

"If *Outside* magazine had been around during the [last] turn of the century, Fridtjof Nansen would have been its number one coverboy." —*Chicago Sun-Times*

JON KRAKAUER, series editor



FARTHEST NORTH

THE INCREDIBLE THREE-YEAR VOYAGE TO
THE FROZEN LATITUDES OF THE NORTH

DR. FRIDTJOF NANSEN

Introduction by Roland Huntford

MODERN LIBRARY EXPLORATION



DR. FRIDTJOF NANSEN

Introduction by Roland Huntford

FARTHEST NORTH

The Incredible Three-Year Voyage To
The frozen Latitudes of The North

JON KRAKAUER

SERIES EDITOR



THE MODERN LIBRARY NEW YORK

CONTENTS

[Title Page](#)

[Dedication](#)

[Series Introduction by Jon Krakauer](#)

[Introduction by Roland Huntford](#)

[Preliminary Sketch-Map of Franz Joseph Land](#)

[Preliminary Map of the Route of the *Fram*](#)

[Map Showing the Route of the *Fram* and Nansen and Johansen's Sledge Journey](#)

[I. Introduction](#)

[II. Preparations and Equipment](#)

[III. The Start](#)

[IV. Farewell to Norway](#)

[V. Voyage Through the Kara Sea](#)

[VI. The Winter Night](#)

[VII. The Spring and Summer of 1894](#)

[VIII. Second Autumn in the Ice](#)

[IX. We Prepare for the Sledge Expedition](#)

[X. The New Year, 1895](#)

[XI. We Make a Start](#)

[XII. We Say Good-bye to the *Fram*](#)

[XIII. A Hard Struggle](#)

[XIV. By Sledge and Kayak](#)

[XV. Land at Last](#)

[XVI. The New Year, 1896](#)

[XVII. The Journey Southward](#)

[APPENDIX Report of Captain Otto Sverdrup on the Drifting of the *Fram* from March 14, 1895](#)

[I. March 15 to June 22, 1895](#)

[II. June 22 to August 15, 1895](#)

[III. August 15 to January 1, 1896](#)

[IV. January 1 to May 17, 1896](#)

[V. The Third Summer](#)

[Conclusion by Dr. Nansen](#)

[Copyright Page](#)

TO
HER
WHO CHRISTENED THE SHIP
AND
HAD THE COURAGE TO REMAIN BEHIND

FARTHEST NORTH



Dr. Fridtjof Nansen

FRIDTOJF NANSEN

Fridtjof Nansen, Arctic explorer, scientist, diplomat, and humanitarian, was born in Frøen, Norway, on October 10, 1861. His father was a well-to-do lawyer; his mother was a vigorous, aristocratic woman who scandalized polite society by taking up skiing. Nansen's yearning for outdoor adventure dated from his early childhood. He learned to ski at the age of two; later, the hardy, self-reliant boy delighted in exploring the forests and mountains surrounding the family's home near Oslo. After studying zoology at the University of Christiania (now Oslo), Nansen, then twenty, set sail on the *Viking*, a sealing ship bound for the waters off Greenland. He later published his recollections of the formative four-month voyage in *Hunting and Adventure in the Arctic* (1925). From 1882 to 1888 he served as curator of zoology at the Museum of Natural History in Bergen.

In 1888 Nansen led a six-man team that became the first expedition ever to cross the Greenland ice cap. *The First Crossing of Greenland* (1890) recounts his celebrated trek by ski and sleigh across a desert of ice and snow. "His account of a perilous traverse of the unknown ice cap is still one of the most absorbing narratives of adventure," said *The New York Times*. *Eskimo Life* (1893), a second book about the trip, is a lively and entertaining anthropological study describing the winter he spent at the native settlement of Godthaab on the west coast of Greenland. Upon returning to Norway, Nansen was appointed curator of the zoological collection at the University of Oslo, but immediately began making plans for a journey to the North Pole.

Nansen and his carefully selected crew sailed for the New Siberian Islands on June 24, 1893, aboard the *Fram*, whose crush-proof triple hull would allow the ship to be frozen in sheets of Arctic ice and then be carried by ocean currents to the North Pole. When it became apparent that the vessel would pass to the south of its target, Nansen attempted to reach the pole by kayak and dog sled. On April 7, 1895, he arrived with colleague Frederik Hjalmar Johansen at latitude 86°14'N, farther north than anyone had ever been. *Farthest North* (1897) is his compelling account of the three-year voyage. "To hear the story from Nansen's lips was to realize that they were truly of the Viking breed," said *The New York Times*. He later published the scientific results of the journey in *The Norwegian North Polar Expedition 1893–1896* (1900–1906) and chronicled the entire history of Arctic exploration in *Northern Mists* (1911).

Afterward, Nansen became increasingly captivated with the emerging science of oceanography. In 1900 he participated in the maiden voyage of the *Michael Sars*, a ship especially outfitted by the Norwegian government for sea exploration. Nansen went on to develop research methods that had a fundamental influence on the study of oceanography. He chronicled the findings of his many oceanographic excursions in such pioneering works as *The Oceanography of the North Polar Basin* (1902), *Northern Waters* (1906), and *The Norwegian Sea* (1909).

Eventually Nansen's international prominence drew him into public service as a statesman and humanitarian. In 1905 he was caught up in the events leading to the dissolution of Norway's union with Sweden and subsequently became the first Norwegian minister to Britain. Following World War I he headed his country's delegation to the League of Nations and oversaw the repatriation of war prisoners. In addition, he supervised relief programs to famine-stricken Russia and was instrumental in creating the "Nansen passport," a special identification card for refugees. In 1922 Nansen was awarded the Nobel Peace Prize for his humanitarian efforts. The Nansen International Office for Refugees in Geneva, which was founded in 1931 to continue his work, was also awarded the same prize. His several books dealing with affairs of state include *Norway and the Union with Sweden*

(1905), *Russia and Peace* (1923), *Armenia and the Near East* (1928), and *Through the Caucasus to the Volga* (1931).

The spirit of adventure and exploration flourished in Nansen until the end of his life. In addition to publishing *Sporting Days in Wild Norway* (1925) and *Adventure and Other Papers* (1927), he became interested in traveling to the Arctic by airship in order to study meteorological conditions. While visiting America in 1929 he delivered the lecture "Why the Arctic Calls Me Again." Fridtjof Nansen died suddenly of a heart attack on May 13, 1930. "One of the best friends of mankind and one of the most fearless, generous and chivalrous of men passed away at Oslo yesterday," wrote *The New York Times*. "All explorers will feel sorry at the death of Fridtjof Nansen," radioed Rear Admiral Richard Byrd from halfway around the world. "He was the dean of explorers and one of the most romantic figures in history."

"Nansen was one of the surprising figures who emerged from northern mists and helped to mould the age," wrote his most recent biographer, Roland Huntford. "He was the father of modern polar exploration. . . . He became the incarnation of the explorer as hero. He had the power of inspiring men to act. He opened what is called the heroic age of polar exploration. His successors tried to build themselves in his image. The combatants in the race for the South Pole, Amundsen, Shackleton and Scott, were all his acolytes. . . . With his wide attainments, he approached the Renaissance ideal of the universal man."

INTRODUCTION TO THE MODERN LIBRARY EXPLORATION SERIES

Jon Krakauer

Why should we be interested in the jottings of explorers and adventurers? This question was first posed to me twenty-four years ago by a skeptical dean of Hampshire College upon receipt of my proposal for a senior thesis with the dubious title, “Tombstones and the Moose’s Tooth: Two Expeditions and Some Meandering Thoughts on Climbing Mountains.” I couldn’t really blame the guardians of the school’s academic standards for thinking I was trying to bamboozle them, but in fact I wasn’t. Hoping to convince Dean Turlington of my scholarly intent, I brandished an excerpt from *The Adventurer*, by Paul Zweig:

The oldest, most widespread stories in the world are adventure stories, about human heroes who venture into the myth-countries at the risk of their lives, and bring back tales of the world beyond men. . . . It could be argued . . . that the narrative art itself arose from the need to tell an adventure that man risking his life in perilous encounters constitutes the original definition of what is worth talking about.

Zweig’s eloquence carried the day, bumping me one step closer to a diploma. His words also do much to explain the profusion of titles about harrowing outdoor pursuits in bookstores these days. But even as the literature of adventure has lately enjoyed something of a popular revival, several classics of the genre have inexplicably remained out of print. The new Modern Library Exploration series is intended to rectify some of these oversights.

The four books we have selected to launch the series span four centuries of adventuring, providing a look at the shifting rationales given by explorers over the ages in response to the inevitable question: Why on earth would anyone willingly subject himself to such unthinkable hazards and hardships?

La Salle and the Discovery of the Great West, by the incomparable prose stylist Francis Parkman, recounts the astonishing journeys of Robert Cavelier, Sieur de La Salle, as he crisscrossed the wilds of seventeenth-century America in hopes of discovering a navigable waterway to the Orient. La Salle did it, ostensibly at least, to claim new lands for King Louis XIV and to get rich. He succeeded on both counts—his explorations of the Mississippi Basin delivered the vast Louisiana Territory into the control of the French crown—but at no small personal cost. In 1687, after spending twenty of his forty-three years in the hostile wilderness of the New World, La Salle was shot in the head by mutinous members of his own party, stripped naked, and left in the woods to be eaten by scavenging animals.

Farthest North is a first-person narrative by the visionary Norse explorer Fridtjof Nansen, who in 1893 set sail from Norway with a crew of twelve in a wooden ship christened the *Fram*, hoping to discover the North Pole. Nansen’s brilliant plan, derided as crazy by most of his peers, was to allow the *Fram* to become frozen into the treacherous pack ice of the Arctic Ocean, and then let prevailing currents carry the icebound ship north across the pole. Two years into the expedition, alas, and still more than four hundred miles from his objective, Nansen realized that the drifting ice was not going to take the *Fram* all the way to the pole. Unfazed, he, along with a single companion and provisions for one hundred days, left the ship, determined to cover the remainder of the distance by dogsled, with no prospect of reuniting with the *Fram* for the return journey. The going was slow, perilous, and exhausting, but they got to within 261 statute miles of the pole before giving up and beginning a desperate, yearlong trudge back to civilization.

Unlike La Salle, Nansen couldn’t plausibly defend his passion for exploration by claiming to do

for utilitarian ends. The North Pole was an exceedingly recondite goal, a geographical abstraction surrounded by an expanse of frozen sea that was of no apparent use to anybody. Nansen most often proffered what had by then become the justification de rigueur for jaunts to the ends of the earth—almighty science—but it didn't really wash.

Robert Falcon Scott, Nansen's contemporary, also relied on the rationale of science to justify his risky exploits, and it rang just as hollow. *The Last Place on Earth*, by English historian Roland Huntford, is the definitive, utterly riveting account of the race for South Pole, which Scott lost to Nansen's protégé, Roald Amundsen, in 1911—and which cost Scott his life. In death, Scott was mythologized as the preeminent tragic hero in the history of the British Empire, but Huntford's book—lauded by *The New York Times* as “one of the great debunking biographies”—portrays him as an inept bungler unworthy of such deification. Huntford also reveals that while Scott was marching toward his demise in Antarctica, his wife, Kathleen, was consummating an affair with his rival and mentor, Nansen, in a Berlin hotel room.

In the final title of the series, *Starlight and Storm*, the dashing French mountaineer Gaston Rébuffat recalls his ascents of the six great north faces of the Alps, including the notorious Eiger Nordwand during the years following World War II. An incorrigible romantic, he describes his climbs in luminous, mesmerizing prose that is likely to inspire even dedicated flatlanders to pick up an ice axe and light out for the great ranges. And how does Rebuffat reconcile the sport's matchless pleasure with its potentially lethal consequences? He resorts to bald-faced denial: “The real mountaineer,” he insists, “does not like taking risks” and shuns danger like the plague. Although he acknowledges that in certain unavoidable situations “a thrill runs through him,” he quickly (and unconvincingly) avows that it is “much too unpleasant a thrill for him to seek it out or to enjoy it.”

If none of the extraordinary people featured in these chronicles adequately answers the nagging question—why?—perhaps it is simply because adventurers, on the whole, are congenitally averse to leading examined lives. “If you have to ask,” they like to mumble by way of dodging their inquisitor, “you just wouldn't understand.” Rest assured, however, that the convolutions of the adventurer's psyche are richly illuminated in these four compelling volumes, however enigmatic the protagonists may have remained to themselves.

INTRODUCTION

Roland Huntford

By the end of the nineteenth century, most of the world had been explored. After the scramble for Africa, the polar regions were the last great blanks upon the map. They saw the last act of terrestrial discovery before the leap into space. *Farthest North* is part of that record. Its author was a hero of his times.

Like Henrik Ibsen and Edvard Grieg, Fridtjof Nansen was one of the celebrated Norwegians who emerged from northern mists and helped to mold the age. Born on October 10, 1861, he belonged to the extraordinary Norwegian renaissance of the nineteenth century. He was an example of a great man from a small country. He was the father of modern polar exploration. *Farthest North* is the tale of his revolutionary attempt to reach the North Pole.

Instead of fighting Nature, like most of his predecessors, Nansen proposed working with her. His idea was to freeze a vessel into the Arctic pack ice and drift with the pack toward the Pole. He had a wooden ship specially designed, with round, smooth bilges, the purpose of which was to allow the ship to rise when squeezed, thus escaping the pressure of the pack rather than trying to resist it. He called her *Fram*—"Forward." On June 24, 1893, she sailed. Three months later, north of the New Siberian Islands, she was committed to the ice.

In our age of instant communication and the view from space, it is hard to conceive of what this meant. It was the era of the telegraph and telephone, but not yet of radio. Then, isolation descended once the shore had disappeared astern. Conversely, when voyagers vanished out of sight, they were swallowed by oblivion. The first men on the Moon, in constant touch with Earth and a quarter of a million miles away, were less alone. For all its technical advances, the world that Nansen knew, like that of Stone Age man, was still bounded by the horizon.

On that account, when Nansen reappeared on the Arctic coast of Norway on August 13, 1896, it was a sensation of the very finest vintage. He was like someone returning from the dead. Nansen man broke out. Overnight, he became one of the most famous living men. Kings and emperors and, in Washington, William McKinley, president of the United States, were all glad to receive him. The great public devoured him. As an English journalist put it, "Nansen is for the moment our popular gladiator."

The fact that he had failed in his objective, to reach the North Pole, seemed strangely not to count. Nansen was a hero for whom the world had been waiting. He had set a new record for farthest north. He had reached a latitude of 86°14'N, still 226 nautical miles from the Pole but breaking the previous record by 170 miles. It was the biggest single advance for nearly four hundred years.

It was, however, not the deed that mattered so much, but the manner of its doing. At a certain point during his voyage, it became clear that the Arctic drift would not lead directly to the Pole. So Nansen, with one companion, Hjalmar Johansen, left *Fram* in the spring of 1895 and headed out across the frozen sea. Having reached their northernmost latitude, they were unable to find their way back to the ship because it was moving with the ice. They made for land, as originally intended. After traveling for seven hundred miles over the pack ice, they were trapped for the winter on an Arctic desert island in the Franz Josef Land archipelago. There they lived a Robinson Crusoe existence in a squalid hut. The following summer, in another part of the archipelago, they met Frederick Jackson, an English explorer, and were rescued. It is this journey that lies at the heart of *Farthest North*.

The book was quickly written and as quickly translated into most civilized languages. Within little

more than two months, the Norwegian original was ready, the first English edition appearing in early 1897. It became an instant bestseller. One explanation for its success was the sheer romantic nature of it all. Nansen's meeting with Jackson was reminiscent of Stanley's legendary one with Livingstone in Africa a quarter of a century before. Also there was the evergreen appeal of authority defied. Received wisdom had roundly condemned Nansen's plan of drifting with the pack ice. Disaster had been freely predicted.

In the same way that explorers on their travels were beyond human ken, what was out of sight lay in the realm of fantasy. More was known about the surface of Mars than about the unexplored regions of the globe. The Arctic was hidden as securely as the dark side of the Moon. It was a place of speculation. Nansen's plan of drifting with the pack ice to the Pole depended on the theory of a current flowing from Siberia to Greenland. It was only one of many postulates in this instance admitted to be based on reasonable though scanty evidence in the form of artifacts recovered from the ice. *Fram* did, in fact, safely return to Norway a week after Nansen, drifting more or less as he had foreseen—and incidentally having reached a latitude barely twenty miles short of what Nansen himself managed on his epic journey across the pack. He had shown an awesome faith in himself and proved the experts wrong.

All these facts were imposing, but Nansen possessed the mysterious power of transmuting them into the elements of greatness. What might have been merely a nine-day wonder turned into a saga of the age. Nansen had the kind of personality to which journalists responded. He was photogenic at a time when use of the half-tone process of reproducing photographs was coming into general use. From many a printed page his mesmeric eyes gleamed out. Through what were the beginnings of mass media, he became a universal hero. He was a creation of the press.

He was also something more. In his own language, he was a master of prose. Through all the vagaries of translation, somehow that came across. Most of his predecessors had returned from their travels with catalogs of horror, enhanced in the telling with an effusion of rodomontade. Nansen was the first of the Pole seekers to bring everyone back alive. He did not suffer unduly. He underplayed his difficulties. He used an economy of means. He had adventure but no disaster. "A modern Viking," the *London Daily Mail* called him—appropriately, as it happened. The old Norse sagas also had dealt in understatement. Moreover, with Nansen's tall form, blond hair, and Nordic good looks, he unquestionably looked the part. A figure from the frozen outlands, he was an inspiration for a world in which the fear of decadence was rampant.

His elusive appeal had an unlikely span. From the start, the popular press was at his feet. Then Sir Leslie Stephen, father of Virginia Woolf, and an intellectual mountaineer, praised Nansen's achievement as "a king of play [which] includes . . . the most valuable . . . human activities." To present my homage to . . . the hero of the North Pole," Jules Verne wrote to Nansen. The very different figure of Sigmund Freud observed that his womenfolk were "mad about Nansen," and that he himself could "make good use of Nansen's dreams," of which some were recorded in *Farthest North*.

"We are no more than human beings with human failings," Nansen wrote to a friend, summing up the expedition. Hjalmar Johansen, his companion on their journey across the pack ice, got to the heart of the matter when he observed in his diary that they had challenged the power of Nature and learned that "mankind is a miserable insect—and yet it is wonderful to be a human being!" And therein lay the instructive paradox. With proper humility before Nature, instead of trying to conquer her, Nansen had demythologized the polar environment.

In practical terms, Nansen had accomplished a technological revolution in polar travel. To cross the packice, he had used dogs, sledges, kayaks, and, above all, skis. He made the momentous discovery that the natural pace of a nordic skier coincided with that of a dog team hauling a loaded sledge. He had established the distinctive method that consolidated the Scandinavian supremacy in high latitude

and finally gave his compatriot Roald Amundsen victory in the race for the South Pole.

Even before he embarked on *Fram*, Nansen had changed the face of polar exploration. In 1888, he made the first crossing of Greenland. This was the first of the great geographical goals reached since Stanley had discovered the sources of the Congo and the Nile eleven years before. And the Greenland crossing had depended on the use of skis.

Norwegian, and hence modern polar exploration, is bound up with the development of skiing. They shared some of the same pioneers. Nansen, for one, had a hand in both. At home, he had been a leading Nordic competition skier in both jumping and cross-country while those disciplines were still being formalized. He was also one of the early mountain skiers. On the first crossing of Greenland, his achievement had been to apply skis to polar travel.

It was the use of skis that lay at the heart of the Nansen revolution. In its modern form, skiing is a Norwegian invention. Nansen's book about his Greenland expedition—published in English as *The First Crossing of Greenland*—and, later, *Farthest North* were not only textbooks of polar exploration but also crucial in the spread of skiing as a universal sport.

He accomplished other technical innovations. Among them was a new type of sledge with broad ski-like runners, based on a traditional model found in Scandinavia and Siberia. Bearing his name, it is still in use.

Nansen abandoned the well-entrenched doctrine of keeping safe lines of retreat. Instead he cut them off, thus harnessing his instinct for self-preservation to drive him on. This approach, however, was highly personal, adapted to the peculiar circumstances of his own expeditions. More generally, he discredited the old system of big, cumbersome campaigns, espousing instead the small, cohesive enterprise. He had five companions on his crossing of Greenland; twelve on the drift of the *Fram*. He put his faith in speed and mobility. He had launched the process that led to the race for the Poles.

Trained as a marine biologist, Nansen was a pioneer of the modern view of the nervous system and hence one of the founders of neurology. And he managed all this before he even set out for Greenland at the age of twenty-six. It was enough for an entire career, but to Nansen it was just a fraction of his being. In an age beginning to glimpse the approaching domination of the specialist, he personified the universal man. This was much of the reason for his fame and the appeal of *Farthest North*.

So, too, did Nansen's honesty of purpose. When he returned from Greenland, one newspaper followed a trend by trying to invest his expedition with a scientific sheen. Nansen protested that he had merely returned from a ski tour. When he sailed on *Fram*, it was frankly to attain the North Pole.

Nansen did, however, have the subsidiary aim of investigating the unexplored quadrant above Siberia. This interest naturally followed from his training as a scientist. He arranged a continuous series of observations, notably a line of soundings taken as *Fram* drifted with the ice. In the process he scotched the reigning theory that the Arctic was a shallow sea, and proved it to be a deep ocean basin, with little likelihood that it concealed any undiscovered land mass. Thus, as a byproduct of his Pole-seeking, he returned with one of the scientific discoveries of the age. Given the mystery shrouding the unknown quarters of the world, this was as sensational as anything later sent back by space probe from the masked vistas of another planet.

Even after the event, Nansen did not pretend that his chief aim had been anything but reaching the Pole. On the other hand, his work on *Fram* set him on the path to yet another career, that of a pioneer of modern oceanography.

His striving did not end there. All too human, Nansen was driven by a complex variety of motives. Among other things, he had also conceived both his expeditions as patriotic enterprises. Norway was then subject to Sweden, and Nansen exploited his polar achievements in his country's campaign for independence. He was an early exponent of the use of nonpolitical activities to gain political ends. When Norwegian independence finally arrived in 1905, Nansen had a hand in the political process.

too.

Although by then he had lost his record for the farthest north, the patina of the *Fram* expedition somehow clung to him. It lasted the rest of his life. It lingered through his later career as a diplomat and as an international civil servant. Between 1906 and 1908 he was the first ambassador of an independent Norway in London. Starting in 1921, he was the first high commissioner for refugees under the League of Nations.

He died in 1930. By then both the North and South poles had already been attained, either over land or by air. The age of terrestrial discovery was over. Nonetheless, for all his other achievements, it was the snows that always loomed largest for Nansen. Decades after the event, it was only when recounting the saga recorded in *Farthest North* that he still came to life. “The history of polar exploration,” he once wrote, “is simply the expression of the power that the unknown exerts on the human spirit.”
Roland Huntford is the former Scandinavian correspondent for The Observer and the author of bestselling biographies of Fridtjof Nansen and Ernest Shackleton.



PRELIMINARY SECTION MAP

OF THE GROUP OF ISLANDS KNOWN AS

FRANZ JOSEF LAND

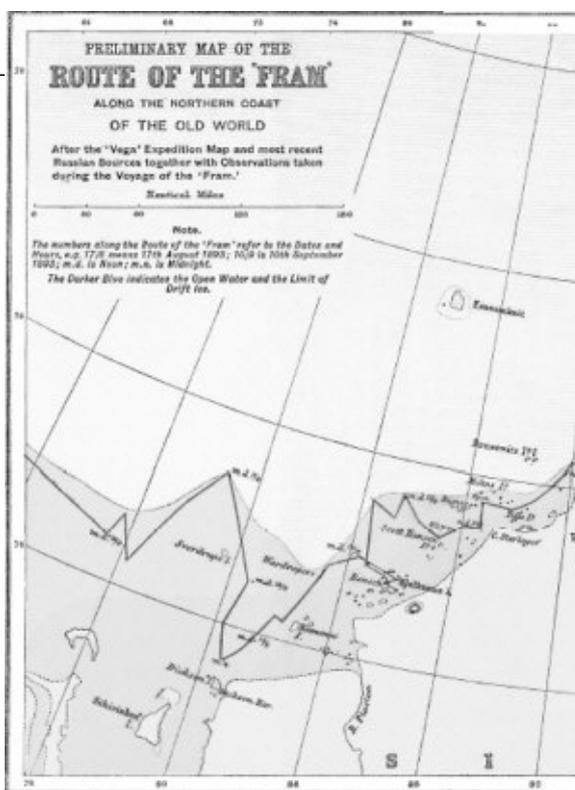
Compiled on Coast Plans, July 1875, and based upon

Payer's, Leitch-Smith's, and Jackson's Maps, together

with my own observations.—Fitzroy's Account.

Scale, Miles
0 10 20
Explanation
--- Rivers and channels of water 1867-1875 (after August)
--- Rivers and channels of water 1867-1875 (before August)
--- The Ocean Sea with Faintest Shores shown Water
--- in 1875.
--- The Ocean Sea with Faintest Shores shown Water
--- in 1875.
The Places where the country is not precisely shown the fact that one
is situated in the darker drawn areas. The same not to show for the
south part of Jackson's Coast, required by Payer, in the necessary infor-
mation and not regular.

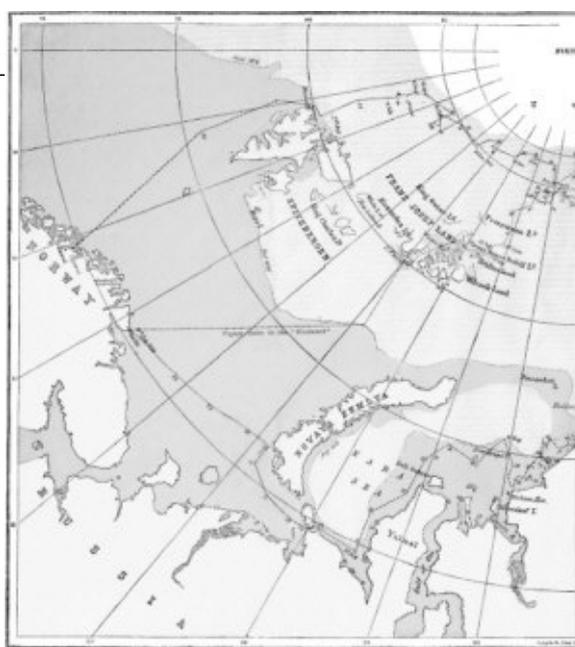




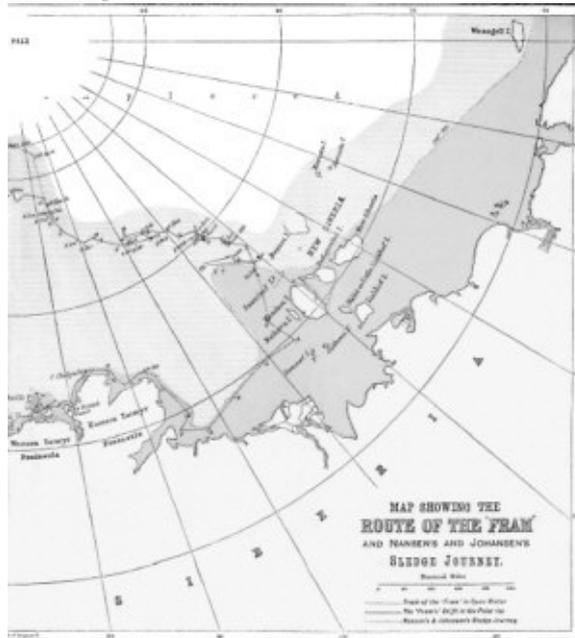
The Edinburgh Geographical Institute



John Bartholomew & Co



The Edinburgh Geographical Institute



John Bartholomew & Co

FARTHEST NORTH

CHAPTER I

INTRODUCTION

“A time will come in later years when the Ocean will unloose the bands of things, when the immeasurable earth will lie open, when seafarers will discover new countries, and Thule will no longer be the extreme point among the lands.” —SENECA

Unseen and untrodden under their spotless mantle of ice the rigid polar regions slept the profound sleep of death from the earliest dawn of time. Wrapped in his white shroud, the mighty giant stretched his clammy ice-limbs abroad, and dreamed his age-long dreams.

Ages passed—deep was the silence.

Then, in the dawn of history, far away in the south, the awakening spirit of man reared its head on high and gazed over the earth. To the south it encountered warmth, to the north, cold; and behind the boundaries of the unknown it placed in imagination the twin kingdoms of consuming heat and deadly cold.

But the limits of the unknown had to recede step by step before the ever-increasing yearning after light and knowledge of the human mind, till they made a stand in the north at the threshold of Nature's great Ice Temple of the polar regions with their endless silence.

Up to this point no insuperable obstacles had opposed the progress of the advancing hosts, which confidently proceeded on their way. But here the ramparts of ice and the long darkness of winter brought them to bay. Host after host marched on towards the north, only to suffer defeat. Fresh ranks stood ever ready to advance over the bodies of their predecessors. Shrouded in fog lay the mythic land of Nivlheim, where the “Rimturser”^{*} carried on their wild gambols.

^{*} Frost-giants.

Why did we continually return to the attack? There in the darkness and cold stood Helheim, where the death-goddess held her sway; there lay Nâstrand, the shore of corpses. Thither, where no living being could draw breath, thither troop after troop made its way. To what end? Was it to bring home the dead, as did Hermod when he rode after Baldur? No! It was simply to satisfy man's thirst for knowledge. Nowhere, in truth, has knowledge been purchased at greater cost of privation and suffering. But the spirit of mankind will never rest till every spot of these regions has been trodden by the foot of man, till every enigma has been solved.

Minute by minute, degree by degree, we have stolen forward, with painful effort. Slowly the day has approached; even now we are but in its early dawn; darkness still broods over vast tracts around the Pole.

Our ancestors, the old Vikings, were the first Arctic voyagers. It has been said that their expeditions to the frozen sea were of no moment, as they have left no enduring marks behind them. This, however, is scarcely correct. Just as surely as the whalers of our age, in their persistent struggles with ice and sea, form our outposts of investigation up in the north, so were the old Northmen, with Eric the Red, Leif, and others at their head, the pioneers of the polar expeditions of future generations.

It should be borne in mind that as they were the first ocean navigators, so also were they the first in combat with the ice. Long before other seafaring nations had ever ventured to do more than hug the coast lines, our ancestors had traversed the open seas in all directions, had discovered Iceland and Greenland, and had colonized them. At a later period they discovered America, and did not shrink

from making a straight course over the Atlantic Ocean, from Greenland to Norway. Many and many about must they have had with the ice along the coasts of Greenland in their open barks, and many life must have been lost.

And that which impelled them to undertake these expeditions was not the mere love of adventure though that is, indeed, one of the essential traits of our national character. It was rather the necessity of discovering new countries for the many restless beings that could find no room in Norway. Furthermore, they were stimulated by a real interest for knowledge.

Adam of Bremen relates of Harald Hårdråde, "the experienced king of the Northmen," that he undertook a voyage out into the sea towards the north and "explored the expanse of the northern ocean with his ships, but darkness spread over the verge where the world falls away, and he put about bare in time to escape being swallowed in the vast abyss." This was Ginnungagap, the abyss at the world's end. How far he went no one knows, but at all events he deserves recognition as one of the first of the polar navigators that were animated by pure love of knowledge. Naturally, these Northmen were not free from the superstitious ideas about the polar regions prevalent in their times. There, indeed, they placed their Ginnungagap, their Nivlheim, Helheim, and later on Trollebotn; but even these mythic and poetical ideas contained so large a kernel of observation that our fathers may be said to have possessed a remarkably clear conception of the true nature of things. How soberly and correctly they observed may best be seen a couple of hundred years later in *Kongespeilet* ("The Mirror of Kings" the most scientific treatise of our ancient literature, where it is said that "as soon as one has traversed the greater part of the wild sea, one comes upon such a huge quantity of ice that nowhere in the whole world has the like been known. Some of the ice is so flat that it looks as if it were frozen on the sea itself; it is from 8 to 10 feet thick, and extends so far out into the sea that it would take a journey of four or more days to reach the land over it. But this ice lies more to the northeast or north, beyond the limits of the land, than to the south and southwest or west. . . .

"This ice is of a wonderful nature. It lies at times quite still, as one would expect, with openings like large fjords in it; but sometimes its movement is so strong and rapid as to equal that of a ship running before the wind, and it drifts against the wind as often as with it."

This is a conception all the more remarkable when viewed in the light of the crude ideas entertained by the rest of the world at that period with regard to foreign climes.

The strength of our people now dwindled away, and centuries elapsed before explorers once more sought the northern seas. Then it was other nations, especially the Dutch and the English, that led the van. The sober observations of the old Northmen were forgotten, and in their stead we meet with repeated instances of the attraction of mankind towards the most fantastic ideas; a tendency of thought that found ample scope in the regions of the north. When the cold proved not to be absolutely deadly theories flew to the opposite extreme, and marvellous were the erroneous ideas that sprang up and have held their own down to the present day. Over and over again it has been the same—the most natural explanation of phenomena is the very one that men have most shunned; and, if no middle course was to be found, they have rushed to the wildest hypothesis. It is only thus that the belief in an open polar sea could have arisen and held its ground. Though everywhere ice was met with, people maintained that this open sea must lie behind the ice. Thus the belief in an ice-free northeast and northwest passage to the wealth of Cathay or of India, first propounded towards the close of the 15th century, cropped up again and again, only to be again and again refuted. Since the ice barred the southern regions, the way must lie farther north; and finally a passage over the Pole itself was sought for. Wild as these theories were, they have worked for the benefit of mankind; for by their means our knowledge of the earth has been widely extended. Hence we may see that no work done in the service of investigation is ever lost, not even when carried out under false assumptions.

By many paths and by many means mankind has endeavored to penetrate this kingdom of death. A

first the attempt was made exclusively by sea. Ships were then ill adapted to combat the ice, and people were loath to make the venture. Little by little they learnt to adapt their vessels to the conditions, and with ever-increasing daring they forced them in among the dreaded floes.

But the uncivilized polar tribes, both those that inhabit the Siberian tundras and the Eskimo of North America, had discovered, long before polar expeditions had begun, another and a safer means of traversing these regions—to wit, the sledge, usually drawn by dogs. It was in Siberia that the excellent method of locomotion was first applied to the service of polar exploration. Already in the 17th and 18th centuries the Russians undertook very extensive sledge journeys, and charted the whole of the Siberian coast from the borders of Europe to Bering Strait. And they did not merely travel along the coasts, but crossed the drift-ice itself to the New Siberian Islands, and even north of them. Nowhere, perhaps, have travellers gone through so many sufferings, or evinced so much endurance.

In America, too, the sledge was employed by Englishmen at an early date for the purpose of exploring the shores of the Arctic seas. Sometimes the toboggan or Indian sledge was used, sometimes that of the Eskimo. It was under the able leadership of M'Clintock that sledge journeys attained the highest development. While the Russians had generally travelled with a large number of dogs, and only a few men, the English employed many more men on their expeditions, and their sledges were entirely, or for the most part, drawn by the explorers themselves. Thus in the most energetic attempt ever made to reach high latitudes, Albert Markham's memorable march towards the north from the *Alert's* winter quarters, there were 33 men who had to draw the sledges, though there were plenty of dogs on board the ship. It would appear, indeed, as if dogs were not held in great estimation by the English.

The American traveller Peary has, however, adopted a totally different method of travelling on the inland ice of Greenland, employing as few men and as many dogs as possible. The great importance of dogs for sledge journeys was clear to me before I undertook my Greenland expedition, and the reason I did not use them then was simply that I was unable to procure any serviceable animals.*

* *First Crossing of Greenland*, Vol. I., p. 30.

A third method may yet be mentioned which has been employed in the Arctic regions—namely, boats and sledges combined. It is said of the old Northmen in the Sagas and in the *Kongespeilet*, that for days on end they had to drag their boats over the ice in the Greenland sea, in order to reach land. The first in modern times to make use of this means of travelling was Parry, who, in his memorable attempt to reach the Pole in 1827, abandoned his ship and made his way over the drift-ice northward with boats, which he dragged on sledges. He succeeded in attaining the highest latitude ($82^{\circ} 45'$) then had yet been reached; but here the current carried him to the south more quickly than he could advance against it, and he was obliged to turn back.

Of later years this method of travelling has not been greatly employed in approaching the Pole. It may, however, be mentioned that Markham took boats with him also on his sledge expedition. Many expeditions have through sheer necessity accomplished long distances over the drift-ice in this way, in order to reach home after having abandoned or lost their ship. Especial mention may be made of the Austro-Hungarian *Tegethoff* expedition to Franz Josef Land, and the ill-fated American *Jeannet* expedition.

The methods of advance have been tested on four main routes: the Smith Sound route, the sea route between Greenland and Spitzbergen, Franz Josef Land route, and the Bering Strait route.

In later times, the point from which the Pole has been most frequently assailed is Smith Sound, probably because American explorers had somewhat too hastily asserted that they had there described the open Polar Sea, extending indefinitely towards the north. Every expedition was stopped, however, by immense masses of ice, which came drifting southward, and piled themselves up against the coast.

The most important expedition by this route was the English one conducted by Nares in 1875–76, the equipment of which involved a vast expenditure. Markham, the next in command to Nares, reached the highest latitude till then attained, $82^{\circ} 20'$, but at the cost of enormous exertion and loss; and Nares was of opinion that the impossibility of reaching the Pole by this route was fully demonstrated for a future ages.

During the stay of the Greely expedition (from 1881 to 1884) in this same region, Lockwood attained a somewhat higher record, viz., $83^{\circ} 24'$, the most northerly point on the globe that human feet had trodden previous to the expedition of which the present work treats.

By way of the sea between Greenland and Spitzbergen, several attempts have been made to penetrate the secrets of the domain of ice. In 1607 Henry Hudson endeavored to reach the Pole along the east coast of Greenland, where he was in hopes of finding an open basin and a waterway to the Pacific. His progress was, however, stayed at 73° north latitude, at a point of the coast which he named "Hold with Hope." The German expedition under Koldewey (1869–70), which visited the same waterway, reached by the aid of sledges as far north as 77° north latitude. Owing to the enormous masses of ice which the polar current sweeps southward along this coast, it is certainly one of the most unfavorable routes for a polar expedition. A better route is that by Spitzbergen, which was essayed by Hudson when his progress was blocked off Greenland. Here he reached $80^{\circ} 23'$ north latitude. Thanks to the warm current that runs by the west coast of Spitzbergen in a northerly direction, the sea is kept free from ice, and it is without comparison the route by which one can the most safely and easily reach high latitudes in ice-free waters. It was north of Spitzbergen that Edward Parry made his attempt in 1827, above alluded to.

Farther eastward the ice-conditions are less favorable, and therefore few polar expeditions have directed their course through these regions. The original object of the Austro-Hungarian expedition under Weyprecht and Payer (1872–74) was to seek for the Northeast Passage; but at its first meeting with the ice it was set fast off the north point of Novaya Zemlya, drifted northward, and discovered Franz Josef Land, whence Payer endeavored to push forward to the north with sledges, reaching 82° north latitude on an island, which he named Crown-Prince Rudolf's Land. To the north of this land he thought he could see an extensive tract of land, lying in about 83° north latitude, which he called Petermann's Land. Franz Josef Land was afterwards twice visited by the English traveller Leigh Smith in 1880 and 1881–82; and it is here that the English Jackson-Harmsworth expedition is at present established.

Only a few attempts have been made through Bering Strait. The first was Cook's, in 1776; the last the *Jeannette* expedition (1879–81), under De Long, a lieutenant in the American navy. Scarcely anywhere have polar travellers been so hopelessly blocked by ice in comparatively low latitudes. The last-named expedition, however, had a most important bearing upon my own. As De Long himself says in a letter to James Gordon Bennett, who supplied the funds for the expedition, he was of opinion that there were three routes to choose from—Smith Sound, the east coast of Greenland, or Bering Strait; but he put most faith in the last, and this was ultimately selected. His main reason for this choice was his belief in a Japanese current running north through Bering Strait and onward along the east coast of Wrangel Land, which was believed to extend far to the north. It was urged that the warm water of this current would open a way along that coast, possibly up to the Pole. The experience of whalers showed that whenever their vessels were set fast in the ice here they drifted northwards; hence it was concluded that the current generally set in that direction. "This will help explorers," says De Long, "to reach high latitudes, but at the same time will make it more difficult for them to come back." The truth of these words he himself was to learn by bitter experience.

The *Jeannette* stuck fast in the ice on September 6th, 1879, in $71^{\circ} 35'$ north latitude and 175° east longitude, southeast of Wrangel Land—which, however, proved to be a small island—and drifted

with the ice in a west-northwesterly direction for two years, when it foundered, June 12th, 1881, north of the New Siberian Islands, in $77^{\circ} 15'$ north latitude and $154^{\circ} 59'$ east longitude.

Everywhere, then, has the ice stopped the progress of mankind towards the north. In two cases only have ice-bound vessels drifted in a northerly direction—in the case of the *Tegethoff* and the *Jeannette*—while most of the others have been carried away from their goal by masses of ice drifting southward.

On reading the history of Arctic explorations, it early occurred to me that it would be very difficult to wrest the secrets from these unknown regions of ice by adopting the routes and the methods hitherto employed. But where did the proper route lie?

It was in the autumn of 1884 that I happened to see an article by Professor Mohn in the Norwegian *Morgenblad*, in which it was stated that sundry articles which must have come from the *Jeannette* had been found on the southwest coast of Greenland. He conjectured that they must have drifted on a floe right across the Polar Sea. It immediately occurred to me that here lay the route ready to hand. If a floe could drift right across the unknown region, that drift might also be enlisted in the service of exploration—and my plan was laid. Some years, however, elapsed before, in February, 1890, after my return from my Greenland expedition, I at last propounded the idea in an address before the Christiania Geographical Society. As this address plays an important part in the history of the expedition, I shall reproduce its principal features, as printed in the March number of *Naturen*, 1891.

After giving a brief sketch of the different polar expeditions of former years, I go on to say: “The results of these numerous attempts, as I have pointed out, seem somewhat discouraging. They appear to show plainly enough that it is impossible to sail to the Pole by any route whatever; for everywhere the ice has proved an impenetrable barrier, and has stayed the progress of invaders on the threshold of the unknown regions.

“To drag boats over the uneven drift-ice, which moreover is constantly moving under the influence of the current and wind, is an equally great difficulty. The ice lays such obstacles in the way that any one who has ever attempted to traverse it will not hesitate to declare it well-nigh impossible to advance in this manner with the equipment and provisions requisite for such an undertaking.”

Had we been able to advance over land, I said, that would have been the most certain route; in that case the Pole could have been reached “in one summer by Norwegian snow-shoe runners.” But there is every reason to doubt the existence of any such land. Greenland, I considered, did not extend farther than the most northerly known point of its west coast. “It is not probable that Franz Josef Land reaches to the Pole; from all we can learn it forms a group of islands separated from each other by deep sounds, and it appears improbable that any large continuous track of land is to be found there.

“Some people are perhaps of opinion that one ought to defer the examination of regions like those around the Pole, beset, as they are, with so many difficulties, till new means of transport have been discovered. I have heard it intimated that one fine day we shall be able to reach the Pole by a balloon, and that it is only a waste of time to seek to get there before that day comes. It need scarcely be shown that this line of reasoning is untenable. Even if one could really suppose that in the near or distant future this frequently mooted idea of travelling to the Pole in an air-ship would be realized, such an expedition, however interesting it might be in certain respects, would be far from yielding the scientific results of expeditions carried out in the manner here indicated. Scientific results of importance in all branches of research can be attained only by persistent observations during a lengthened sojourn in these regions, while those of a balloon expedition cannot but be of a transitory nature.

“We must, then, endeavor to ascertain if there are not other routes—and I believe there are. I believe that if we pay attention to the actually existent forces of nature, and seek to work *with* and not *against* them, we shall thus find the safest and easiest method of reaching the Pole. It is useless,

previous expeditions have done, to work *against* the current; we should see if there is not a current which can work *with*. The *Jeannette* expedition is the only one, in my opinion, that started on the right track, though it may have been unwittingly and unwillingly.

“The *Jeannette* drifted for two years in the ice, from Wrangel Land to the New Siberian Islands. Three years after she foundered to the north of these islands there was found frozen into the drift-ice in the neighborhood of Julianehaab, on the southwest coast of Greenland, a number of articles which appeared, from sundry indubitable marks, to proceed from the sunken vessel. These articles were first discovered by the Eskimo, and were afterwards collected by Mr. Lytzen, Colonial Manager of Julianehaab, who has given a list of them in the *Danish Geographical Journal* for 1885. Among the following may especially be mentioned:

- “1. A list of provisions, signed by De Long, the commander of the *Jeannette*.
- “2. A MS. list of the *Jeannette*'s boats.
- “3. A pair of oilskin breeches marked ‘Louis Noros,’ the name of one of the *Jeannette*'s crew, who was saved.

“By what route did this ice-floe reach the west coast of Greenland?

“Professor Mohn, in a lecture before the Scientific Society of Christiania, in November, 1891, showed that it could have come by no other way than across the Pole.

“It cannot possibly have come through Smith Sound, as the current there passes along the western side of Baffin's Bay, and it would thus have been conveyed to Baffin's Land or Labrador, and not to the west coast of Greenland. The current flows along this coast in a northerly direction, and is a continuation of the Greenland polar current, which comes along the east coast of Greenland, takes a bend round Cape Farewell, and passes upward along the west coast.

“It is by this current only that the floe could have come.

“But the question now arises: What route did it take from the New Siberian Islands in order to reach the east coast of Greenland?

“It is conceivable that it might have drifted along the north coast of Siberia, south of Franz Josef Land, up through the sound between Franz Josef Land and Spitzbergen, or even to the south of Spitzbergen, and might after that have got into the polar current which flows along Greenland. But however, we study the directions of the currents in these regions so far as they are at present ascertained, it will be found that this is extremely improbable, not to say impossible.”

Having shown that this is evident from the *Tegethoff* drift and from many other circumstances, he proceeded:

“The distance from the New Siberian Islands to the 80th degree of latitude on the east coast of Greenland is 1360 miles, and the distance from the last-named place to Julianehaab 1540 miles, making together a distance of 2900 miles. This distance was traversed by the floe in 1100 days, which gives a speed of 2.6 miles per day of 24 hours. The time during which the relics drifted after having reached the 80th degree of latitude, till they arrived at Julianehaab, can be calculated with tolerable precision, as the speed of the above-named current along the east coast of Greenland is well known. It may be assumed that it took at least 400 days to accomplish this distance; there remain, then, about 700 days as the longest time the drifting articles can have taken from the New Siberian Islands to the 80th degree of latitude. Supposing that they took the shortest route—*i.e.*, across the Pole—the computation gives a speed of about 2 miles in 24 hours. On the other hand, supposing they went by the route south of Franz Josef Land, and south of Spitzbergen, they must have drifted at much higher speed. Two miles in the 24 hours, however, coincides most remarkably with the rate at which the *Jeannette* drifted during the last months of her voyage, from January 1 to June 12, 1881. In this time

sample content of Farthest North (Modern Library Exploration)

- [Timeshares pdf, azw \(kindle\)](#)
- [Alcools: Poèmes 1898-1913 for free](#)
- [Symmetry: A Very Short Introduction \(Very Short Introductions\) pdf, azw \(kindle\), epub, doc, mobi](#)
- [download The Complete Short Stories: Volume 2](#)
- [click Practice Makes Perfect Basic Portuguese \(Practice Makes Perfect Series\)](#)
- [click Density and duality theorems for regular Gabor frames pdf](#)

- <http://test1.batsinbelfries.com/ebooks/Waterfire-Saga--Deep-Blue.pdf>
- <http://poulterandmac.com/?books/Solomon-Kane.pdf>
- <http://louroseart.co.uk/library/Symmetry--A-Very-Short-Introduction--Very-Short-Introductions-.pdf>
- <http://toko-gumilar.com/books/The-Complete-Short-Stories--Volume-2.pdf>
- <http://www.satilik-kopek.com/library/Practice-Makes-Perfect-Basic-Portuguese--Practice-Makes-Perfect-Series-.pdf>
- <http://poulterandmac.com/?books/Left-for-Dead--My-Journey-Home-from-Everest.pdf>