ease, with of course those two virtues which all Arctic explorers ought to possess, namely patience and perserverance, reach Franz Josef Land."<sup>43</sup>

Unlike 1873, when Chermiside wrote his account of Leigh Smith's expedition and it was rejected by the RGS's *Proceedings*, this time Clements Markham himself wrote up the results and brought the finished article to Leigh Smith's townhouse on Gower Street in mid-November, 1880. The article's peer review by the Royal Navy's problematic polar explorer George Nares lasted all of one line: "This paper is original & should be printed in *Proceedings*."<sup>44</sup>

Markham would read the paper at a meeting of the Society on January 17th, 1881, a reading pushed back by a month when several officers arrived in London on leave with a new survey of Afghanistan and had to present their results at the December meeting.<sup>45</sup> Even with the additional time, Leigh Smith found himself indisposed when the time for meeting arrived. After the reading, George Nares rose to offer his support to further work in Franz Josef Land, and Robert Etheridge followed with a talk on the geological results, illustrating his lecture with fossils brought back by the expedition. Never one to pull a punch, Clements Markham was perturbed that Grant, too, did not show, as he was "hard at work shooting woodcocks with [Henry] Gore Booth."<sup>46</sup>

But these minor quibbles could not deter the fact that in less than ten years Leigh Smith had gone from unknown neophyte to Britain's essential Arctic explorer. The transformation was made complete when a letter arrived from Markham just three months after the January meeting, with congratulations on Leigh Smith's unanimous selection by the RGS Council to receive the Society's Gold Medal, "in recognition of your Arctic discoveries."<sup>47</sup> It would be fifteen years and take Fridtjof Nansen and the *Fram* to best the results of the 1880 *Eira* expedition.