Top: R.C.M. Police schooner "St. Roch" leaving the harbour, Halifax, July, 1944.
R.C.N. photo

Left: Staff-Sgt. Henry A. Larsen, Captain and Navigator on the "St. Roch"
R.C.N. photo

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Conquest of the Northwest Passage
by R.C.M.P. Schooner St. Roch

by J. LEWIS ROBINSON

The search for the Northwest Passage forms an intriguing chapter in the history of Canadian exploration. The stories of early navigators who faced the dangers of polar pack-ice in tiny wooden sailing ships, travelling, with doubtful compasses, along uncharted coasts, are accounts of hardship, courage and perseverance. The fruitless quest for a route north of the North American mainland to the wealth of the Far East, resulted in the exploration and charting of most of the numerous Arctic Islands of Northern Canada. As more and more knowledge of this inhospitable region was obtained through exploration, the trading incentive behind the search for a northwest route waned in the light of geographic facts which showed the route to be commercially impractical.

In the sixteenth century Europe began to look towards the new continent to the west, and expeditions from England, Spain, Portugal and France groped their way along the unknown coasts. At first this new land-mass was regarded chiefly as a barrier, of little value in itself, blocking the route to the fabled riches of the East. Exploration was interested in a way around or through it, and in 1576 Martin Frobisher first entered the Eastern Arctic seeking such a route. John Davis, who followed Frobisher’s lead, reached Baffin Bay before the end of the century and noted several westward openings on the barren rocky coast.

Exploration in the early seventeenth century was side-tracked by the broad opening of Hudson Strait, and many years were spent in defining the limits of extensive Hudson Bay. The failure of several expeditions to find openings west of Hudson Bay dampened interest in the search in this direction, and for a time exploration was neglected.

After the Napoleonic Wars expeditions from the British Navy renewed the search for a northern route through the sea reported north of America. Edward Parry entered Lancaster Sound in 1819 and twisted through eastward-moving ice-floes as far as Melville Island before freezing his ship in for the winter. The next season ice choking the channel to the westward prevented further progress, and Parry returned to England. In 1821 Parry tried the southern route through Hudson Strait and Foxe Channel, and reached the entrance to Fury and Hecla Strait before being stopped by ice. Later attempts to pass through this strait also failed, and it has not yet been navigated by other than Eskimo mariners. Further exploration by John Ross, beginning in 1829, confirmed the existence of Boothia Peninsula extending north from the mainland of Canada and discouraged all hopes for a passage through this region. Since Ross did not see Bellot Strait, the strategic opening to the west, it was believed that Somerset Island was part of this long barrier peninsula.

In 1845 Sir John Franklin led a British Naval expedition into Lancaster Sound, and, after being stopped by ice in Barrow Strait, wintered at Beechey Island, the southwestern corner of Devon Island. The next year he continued westward and was lost, never to be seen again. Despite the fact that sixteen rescue expeditions entered the Arctic from both the east and west, discovered 6,000 miles of new coastline in their search, and covered about 40,000 miles by winter sledge trips, Franklin’s fate remained a mystery until M’Clintock brought out some
clues in 1859. This extensive search well illustrated the vastness of the Canadian Arctic. Many famous explorers, whose names are now commemorated on our maps, travelled widely by small boat in summer and by sledge in winter, and their mapping brought forth the first definite outlines of the Arctic Islands. All their accounts lay stress on the short navigation season after the land-fast ice breaks up, on being obstructed by extensive masses of pack-ice moving eastward from the Arctic Ocean through the many channels of the Arctic Islands to Baffin Bay and the North Atlantic, and on an early freeze-up followed by a severe winter, with sledges as the only means of travel.

In 1854 the long-sought Northwest Passage was finally traversed by Captain M’Clure and part of his crew. They abandoned their ice-bound ship north of Banks Island in 1853 and sledged eastward to meet Captain Kellett at Dealey Island. The next spring M’Clure sledged to Beechy Island and was brought out from there by ship. When the news that the difficult route had been found was combined with geographic information which was reported on ice and navigation conditions by the many expeditions, enthusiasm for the Northwest Passage declined among explorers. In the meantime, commerce now knew safer and more dependable routes to carry the world’s merchandise, and no longer encouraged interest in the Passage.

The Northwest Passage, which had brought so many ships to destruction in the ice during three long and arduous centuries of polar exploration, remained unconquered by any one vessel until the beginning of the present century. In 1903, Roald Amundsen, Norwegian Arctic adventurer, entered Lancaster Sound in a small 47-ton vessel, the Gjoa, and took a route southward into uncharted Peel Sound, between Somerset and Prince of Wales Islands. He navigated as far as southeastern King William Island, where his party spent two winters at Gjoa Haven (Petersen Bay), studying terrestrial magnetism near the North Magnetic Pole on western Boothia Peninsula. In leaving the Arctic, Amundsen sailed westward through Queen Maud and Coronation Gulfs but was caught in the ice near Herschel Island, where he passed his third winter in 1906. Next summer he and his crew continued westward, becoming the first persons to navigate the Northwest Passage successfully from east to west in a single ship.

Within the modern period the Hudson’s Bay Company has experimented with the use of the northern route to bring supplies to its far-flung northern trading posts. In 1928 the H.B.C. schooner Fort James, drawing 9 feet of water, entered the Western Arctic from the east through Lancaster Sound and Peel Strait and brought supplies to the Gjoa Haven trading post on King William Island. After spending two winters there, the Fort James returned to the Eastern Arctic via the same route. This was the first commercial use of part of the passage, but when the Fort James was sent to the Western Arctic in 1934, she travelled via the Panama Canal.

In 1937 the Hudson’s Bay Company icebreaker Naesopic, carrying the Canadian Government Eastern Arctic Patrol, opened the trading post of Fort Ross at the eastern end of Bellot Strait, and here met and exchanged freight with the small H.B.C. schooner Aklavik, which came up from King William Island. Thus Bellot Strait, which had five times defied Captain M’Clintock and his Fox in 1858-59, became the meeting-place between the Eastern and Western Arctic on the Northwest Passage. Shallow seas along the western section of this route, however, limited the size of boats to small schooners like the Aklavik, causing the route to be of little economic value, and the scheme was dropped in 1940.

The boat which was to make history in the Northwest Passage, the R.C.M.P. schooner St. Roch, was built in 1928 and entered the Western Arctic around the Alaskan coast. In the following years the 80-ton, two-masted vessel travelled along the Western Arctic coasts and islands as a "floating police detachment", carrying sup-
plies and doing routine patrol work without fanfare, through the same difficult ice conditions which had cost so many ships and lives among the early explorers. These hardy adventurers were able to brave only one or two winters in the Arctic, but the sturdy St. Roch has spent ten of her sixteen years frozen into the ice of some Arctic harbour. Four successive winters, 1930-34, were spent at Tree River, in Coronation Gulf, and three winters, 1935-37 and 1938-39, were passed frozen in at Cambridge Bay. Aided by modern equipment and radio communication, the R.C.M.P. boat has been performing feats of Arctic ice navigation equal to those history-making voyages of less than a century ago. But to Staff-Sergeant Henry A. Larsen, who has been the unassuming Captain of the schooner during all of these years, this difficult work of navigation and long winter dog-sled patrols are the usual routine in maintaining law and order in the Canadian North.

On June 23, 1940, the St. Roch left Vancouver, British Columbia, beginning the historic voyage which was to make the 80-ton schooner the first ship to complete the elusive Northwest Passage from west to east. The voyage northward through the Inside Passage and across the north Pacific to the Aleutians was uneventful. The St. Roch entered Bering Sea through Unimak Pass and anchored at Akutan Harbour to check her engines and fill the fresh-water tanks. The schooner continued to Dutch Harbour in the Aleutians on July 8 to load a supply of fuel oil for the diesel-powered engines. Adverse weather, with strong winds, rain, and fog, was met in crossing Bering Sea and, after stopping at Teller Harbour for a day, the St. Roch passed through Bering Strait in a dense fog and entered the Arctic Ocean on July 17.

On July 23, the St. Roch rounded Point Barrow spit and met the first loose-scattered ice-floes. By evening the blocks had become

Captain and crew of the "St. Roch" at the end of the first historic voyage, 1940-42. Left to right: Const. W. J. Parry, Cook; Const. P. G. Hunt, Deckhand; Const. E. C. Hadley, Wireless Operator; Staff-Sgt. H. A. Larsen, Master; Const. F. S. Farrar, Mate; Const. J. W. Doyle, Deckhand; Cpl. M. F. Foster, Engineer; Const. G. W. Peters, 2nd Engineer

R.C.M.P. photo
more numerous, and the St. Roch began the familiar task of slowly "working the ice"—twisting and turning from one lead to another opening, edging around large floes and pushing aside small blocks, drifting with the pack and waiting for a lead to appear; Larsen and the St. Roch had been doing this patient work in partnership since 1928. Progress was slow and it became apparent that this was going to be a bad year for ice along the northern Alaskan coast.

Ice conditions are unpredictable in the Arctic, and are greatly dependent upon prevailing winds. The polar pack-ice, which moves in a general clockwise direction in the Arctic Ocean, presses southward against the Alaskan coast. In years when prevailing winds are easterly or southerly, the ice is moved westward and leaves an open strip along the coast; but northerly winds will pack the floes against the shore, impeding or blocking passage. Although this northern route was formerly used by whalers, many were lost during bad years, and since 1936 only the H.B.C. schooner Fort Ross, in addition to the St. Roch, has entered the Western Arctic via this route. Small schooners have more success along the Alaskan coast because they can travel close to shore inside of the ice which grounds in the shallow coastal water. The only large ship to attempt this route, the H.B.C. icebreaker Baychimo, after a few successful trips was caught in the ice off Point Barrow in September, 1931, and abandoned.

For eighteen days the St. Roch struggled in the pack-ice, east of Point Barrow. During much of this time the schooner had to be continually tied up to large floes for protection, and movement was mainly concerned with preventing the ship from being crushed. The weather was constantly foggy, further curtailing chances to see leads. At one time the St. Roch was able to anchor close to shore near Beechey Point, but as the ice began to close in again Larsen had to put the schooner back into the pack to avoid being shoved ashore. It was then moored to
Above: Loading a basket-sled for winter patrol to Eskimo camps.

Top right: Const. Peters and Eskimo guide encamped on Prince of Wales Strait.

Centre: Native boy with dog-team hitched in Western Arctic style.

Below: Snow-houses in Eskimo winter camp
Left: Heavy ice-floes packed solidly.
Photo by J. L. Robinson

Centre: "St. Roch" stuck in ice off Boothia Peninsula.

Right: Heavy ice loosely packed.
Photo by J. L. Robinson
a grounded floe for two days so as not to lose distance by being pushed westward during a furious northeasterly gale. On August 2 the police vessel resumed working eastward and reached Cross Island before being caught once more. Northwest winds jammed the ice against the shore and pressed hard against the boat, so that on August 10 Larsen had to start blasting the ice in order to work free. After each blast the schooner charged into the opening and finally reached open water near shore. Thereafter good progress was made eastward, although the vessel scraped bottom several times. Barter Island was passed on the morning of August 11, and very little ice was encountered between there and Herschel Island.

After loading coal and other supplies, the St. Roch left Herschel Island on August 18 and crossed Mackenzie Bay to Port Brabant (Tuktoyaktuk or Tuk-tuk). From this harbour the police schooner continued her normal routine patrol work of carrying supplies to the various R.C.M.P. detachments in the Western Arctic. Bad weather, fog and strong winds caused several delays in the eastward trip to Coppermine and Cambridge Bay, and it was not until September 16 that the schooner returned to Coppermine with her freighting duties finished.

Captain Larsen had originally hoped to proceed through the Northwest Passage via Prince of Wales Strait between Victoria and Banks Islands after completing the freighting work, but the delays caused by ice and bad weather discouraged any such attempt so late in the season. A decision was then made to winter either on Banks Island or at Walker Bay on central west Victoria Island, and to be ready to navigate the Passage early the next summer. The St. Roch, therefore, left Coppermine on September 19 and went to Holman Island and thence to DeSalis Bay, Banks Island.

September 25 was spent in examining the enormous harbour and surrounding country at DeSalis Bay, but when Larsen noted high ridges of rock and gravel pushed up along the shore, indicating heavy ice pressure during break-up in the spring, he considered it unwise to winter here. Since no other good harbours were known in the area, the St. Roch sailed for Walker Bay, where the explorer, Collinson, had wintered in 1851-52. The vessel had a total of 5,246 miles to show for a season's work when she was anchored in the southeastern part of this bay.

A continuous strong east wind blew during most of October and prevented Walker Bay from freezing over until October 30. It was the latest freeze-up known in this area, and, if Larsen had had any way of knowing that it was to be so delayed that year, it is possible that he might have been able to make his way immediately through the Passage to the Eastern Arctic. The vagaries of Arctic weather are unpredictable, however, and what is done in one year may not be possible in another. After the schooner was frozen in, a framework was constructed and the deck was completely housed over with canvas.

During the winter of 1940-41 the St. Roch detachment made several normal patrols through the area, visiting native camps to investigate Eskimo conditions and welfare, registering vital statistics and firearms, and generally carrying out the many other duties of the R.C.M.P. in supervising this vast Arctic region. As is customary, travel was by Eskimo dog-team and sled, and the nightly shelter was a snow-house of their own construction. Short patrols totalling 990 miles were made to Holman Island for mail, to Minto Inlet, to Prince of Wales Strait and inland on Victoria Island. One especially long patrol of 41 days, covering about 600 miles, was made for the purpose of visiting the prosperous Eskimo camps on the western side of Banks Island.

During the spring, when days became longer, the vessel and equipment were scraped and painted and all machinery was examined and overhauled. The ice in the harbour began to break up in July, but westerly winds kept Walker Bay blocked with floes for some time. On July 31, Larsen decided to try to work his way out, and, after much manouevring, finally reached the trading post and mission at Holman Island.
Here duty intervened, preventing the schooner from attempting the Passage through Prince of Wales Strait. A native boy had been accidentally shot and needed to be taken to hospital at Aklavik. Large and numerous ice-floes, foggy weather, and a storm off the mainland coast made progress slow, and the harbour at Port Brabant was not reached until August 5. Whereas Amundsen Gulf had been free of ice until very late in the preceding year, during the summer of 1941 floes jammed the northern part of it throughout the whole season. Thus does the natural environment limit planning in the Western Arctic.

Supplies were loaded into the St. Roch at Port Brabant on August 8, and the vessel left for Coppermine to fulfil her freighting duties. Scattered ice, rain and fog made travel to Baillie Island difficult, while large unbroken floes extending eastward to the horizon forced the schooner to travel along the shallow shores. Open water was finally reached in Dolphin and Union Strait, and the vessel arrived at Coppermine on August 12. Coronation Gulf favoured the St. Roch with good weather and open water, and she anchored in Cambridge Bay early on August 16.

Since the detachments had now been given their year’s supplies, Larsen decided to continue eastward and attempt the Passage around King William Island and through Bellot Strait. On August 19 he left Cambridge Bay, but strong westerly winds, rain and fog were ill omens. Larsen was forced to anchor in the shelter of Lind Island and was held there until August 24. The compass
Native women of Bathurst Inlet in holiday attire

was now useless, owing to the proximity of the Magnetic Pole, and navigation through island-studded Queen Maud Gulf was by experience and seaman's 'sixth sense'. The St. Roch proceeded cautiously towards Simpson Strait, south of King William Island, taking soundings continually, since no vessel of her draught (13 feet) had ever been in these waters. Because Simpson Strait is narrow and full of small rocky islands, Larsen sent the motor launch ahead to sound a course. The bottom was uneven, with depths averaging from 6 to 8 fathoms, and with several shallow places of 3 fathoms. On August 26 the vessel remained at anchor during a thick fog. The next day she proceeded carefully and reached Gjoa Haven (Petersen Bay) in the afternoon.

The sea-faring policemen left this trading post on August 30 and were soon inching their way through shoal water and strong tide rips in Rae Strait. A northwesterly storm, accompanied by hail and snow, forced the schooner to the coast in the shelter of Mt. Matheson, on the eastern tip of King William Island. Here she pitched and rolled for a day before proceeding northward, with one man continuously sounding with the lead and another at the masthead on the lookout for shoals. East of Matty Island large shoals, which rose abruptly from 10 to 2½ fathoms, forced the schooner to seek deeper water.

In the narrowest part of James Ross Strait, northeast of Matty Island, the St. Roch was stopped by a solid wall of grounded ice extending from shore to shore. Since the vessel was not built or powered to break such

Staff-Sgt. H. A. Larsen on the trail—visiting Eskimo camps.
a barrier, she was anchored near by to wait for the tide to change direction. Early in the evening the ice began pushing southward in a strong current. The only shelter available was on the lee of a small rocky islet only slightly larger than the schooner herself. A snow-storm shut off visibility, and throughout the night the St. Roch, with both anchors out, was continually battered and pushed by grinding ice blocks, and the little company on board did not know whether they were still near the islet or were caught in the ice. The morning of September 2, however, found them still there and undamaged, and when a south wind began pushing the ice northward they moved along with it.

On September 3, improved weather allowed the St. Roch to proceed northward between the coast and the ice. The low land was now snow-covered, and when visibility became poor the white shore could not be distinguished from the grounded ice. During the day the wind changed to the west, gradually moving the ice closer to the coast. It became apparent that there was a definite danger of being caught and crushed. Fortune was with the valiant ship, however, for Pasley Bay, a long inlet, erroneously shown on the charts as a broad bay, appeared ahead, and the St. Roch was forced into it.

The next morning its crew made a trip to a near-by hill to look westward over the ice of Franklin Strait and M’Clintock Channel. It was jammed against the coast as far as could be seen, and extended in a jumbled mass to the horizon. In the afternoon large floes began to shove into the inlet, and the St. Roch had to move farther in. Soon the ship was completely surrounded by heavy ice and could no longer manoeuvre. On the morning of September 6 the ice carried the vessel against a shoal in 1½ fathoms, turned the schooner twice, listed it to alternate sides, and then pushed it completely over the shoal, dragging two anchors and 90 fathoms of chain.

Heavy snowfall and variable winds continued, and the St. Roch remained locked in the ice until September 9, when deep water was found in an opening close to the shore. On September 11 the ice movement ceased. New ice soon formed rapidly in the open places, and the whole inlet froze over solidly. As it was now impossible to escape, the ice was cut away from the ship, which was anchored farther off-shore so as not to be grounded in the spring. Preparations were then made to spend the winter in Pasley Bay, close to the North Magnetic Pole on Boothia Peninsula, and the news was radioed outside. The schooner had travelled 1,660 miles during the summer. The season was still early by normal standards, and Bellot Strait and the Northwest Passage were only 100 miles away, but the sickly Arctic had again frowned on the St. Roch.
The stranded R.C.M. Policemen had an important task to perform during the winter of 1941-42. In the taking of the census of the Canadian Arctic areas, their job was to meet as many as possible of the Canadian Eskimo in this little-visited region. In order to do this Larsen travelled by dog-team to the trading post at Fort Ross in early December and obtained information as to the location of the native camp-sites in the area. In early January Constable Chartrand patrolled to King William Island to prepare a fish cache for the long spring census trip, and also to bring back additional winter clothing made by the natives for the detachment. Towards the end of February, Sergeant Larsen and Constable Hunt, having picked up a native guide, left their winter headquarters on the St. Rock for an epic patrol which was to cover 1,140 miles and extend over a period of 71 days. They travelled north to Fort Ross and beyond to Creswell Bay, then southward along the east coast to Boothia Peninsula to the mission at Pelly Bay. After spending Easter there, they travelled westward to Gjoa Haven, King William Island, where both were laid up for fourteen days with influenza. This illness curtailed the patrol, and they returned to the St. Rock on May 6.

The winter weather at Pasley Bay was quite different from any other that Sergeant Larsen had known previously in the Arctic. Continued fog and snow-fall with variable winds made visibility poor, while sudden changes in temperature from 30 below zero to zero and back again within a short time made it difficult to become acclimated. As summer approached it became apparent that the ice was not going to break up early in this region. It was still packed solidly outside the inlet, and pressure ridges, 50 to 100 feet high along the coast north of Pasley Bay, showed the results of enormous ice forces. Since the ice was to remain that year there was virtually no navigation season for the west side of Boothia Peninsula during the years 1941-42.

The St. Rock and police crew spent eleven months at Pasley Bay. On August 4, fresh water draining into the harbour loosened the ice and allowed them to move out of the inlet. On the shore behind they left a new cairn and grave. On February 18, Constable Chartrand had had a sudden heart attack and died almost immediately; his death was the only tragedy of the trip.
Captain Larsen navigated shoreward of the main pack-ice and made 15 miles northward along the coast before being stopped by a solid mass of fœs. He then put the vessel into a small lead extending westward to await a break-up. The opening closed, however, and the schooner was caught and held there helpless for twenty days. On several occasions, while they were beset, severe pressure lifted the boat high in the ice and threatened to turn her over. At these times charges of black powder were set off near the vessel to relieve the pressure, while the police crew worked with ice-chisels to keep free the propeller and rudder. An easterly wind carried the schooner farther and farther away from the coast.

On August 24 a strong northerly gale split the ice and opened a long lead south from one of the rocky Tasmanian Islands. It took two anxious days for the St. Roch to break through the short distance to the lead and then to follow the twisting, grinding opening to the safety of a deep anchorage among this small group of high islands. A strong current set back and forth through the islands, with the regular 5-foot tide, and on August 29 Larsen decided that the leads looked promising. They worked northward to Dixon Island and then found easier going to Bellot Strait.

With the Northwest Passage practically in their grasp, tragedy almost struck the St. Roch and crew in Bellot Strait. The western end of the strait was free of ice, but the tide was changing direction to the eastward as the vessel entered. The ice from Peel Sound was carried in behind them. Half-way through the strait, Larsen suddenly saw that an ice-jam had formed ahead from shore to shore. They could not turn back and were headed for a large, thick, grounded floe. Then, just as they were about to crash and be wrecked, a smaller floe hit the larger one and broke off its southern half. The next moment the St. Roch’s prow went into the widening crack and she drifted forward between the two floes.

The St. Roch left Port Ross on September 9, surrounded by moving fœs, and worked north in Prince Regent Inlet, with young slush ice already forming. The Nuncapie, on
the Eastern Arctic Patrol, was to have entered this inlet later in the month, but although she had reached Fort Ross successfully for five previous years, she was stopped this time by the ice which was already threatening the St. Roch. The hurrying schooner entered Navy Board Inlet and stopped at the Pond Inlet post on Northern Baffin Island to discharge stores and coal for the police detachment and to pick up Constable Doyle. On September 10 it left this Eastern Arctic post and travelled through numerous bergs and storms southward along the Baffin Island and Labrador coasts.

After stopping at Labrador, Newfoundland and Sydney, Nova Scotia, the St. Roch and crew arrived in Halifax on October 11, having travelled 2,849 miles en route during their third summer season. The historic news that the St. Roch was the first ship to complete the west-to-east voyage through the Northwest Passage in Northern Canada was then released. The trip of 27½ months bettered Amundsen’s time, and, with improved weather and ice conditions, it might well have been less. To Staff-Sergeant Henry A. Larsen this historic feat was an achievement of which to be proud, but nothing about which to become excited. He and his police crew had been travelling around amid the ice-floes of the Western Arctic in good and bad seasons for fourteen years, and had conquered the Passage as a side-activity while successfully carrying on with their other police duties. Larsen discounted his long winter patrols by Eskimo dog-team and sled as something which the R.C.M.P. Police are doing every winter throughout the Arctic in keeping contact with our migratory Eskimo population.

During the 1943 navigation season the St. Roch had a change of scenery while patrolling the Eastern Arctic detachments. She entered Hudson Strait after most of the ice had gone, and had little trouble in sailing around in this new region with no ice impediment except the huge bergs met off the eastern Baffin Island coast. The Eastern Arctic, however, is not always so friendly.

During the spring of 1944 the St. Roch was provided with greater engine-power, one mast was removed, and she was fitted with the luxury of a new gyro-compas. The R.C.M.P. were going to patrol another route through the Arctic Islands as part of Canada’s work in maintaining sovereignty over these barren, uninhabited islands, and the partnership of Larsen and the St. Roch was scheduled for another history-making voyage.

On July 22, 1944, the St. Roch left Halifax, but developed engine trouble which forced her to put in to Sydney. She left there on July 26, but had to moor again at Curving Cove, Newfoundland, to make further engine adjustments. On July 28, she put to sea once more, and thereafter had no further engine difficulties. Numerous bergs and thick fog were found off the Labrador coast, but Larsen navigated around icebergs just as efficiently as he worked through floes. Cape Chidley, the northern tip of Labrador, was passed on August 2, and the next day the patrol was greeted with the familiar sight of pack-ice off Hall Peninsula, Baffin.

"St. Roch" in dry-dock at Halifax, N.S. Her wooden hull is undamaged despite two years in the ice. Note the steel plates on the prow.
Island. The ice was broken, but tightly packed, and progress was impossible, so Larsen swung over to the usual open water off the Greenland coast on August 4. On August 6 he turned westward towards Baffin Island, and again met pack-ice and fog slightly south of River Clyde. For several days the gyro-compass had been unreliable, and would suddenly change 10 to 20 degrees; finally it had to be ignored as useless. Larsen’s navigation from then onward was by sight, experience and the wavering magnetic compass.

In trying to work through the ice to travel near the coast off River Clyde, Larsen found that the land-fast ice had not yet broken up and he had to stay offshore. His difficulties were further increased by an amazingly strong mirage effect which made the leads difficult to pick out. Progress was stopped on August 9 by floes that were very large and unbroken, although only about 2 feet thick. Bylot Island was glimpsed through a thick fog that evening, but the St. Roch remained moored to a large floe off the entrance to Pond Inlet until August 12, when she slipped forward and anchored off the post settlement.

Detachment supplies were unloaded at Pond Inlet, and the police picked up a native, his family and seventeen dogs. The Eskimo was quite willing to adventure into the unknown, and so, in case the St. Roch should be forced to winter, he was taken along to hunt food and aid in winter travelling with his dog-team. The expedition left Pond Inlet on August 17 and, proceeding up Navy Board Inlet, crossed Lancaster Sound to Devon Island. A strong southerly gale off Cape Warrenden caused the St. Roch to pitch a great deal before shelter was found in the lee of a large flat-topped iceberg. There it cruised back and forth until the storm subsided.

The St. Roch arrived at the former R.C.M.P. post at Dundas Harbour, Devon Island, on August 18, and found the unoccupied buildings in good condition. The patrolling schooner and police crew left the next day and followed along the high, clifftop coast until they came to a good harbour in a little-known 7-mile inlet (either Stratton Inlet or Burnett Creek). Here they found ruins of an Eskimo culture of several centuries ago; after building a cairn and depositing records of their visit, they departed. That evening (August 19) the first snow fell, heralding the coming winter.

Larsen and the St. Roch continued westward, but the coastline was usually hidden by frequent heavy snow-squalls. The weather cleared near Maxwell Bay, Devon Island, and they saw a steep-walled coast with no beach and a flat-topped upland. A few bergs could be seen to the south, but otherwise

*Picturesque Pangnirtung fiord, the last stop of “St. Roch” on her 1943 patrol.*

Photo by P. D. Baird

*The twisting inlet at Lake Harbour; “St. Roch” called here in 1943.*

Photo by J. L. Robinson
Prince Regent Inlet was free of ice. On August 20, they arrived at historic Erebus Bay, Beechey Island.

Beechey Island is actually connected to Devon Island by a low spit which is dry at low tide. A narrow lowland at the base of the former high cliffed 'island' was the site of the winter quarters of several early Arctic explorers. Within recent times the site had been visited by one of Otto Sverdrup's sledge parties in 1902, by A. P. Low in 1904, by Captain Bernier in 1906 and 1908, and by the C.G.S. Arctic in 1923. Numerous police patrols from Dundas Harbour, and also the Beothic, carrying the Canadian Government Eastern Arctic Patrol in 1927 and 1928, called there to keep a watchful eye on the historic ruins. Except for part of the keel and a bit of planking, all that was left of the yacht Mary, placed there in 1853 by Sir John Ross, was the mast, which was stuck in the sand. Only ruins remained of the cache called Northumberland House, left by Commander Pullen of the H.M.S. North Star in 1854. A further search of the island revealed nothing of historic interest. Since the land was barren and desolate, with no fresh-water supply, the St. Roch proceeded from Beechey Island on the morning of August 22.

Wellington Channel was clear of ice as far as could be seen to the northward, but the first floes were met drifting eastward at Cornwallis Island. Larsen followed leads through the tightly-packed floes, staying inside of the line of Griffith, Somerville and Brown Islands, along the Cornwallis Island coast. Several walrus were seen in this area, and four were shot and brought on board to

**Passing glaciers and ice-cap along Baffin Island coast of Navy Board Inlet.**

*Photo by P. D. Baird*
be used as dog-feed. At other times, along the way, seals were shot to feed the team of hungry Eskimo dogs. Since the ice was packed solidly to the south, Larsen turned north along Cornwallis Island as far as Cape Airy, where he found leads pointing westward towards Bathurst Island, the south shore of which was obscured by a heavy snow-storm. Despite being turned and buffeted by the ice, the St. Roch maintained a forward course, and Cape Cockburn was reached about noon on August 23. Here solidly-packed floes blocked further progress. The tide set to the east, and the St. Roch was carried 20 miles back to Ackland Bay before anchoring close to shore. Larsen’s difficulties were further increased by the failure of his magnetic compass, which had pointed fixedly at the bow of the schooner for several days. For the remainder of the voyage he had only his Admiralty charts and an amazing sense of direction upon which to depend as navigation aids. Even the sun was hidden by continuous snow-storms.

Early in the morning of August 24 the St. Roch once more slipped along the coast to Cape Cockburn and anchored, while a party went ashore to look for Captain Bernier’s cairn. No trace of the cairn could be found, but numerous bear tracks in the area suggested that these curious animals might have scattered it. Larsen left an R.C.M.P. cairn near a conspicuous rock on the south side of the point and placed a record of their visit inside it for historical reference. From this high cape it could be seen that Viscount Melville Sound was filled with ice to the horizon. The ice was broken but tightly-packed, and was pushed against the islands by a strong south wind. Ice was also being carried southward by currents through Austin Channel, west of Bathurst Island.

Since he could not proceed westward, Larsen decided to try a route north of Byam Martin Island. He experienced a great deal of trouble near Graham Moore Bay on western Bathurst Island, due to the St. Roch drifting southward with the current each time she was stopped by the ice. After patient work back and forth from one small opening to another, shoving the floes when possible, or letting them drift by, the St. Roch made the north coast of Byam Martin Island on the afternoon of August 25. Here Corporal Hunt and a party went...
Approaching Beechey Island—historic Erebus Bay to right behind cliff.

The cairn and ruins at Beechey Island are on the foreland to the left below the cliff.

Ruins of Northumberland House, built 1852-54 by Commander Puleen, R.N.; note mast of yacht "Mary" stuck in sand. Erebus Bay in background.

ashore to build a cairn and leave a record of the patrol. Because of a heavy snow-fall, no observation of the surrounding land could be made, but fresh caribou tracks were seen.

August 26 began with clear weather and a fresh westerly wind. After rounding the northern tip of Byam Martin Island, the expedition found open water to the westward. Melville Island was soon sighted, near Consett Head, and the men saw a herd of twelve musk-oxen grazing on the grassy lowland. Other herds of musk-oxen were seen on the tundra farther south, proving that these protected animals, part of the remnant of the species, had survived on their isolated sanctuary. Except for a long patrol by the late Inspector Ernest Joy of the R.C.M.P. to the island in 1929, no white man has visited Melville Island since Stefansson’s party in 1917.

South of Griffith Point, Melville Island, where a cairn was built, the St. Roch was forced to travel slowly, due to shoal water of 4 to 8 fathoms for 2 miles off the coast. At midnight the expedition anchored off Palmer Point, with still no ice in sight, and another record was deposited. An excellent harbour north of the point was examined the following morning, when thick weather discouraged further sailing. At noon on August 27 the weather cleared, and they approached Dealey Island, where the huge cairn, topped by three barrels on a post, could be seen for miles at sea. The party went ashore and examined the large cache left by Captain Kellett of the H.M.S. Resolute in 1852-53. The walls of the cache were still standing, but there was no roof and most of the contents had been destroyed by the weather and marauding bears. The skeletons of two bears found near by suggested that they might have been poisoned by consuming some of the spoiled food. Some of the barrels contained clothing, sea-boots, flour, chocolate, peas, beans, and tea; all were in a soggy, rotten condition. Some of the iron cans and tanks contained hard-tack and canned meats and vegetables, but most of them had been broken into and the contents had spoiled. On the beach close by the men found two broken rifles and a case of ammunition left by Captain Bernier in 1909.

They left Dealey Island on the morning of August 28, and travelled along the low coast to Winter Harbour, about 30 miles to the southwest. Winter Harbour was chosen by Captain Bernier as the winter quarters for his Canadian Government Expedition of 1908-09, and was visited again by him in 1910. The storehouse built by Bernier in 1910 was still in fair condition, although almost empty, and from a rafter hung a bottle containing the record left by Inspector...
Several times heavy fog, which obscured leads, prevented progress, and they were gripped by the general counter-clockwise revolving motion of the churning, growling ice. Soundings of 50 and 63 fathoms were obtained during the crossing of the strait. They drifted throughout September 1, but towards evening of September 2, after they had worked forward again, the fog lifted and a cape loomed ahead. Larsen did not know which coast of Prince of Wales Strait the cape marked, but decided to turn eastward. The cape proved to be Peel Point, and he soon realized that he was in Richard Collinson Inlet. Since there was much ice in the inlet and more pouring in behind the boat, Larsen did not consider it wise to explore the inlet to its head, and so turned around and retraced his course to Peel Point.

The St. Roch entered Prince of Wales Strait on September 3 in bright, clear weather. No ice blocked the passage and good time was made to the southward. Holman Island was reached in mid-afternoon of September 4, and the exciting news that the vessel had come through the Northwest Passage was given to the amazed Hudson's Bay Company manager. Although many explorers had spent years in unsuccessfully trying to work through the eastward-moving ice, it had taken Larsen and the St. Roch only eighteen days from the time they entered Lancaster Sound until they were
at Holman Island in the Western Arctic.

Larsen received instructions from Ottawa to proceed outside to Vancouver and to complete the coast-to-coast voyage if he could. After he left Holman Island on September 5, heavy ice gave difficulty all across Amundsen Gulf and forced the St. Roch to proceed slowly close to the shallow shore of the Canadian mainland west of Cape Parry. On September 8 she was freed of the ice off the harbour at Port Brahan, but ran aground trying to enter it in the dark. Larsen backed her off and was able to get in just in time to ride out the worst storm ever known at this place. Two days later, when the storm abated, the entrance to the harbour was completely changed and Larsen erected new markers. The ice was packed solidly in Mackenzie Bay by the northerly hurricane, and it appeared that the St. Roch would have to winter at Port Brabant. On September 17, however, Larsen decided to attempt the crossing, and, after making slow progress through the heaviest ice seen during the voyage, successfully reached Herschel Island.

The Eskimo family and dogs from Pond Inlet were left here, along with a large share of the St. Roch's coal and other supplies.

The history-making 'Mounties' left Herschel Island on September 21, as the harbour was beginning to freeze over, and met more heavy ice and fog along the Alaskan coast. With their goal so close, the cruel Arctic weather was teasing them by making their progress more and more difficult, but the St. Roch and her determined crew were not to be denied this time, and their experienced captain countered every aimless movement of the ice. The last of the polar pack was left behind near Wainwright Inlet, Alaska, and the remainder of the voyage became merely a matter of reaching port. Stops were made at King Island in Bering Sea and Akutan Harbour in the Aleutians.

After they left the Aleutian port on October 4, a violent two-day storm and heavy swells on the North Pacific provided but a fitting finish to an exciting historic voyage. Towards evening on October 16, the St. Roch came into Vancouver Harbour with all flags flying and a large white banner proclaiming the successful trip through the Northwest Passage. Three hundred and sixty-eight years after Martin Frobisher first attempted to enter the Arctic, seeking a northern route, the R.C.M.P. schooner St. Roch became the first ship to complete the Passage in a single year from east to west, with a total elapsed time of 86 days. As Captain Larsen expressed it: "We were lucky and had the breaks. No one can predict ice or navigation conditions in the Arctic. What we accomplished this year might be repeated the next or it might be many years. Much would depend upon the type of vessel used, and the ice conditions of that particular year. Our voyage showed that the Northwest Passage can be traversed in a single year, but does not prove that this could be accomplished every year."

*Arrival in Vancouver, B.C., after successfully traversing the Northwest Passage—for the first time in a single year.*