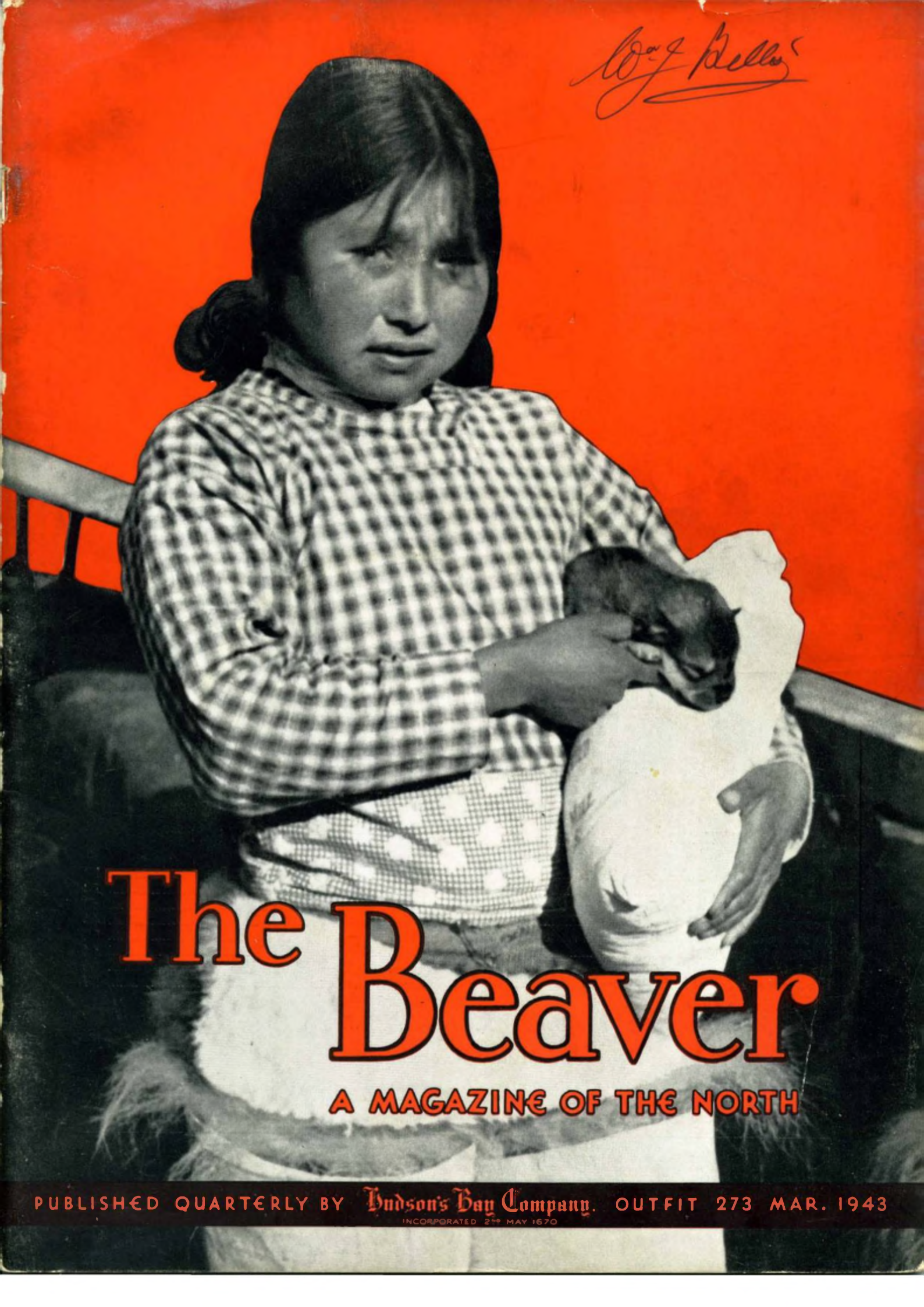
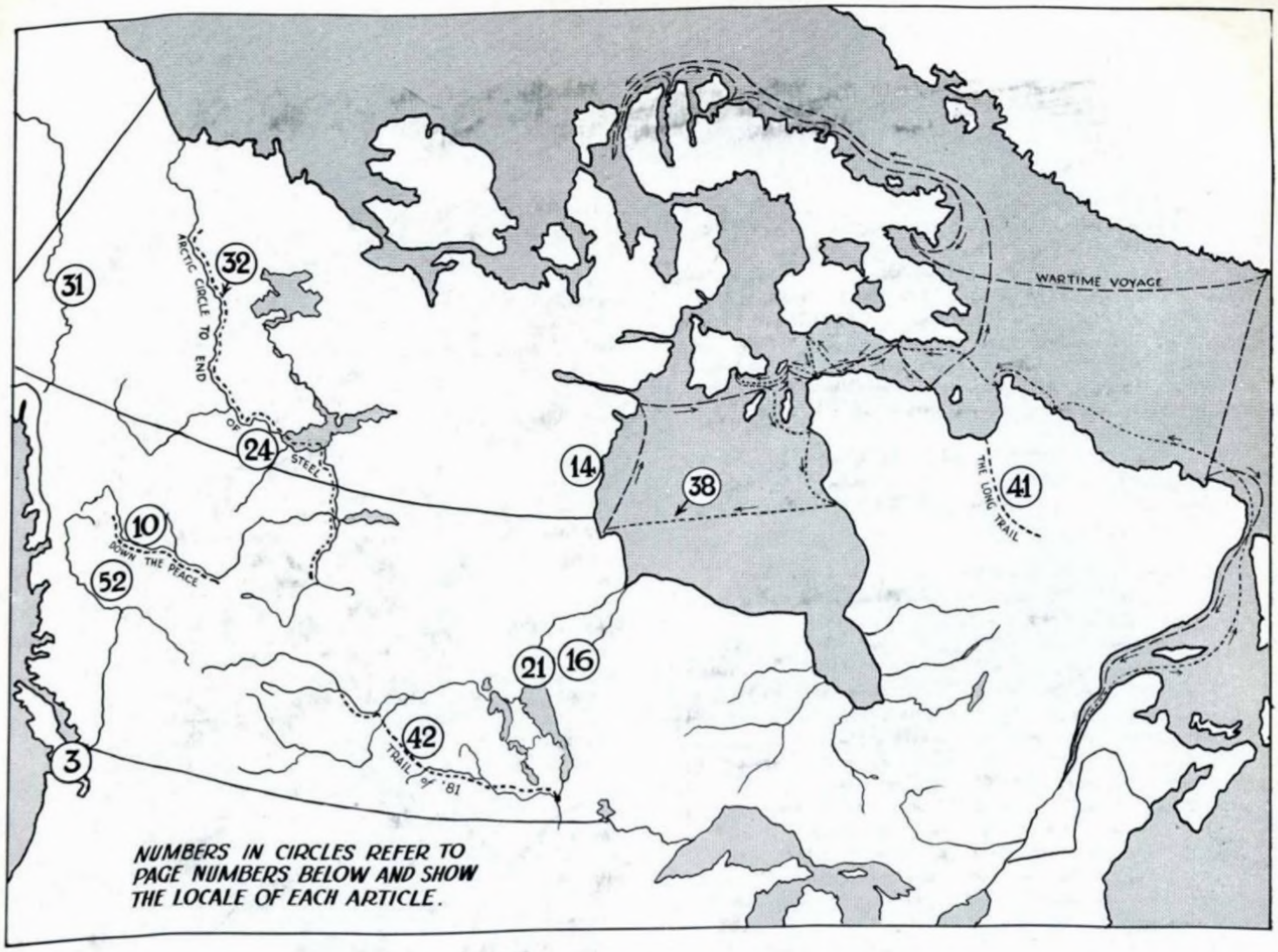


The Beaver

A MAGAZINE OF THE NORTH

PUBLISHED QUARTERLY BY Hudson's Bay Company. OUTFIT 273 MAR. 1943
INCORPORATED 2ND MAY 1670



The Beaver

A MAGAZINE OF THE NORTH

OUTFIT 273 MARCH 1943

CONTENTS

Greenland Eskimo Girl—Lorene Squire 1
The Founding of Victoria 3
Down the Peace in a Dugout—Sir Cecil Denny 10
Trapping the Arctic Fox—D. B. Marsh 14
By Canoe to Oxford House—Leonard Mason 16
Nutrition in the North 21
Life in the Mackenzie Valley—G. Pendleton 24
The Strange "Dog" of Fort Selkirk—J. Gregg 31
Arctic Circle to End of Steel—R. Bonnycastle 32
Wartime Voyage—J. W. Anderson 38
The Trail of '81—William B. Cameron 42
The Long Trail—Mrs. J. S. C. Watt 46
Camp Trade—W. P. Johnston 52
Spring Packet 54
Northern Lights—James Simpkins 56
Book Reviews 57

ONE DOLLAR A YEAR

PUBLISHED QUARTERLY BY

HUDSON'S BAY HOUSE — Hudson's Bay Company. — WINNIPEG, CANADA

INCORPORATED 2ND MAY 1670.

THE BEAVER is published quarterly by the Governor and Company of Adventurers of England trading into Hudson's Bay, commonly known as the Hudson's Bay Company. It is edited at Hudson's Bay House, Winnipeg, at the office of the Canadian Committee. Yearly subscription, one dollar; single copies, twenty-five cents. THE BEAVER is entered at the second class postal rate. Its editorial interests include the whole field of travel, exploration and trade in the Canadian North as well as the current activities and historical background of the Hudson's Bay Company, in all its departments throughout Canada. THE BEAVER assumes no liability for unsolicited manuscripts or photographs. Contributions are however solicited, and the utmost care will be taken of all material received. Correspondence on points of historic interest is encouraged.

The entire content of THE BEAVER is protected by copyright, but reproduction rights will be given freely upon application.
Address: THE BEAVER, Hudson's Bay House, Winnipeg

THE FOUNDING OF VICTORIA

A HUNDRED years ago this month, Victoria, the present capital of British Columbia, was founded as a Hudson's Bay Company fort. The establishment of that fort and the part the Company has since played in the growth of Victoria were touched upon briefly in the September 1941 issue of *The Beaver*. Here are reproduced a few extracts from contemporary documents dealing with the foundation of this charming and beautiful city, which has become famous throughout the continent as "Canada's Evergreen Playground."

Most of these extracts are from copies of the original documents sent by the Governor and Committee of the Hudson's Bay Company to the Provincial Archives in Victoria.

From the dispatch of Governor Sir George Simpson to the Governor and Committee of the Hudson's Bay Company, dated at Honolulu, March 1, 1842:

A three weeks detention inside Cape Disappointment, watching a favorable opportunity for crossing the very dangerous Bar off the entrance of the Columbia river, recalled my attention very forcibly to the importance of a depot being formed for such portion of the Company's business, as is more immediately connected with the Foreign Trade and Shipping department, on some eligible part of the coast instead of continuing Fort Vancouver as the great centre of the business of the west side of the Continent, and exposing many lives and the whole of the valuable imports and exports of the Country to a danger which is becoming more alarming every successive year.

In measure as the natural resources and sources of commerce of the Northern Pacific and its shores and interior country develope themselves, in like measure does it become apparent that we cannot avail ourselves of them advantageously, while entirely dependent on Fort Vancouver as the principal depot; as independent of the dangers of the Bar, the time lost in watching opportunities either to get out or in (frequently from a month to six weeks, while three weeks more are often consumed after crossing the Bar, in getting from Cape Disappointment up to Fort Vancouver) renders it impossible to calculate with any degree of certainty on the quantum of work that ought to be performed by the Shipping, deranging the best laid plans, burdening the different branches of the business with very heavy Shipping charges and depriving us of the means of embarking in other branches of Commerce, which might be carried on with great advantage, had we a depot eligibly situated on the Coast.

The Southern end of Vancouver's Island forming the Northern side of the Straits of de Fuca, appears to me the best situation for such an establishment as is required. From the very superficial examination that has been made, it is ascertained there are several good harbours in that neighbourhood no place however has as yet been found combining all the advantages required, the most important of which are, a safe and accessible harbour, well situated for defence, with Water power for Grist and Saw Mills, abundance of Timber for home consumption and Exportation and the adjacent Country well adapted for tillage and pasture Farms on an extensive scale. I had not an opportunity of landing on the southern end of the Island, but from the distant view we had of it in passing between Puget's Sound and the Gulf of Georgia and the report of C F McLoughlin and others who have been there, we have every reason to believe there will be no difficulty in finding an eligible situation in that quarter for the establishment in question.

There follow some remarks on the salmon and whale fisheries, both of which, the Governor considered, could be carried on advantageously from the south end of Vancouver Island. Sir George continues:

From these notes your Honors will observe that an establishment in the Straits of de Fuca would be admirably adapted for prosecuting that branch of business with every prospect of success being in the immediate vicinity or in the heart of the best fishing grounds at present known. Vessels employed in the Fishery might run in and out from month to month as circumstances might render desirable, deliver their oil, receive refreshments or other supplies and thus remain on their stations from years end to years end following the "Right" Whale during the summer when the weather is moderate in the higher latitudes, and the Spermaceti to the Southward during the winter Months, where there is no exposure to bad weather.

There is a very large population of daring fierce and treacherous Indians on, and in the neighbourhood of the Southern Shore of Vancouver's Island, so that a heavy establishment of people say from 40 to 50 Officers and men, will be required for its protection in the first instance; but with the occasional presence of the Steamer [*Beaver*] whose power and ubiquity, has done more in my opinion to tame those daring hordes, than all the other means to that end that have ever been brought into action by Whites, not only the new depot but every other establishment on the Coast may in due time be reduced in point of numbers to as many only as are absolutely required to accomplish the work.

But there was another reason, not mentioned in this dispatch, why the Company deemed it advisable to move their Pacific Coast depot farther north. The Americans were beginning to populate the Oregon country, and it was quite within the bounds of possibility that Fort Vancouver would soon find itself within the territory of the United States. The Council of the Northern Department of Rupert's Land, held at Norway House, June 28, 1842, therefore resolved:

That in accordance with the 23rd paragraph of Governor Sir George Simpson's dispatch to the Governor and Committee, dated Fort Vancouver 25th November 1841, Chief Factor McLoughlin take the necessary steps for abandoning the posts of Fort McLoughlin and Takoo in Summer 1843, and the Posts of Stikine in Summer 1844; and for fitting the "Beaver" Steamer to secure the trade usually collected at these abandoned Establishments.

It being considered in many points of view expedient to form a depot at the Southern end of Vancouver's Island, it is resolved that an eligible site for such a Depot be selected, and that measures be adopted for forming this Establishment with the least possible delay.

Chief Factor James Douglas had meanwhile been sent north from Fort Vancouver to investigate the various harbours along the southern coast of Vancouver Island, and to choose a site for the new depot. His report of this expedition follows:

Fort Vancouver 12th July, 1842.

John McLoughlin Esqre:

Dear Sir

According to your instructions I embarked with a party of 6 men, in the Schooner Cadboro, at Fort Nisqually and proceeded with her, to the South end of "Vancouvers Island," visited the most promising points of that coast, and after a careful survey of its several Forts and harbours, I made choice of a site for the proposed new Establishment in the Port of Camosack which appears to me decidedly the most advantageous situation, for the purpose, within the Straits of De Fuca.

2. As a harbour it is equally safe and accessible and abundance of timber grows near it for home consumption and exportation. There being no fresh water stream of sufficient power, flour or saw Mills may be erected on the canal of Camosack, at a point where the channel is contracted to a breadth of 47 feet, by two narrow ridges of granite projecting from either bank, into the canal, through which the tide rushes out and in with a degree of force and velocity capable of driving the most powerful machinery, if guided and applied by mechanical skill.

3. In the several important points just stated, the position of Camosack can claim no superiority over some other excellent harbours on the south coast of Vancouvers Island, but the latter are, generally speaking, surrounded by rocks and forests, which it will require ages to level and adapt extensively to the purposes of agriculture, whereas at Camosack there is a range of plains nearly 6 miles square containing a great extent of valuable tillage and pasture land equally well adapted for the plough or for feeding stock. It was this advantage and distinguishing feature of Camosack, which no other part of the coast possesses, combined with the water privilege on the canal, the security of the harbour and abundance of timber around it, which led me to chase [choose] a site for the establishment at that place, in preference to all others met with on the Island.

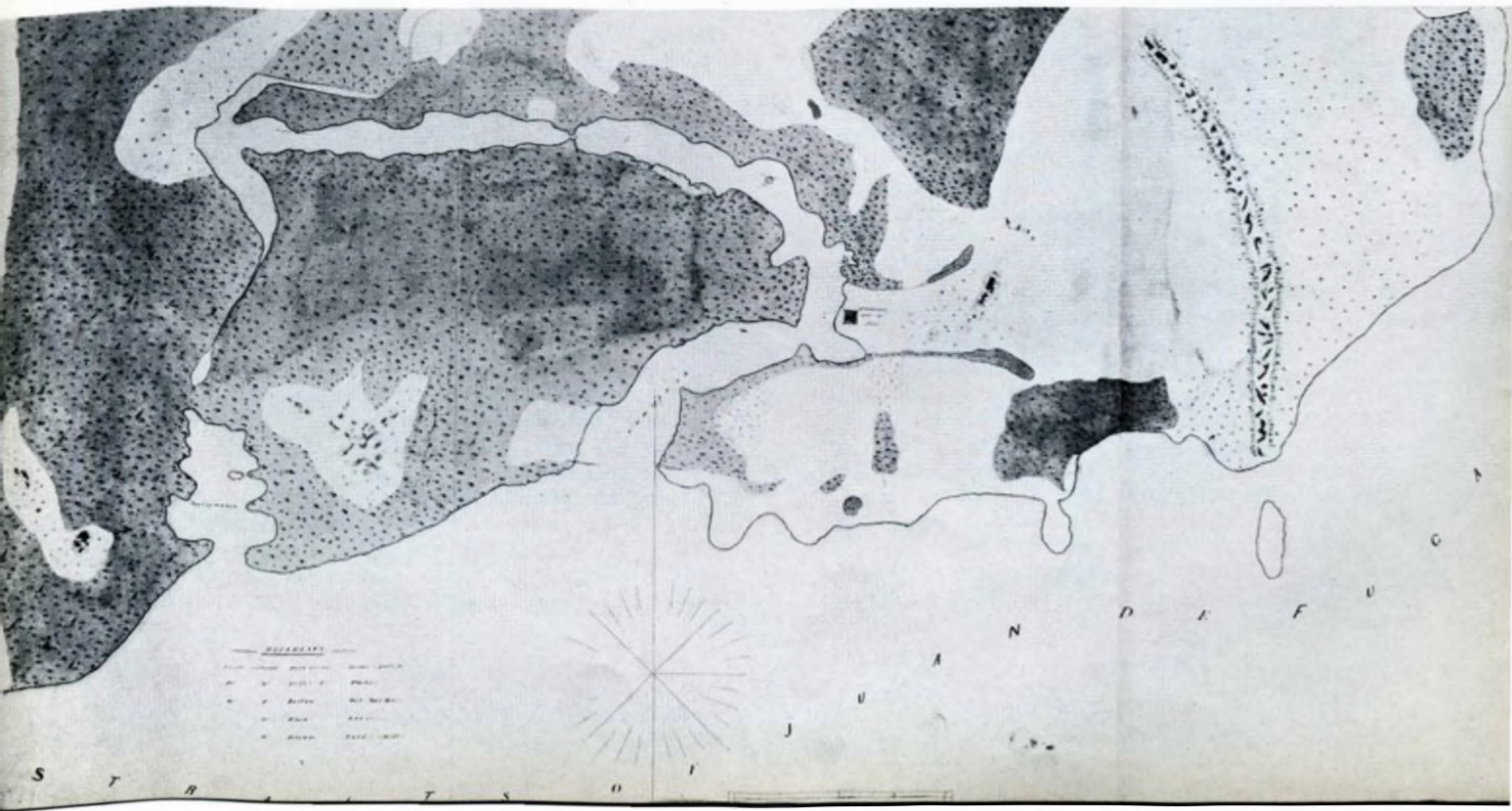
4. I will now proceed to describe the most prominent features of the other Ports visited during this cruize, in order that you may know and weigh the grounds of my objections to them as eligible places of settlement.

5. The finest and only district of Vancouvers Island which contains any considerable extent of clear land is situated immediately on the Straits of De Fuca beginning at Point Gonzalo the south east corner of the Island and running westward from it, to the Port of "Sy-yousung" [Sooke] from whence to the south west point of the Island opposite Cape Flattery, there are no safe harbours for shipping and the country is high, rocky and covered with woods, presenting in its outline the almost unvarying characters of the coast of North west America, to which unfortunately it bears a too faithful resemblance.

6. On the contrary, the former District of the Island extending from Port Sy-yousung to Point Gonzalo [Gonzales], is less elevated, more even and diversified by wood and plain; the coast is indented with bays and inlets; there are several good harbours, with anchorage at almost every point where vessels may bring up in calms. To this part of the coast I directed much attention and having travelled over almost every mile of it, I will here state the result of my observations, beginning with Port Sy-yousung the most westerly harbour deserving of notice.

7. "Sy-yousung" (see map) is a spacious inlet extending more than two miles into the country; where shipping may lie at all seasons of the year in perfect safety, as it is protected from every wind; there is however a strong current setting through the entrance, with the flood and ebb that might detain and prove

Part of Douglas's map of 1842. Esquimalt Harbour is shown as "Iswhoymalth," Victoria Harbour as "Camosack." The black square shows the position of the fort. From the photostat in the B.C. Archives. The original is in the Company archives.



inconvenient to vessels entering or leaving Port, otherwise it is unexceptionable as a harbour. A shallow rivulet 30 feet wide, which takes its rise from a Lake in the interior of the Island, falls into the north end of the Inlet, remarkable as being the largest and only fresh water stream capable of floating a canoe that we found on this part of the Island.

It can however hardly be called navigable, as during a short excursion I made upon it, we had to drag our canoe, over banks of gravel that traverse the bed of the stream at every hundred yards. An extensive mud flat also lies off its mouth, which is nearly dry and impassable in the smallest craft at low water. It has also the reputation of being a good fishing stream, and as far as I could learn from the natives of the place, a considerable quantity of salmon is caught there annually; a consideration which would make it exceedingly valuable to an establishment. These are the only good points of this harbour, which the character of the country in its vicinity, render of no avail, as the place is totally unfit for the purpose, the shores being high, steep rocky and every where covered with woods. In ranging through the forest we found one small plain containing 3 or 400 acres of land at the distance of one mile from the harbour; but the rest of the country in its neighbourhood, appeared to consist either of wood land or rocky hills.

8. Eight miles east of Sy-yousung is the Port of Whoyung [Whyring] divided from the former by a ridge of wooded hills extending from the coast to the central high land of the Island. This is a pretty good harbour, but has nothing further to recommend it, as a single glance at the high broken hills of naked granite, which form the east side of the basin, and the equally sterile character of the west shore, satisfied me that this place would not answer our purpose.

In one of our excursions we found a narrow plain nearly a mile long at the same distance from the harbour, which is the only clear land in its vicinity.

9. Metsho-sin is an open roadstead one and a half mile east of the former Port. It is a very pretty place, and has a small fresh water run near it. There is however no harbour and the anchorage is exposed and must be insecure in rough weather; in addition to that disadvantage, the extent of clear ground is much too small for the demands of a large establishment, and a great part of what is clear, is poor stony land with rolling surface, so that on the whole it would not do for us.

10. Is-whoy-malth [Esquimalt] is the next harbour to the eastward and appears on the ground plan accompanying this letter. It is one of the best harbours on the coast, being perfectly safe and of easy access; but in other respects, it possesses no attraction.

Its appearance is strikingly unprepossessing, the outline of the country exhibiting a confused assemblage of rock and wood.

More distant appear isolated ridges thinly covered with scattered trees and masses of bare rock, and the view is closed by a range of low Mountains which traverse the island at the distance of about 12 miles. The shores of the harbour are rugged and precipitous and I did not see one level spot, clear of trees, of sufficient extent to build a large Fort upon. There is in fact no clear land within a quarter of a mile of the harbour, and that lies in small patches here and there, on the aclivities and bottoms of the rising ground. At a greater distance are two elevated Plains, on different sides of the harbour, containing several bottoms of rich land, the largest of which does not exceed 50 acres, of clear space, much broken by masses of Limestone and Granite.

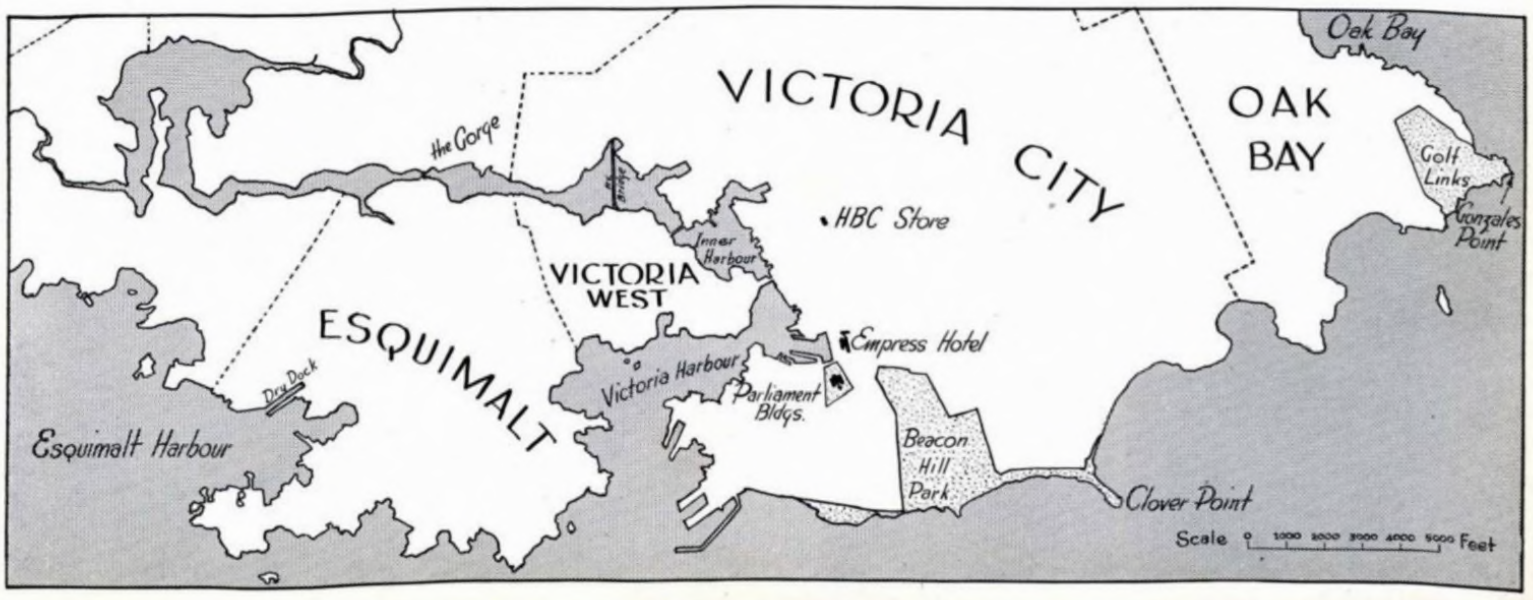
Another serious objection to this place, is the scarcity of fresh water. There are several good runs in winter, but we found them all dried up, and we could not manage to fill a single breaker in the harbour.

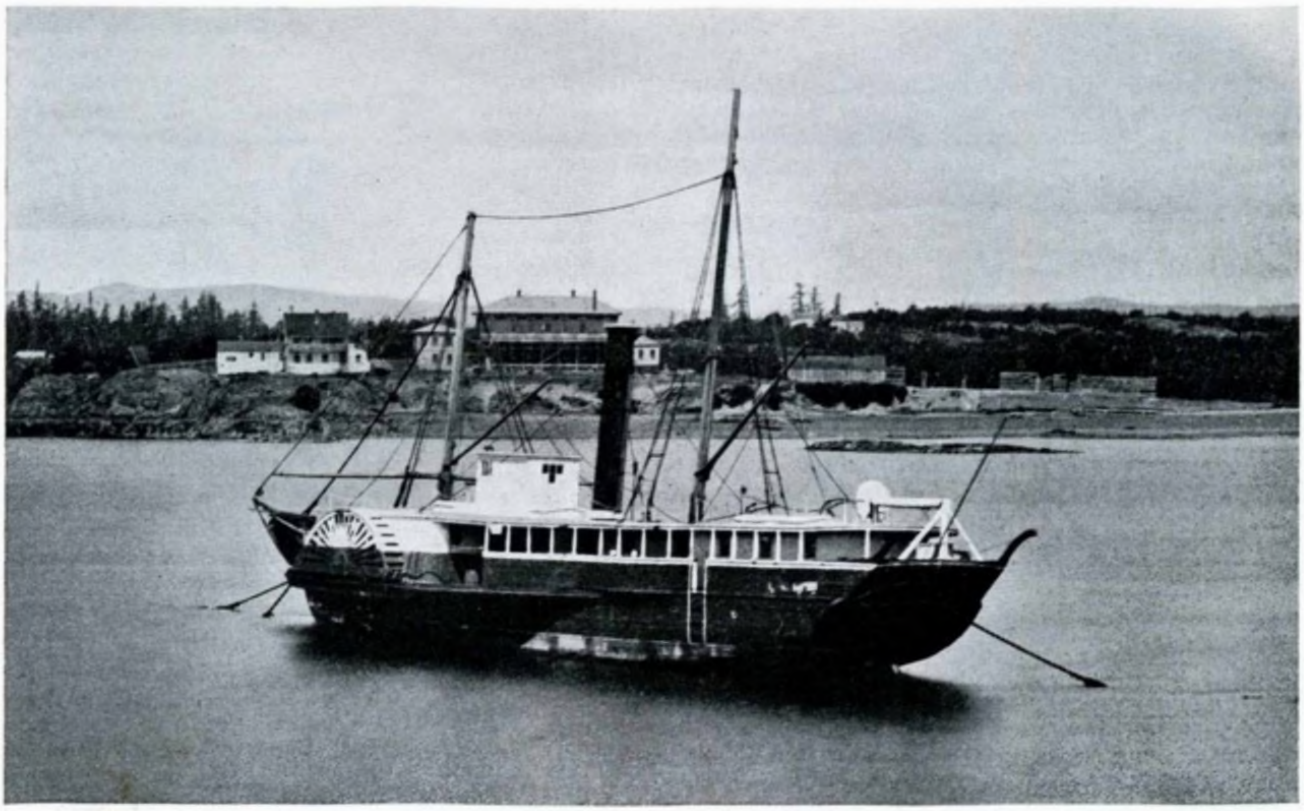
11. The next harbour about $1\frac{1}{2}$ mile, east of the former is the Port and Canal of Camosack, which is already said I think the most advantageous place for the new establishment.

From the general description here given, I fear you will not discover many traces of the level champaign country so fancifully described by other travellers who preceded me in this field; and you will also observe that there is one important objection which applies to all the places, except "Camosack," mentioned in this sketch, namely the absence of any tract of clear land sufficiently extensive for the tillage and pasture of a large agricultural establishment. It would also be difficult to find a convenient situation for an establishment on the high, rugged shores of any of the other harbours, and moreover these latter places with the exception of "Sy-yousung" and "Metshosin" are all scantily supplied with fresh water.

12. On the contrary, at Camosack there is a pleasant and convenient site for the establishment, within 50 yards of the anchorage, on the border of a large tract of clear land, which extends eastward to Point

Modern map of part of Victoria. Compare with Douglas's map opposite. The Gorge is where he proposed erecting the mills. (See his letter, paragraph 2.)





The "Beaver" in Victoria Harbour. The photo was taken between 1862 and 1872, after more cabin accommodation had been added and she had been chartered to the government as a survey ship.

Gonzalo at the south-east extremity of the Island and about 6 miles interiorly, being the most picturesque and decidedly the most valuable part of the Island that we had the good fortune to discover.

The accompanying ground plan shows pretty correctly the distribution of wood, water and prairie upon its surface, and to it I beg to refer you for information on such points.

13. More than two thirds of this section consists of Prairie land and may be converted either to the purposes of tillage or pasture, for which I have seen no part of the Indian Country better adapted; the rest of it with the exception of the ponds of water is covered with valuable oak and pine timber. I observed, generally speaking, but two marked varieties of soil on these Prairies, that of the best land is a dark vegetable mould, varying from 9 to 14 inches in depth, overlaying a substrate of grayish clayey loam which produces the rankest growth of native plants that I have seen in America. The other variety is of inferior value, and to judge from the less vigorous appearance of the vegetation upon it, naturally more unproductive.

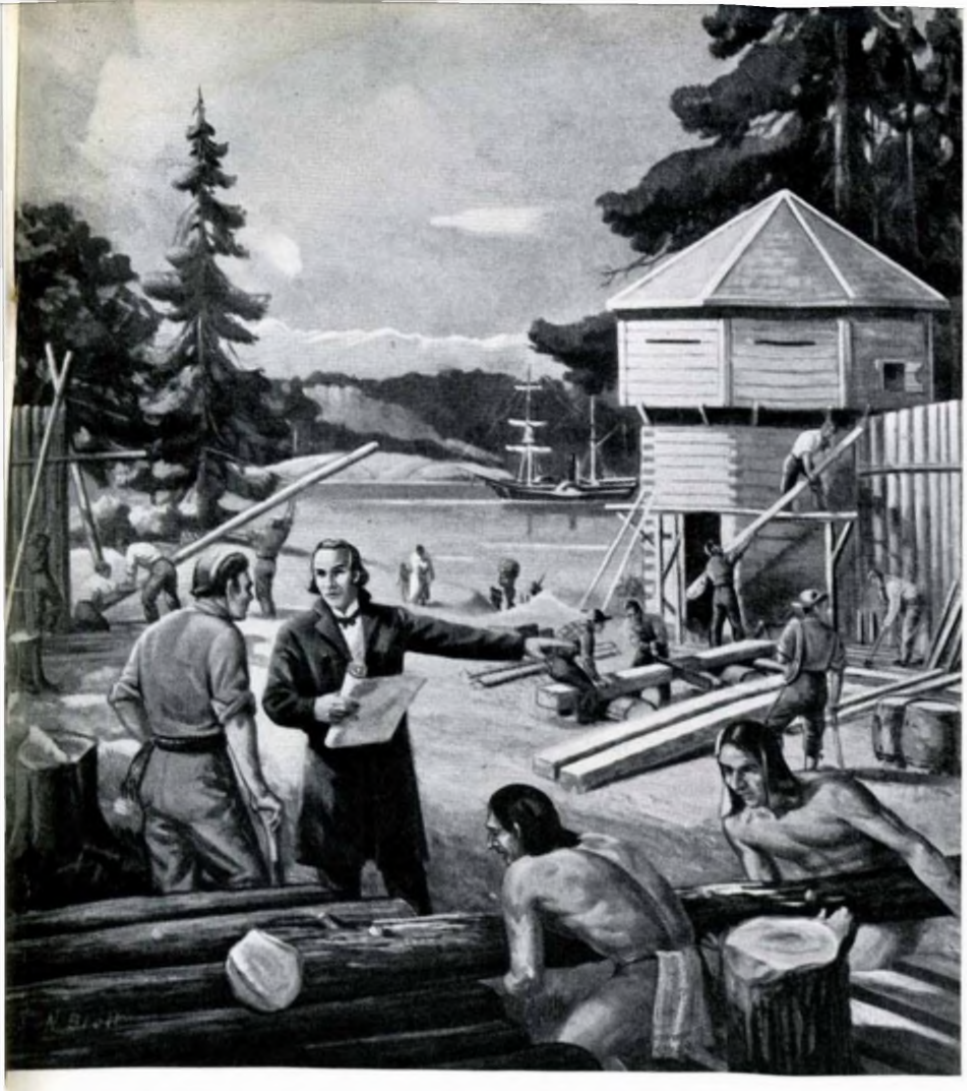
Both kinds however produce abundance of grass, and several varieties of red clover grow on the rich moist bottoms.

In two places particularly we saw several acres of clover, growing with a luxuriance and compactness more resembling the close sward of a well managed lea, than the produce of an uncultivated waste.

14. Being pretty well assured of the capabilities of the soil as respects the purposes of agriculture; the climate being also mild and pleasant we ought to be able to grow every kind of grain raised in England. On this point however we cannot speak confidently, until we have tried the experiment and tested the climate as there may exist local influences, distructive of the husbandmans hopes which cannot be discovered by other means. As for instance it is well known that the damp fogs which daily spread over the shores of upper California, blight the crops and greatly deteriorate the wheat, grown near the sea coast in that country. I am not aware that any such effect is ever felt in the temperate climate of Britain, nearly corresponding in its insular situation and geographical position with Vancouvers Island, and I hope the latter will also enjoy an exemption from an evil at once disasterous and irremediable. We are certain that Potatoes thrive and grow to large size, as the Indians have many small fields in cultivation, which appear to repay the labour bestowed upon them and I hope that other crops will do as well.

15. The canal of "Camosack" is nearly 6 miles long and its banks are well wooded throughout its whole length, so that it will supply the establishment with wood for many years to come, which can be conveyed in large rafts, with very little trouble, from one extreme of the Canal to the other.

I mentioned in a former part of this letter, that I proposed to erect any machinery required for the establishment at the narrows of this Canal, about 2 miles distant from the site of the Fort, where there is a boundless water power, which our two milwrights Crate & Fenton think might, at a moderate expense, be applied to that object. A fresh water river would certainly be, in many respects, more convenient, as the moving power could be made to act with greater regularity and be applied to machinery at probably less labour and expense than a tide power; besides the facilities and immense advantage of having a water communication, instead of a tedious land transport, for the conveyance of timber, from a distance, after exhausting that growing in the immediate vicinity of



The building of Fort Victoria. From the painting by Newton Brett for this year's H B C calendar. The "Beaver" lies at anchor in James Bay, close to where the Empress Hotel now stands on filled in land. In the distance rise the snow capped Olympic Mountains.

the Mill seat. But I saw no stream that would fully answer these purposes, not even excepting the one, in the harbour of "Sy-yousung"; we must therefore of necessity have recourse to the Canal, or select a Mill seat on the continental shore, a step that I would not advise, until we have gained the confidence and respect of the Native Tribes.

16. The natural supply of fresh water will probably be found scanty enough for the Establishment in very dry seasons, but I think that between a small stream at the distance of 300 paces, and its feeder a Lake 800 Yds from the site of the Fort, we may always depend on having at least a sufficiency of this indispensible element. The labour of carting it from a distance of even 800 Yds would however be very great, and I would therefore recommend that wells should be dug within the Fort, of sufficient depth, to yield a constant and regular supply at all times: This I have no doubt will be found the cheapest plan in the end, besides the importance of having water at hand in case of fire, or in the event of any rupture with the natives.

17. I think your opinion cannot vary much from my own respecting the decided superiority of Camosack over the other parts of the Island, or of the continental shore known to us, as a place of settlement. The situation is not faultless or so completely suited to our purposes as it might be, but I dispair of any better, being found on this coast, as I am confident that there is no other sea port north of the Columbia where so many advantages will be found combined.

I Remain, Dear Sir
Your very Obt. Sert.
JAMES DOUGLAS

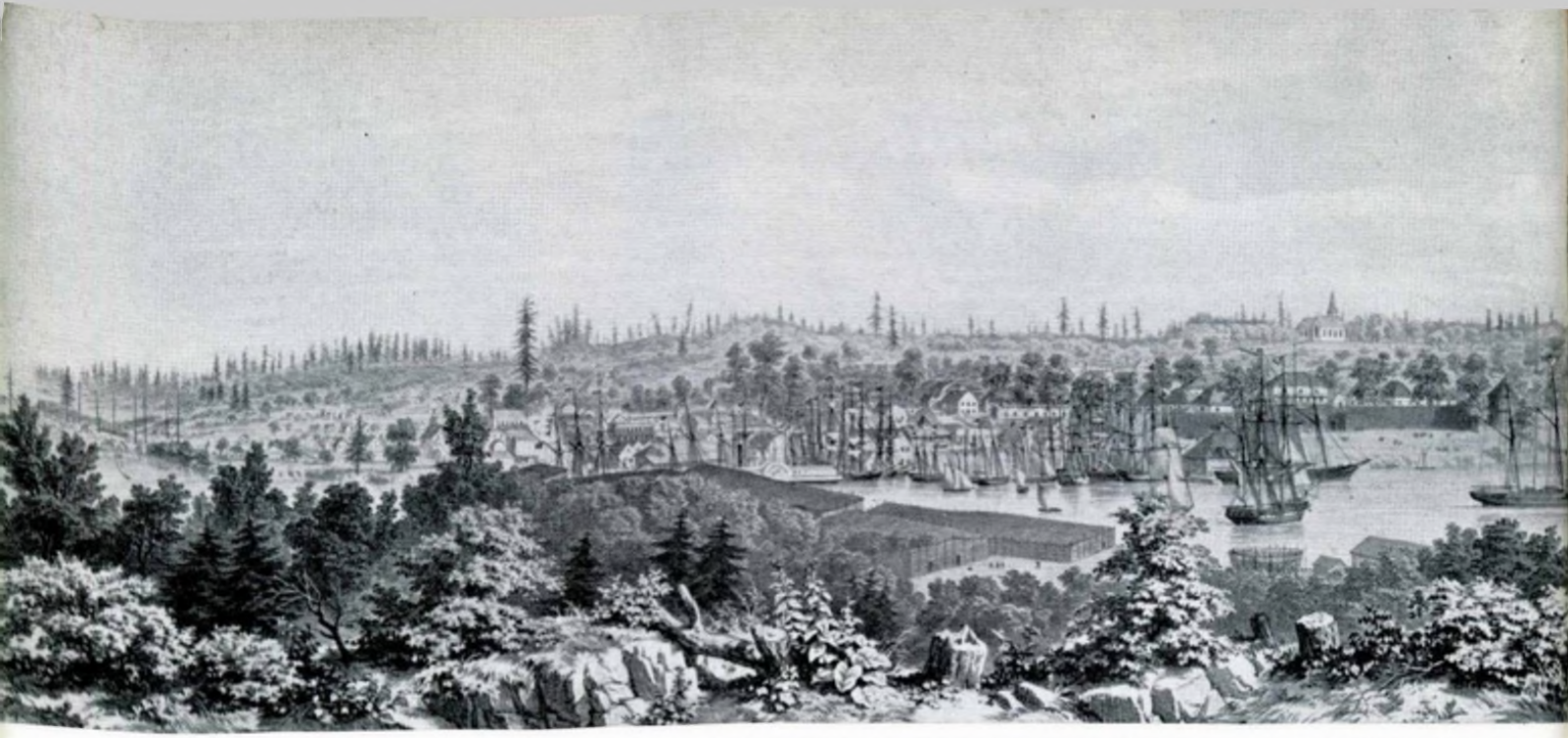
Douglas's recommendations were followed, and on March 1, 1843, he left the Columbia depot for Vancouver Island with about fifteen men. At Fort Nisqually they embarked on board the steamer Beaver, *and proceeding to Camosun, anchored off Shoal (Clover) Point on March 14. In a small notebook, which is now preserved in the Provincial Archives at Victoria, the chief factor kept a few pencilled notes, extracts from which are given here:*

Wednesday 15th March. Went out this morning with a boat and examined the wood of the north shore of the harbour; it is not good being generally short, crooked and almost unserviceable. On the south shore, the wood is of a better quality and I think we will have no difficulty in getting enough for our purpose. Small wood for picketing is scarce, particularly cedar which answers better than any other kind for that purpose from its lightness and greater durability under ground. We will probably have to bring such as we require from a distance. . . .

I am at a loss where to place the Fort, as there are two positions possessing advantages of nearly equal importance, though of different kinds.

No. 1 has a good view of the harbour, is upon clear ground, and only 50 yds from the beach, on the other hand vessels drawing 14 feet cannot come within 130 feet of the shore, we will therefore either have to boat cargo off and on at a great distruction of boats, and considerable loss of time or be put to the expense of forming a jettie at a great amount of labour.

No. 2 on the other hand will allow of vessels lying with their sides grazing the rocks, which form a natural wharf, whereon cargo may be conveniently landed from the ships yard, and in that respect would be exceedingly advantageous but on the other hand, an intervening point intercepts the view so that the mouth of the Port cannot be seen from it, an objection of much weight in the case of vessels entering and leaving Port, another disadvantage is that the shore is there covered by thick woods to the breadth of 200 yards so that we must either place the Fort at that distance from the landing place, or clear away the



Victoria Harbour, from a lithograph of 1860. The fort, with its stockade and one of its bastions, can be seen beyond the shipping, below the church on buildings now stand, are seen over

thickets which would detain us very much, in our building operations. I will think more on this subject before determining the point. The weather rather cloudy, but dry, and beautifully clear in the afternoon.

Thursday 16. The weather clear and warm. The gooseberry bushes growing in the woods beginning to bud.

Put 6 men to dig a well and 6 others to square building timber. Spoke to the Samose today and informed them of our intention of building in this place which appeared to please them very much. and they immediately offered their services in procuring pickets for the establishment, an offer which I gladly accepted and promised to pay them a Blanket (2½)* for every forty pickets of 22 feet by 36 inches which they bring. I also lent them 3 large axes, 1 half sqre head Do. and 10 half round head axes, to be returned hereafter, when they have finished the job.

Bought a few salmon today at 2 charges of ammunition each. At Cape Flattery they are bought for 2 leaves tobacco each. . . . 5 Men squared 1½ pce of 40 feet, & 1 pce of 32 feet today. 6 men digging the well.

Friday 17th. Clear warm weather. Frost last night. The 5 squares finished ½ pcs of 40 feet and 1 of 32 feet. . . . Six men digging the well.

Saturday 18th. Men employed as yesterday. The well is now about 11 feet deep.

A few days later, Douglas continued up the coast in the Beaver *to dismantle Fort Durham on Taku Inlet and Fort McLoughlin on Millbank Sound, and with the staffs of these two places, numbering about fifty in all, returned to Fort Camosun on June 1. They were housed in log huts, and the construction of the fort went on apace. Supplies were brought from time to time by the schooner* Cadboro (*see* The Beaver, *September 1942, page 25*). *A few extracts from her* Journal *are given here:*

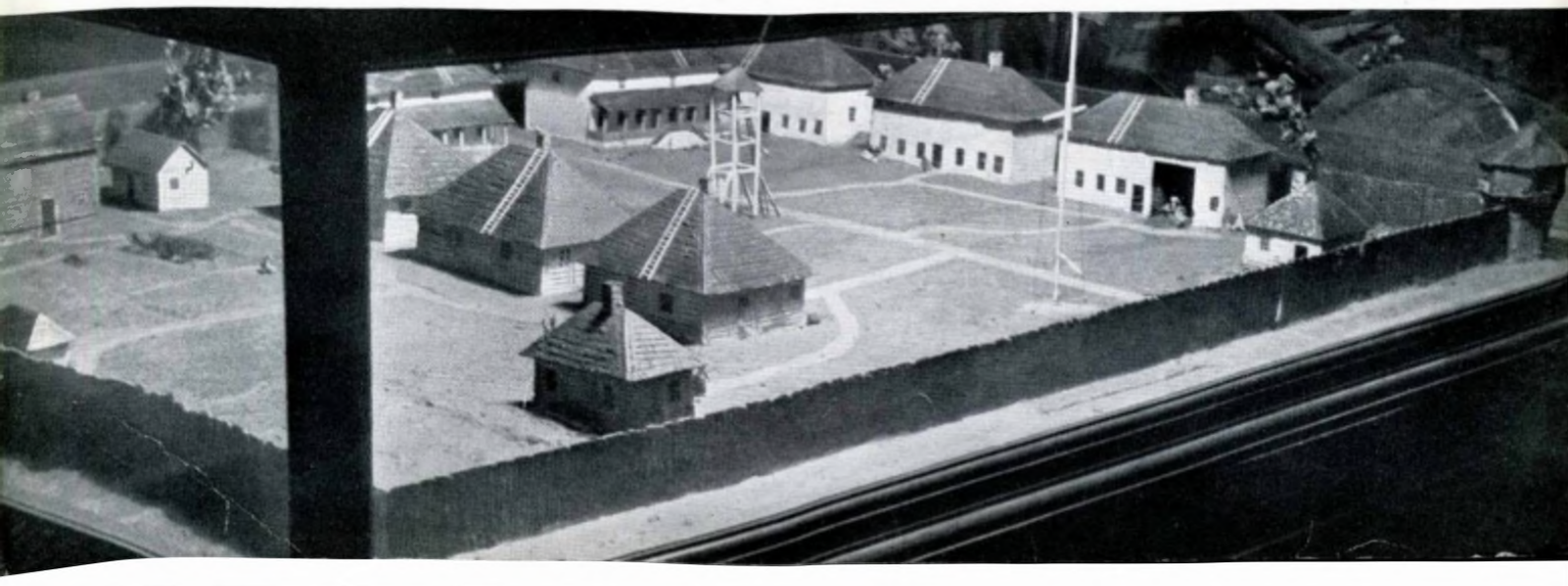
Sunday August 6th 1843

. . . at 6.30 hauld close round the Southern most Rock off Rocky Pt and run for *Camosum* at 8.20 Calm nearly at 10 keeping the Lead going in from 9. to 13 fms found ourselves between *Hyomalth* Harbour and Camosum between these two places there are two mid size Islands one with trees and the other none but a barren Rock at 11.30 A M arrived safe and Moor'd abreast of *Fort "Albert"* People allowed liberty on shore.

Monday August 7th 1843

. . . At 6 A M got the long boat out and got all clear for discharging the Cargo at 9 A M. Commenced landing the cargo with the long boat. Assisted by two men from the Fort. "*Frank*" the Cook being quite recovered came on board and commenced his duty Robt Allan still sick. Carpenter assisting discharge the

Model of Fort Victoria in the Company's historical collection, looking from the water side. Comparison may be made with the photos in the September 1941 "Beaver." L. Coote



the hill. In the left foreground are the Songhies Indian houses and a boat on the stocks. The first government buildings, where the present parliament the roof of the house by the big tree.

Cargo. The passenger "*Martineau*" Ordered on shore by Mr Chief Trader Ross. . . .

Wednesday Augst 9th

. . . At 11h. A M. Mr Chief Trader Ross having deliver'd his dispatches to me I went on board hove up the Anchor and commenced warping. . . . Made sail from Kedge and went between Brother's Ledge and the Shore Received 5 Small baskets of Berry's from Mr Rod'k Finlayson After getting off the Land a little and the breeze increasing shape'd a course for Nisqually. . . .

Sunday Septr 17th 1843

. . . Set the square sail and run for the Harbour of "Camosum" where we arrive'd safe and anchor'd in 3 fms at 5 P M and moor'd with a warp to the shore furld all sails.

Monday Septr 18th 1843

. . . At 6 A M hoisted the Long boat out and washed the decks &c at 9 AM sent three men on shore to cut fire wood Carpenter on shore looking for spars to make "buoys" one of the Buoy's having gone from the first sleeper, a dangerous Rock.

Tuesday September 19th 1843

. . . At 9 AM commenced discharging the Grain for Fort Albert with the Assistance of several Indians. Sun Set got all the Pease and barley discharge'd Mr Charles Ross tells me that the Pease are short of the measure 40 Bushels which is a great quantity.

Wednesday September 20th 1843

. . . At 6 AM commenced discharging wheat Carpenter myself and one Indian Buoying the Channel into the Harbour. at Noon fine pleasant Wr several Indians employd Thos Johnstone Cutting fire wood and getting it on board. No Water to be got all about here We shall have to get the Fort Cart to supply us. Finishd taking the wheat out 300 Bushels

Thursday Septr 21st /43

. . . Sent 8 Bushels of Potatoes on shore to Mr. Ross Employ d cleaning the hold ready for taking in Cargo Sent two Tierces of Vancouver Beef to Fort Albert. Employ d getting cargo on board with the assistance of several indians. Sent a Canoe away with three people for to get fresh water they returned but could get no water. I myself Carpenter and one Indian employ d buoying the Channel as yesterday and at Noon finish d having laid down 4 four extra buoys

Friday September 22nd 1843

. . . Sent a quantity of Sheep Skins on shore again not having room for them. Unbent the boarding nettings and sent them on shore with all the gear belonging to them put the Carronades down below the Vessel being too light. P M. Hoisted the long boat in and clean d the Vessel outside and in

Vessels Draught of Water		
	feet	inches
Aft	7.	10½
Forward	6.	9

Saturday September 23rd 1843

. . . Mr Charles Ross, Gentleman in Charge of Fort "Albert" Sent his water cart to fetch a supply of water for the vessel. Say two Puncheons, which was bad, being swamp water. we finish d taking it on board after sun down The Watering place being about two miles from the Fort to the N E.

Sunday September 24th 1843

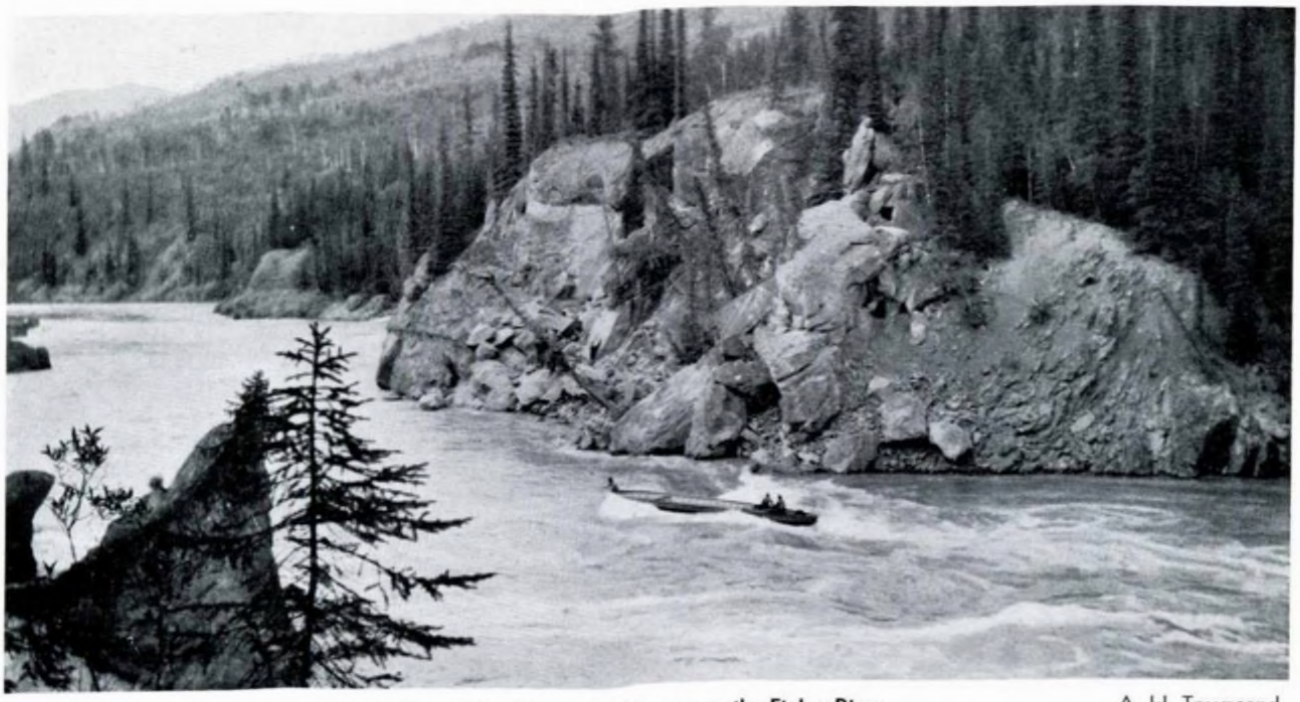
Calm Thick foggy weather at 9.30 AM. Received three of Charles Ross Esqurs children on board Made sail weigh d and proceeded out of the Harbour, with the boat and four hands ahead towing.

It will be seen by the above that the new establishment, which had been first called Fort Camosun, was now renamed in honour of the Queen's consort. The Council of the Northern Department, however, meeting at Fort Garry on June 10, 1843, had already decided on another name:

Resolved: That the new Establishment to be formed on the Straits de Fuca to be named Fort Victoria be erected on a scale sufficiently extensive to answer the purposes of the Depot; the square of the Fort to be not less than 150 yards; the buildings to be substantial and erected as far apart as the grounds may admit with a view to guarding against fire.

In October the stockades and bastions were completed, and Douglas sailed away, leaving Charles Ross in charge, with Roderick Finlayson as second in command.

* 2½ Point Blanket.



A power boat heading up stream through the rapids of Deserters' Canyon on the Finlay River. A. H. Townsend.

DOWN THE PEACE IN A DUG-OUT

by the late Captain Sir Cecil Denny, Bart.

EDITOR'S NOTE—The construction of the Alaska Highway lends particular interest to the first part of this story. During the Klondike gold rush, there was no overland route from Edmonton to the Yukon except a very difficult trail blazed by Inspector Moodie, N.W.M.P., in 1897-8. The government at Ottawa, seeing the importance of an all-Canadian route to the gold fields, in 1905 ordered the R.N.W.M.P. to cut a seven-foot pack-horse trail from Fort St. John on the Peace (start of the present highway) to Fort Grahame, and then northwest to Teslin Lake, one of the headwaters of the Yukon River. The route was to be clearly marked so that travellers would need no guide. Later on they intended to widen it into a waggon trail.

It took two years for about thirty police to cut the trail to Fort Grahame. Then, because no agreement on costs could be reached between the Dominion and British Columbia governments, the whole scheme was abandoned. The author, a sub-inspector at the time, was in charge of the pack-train of over a hundred horses.

WE started on our expedition to the north from Fort Saskatchewan, the party being under the command of Superintendent Constantine. He however only went with us as far as Fort St. John, which is about two hundred miles above Peace River Crossing. We erected buildings there, and stayed the first winter at this point, with Inspector Richards in charge.

From Peace River Crossing to Fort St. John was not bad travelling, as this part of the country had been travelled before; but the two hundred miles from there to Fort Grahame was, I can tell you, pretty wild and rough, across high mountains and very bad rivers. I had several men with me on the pack train. We had to carry all the grub, bedding, tents and everything else on these pack horses to keep the men who were working and cutting the trail supplied with food, and it was essential that they had their tents and supplies each night.

The route lay through thick forests, through beautiful park-like stretches, over many rivers, and across two ranges of mountains. No one but Indians had gone over it before, and we had to employ an Indian guide to show us the way. We cut the trail seven feet wide, but I doubt if it has ever been used since, and it must now all be overgrown again, and blocked with fallen trees.

It took us from March until the middle of August to go from Fort St. John to Fort Grahame. I enjoyed the journey; there were all kinds of game—moose, deer,

Pack horses in a British Columbia forest.

caribou, and we saw whole bands of bear, both black, brown and grizzly. Where they had been feeding on the berries, which were most plentiful, they tramped down the bushes so you would think a drove of hogs had passed through. We also killed for meat a number of mountain goats as we trailed through the mountains.

When we reached Fort Grahame in the middle of August, it was determined to remain there for the winter and build log houses to live in. Fort Grahame was only a small collection of log cabins right in the heart of the mountains on the Finlay River. It boasted a Hudson's Bay trading store; and the only white man living there, named Fox, was in charge of the post. He was married to a Beaver squaw, had several children, and had lived there for fourteen years.

He had to take his furs down the river one hundred miles in canoes to the mouth of the Parsnip River, and then up that river another one hundred miles to a Hudson's Bay post named Fort McLeod. From there they were taken by canoe and pack horse to Vancouver. He obtained his grub and trading goods for the next year at Fort McLeod, and then took the long journey back home with his boats.

Fort Grahame is situated in a deep valley between two massive mountains, with the river (which is much wider than the Saskatchewan at Edmonton) running near. After I had assisted in getting our party fixed up, I made up my mind to go down the river in a canoe to Peace River Crossing (about four hundred miles down) and from there on to Edmonton, which was another three hundred miles. It was getting pretty late in the season, as I did not get away until the first of September, and I was afraid of being caught on the way by winter. The police did not want me to go, and tried hard to dissuade me; but I had made up my mind to go anyhow, and, being of an obstinate disposition, refused to listen to anything they said. I bought a dug-out canoe twenty feet long from Fox, the Hudson's Bay man, and tied to it two long dry pine logs.

I took some bacon, tea, sugar and some flour, lots of matches and tobacco, a pair of blankets, a small tent, a small axe, my shot gun and cartridges, a good slicker, and a bag with a change of clothes. My grub I put into a greasy bacon sack (as it would keep out the wet), my matches into a watertight case. With this outfit on board, I started down the river all alone.

I had been told that it was impossible to go down that river alone, that the rapids and falls would surely drown me, and that there were two dangerous rapids that no boat could pass through. The first one was known as the Finlay Rapids, with very bad water full of rocks at the place where the Finlay and the Parsnip Rivers joined. The other bad rapid, they told me, was called the *Parle Pas*, which is French for "does not speak," so called because it makes no noise. You come right onto it unawares, while most rapids can be heard for miles. This "Parle Pas" Rapid was said to be about one hundred miles below the Finlay Rapids.

I was also informed that there was a number of Beaver Indians camped at the junction of the Finlay and Parsnip Rivers, and just above the Finlay Rapids; so I hoped to be able to catch them there and get them to help me over. I always got on well with the Indians, and could talk enough Cree to make them understand. All these Northern Indians talk more or less Cree, although it is not their own language. This no one can understand but themselves.

I made a very good and a long journey the first day. There were lots of old dead trees sticking up in the river, and I had to watch out not to strike them, as, should I hit one, it would most likely punch a hole in the canoe, and that would be my finish. It was pretty lonesome the first night, but I built a big fire after tying my canoe so it could not get away, put up my little tent, cooked some fish which I had caught, and after a smoke went to bed.

Fort Grahame to-day. The trading store referred to above is now a guest cabin. The new store is the large building.

The wolves were very bold in the mountains, those great big black timber wolves, and they were hungry. They lived mostly on rabbits. This year the rabbits had disappeared, so they had to kill moose and deer, both of which were hard to catch. I got up often during the night to put wood on the fire to scare them off, and I could see their eyes shining through the brush. Those big timber wolves do not howl, but make a regular roaring sound. It strikes you as pretty wild in the mountains at night when they start their concert. However, just at daylight they left, and after breakfast I packed up and made another start.

On the third evening I came to the mouth of the Parsnip River, and think I made a splendid trip doing the one hundred miles in three days. Sure enough I found the Indian camp at night and went on shore

Group of N.W.M.P. officers at Fort Walsh, 1876. The author is on the extreme right, Charles Dickens' son on the left. Seated are Asst.-Commr. Irvine, Commr. Macleod, and Dr. Kittson.

and pitched my tent near them, staying a day and hiring one of the men to take his own canoe and go with me as far as the Parle Pas Rapids, which he said were two days down the Peace River. I walked with the Indian and looked at the Finlay Rapids, and they looked bad. The river here was twice as wide as the Saskatchewan at Edmonton, and for a good mile it was a boiling cauldron, rocks all the way down, with great waves breaking over them. No boat in the world could get through, but near the south shore a canoe could be let down with ropes. So I got a number of the Indians to assist us, and we let down my canoe, and the Indian's. The second day he tied his canoe to mine and came in with me, and we started down the river. I agreed to give him an order on Fox, the trader at Fort Grahame, for ten dollars' worth of grub for going with me as far as the Parle Pas Rapids.

I was glad to get away from the Indian camp, as they were great beggars, particularly for tea and tobacco, and if I had stayed much longer they would have begged all I had. The second day we made an early start, with the two canoes tied together, and for two days we drifted on down the Peace River. The river ran between high mountains, which were covered with a thick forest of spruce and pine. We passed many rapids without much trouble, but had to be very careful. Sometimes the river would be quite narrow between two mountains or through a canyon, where it ran very swiftly; at other times it would be a quarter of a mile wide and very sluggish.

On the third day about noon the Indian told me we were near the Parle Pas Rapids. This surprised me, as we could hear the roar of the rapids for a long distance ahead, and I understood that you could not hear the Parle Pas until you were right on them. However I thought the Indian ought to know best, as he had lived in this part of the country all his life.

We went ashore before coming close to the rapids, drew up the canoes and, making a camp, cooked some bear meat and made tea. I then walked down to look at the rapids, but they did not look at all bad, and not what I had expected to find; there was quite a wide smooth channel on the north side, and it would be easy to let a canoe down with a rope. I went back and told the Indian I did not think this was the Parle Pas Rapids. He got very mad and said he had lived here all his life, and ought to know. I, of course, could say

Bales of fur from one of the Company's B.C. posts, on their way down to the Raw Fur Department at Vancouver, in one of the long power boats operated on the Finlay and Parsnip Rivers. A. H. Townsend.

"The canoe, with me in it hanging on like grim death, plunged over the falls, and then right under."

no more and, as it was late, we made a big fire and went to bed.

The next morning we let my canoe down the north side of the rapids, which were about a mile long. The river was wide and full of rocks. So, after packing my things again into my canoe, I gave the Indian the ten-dollar order on Mr. Fox at Fort Grahame, as I had promised him. I also gave him a part of the bear meat. He would take at least a week to get back to his camp above the Finlay Rapids, as he had to pole and paddle his canoe all the way against the stream, which is a very slow job indeed. It is a strange thing that, from that day to this, that order has never been presented. I wrote to Fox, but he said he never saw the Indian again. What became of him is hard to tell. He may have been drowned, or a dozen other things may have happened to him; but this I know, he never did turn up with the order.

I was pretty lonesome all by myself on this great river, with those huge mountains towering over me and the dense black forests on both sides. And I could not help thinking at times what would become of me, should my canoe get wrecked. I was hundreds of miles from any human being, and winter was rapidly coming on.

The third morning, I was sure that it was all right, and paddled my canoe out into the middle of the river, where the current was swifter. In the afternoon I was lying back in the canoe smoking, all my things including even the gun being well tied down, when, in passing round a bend of the river, the boat seemed to be suddenly seized by a giant hand, and all in a moment I was swept right on to the middle of the dreaded Parle Pas Rapids. I never heard a sound until I was right into them. The river here took a fall of at least ten feet. As the canoe and I went over, I looked back, and it seemed as if I were going over Niagara Falls! I had no time to think of anything, but the canoe, with me in it hanging on like grim death, plunged over the falls, and then right under. In a flash I thought, as I went under water, that this was the last of me. I could not have been under long, and think the canoe must have struck the bottom, and the dry logs on each side made it rise again to the surface.

The canoe was full of water, but nothing seemed to have got loose. I could now see ahead down the river; and a wild sight it was—for miles a boiling cauldron of foam where the water thundered over the rocks. Of course, I could do nothing with the canoe, as I had lost my paddles; so down we drifted, sometimes sideways, sometimes pointing straight, and now and again scraping the rocks. We went this way for at least two miles, and I began to have a little hope of escaping. What seemed hours to me must have been only minutes, as we travelled at railroad speed. At last we came into quieter water, and the current at last took me near shore. I then jumped out and, half swimming, and sometimes under water, managed to drag the boat ashore.

It was now getting on towards night, and it had begun to snow, but I had landed quite close to a huge pile of dead dry trees, all piled up in a heap ten feet high; so I at once went to work to set fire to them. As luck would have it, I had my matches in a watertight box, and they were dry. I soon had an enormous fire going, and hung my wet blankets near; then I put up the small tent. My grub was not wet, only damp; the greasy old bacon sack had kept out the water. I soon had my clothes drying at the roaring fire, and, after cooking some supper, lay down near the fire and went to sleep. It snowed all the next day and then cleared up. I remained here two days getting things dried out. I visited the falls, which are very bad—a big drop right across the river. I couldn't understand how I managed to get through alive. This was the Parle Pas Rapids without a doubt. I don't know why the Indian fooled me; but I suppose he wanted to get back home quickly and earn the ten dollars, so told me the first bad rapids we came to were the Parle Pas.

From here it was all plain sailing for several days—with the river twisting and winding between great towering mountains—until I reached Rocky Mountain Canyon. Here the Peace cuts right through a mountain for twelve miles, and navigation is impossible. So I left my dug-out that had carried me all the way from Fort Grahame, and walked the twelve miles to the Hudson's Bay post at Hudson's Hope. On the way I had the bad luck to meet an enormous grizzly bear. He was only about twenty feet off, and we stared at each other for quite a while, neither of us moving a muscle, before he ambled slowly away.

At Hudson's Hope I built a raft, about ten by twelve feet, out of dry pine logs, and on this primitive craft started down river again. At Fort St. John the manager, Mr. Bedson, invited me to stay at the post, and you can imagine what a luxury it was for me to have a change of clothes and a bed to sleep in.

After three more days of drifting I reached Peace River Crossing, and from there continued by waggon, scow, and stage coach to Edmonton, my journey's end.

Left: The Eskimo hunter, having cached a caribou carcass beneath
pile of moss and stones, finds that an Arctic fox has burrowed into i
He begins to set his trap by fixing the chain to the antlers, a part o
which is seen at the right. Here he tests the chain to make sure the tra
is firmly anchored.

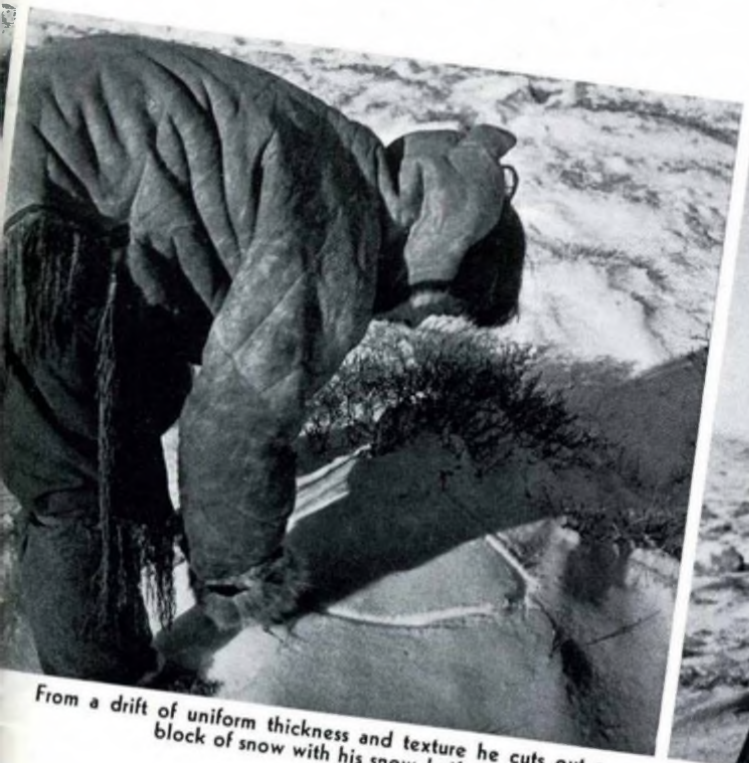
Above: At the entrance to the burrow he chops the snow fine and pile
it up to form a mound; then makes a hollow in the mound and sets th
open trap in it.

Carefully he lays the block over the trap, not touching it, but resting on the sides of
the hollow in which it lies.

Taking his knife, he begins to slice away
using the excess snow to pile around it.
down until it is not much thicker than a p
is careful to keep the pan in shadow, so t
more easily seen. A thin pan shows white
in the shade.

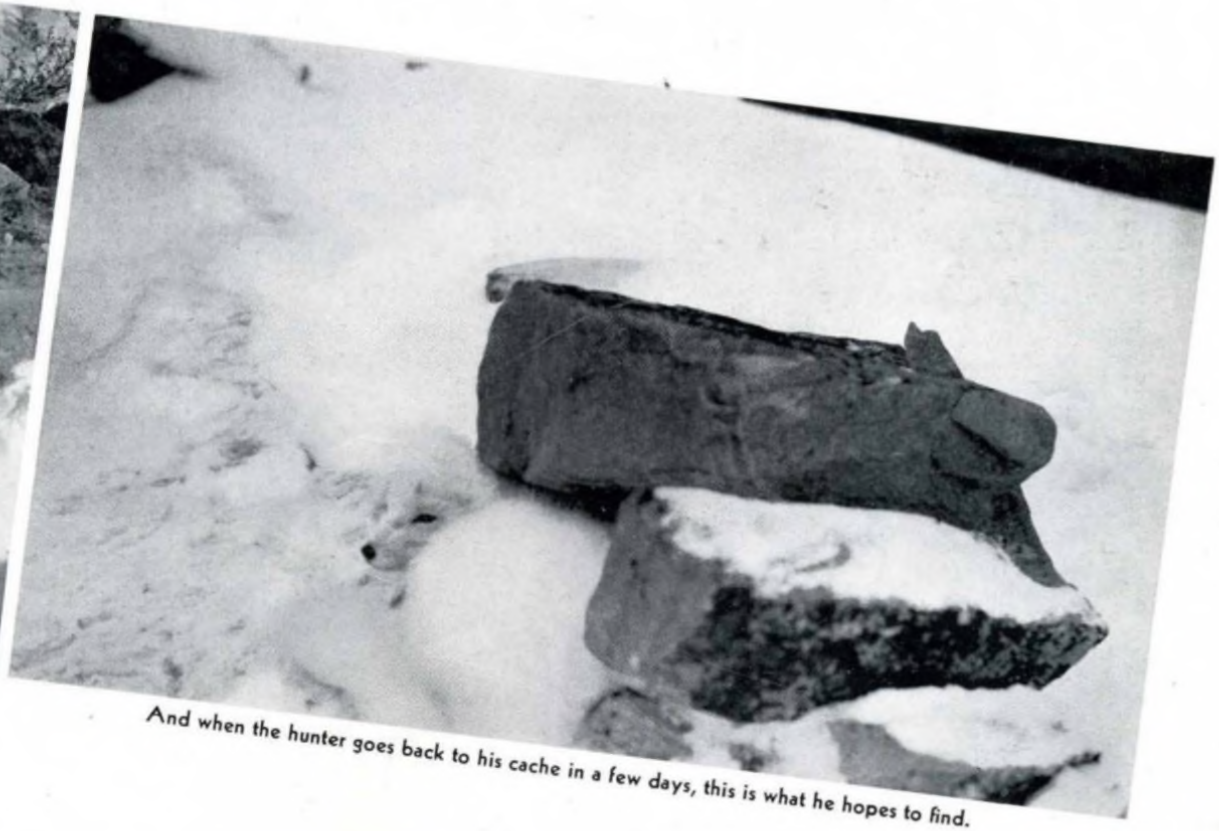
Trapping the Arctic Fox

by D. B. Marsh



From a drift of uniform thickness and texture he cuts out a block of snow with his snow-knife.

Next he shaves off the face of the block to make sure there are no hard spots.



And when the hunter goes back to his cache in a few days, this is what he hopes to find.

Canoe brigade in northern Manitoba.

Photo by Nicholas Morant.

BY CANOE TO OXFORD HOUSE

Story and Pictures by Leonard Mason

HIGH Hill portage! From a clear sky the sun blazed down through clouds of mosquitoes, sand flies and "bull-dogs" which hummed their song of torture near the top of the hill. Suddenly over the brow of the ridge there came into view the upturned, green bow of a two-hundred-pound Hudson's Bay freighter canoe. Peering from beneath this unwieldy burden, which weighed cruelly upon his shoulders, was a Swampy Cree Indian, breathless and perspiring. As he passed me with a short, quick step, his strained features relaxed into a grin and the whites of his eyes gleamed in the darkness of the empty canoe overhead.

This trip was his fifth, and last, over the mile-long portage which connects Logan and Max Lakes, one link in the historic fur trade route between Norway House and the Bay. Two centuries ago, the Cree ancestors of Thomas Wenisk had laboured on similar portages to transport the bales of beaver fur and their canoes to the waiting schooner which lay at anchor in the low tide off York Factory. From that lonely yet bustling fort on the western shore of Hudson Bay, the precious furs were shipped over thousands of miles of ocean water to London for sale to the highest bidder at the annual fur auctions. Today Thomas and his fellows toil to bring food and supplies from Norway House to the Hudson's Bay Company post at Oxford House, which has served since the end of the eighteenth century as a rest stop on that same fur trade route.

Two days had passed since Hazel and I had last seen the fort at Norway House. The beauties of Playgreen Lake had soon been lost to mind as we started down the Nelson River in the company of seven canoes loaded with freight and manned by Oxford House Indians. After our own leisurely paddling on the moonlit lakes of city parks in the States, the canoes beside us seemed immense. Nineteen feet from bow to stern and more than two feet deep, these graceful canvas craft amazed us by their seemingly limitless capacity. The leading vessel seated three people amidships, as well as their luggage and seven hundred pounds of flour. An Indian guide watched the tricky waters of the Nelson from the bow. An H B C clerk crouched on the stern-seat with his browned hand on the tiller of a quivering 8-h.p. outboard motor, which churned the water into a mass of foam and smoke-filled bub-

bles. In single file and linked by towlines, the six other canoes followed, each one loaded high above the gunwales with twelve hundred pounds of flour, bacon, tea, canned goods, axes, biscuits and iron stoves. A solitary Indian sat in the stern of each canoe with paddle ready to keep his craft in the path which the motorized leader was blazing.

As the swing of silent canoes glided downstream behind the moaning staccato of the "kicker," Charlie Sinclair, the Indian guide, stood erect in the bow to watch for the rocks which lurked inches below the surface of the water. Our first portage at Sea River Falls was almost within sight when the last canoe scraped ominously over a rough boulder, and the water began to seep in, gurgling hungrily around the flour sacks which lay on the bottom boards.

As it was imperative to keep the freight dry, the party turned ashore, the damaged canoe was emptied and the breach was found. While Charlie patched the damage with a piece of canvas and a bit of white lead, the others quickly built a fire. Soon the water in their soot-blackened kettles was brought to a boil for the tea which is relished at every stop along the trail. A couple of kettles were filled with chunks of white-fish, and these, with bannock, were washed down the throats of the hungry Indians with tea.

While the afternoon sun lengthened our shadows across the quiet water of Hairy Lake, we encountered a new obstacle. A few hours ago we had turned off the broad path of the Nelson to let it continue, romping and rollicking, on its journey to the Bay hundreds of miles away. The appearance of the lake which now lay before us gave a clue to the reason for its name, as everywhere tall reeds covered the surface like a three-day stubble on a man's chin. The plants fouled the motor propeller and paddles were brought into play. Then came the sickening sound of keels scraping along the muddy bottom of the shallow lake. This year being a dry year, low water was causing anxiety all over the North country. We still had several hundred yards to go before deeper water would be reached.

Charlie patches the canoe.

The Indians stood in their canoes and, straining and grunting, they leaned hard on their paddles, using them as punt poles in a seemingly futile effort to shove their loaded craft over the clinging mud. In twenty minutes—it really seemed many times longer than that—all seven canoes with their perspiring crews once more floated in deep water. At the end of the lake, we pulled ashore for our first camp.

After breakfast of tea and bacon in the early dawn of the following morning, the Indians huddled around the warm camp fire for "mass." One of their number led them in prayer as with bowed heads they asked the Great Giver for a safe journey and for the health of their wives and children who waited at home.

The little stream along which we now threaded our way, called by the Indians "Echamamish," never failed to amaze us with an infinite number of twists and turns in its long course down to the Nelson River. In truth, at times the leading canoe rounded a sharp bend only to pass the last boat going in the opposite direction.

The canoe brigade sweeps round a bend of the Echamamish River.

Hauling the hand car on Robinson portage.

The Indians load canoes at the end of a portage.

At the next portage on the Echamamish, while the freight was being carried past the dam, I took the opportunity to reload my plate-holders with camera film, using a black cloth bag to keep out the light. As I crouched beside the portage trail with my arms in the black bag, I noticed the puzzled glances of the superstitious Indians as they passed me bearing their portage loads. I have since wondered what black magic they imagined I was performing within my mysterious bag.

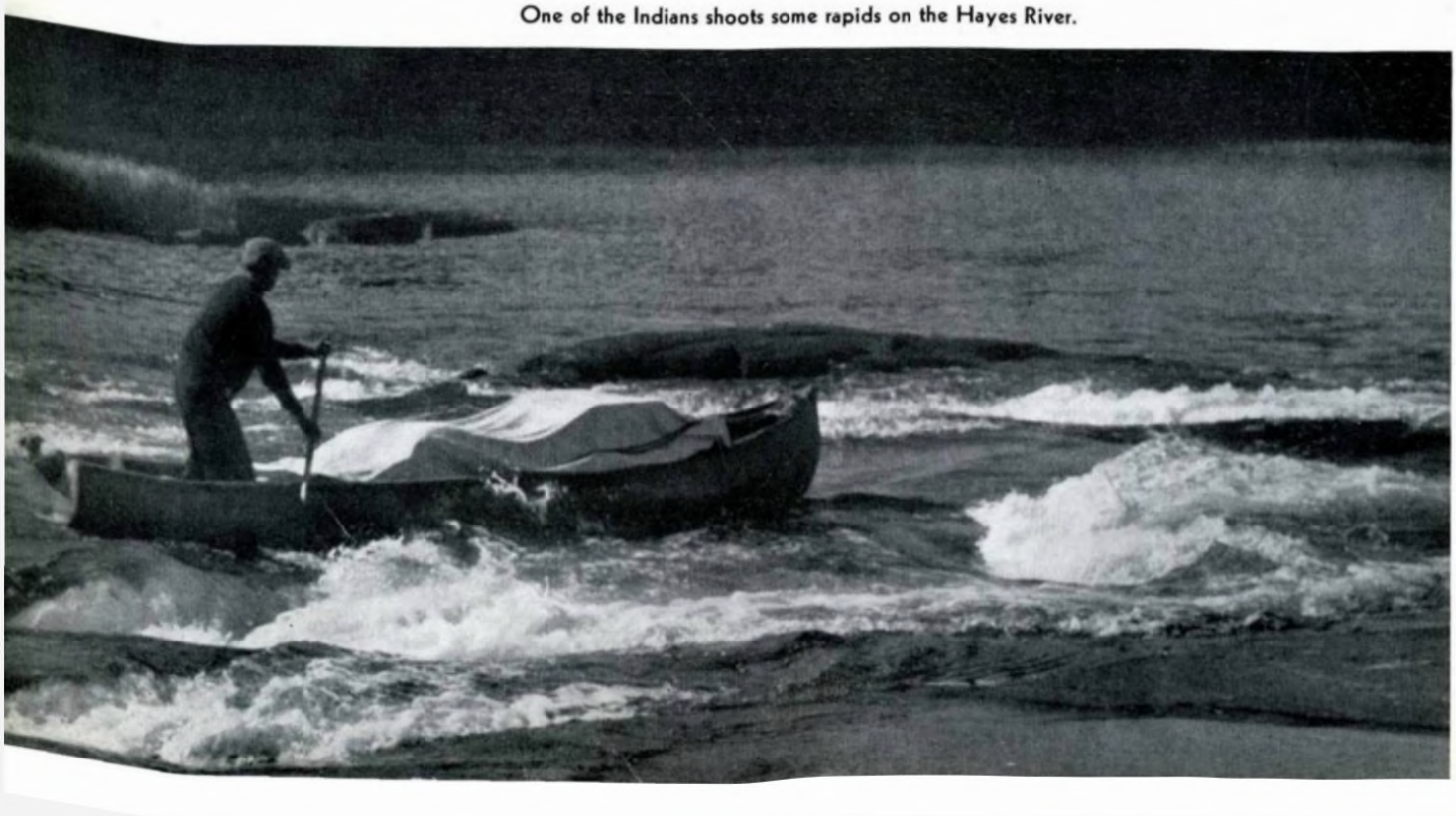
I noticed also that these woodland people, with all of their knowledge of the habits and characteristics of birds and animals, are quite frightened at the idea of handling frogs. When one of these slippery little amphibians was handed to them, they quickly withdrew and would not touch the animal under any circumstances. It is their belief that frogs secrete some sort of poison.

Among the unearthly inhabitants of the Cree spirit world are the dreaded *witikos*, cannibalistic creatures which fly through the night, breathing flame, in search of victims to satisfy their craving for human flesh. On the Echamamish we came suddenly upon a giant figure, a dummy shaped like a man, which apparently had been set up on the bank to frighten away unwelcome prowlers. At any rate, Cree Indians canoeing down stream in that vicinity at dusk were quite frightened by the immense white shape which loomed up before them. It was associated in their minds with the witiko.

That night we camped at the western end of Robinson portage. The morning hours of the following day witnessed the laborious task of transferring four tons of freight and seven canoes to the other end of the two-mile trail. The task was eased considerably by a rickety railroad laid down on hewn logs. The track reminded me of a Coney Island roller coaster with its two small hand cars and the serpentine character of the route, which followed too closely the contours of the hilly country it traversed. On each trip the Indians piled the cars high with sacks and boxes and tins, then for two miles they pushed and pulled, straining like draft animals in the harness of their leather tumplines. In less than four hours, all the supplies had been stowed in the canoes at the far end of the trail. A satisfying lunch enabled us to anticipate the difficult High Hill portage with lighter hearts.

Our last day on the trail began at five o'clock in the morning in order to cross Windy Lake before the breezes outdid themselves. About noon we arrived at Oxford Lake, at the other end of which, thirty miles away, was the end of the trail—Oxford House. Before

One of the Indians shoots some rapids on the Hayes River.



starting the last lap, we must "boil the kettle." Tea, bread and jam, and the rest of the bacon, then off once more, all of us praying that the wind would not become too strong before we had crossed the long open stretch ahead.

We kept from shipping water by hugging the lee shores of the numerous islets at the western end of the lake. At the Gateway, however, we reached the open part and were forced into a little bay to wait. How long? Maybe two hours, maybe two days! There is no schedule in the North country. One travels when possible and waits when the elements command otherwise. Indians have camped a few miles from home, within sight of their tents and cabins on the opposite side of the lake. They knew their families were there waiting for them, and yet the storm-bound crews were unable to cross the wind-swept waters for four days. This is what we hoped to avoid.

Willie Smith, in the employ of the Hudson's Bay Company at Oxford House, was in charge of the "swing" this trip. With the experience which comes after years of matching wits against wind and water, he was clever enough to snatch every moment of calmer weather to get us a few miles closer home. But again we were stopped. No let-up in the blustery weather could be predicted, so we "boiled-up" to pass the time. The last of our bread and jam was sluiced down with cups of scorching hot tea. The Indians napped in their canoes, gently rocking with the motion of the waves. Within our sheltered haven all was quiet and peaceful, but outside the fretting wind blew whitecaps on the restless water and storm clouds sped with giant strides across the darkening sky. On shore only one man kept watch, Willie Smith in his cocky Hudson's Bay cap, his eyes at times rising to the swiftly travelling clouds, then dropping to peer intently across the foam-whipped waves.

"Willie Smith in his cocky Hudson's Bay cap."

Finally Willie determined to make a last effort to reach the eastern shore of the lake. It was about nine o'clock, the sky had cleared, and the sun was just dipping behind the distant hills. With the loss of the sun's direct rays and with the steadily blowing wind,

Cooking lunch on the trail.

Map of the author's route, taken from Franklin's "Journey to the Shores of the Polar Sea in 1819-22."

the air quickly chilled. After all, the ice had gone out of the lake just a month before. Six miles away, in the deepening darkness could be discerned a thin grayish line on the water which meant the end of the trail. We strained our eyes for a glimpse of the post buildings on top of the hill.

A sudden exclamation drew our attention from discomfort and anxiety to the sky overhead, where flickered a few greenish lights of aurora borealis. This much we had seen in our Minnesota home on cold winter nights. Now, however, we gasped, for the whole sky lit up, at first like a fireworks display with blues and pinks and reds, fading out here, coming in stronger over there—colours shifting from one part of the sky to another like splashes of quicksilver. For ten minutes we watched the curtains of light as they swept hither and yon like ghostly shades of another world. The Indians say the ghosts of their ancestors were enjoying themselves in the sky that night with their Dance of the Spirits.

A light blinked on the shore in the dim distance, faintly, then disappeared. Someone must have heard the throbbing of the motor and was trying to light us in safely. It was close to midnight; all the light that remained was a dim glow in the western sky and a golden quarter-moon resting its tip on the water behind us. There came the light again, stronger now, moving from the top of the hill down to the beach. At intervals along the shore other flashes of light told us that Indian families on the reserve had also heard us and were coming to meet their returning men.

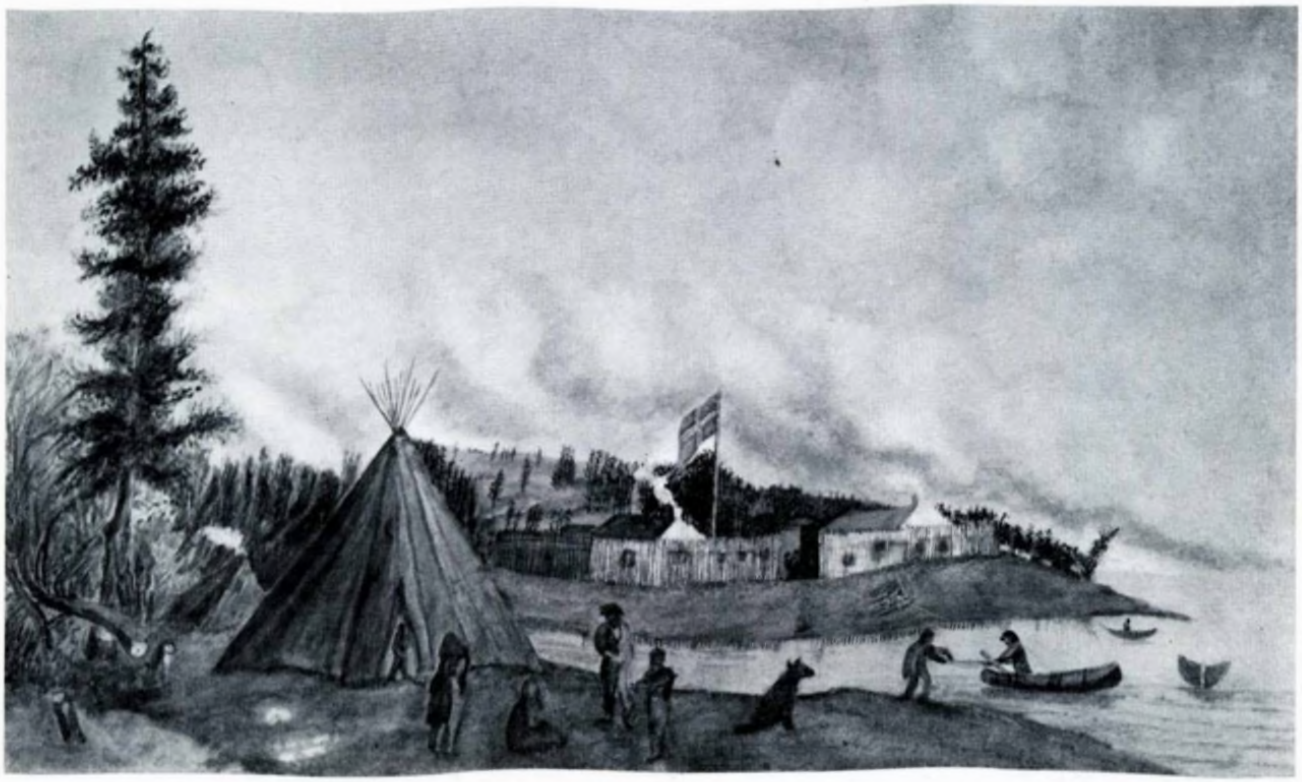
"Hi! Hi there, Oxford House!"

"Hello! we thought you wouldn't make it tonight."

Back and forth our greetings passed over the narrowing strip of water and soon we were stamping clumsily on the wet beach and shaking hands with everyone. There was H. M. Paul, the old "sourdough," as he liked to call himself; Bill Forbes, the Mountie from God's Lake; and Ernie Hampton, the manager of the H B C post. All were on hand to greet a couple of shivering visitors from the States.

Yes, we were wet and cold, but somewhere within us a warm feeling began to glow, for at last we were among friends at the end of the trail.

Water colour of Oxford House, in the W. H. Coverdale collection at the Manoir Richelieu. This was possibly done by one of Franklin's party who visited the post in 1819. Note the flag—St. George's Cross with a white outline on a blue field. C. S. L.



NUTRITION in the NORTH

A study of the State of Nutrition of the Canadian Bush Indian

by Percy Moore, M.D., H. D. Kruse, M.D., and F. F. Tisdall, M.D.

Photos by Wing Commander Tisdall

IN March 1942, a scientific medical expedition of unusual character was undertaken in northern Manitoba. The organization of the expedition was under the direction of the Medical Department of the Indian Affairs Branch of the Federal Department of Mines and Resources, and it was made possible by the co-operation of three other organizations: The Milbank Memorial Fund, New York City, the Medical Branch of the Royal Canadian Air Force, and the Hudson's Bay Company. After months of planning, in one short week information was obtained which should prove of real value in improving the health not only of the Indian but of all people living in the North. It is doubtful if any medical expedition in the past ever obtained so much information in so short a time.

The object of the trip was to study the state of nutrition of the Indian by newly developed medical procedures. This involved the transportation of scientific apparatus, medical instruments, and cameras. The bush Indian of northern Manitoba was chosen because of his accessibility by plane, because his mode of living and dietary habits are essentially the same as other Canadian bush Indians, and because of the availability of the local medical staff of the Indian Affairs Branch, who made excellent arrangements at each of the places visited.

Arriving at one of the posts. Dr. Moore, Mr. Bonnycastle, and Dr. Kruse are seen on the left.

The authors, standing beside the snowhouse built by Ralph Jardine at Norway House. L. to R.: Dr. Moore, Indian Affairs; Wing Commander Tisdall; Dr. Kruse, Milbank Memorial Fund. With them is R. H. G. Bonnycastle, H B C, who accompanied them on their tour.

The Itinerary

The expedition started from Winnipeg on March 4, 1942. The first leg of the trip was the drive from Winnipeg to the plane at Lac Du Bonnet, a distance of sixty miles. Before leaving Winnipeg, all the apparatus was checked to be sure it was in order. To our dismay, one essential piece of apparatus was found to be out of adjustment but, with the assistance of George Horner, radio technician of the Hudson's Bay Company, and instructions from New York in the course of a half-hour telephone conversation, it was repaired and no mishap developed from this source throughout the trip.

The tales told by the Canadian members of the party to our American confrere about the hardships that he would have to endure on the trip caused great apprehension on his part. The hardships, however, turned out to be a twenty-five foot walk from the car to the plane and a few hundred-yard walks from the plane to the various buildings where the medical examinations were conducted. There was the additional hardship that he had no roast beef and, during the seven days, had only moose meat, caribou, ducks, geese, and whitefish. In order to get some local colour, he insisted on travelling the three miles from Rossville to Norway House by dog carriole and having his picture taken beside an exhibition igloo which had been built between these two points.

The plane was a Canadian Airways "Norseman." No mishap occurred at any stage of the trip. We were blessed with ideal weather—not a cloud in the sky for the seven days. With each trip through the North, our admiration increases for the manner in which our Canadian "bush pilots" always manage to come through.

The first stop was at God's Lake Mine. Dr. Hector Moir, the mine doctor, had made excellent arrangements, and over fifty Indians were waiting to be examined. We worked through that evening until nearly midnight, and again the next morning.

The next stop was at Cross Lake, where we were met by Dr. Cameron Corrigan, the resident doctor for the Indian Affairs Branch at Rossville, some sixty miles to the south. He had come up by dog-team to meet us. A large number of Indians were waiting for us at this point, but we only examined about thirty-five as we had to get on to Rossville.

The major portion of our investigation was done at Rossville, where Dr. Corrigan had completed arrangements for the examination of nearly four hundred Indians. The hospital at Rossville proved to be ideal for our purpose, as it is equipped with an excellent laboratory, X-ray apparatus, electrical power, and everything that we needed for our various procedures.

The plane went on to Norway House, just three miles away, and it was at this point that we took off for The Pas some four days later. As already mentioned, the three-mile trip from Rossville to Norway House was made by one of the members in a dog sleigh.

At The Pas we were met by Dr. Robert Yule of the Indian Affairs Branch, who arranged for us to see a number of the Indians from the near by reserve, and also some of the white inhabitants of the district. Incidentally, at each of the stops a few white inhabitants were examined in addition to the Indians.

A group of Indians gathered for examination at Cross Lake.

The Findings

The scientific findings are in the course of preparation for publication in a scientific journal. However, a general report on them may be of interest.

The investigation was particularly concerned with a study of physical defects which might be produced by a lack of a number of the vitamins; namely, vitamin A; thiamin, or vitamin B_1; riboflavin, or vitamin B_2; niacin, another member of the B family; and vitamin C. The one mineral studied was iron. An investigation was also made of the dietary habits of these people.

From the examination of four hundred Indians, it was evident that practically everyone examined was suffering in a marked degree from three or more vitamin deficiencies; every Indian examined, over twelve years of age, showed evidences of a lack of vitamin A, riboflavin, and vitamin C. In addition, anemia, due to a lack of iron, was very prevalent. A lack of these food substances has been shown to result in lack of initiative, indolence, and decreased ability to do physical work. It has been noted by many observers that these characteristics are quite prevalent among the Indians, and it is our belief that one factor, and probably the most important factor in this state of affairs, is their deficient diet. One other point of great practical importance is that it has been demonstrated that a lack of minerals and vitamins results in a lowered resistance against disease. It is well known that tuberculosis is very prevalent among the bush Indians; in fact, many times more prevalent than among the white population of Canada. It has been noted that tuberculosis is more prevalent among the bush Indians than it is among the Indians on the prairies and on the west coast, where their diet more closely approximates that of the white inhabitant. It is not at all improbable that an important cause of this is a lowered resistance due to the dietary deficiencies from which these Indians suffer.

Dr. Kruse undergoing the rigours of northern winter travel. Dr. Corrigan stands on the rear of his carriole.

As for the white inhabitants examined, although these individuals were in much better condition than the average Indian, still, evidences of dietary defects were more prevalent amongst these people than usually seen elsewhere.

Vitamin A—It is well known that a severe lack of vitamin A results in a condition in which the individual has difficulty in seeing in dim light and, if the lack of vitamin A is prolonged, ulceration of the eye will occur. It has quite recently been demonstrated that a thickening and yellow discoloration of the tissues of the white of the eye can be brought back to normal by the administration of large quantities of vitamin A over some months. From this it can be inferred that one factor in the development of this thickening and yellow discoloration of the white of the eye may be an insufficient amount of vitamin A in the diet. Every Indian examined over twelve years of age showed this thickening and yellow discoloration. In fact, the thickening in many cases extended on to the pupil of the eye and caused impairment of vision in a large number of instances. Our best sources of vitamin A are liver, coloured vegetables (such as carrots, green cabbage, spinach, green beans, etc.), butter, milk and eggs. From this list it is obvious that the average Indian's diet certainly would be deficient in vitamin A, as he gets little of coloured vegetables, butter, milk or eggs.

Vitamin B_1—The best sources of thiamin, or vitamin B_1, are pork and whole grain products, such as whole-wheat flour and oatmeal. Unfortunately, in common with the white people, the Indian has a preference for white flour, which contains only one fifth to one sixth of the thiamin in the whole-wheat, and oatmeal is not one of his favourites. Pork is not a widely used meat.

An example of blindness caused by lack of vitamin A.

Accordingly, we could expect an insufficient intake of thiamin in the diet of the Indian. A lack of thiamin results in a change in certain nerve reflexes and the ability to feel certain vibrations such as produced by a tuning fork. In approximately seventy-five percent of the Indians examined, changes were found in the nerve reflexes and the vibratory sense which would indicate that a lack of thiamin was definitely affecting these Indians.

Vitamin B_2—The best source of riboflavin, or vitamin B_2, is milk and cheese; both items being rarely seen in the Indian's diet. The lack of riboflavin results in the growth of abnormal blood vessels in the clear part of the eye. To detect these blood vessels requires a special instrument which was taken along on the trip. Examinations showed that in every Indian examined these abnormal blood vessels were very marked. There is considerable evidence to indicate that snow blindness is due to a dietary deficiency, the result of an insufficient intake of riboflavin, combined with exposure to bright light.

Niacin—The best sources of niacin are meat, fish, poultry, and whole grains. Intake of niacin by the Indian should be fairly high due to his comparatively high consumption of meat and fish. The amount of niacin, however, varies with different types of meat, and we have no idea at the moment as to the content of niacin in the meat and fish consumed by the Indian. There may also be considerable loss of niacin depending upon how the meat is cooked. Certain abnormal conditions of the tongue result from a lack of niacin in the diet. These abnormal conditions were found in approximately fifty percent of the Indians examined.

Vitamin C—Ascorbic acid, or vitamin C, the vitamin which prevents scurvy, is found in many fresh fruits and vegetables, such as oranges, grapefruit, canned fruit juices, tomatoes, canned tomatoes, cabbage, turnips, and potatoes. It is readily destroyed by excessive cooking or cooking in too much water which dissolves out the vitamin and it is lost in the discarded cooking water. From a study of the dietary habits of the Indians, one would expect a large percentage to be suffering from a lack of this vitamin. Such was found to be the case, as one hundred percent of the Indians examined showed definite changes of the gums, which changes are the result of a lack of this vitamin.

Iron—The iron or hemoglobin content of the blood was examined in approximately one hundred Indians and was found to be low in seventy-five of them. This means that seventy-five percent of the Indians examined were anemic. The best sources of iron are meat, eggs, whole-grain products, and many vegetables and fruits.

From the above, it is evident that information of considerable practical value was obtained from this study. However, it is obvious that the surface has just been scratched and there is a great amount of work yet to be done. Active steps are being taken by the Medical Department of the Indian Affairs Branch to obtain this information. Dr. Corrigan proceeded to New York in the summer of 1942 to take a post graduate medical course and is now carrying out a carefully planned investigation at Rossville and Norway House, an investigation which it is hoped will give some of the answers to the many problems which were raised on this trip. Active steps are being taken by the Indian Affairs Branch to find out the best practical means of improving the diets of the Indians. This means a study not only of the natural sources of food supply but also a study of the best types of food to be sent in for consumption by the Indians. It is realized that any food changes must be to a considerable degree in line with the present food habits of the Indian. As an example, all white flour now being furnished to the Indians is Canadian approved white flour which retains two thirds of the vitamin B_1 content of the wheat, instead of the one fifth retained in ordinary white flour. Large amounts of cod-liver oil, an excellent special source of vitamin A, are being distributed. The development of a special biscuit containing large quantities of vitamin A is also being studied, and means of incorporating riboflavin, niacin and iron in flour is receiving attention.

It is hoped from all of this that practical means will be found for improving the health of the Indian and of white inhabitants of our north country, so that through a better diet they will approach more closely the level of health and efficiency, and resistance to tuberculosis and other diseases.

This old lady, suffering from blindness caused by lack of vitamin B_2 (riboflavin), is being examined by Dr. Moore.

A company post manager and his wife in their living room at one of the Mackenzie River posts about thirty-five years ago.

J-9
P-39

LIFE IN THE MACKENZIE VALLEY

by George Pendleton

The pictures are from negatives collected by the author. Most of them were taken by Henry Jones about 1908.

THE Mackenzie River, one of the world's great waterways, drains almost a million square miles of territory. The waters of the Mackenzie proper are swelled by those of three mighty rivers—the Athabaska, Peace and Liard—and three huge lakes—Athabaska, Great Slave and Great Bear. All these are historic waterways, along which for many decades trade goods have been carried into the interior and furs brought "outside." But to-day the great artery of transportation is that running north and south, and in common parlance the Mackenzie system of lakes and rivers is taken to mean the Athabaska, Slave, and Mackenzie proper, with the tributary lakes. It is with certain aspects of life along the valleys of these three great rivers that this article deals.

Trapping and the Fur Trade

To the primitive Indian, fishing and hunting (and this includes trapping) was an essential part of his life. By the practice of these pursuits he obtained food and clothing for himself and those dependent upon him. The Indian, like all primitive men, was superstitious. He believed in an unseen world, peopled by benevolent and malignant spirits. The elements, birds of the air, the fish in the rivers and lakes, the beasts of the forests were, to him, possessed of personalities. There were seasons when it was proper to hunt the creatures of the woods and seasons when it was not proper to do so. Some animals could be hunted only by men and boys; others could be hunted by the womenfolk. Women were forbidden to eat certain parts of animals and, indeed, in some cases, to eat any portion of some beasts. The Indian would invoke the good spirits before hunting certain animals and would apologize to

others before delivering a death stroke. It was the existence of these beliefs, superstitions if you will, that, through the ages, preserved for the Indian the creatures of the wilderness. The Indian by instinct was a conservationist; game laws and restricting regulations were not necessary until the white man came on the scene.

The hunting season was divided into three parts: the fall, winter and spring hunts. Each tribe or band of Indians had its own hunting grounds, and each family in the tribe had its own share of them. The natives generally travelled to their hunting grounds by canoe.

During the summer months, considerable preparation had been made for the winter's work. The men had cut and shaped snowshoe frames, while the women had strung them with caribou sinew (babiche). Skins had been made ready for lodge coverings and winter clothing and footgear repaired or renewed. After the main winter camp had been established, the men and boys set out trap lines which might be ten, twenty or more miles in extent. In the meantime the women and girls prepared shorter ones around the camp, where they set snares for rabbits, partridge, ermine, muskrats and skunk. The women also prepared frames and stretchers to be used later for stretching and drying beaver and muskrat skins. Before white traders introduced steel traps and firearms, Indians depended on deadfalls, sinew snares and bows and arrows to procure their needed supplies of meat and skins. Even to-day Indians depend much more than white men do upon snares and deadfalls.

As an Indian generally takes his family with him when he goes trapping in the fall, who can wonder that the Indian boy longs for the day to come when he, too, will be a good hunter. He is encouraged in this desire by his father, and perhaps by his grandfather as well. By them he is taught the ancient lore of the forest; he is told what to do should he become lost in the woods; how to recognize the tracks of the creatures of the wilds; how to find where they are most abundant,

The various river valleys of the Mackenzie basin are shown in different shadings.

Foxes and large timber wolves at one of the Company's posts.

and how to set snares, traps and deadfalls with which to capture them.

He is told that all "long-haired" furs are at their best in December and perhaps for a few weeks in January; that beaver and musquash are prime in March or April. He learns that the marten is to be found only in the densest forest and underbrush, and that the tree loving fisher takes to the high wooded ridges in midwinter. The mink will be found near water, and he should set traps for otter near one of the "slides" that creature makes on the banks of streams. The fox, he is told, is the most cunning animal in the woods, but its inquisitiveness often leads to its undoing; while the lynx, which rambles far and near through the woods, is easily snared. Then he is shown where to look for the houses of the beaver and the muskrat.

Prairie wolves are not numerous in the far north, but Canada's largest and finest furred timber wolves are often found in great numbers. Our Indian lad is told that, though they look most formidable when running in packs, they are not to be feared by the resolute hunter. Wolverine, he learns, must be exterminated at once should they appear on the trapline or he may as well cease trapping. Immensely strong, the "carcajou" will steal the bait and the contents of traps, and even rip up traps and bury them.

As moose and caribou will loom large in his life, for they are depended upon to provide meat and clothing, he will be taken on journeys to secure them as soon as he is old enough to follow their trails. But he will find out that while he, as a man, will kill them, to the womenfolk of the family will fall the task of cutting up the carcass and dressing the hides for use later as garments and footwear.

The relative merits of white and Indian trappers have often been debated, and sometimes with decisions unfavourable to the latter. As a matter of fact, and with both using the same equipment, a white man may take a greater number of skins in a season, but they will not be so well prepared or "handled" as those secured by the Indian hunter. The Indian is slower in his work than the white man, but he is more patient and thorough in matters relating to trapping.

After the Indian has accumulated some skins, he may visit a trading post to dispose of them in exchange for needed supplies. This is where the dogs he took to his camp in the fall will come into use, for he may have to cover a hundred or more miles on the two-way journey. The Indian thoroughly enjoys bartering his skins with the trader, and is never in a hurry to shorten

A customer in regulation blanket capote and Assomption sash buys a packet of "Hudson's Bay Co.'s Tea" in the store at Fort Resolution. The trader appears to be the same as on page 24.

the process. Although he is often as well informed as the white trapper concerning current market prices, he has one peculiarity which time does not seem to efface. He may have a very fine silver fox skin and a very poor red one in the same hunt, but, because the fine silver fox almost fell into his outstretched hand and the red fox had been hard to come by, he asks and expects to get more for the inferior skin. To prolong the pleasure he takes in disposing of his furs, the Indian seldom takes his whole collection to the trader at once, as does the white trapper. He prefers to camp at some distance from the trading store. Then, every day, accompanied by his wife and perhaps his children, he will carry a few skins over to the trader. Sometimes he will dispose of them in a few minutes, while at other times the bargaining may take much longer, and in the end he is likely to return to his camp and fetch a few more skins in order to repeat the process. For her part, his wife may act in a similar manner and sell one or two ermine or squirrel at a time, although she may have a considerable number at home. In fact the whole thing resembles the antics of a small boy who, having a nickel to spend, changes it for five single cents in order to "make it go further."

Baling furs at Fort Resolution with a lever type fur press.

Native Food Supplies

Before the advent of the white traders, the natives of the Mackenzie River country depended for food upon fish and deer meat. They used a few herbs and some of the wild berries, but chiefly for medicinal purposes. No attempt was made to cultivate the soil, which so many thought to be unkindly frozen land incapable of producing any crop other than indigenous trees and shrubs.

As a matter of fact, there is a considerable amount of cultivable land throughout the valley, even within the Arctic Circle. The long hours of daylight and strong sunlight compensate for the short season of growth. It will surprise many to learn that wheat grown by the Roman Catholic Mission at Fort Chipewyan captured the world's championship at the Centennial Exposition held in Philadelphia in 1876.

Natives who make their homes along the rivers and around the many lakes of the North depend upon fish for their chief food supply, both for themselves and their dogs. Fish also plays a very important part in the economic life of the white population, and the mission schools are particularly dependent on the harvest of their nets.

Each native band has its own particular fishing ground. The early fur traders are often given credit for the excellent judgment shown in choosing the sites upon which trading posts have been established throughout Canada. The credit is really due to the Indians. The traders erected their posts upon the tribal camping grounds simply because they found such spots to be the general meeting places of Indians, and these places were not only situated on native highways but were centres of fishing and hunting regions. In turn, from trading posts arose cities, their sites determined by the Indians' original choice.

Fishing takes place both in the fall and the winter, the last mentioned being done through the ice. The fall fishing is a time of great activity. The tribes gather to work and exchange gossip. First, nets must be repaired; drying racks repaired or erected; fuel for smoking must be gathered. As the men take the fish from the nets, the women and children split and gut them and arrange them on the racks to be cured by sun and smoke. All up and down the northern waterways, the pungent smell of fires arises and above all is the insistent, penetrating smell of fish, the same the world over, whether it be on the Mackenzie, at Boston, or at Yarmouth. Baled dry fish is an important article of commerce throughout the North country.

It is seldom that one sees to-day any but factory made nets. Formerly, nets were made of shredded willow roots. In appearance, they closely resembled the factory made article; in use they were its equal. Hay River was formerly a notable place for such nets.

The inland waters of the Mackenzie Basin are well stocked with several species of valuable fish. The chief varieties are whitefish, lake trout, *inconnu* (unknown)

Fish from the Mackenzie being gutted and hung on a drying rack.

pike and a species of herring. Whitefish and trout are the most desirable. Inconnu (*Stenodus Mackenzii*), generally called the "conny," is a fish peculiar to the Mackenzie River. Those caught in the lower river, in colour a light pink, are very good eating, much resembling salmon in taste. As they go further upstream they become poor; the flesh gets soft and white and unpalatable. Inconnu average ten or twelve pounds in weight, but have been caught weighing thirty or forty. Trout caught in the lakes sometimes attain great size, some reaching forty to fifty pounds.

Indians living on the eastern side of the Basin depend largely on caribou for food. The barren ground caribou (*Rangifer Articus*) is the most prolific and economically valuable big game animal of the Northwest Territories. It is smaller than the woodland caribou and slightly smaller than the reindeer, to both of which it is closely related. Some observers have estimated the total of the caribou in millions. That they exist in vast numbers is true, but in recent years there is reason to believe that their numbers have declined. Wolves and high-powered rifles have taken deadly toll of them. There are two migrations of the caribou annually. Each spring the whole body surges northward to the Arctic coastal regions and the Arctic islands, and each fall returns to winter along the fringe of the sub-Arctic forest zone.

An interesting experiment was begun in 1925 and continued for four years. It was a mass transfer of buffalo from the Dominion Government herd at Wainwright, Alberta. Altogether, 6,673 buffaloes were liberated in the Wood Buffalo Park, the largest big game preserve in America. Seventeen thousand three hundred square miles in extent, it lies partly in the province of Alberta and partly in the Northwest Territories. This area was chosen because it was already the home of some fifteen hundred wild bison, a remnant of the vast herds which once roamed the North American continent.

In 1929, after several years of investigation, the Canadian Government purchased three thousand head of adult reindeer in Alaska. Since then the animals have been driven slowly from Alaska, across the Mackenzie Delta and along the Arctic Coast. The herd has greatly increased, and in the years to come will afford Eskimos and Northern Indians a valuable food supply.

Water Transport

Birch-bark canoes were the means of conveyance used when the first traders entered the northland. With the coming of the Hudson's Bay Company and the North West Company, definite types of canoes became general. There was the two-fathom or twelve-foot canoe used by individuals. Then came the two-and-a-half to three-fathom canoe which could carry an entire family. "North" canoes were the ones mostly used. The "Canot de maitre," a very large canoe, used on Lake Superior and elsewhere in the East, was not used on the Mackenzie River.

"York" or "Inland" boats were introduced between 1820 and 1821, although George Sutherland of Fort Edmonton had built a very similar craft in 1795. Shaped like a whale-boat, the large ones used on the Mackenzie were forty feet in length by ten in beam, with bow and stern posts cut in at an angle of 45° so that they could be readily moved off obstructions.

York boats carried both oars and a square sail. They were more economical of man power than were canoes and could carry more freight. York boats were

Indians cooking a meal under the framework of a wigwam. Note the "ponasked" bird. I-40 I-9

used between Methye Portage and Fort McPherson until 1886. In later years they were supplemented by shovel-nosed scows called "sturgeon boats," which could carry still greater loads.

The introduction of steam power in Western Canada revolutionized northern transportation. The steamer *Northcote* reached Edmonton in July 1875. The Canadian Pacific Railway reached Calgary in 1883. Three years later a wagon road was built between Edmonton and Athabaska Landing, ninety-five miles away on the Athabaska River. The famous Methye Portage, which generations of voyageurs had toiled and sweated over, became disused. Instead of the long haul from York Factory on Hudson Bay by river and portage, goods were to be brought to Edmonton by steamer, taken to Athabaska Landing by road, and distributed from that place by the river route. In 1891 a railway reached Edmonton from Calgary, and so eliminated the Saskatchewan river route.

In the meantime, steam power had invaded the North, for Chief Factor Roderick MacFarlane had persuaded the Company to construct two river steamers for use on the great waterway. In the winter and summer of 1882 and 1883, Captain John M. Smith built and later commanded the *Grahame*, the first northern stern-wheel steamer, at Fort Chipewyan. John A. Littlebury was her first engineer, and she began to operate in 1884 between Fort McMurray and Smith's Landing (Fort Fitzgerald). During the winter of 1885-6, Captain Smith built the steamer *Wrigley* at Fort Smith for use on the lower river. She was a screw propelled craft, and her first master was Captain John Bell. The first stern-wheeler on the Mackenzie was S.S. *Mackenzie River*, built in 1902, and still in service.

For over thirty years, passengers and freight were taken by scows from Athabaska Landing to Fort McMurray to connect with river steamers. (See *The Beaver*, March 1938). Then came the railway from Edmonton to Waterways, the "Muskeg Express" as it was sometimes called. This completed direct rail connection between the eastern and western seaboards with steamers loading at Waterways for the Arctic. The only obstacle to through connection was, and still is, Smith Portage, the sixteen miles of sand and bush between Fort Fitzgerald and Fort Smith. The first fur traders had their supplies portaged by man power. Then came Red River carts, often drawn by oxen, while to-day motor trucks and caterpillar tractors, automobiles and buses ply to and fro along a well kept highway.

Mail Service

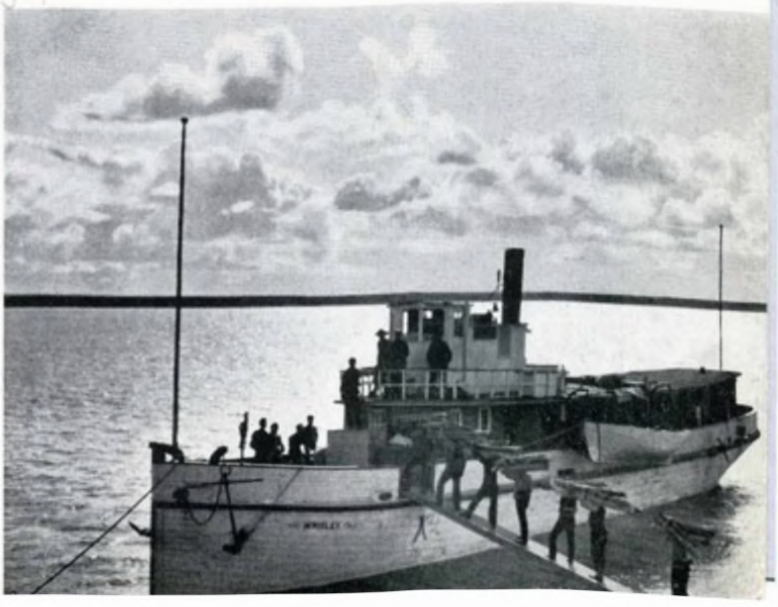
In the days before the North had been opened up to anyone but fur traders, the Hudson's Bay Company carried mail by canoe and York boat in summer, and by dog-sled in winter. The service was maintained primarily for the benefit of the Company, but mail was carried for its employees and also for rival fur traders. Later it was carried for missionaries of all denominations, explorers, government officials and the police. For this service no charge was made, and the Company's own mail was given no preference over that of others.

The summer service was given but little attention by the public, but the winter packet captured its fancy. In the latter days of the Mackenzie River packet, the run made by the Company's dog teams was the world's longest. From Edmonton to Fort

Birch-bark canoes at Fort Smith. C-11A

Above: York boat under sail. Below: Pushing a scow off the shallows. Note how the men stand up to handle the sweeps.

Firewood goes aboard the first "Wrigley," first steamer on the lower river.



McPherson, it was a distance of two thousand and twelve miles. Later, when Aklavik became the northern terminal, the distance became slightly less, as by that time the railway to the north of Edmonton cut the distance down.

Mail packets were operated on a time-table, just as are mail flights by aeroplanes to-day. "Packateers" were never armed. Wild animals of the Mackenzie never attack human beings—not even timber wolves, of which it possesses many of the largest kind. The men were supplied with an axe, some light camping equipment and food for themselves and their dogs. Relays of dogs and drivers were kept in readiness at each post to pass the mail on without delay.

No effort was made to establish records for daily runs. The Company's idea was to maintain a service that was regular and reliable under all conditions. The mail teams covered the long route at an average rate of twenty-seven and a half miles a day, including stoppages for cooking and care of dogs. This time was based on a ten years' average. Many writers on the far North like to have their heroes make fifty, sixty or more miles a day. This they might do for a couple of days, but certainly not on a long mail run. It was only the officers of the fur trade, with their privately owned dog teams, that were out to make records.

With the advent of police officers, white trappers and government officials to the Mackenzie area, the amount of mail to be carried so increased that the Post Office Department took over the service, with the Company as carriers. This lasted until 1929, when river steamers in the summer and dog teams in the winter were discarded for an all-the-year-round aeroplane service—a newly founded company, Western Canada Airways, being given the contract.

Even then, aeroplanes were not new to the region, the first to appear being two Junkers ships, flown by Messrs. Gorman and Fullerton to Fort Simpson in March 1921. They were en route to the Fort Norman oil wells for the Imperial Oil Company. Both 'planes were damaged when landing at Fort Simpson, one smashing its propellor. Fortunately, there was at Fort Simpson at the time a versatile craftsman, Walter Johnston, engineer of the Company's M.T. *Liard River*, who had been a cabinet maker. With oak sled-boards and glue made from moose skins, Walter fashioned a propellor which not only enabled the 'plane to reach the oil wells in safety but carried it back to Peace River later on. Since those days, flying has become to residents, Indians and Eskimos, a commonplace matter.

Radio

The use of aeroplanes brought a demand for telegraph facilities. A wireless station was established at Fort Simpson by the Royal Canadian Signals in 1924, and another at Aklavik in 1925. Others rapidly followed and there are now few posts in the valley where wireless facilities are not available, either through local government stations or by the Company's own short-wave transmitters.

Minerals

During the past fifty years the Geological Survey of Canada has opened up a treasure house of wealth in what was hitherto regarded as a land fit only for Indians and fur-bearing animals.

Three of the major geological divisions cover Mackenzie River district. There are the Precambrian or Laurentian, the Great Plains and the Cordillerian. Oil, salt, lead, zinc, copper, tungsten, gold, silver and other desirable and much wanted substances have been found. At Yellowknife and Goldfields there are producing gold mines. The Norman oil wells, fifty miles north of Fort Norman, are proved producers. Along the Athabaska River are vast tar sand deposits holding billions of gallons of precious fluid awaiting the day when a really satisfactory method of extraction has been devised.

One of the most spectacular finds was the discovery in 1930 of pitchblende on the eastern shore of Great Bear Lake. It quickly became world news, as the discovery meant that the radium monopoly, hitherto held by the Belgian Congo, had been broken.

All this development in a region so far removed from the centres of population means that transportation is all-important. In the winter dog teams hauling toboggans are still widely used by trappers and others, but regular air services are maintained between Edmonton and far northern points, while over the frozen lakes and rivers and along winter roads cut through the bush, trains of big sleds are hauled by tractors.

It is in the summer, however, that the Mackenzie valley really comes to life. After the ice goes out, the barges, and diesel-engined tugs and big stern-wheelers are launched into the waters of the Athabaska, the Slave, and the Mackenzie, and through the long days of summer the settlements on the banks of the great northern waterway bustle with activity as the gleaming white vessels come and go. Trade goods and supplies and machinery go north, and furs and minerals come south, while the great Mackenzie valley pulses with life from Waterways to Aklavik.

Red River cart brigade at Fort Smith. C. W. Mather.

The Strange "Dog" of Fort Selkirk

by John Gregg

Dramatis personae. Mrs. Cameron, Peter and John, with Sheep and his friend (what's left of her), at 56° below.

WHETHER it was as cold in Robert Campbell's day at Fort Selkirk as it is now, there's no telling. But it is on record in some government office that at one time the thermometer liquid hit eighty below and kept on dropping. However true that may be, it is true that on Sunday, December 20, 1942, the temperature went down to 72° below and broke the bulb of my thermometer. By eleven o'clock on Sunday morning, it had warmed up to 56° below, and I went off to church, calling in at the R.C.M.P. barracks to leave some air mail with Mrs. Cameron, who is the local agent.

On the way back from church, I heard Mrs. Cameron ask some of the men passing her door if they owned a big black dog. She told them how, a little after church time, she had gone out to the back yard to get a stick of round wood for the heater, and, as the wood was near the double kennel of her dog "Sheep," she went to see how he was getting along in the cold. She was very much surprised to see a big black head poke out of one of the kennel entrances, and, thinking it was some strange dog from the Indian village, she went back to the house, got her broom and then tried to get the animal out of the kennel by poking at it with the broom and "shooing" it. With that, old Sheep came out of his half of the kennel and stood in front of the other entrance, as though to protect his friend; so Mrs. Cameron decided the best thing she could do would be to wait until church was over and ask the Indians if any of them had a black dog running loose.

Peter McGinty and John Ellis, when they heard the story, went round to the back of the house with Mrs. Cameron to look at the intruder. But so many people all at once were too much for the "dog," which suddenly bolted out of the kennel, through the back yard, and away down the trail. The onlookers were flabbergasted when they saw it was a huge gray wolf with a trap hanging on to one foot!

Mrs. Cameron at once dashed into the house, grabbed a couple of .22 rifles and gave them to Peter and John, who took after the wolf and caught up with it about a mile from the village.

In about an hour, Peter and John came back from the hunt, Peter with the pelt on a pole over his shoulder, and John packing the No. 1½ trap. It transpired that the wolf had previously been in another trap, for some toes were missing from her left hind foot, and this time she was caught by the right front foot. She was dark grey with a black head, but she was in poor shape, not good enough even for the carcass to serve as dog feed.

I think the explanation for her surprise visit may be that she had heard Sheep howling in the night and had decided that, as he had such a nice, kind voice, he would be only too willing to help her get rid of the pesky trap. But as Sheep could do nothing about that, the next best thing he could do was to let the poor thing sleep in his warm, comfortable kennel.

London Letter

4th January, 1943—We have been glad to welcome at Beaver House Mr. C. S. Riley, Chairman of the Canadian Committee, and Mr. P. A. Chester, General Manager for Canada, on a "flying" visit for discussions with the Board.

Other recent visitors to Beaver House have included the following members of our Canadian staff serving with the Canadian Forces on this side: F. Sergt. J. J. Scissons, R.C.A.F., from Saskatoon; Lieut. J. R. Allen, R.C.O.C., from Vancouver; Lieut. G. P. Eligh, R.C.A.S.C., from Vancouver and Calgary; Pilot Officer Sturrock, R.C.A.F., Fur Trade Dept., Western Arctic; Lieut. D. B. Cameron, Seaforth Highlanders of Canada, from Vancouver.

A recent visitor to our Archives Department was Captain C. B. Gladman of the Canadian Army, who was anxious to collect information concerning his great-grandfather, George Gladman, senior.

The members of the Beaver Club at Beaver House were delighted to receive Christmas greetings and good wishes from the Beaver Club at Hudson's Bay House, Winnipeg, in the form of an artistic Christmas card with specially appropriate verses relating to the war, together with a cheque which enabled us to send comforts to our staff serving overseas. Our grateful thanks and good wishes have been expressed in a few verses which we hope will effectively convey our sincere appreciation.

Although since the outbreak of war it has not been possible to hold our Beaver Club annual Christmas party, a successful attempt was made to introduce a little relief from the strenuous work and tension under war conditions by the organization of a visit on December 18 to the musical play "Let's Face It."

The preparation of volume V of the publications of the Hudson's Bay Record Society, *Minutes of the Hudson's Bay Company, 1671-74*, with an introduction by Professor J. H. Clapham, M.A., is well in hand, and it is hoped to publish the volume early in the new year. We were very pleased to see the name of Professor Clapham included in the recent honours list when a knighthood was conferred upon him.

A trapper is welcomed by a Company clerk at Fort Good Hope.

Arctic Circle to End of Steel

by R. H. G. Bonnycastle

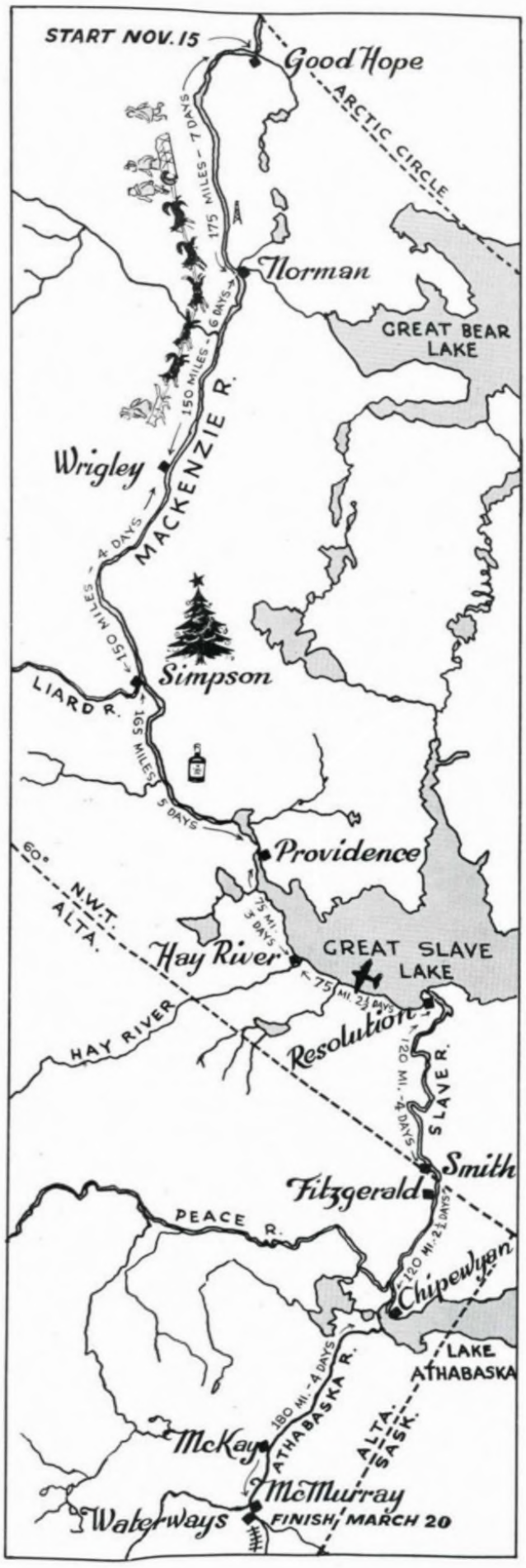
An account of the last of the long dog-team journeys made by Company men along the Mackenzie waterways

IN 1928 I was assigned to accompany Hugh Conn, General Inspector, Fur Trade Department, H B C, on a lengthy inspection of northern posts. First, during the summer, we were to visit the Western Arctic units from Herschel Island to King William Land and subsequently, during the fall and winter, those posts on the great water route between Aklavik near the mouth of the Mackenzie and McMurray at the railhead north of Edmonton.

We managed to get back from the Arctic to Fort Good Hope before freeze-up, and waited a month there, from October 15 to November 15, for the river to set fast. All that time it was jammed with swift moving ice floes. Great was the speculation as to when the river would freeze solid, and we would inspect it a dozen times a day. The final freeze-up came on November 10. The movement of ice became slower and slower until it gradually blocked up and finally came to a dead stop—as far as we could see up and down stream, nothing but mile upon mile of jagged up-ended chunks of ice, all jammed together and forming the most impassable highway imaginable. But we knew there would be smooth places along the edges of the banks and up the back waters, eddies, and islands.

We had thirteen real huskies, most of which had been used by Hugh Conn the previous winter on his long trip from Coronation Gulf to Churchill and then brought by rail and boat to Good Hope for this trip. They were large powerful brutes with heavy coats and, unlike the Indian and local dogs, extremely friendly and affectionate.

Friday, November 15, was fixed for the start of our trip to Fort Norman, one hundred and seventy-five miles south. Our grub was all cooked and frozen in advance. We had exactly sixty-nine moosemeat balls, seventy hefty slices of bacon (sliced in advance to save time and trouble on the trail); beans cooked with minced up meat, bovril and molasses, frozen in slabs and then broken up in small pieces for easy handling and heating on the trail; individual bannocks by the hundred, made with plenty of shortening so they



would not freeze hard; doughnuts for the sweet tooth; ample supplies of tea, coffee, rolled oats, rice, jam, sugar, milk and the like. We figured the trip to Norman would take a week, but of course allowed extra food for possible delays.

Friday morning we were up at five. It was dark except for the light of the stars, which were brilliant in the black sky, crystal clear and cold. Early morning noises came distinctly through the frosty atmosphere—ice cracking down river, a tree snapping with frost back in the bush, a dog barking and an early riser banging a cabin door.

We had three teams, two of six dogs each and one of seven. Victor Lafferty, Good Hope interpreter, was guide. He had a crack team of dogs, somewhat smaller than our huskies but well trained and fast. His load was chiefly four hundred pounds of dried fish, the dog feed for the entire party. Angus Hooker, H B C clerk, with one of our teams, hauled our food supplies, tent, camp stove and some more of our dunnage, while Hugh Conn and myself, with the third team, took the remainder of our baggage, sleeping bags, inspection records, etc.

By daylight we were ready, said final good-byes, and Victor's team shot off with a bound in the lead. The dogs were wild with excitement after their long inactivity and crazy to get started. It was a perfect winter's day, clear, calm, the frost particles in the still air, on the trees and ground, glistening in the sunshine.

After lunch we crossed the river in the middle of the Ramparts. This meant descending a very steep gully in the cliffs to the ice, so we unhitched the dogs and lowered the toboggans to the bottom, taking the dogs down separately. Hitching up again, we crossed to the other side and made a few more miles before deciding to make an early camp for the first night.

Between Good Hope and Norman the party met this trapper with a newly caught lynx.

Lunch on the first day. Left to right: The author; Angus Hooker, H B C clerk; Victor Lafferty, Fort Good Hope interpreter, who acted as guide as far as Norman. Beyond is the wide expanse of the Mackenzie.

It was pitch dark and icy cold in the tent next morning when the alarm went off. Victor rolled out and put a match to the stove. Dressing did not take long, and there was no thought of washing, of course. We lit another fire outside, the purpose of which was to relieve the congestion on the small stove. We usually boiled our tea and washing up water outside while making porridge, frying bacon, etc., on the stove. Hugh Conn did the cooking while I rolled up our bedrolls; then we had breakfast, did the inevitable washing up, struck and folded the tent now icy from the condensation, loaded the sleds, hitched up the dogs and pulled out in the inky blackness.

The second day we crossed the river to the other side and Victor went ahead with his axe to test the ice. His dogs were wonderfully obedient. They would wait while he went ahead a hundred yards and tested the ice, then on his call jump up, jerk their heavy toboggan into motion and trot up to him, stopping as required. The first two days netted us only about twenty-five miles together, due to somewhat poor conditions and the necessity for breaking in men and dogs gradually.

On the sixth afternoon we struck a cabin about camping time. It was occupied by an old man of seventy-seven who had been wrecked there with a little scow in the fall. He had removed the heavy engine, taken the scow apart and built a small cabin with the lumber, right on the side of a creek. The bank of the creek formed one wall of the shack, which was extremely crude; but the owner invited us to spend the night, and it was luxury not having to make camp. The old man had very few visitors and was glad to see us. We chatted to him as long as we could keep awake and then turned in—a very tight squeeze on the floor. My diary says, "Distance 30 miles. Feet agony." Running in moccasins on glare ice, with no snow to provide a cushion, was beginning to tell.

On the seventh day out we made Fort Norman, a final thirty miles. Up at four a.m., we had reasonably good going, and our last camp fire before reaching the fort was real sport—no need to economize on grub, everyone in good form, looking forward to reaching our destination in a few hours, a square meal and a bed to sleep in at night. We passed opposite Bear Rock and the mouth of the Bear River until directly across from the fort, then crossed the Mackenzie and up the bank to the post.

The stranded plane at Chipewyan, G-CASN. "Punch" Dickins is on the left, Lou Parmenter second from the right.

We got a great welcome from Dave McAlpine, George Duncan and Tim Gaudet. They helped us unhitch, brought us and our gear into the warm house, where we soon had a complete change, wash and shave, and, after an excellent meal cooked by Mrs. Gaudet, felt like new men. After a night's sleep in real beds, we were ready for work the next day.

We spent nine days at Norman, and our procedure was typical for all posts visited. Hugh Conn took stock, while I audited the books and took off a trading account. Every aspect of the trade was thoroughly investigated, prices of goods and furs, Indian debts, expenses; buildings and equipment were carefully examined, the manager given detailed written instructions for his guidance and a complete report prepared for the head office in Winnipeg before leaving the post.

Leaving Norman, we said good-bye to Victor, who returned to Good Hope. His place was taken by Isidore Thomas, who was running the mail through to Simpson to catch the outgoing winter packet. We made the one hundred and fifty miles to Fort Wrigley in five nights (six days), with both good and bad going. We made a very good run the last day, most of which, about twenty-five miles, I covered on foot. After sighting the post I ran up and rode beside Isidore on his toboggan. There was quite a keen head wind. All of a sudden Isidore said, "Your nose is frozen," reached down, picked up a handful of snow and rubbed it on my nose, effectively removing the skin from the tip in the process. I understood thoroughly then why the popular remedy of applying snow for frost-bite is all wrong and the gradual thawing of the frozen member by applying a warm hand is the correct method of procedure. I usually froze the corners of my chin and my nose between posts, but they always healed again before we started the next stretch.

G. S. Botzow was in charge at Wrigley with his wife and two youngsters. We spent six days with them, and then, after getting together our usual rations of meat balls, beans, bannocks, doughnuts, etc., started on December 12 for Fort Simpson, metropolis of the Mackenzie, where we were to spend Christmas.

At Wrigley, however, we made one excellent move. We hired an Indian boy, Frank Horrassie, as forerunner. The forerunner's duties are exactly what the name implies—to run ahead. Being the first travellers of the winter, we had no trail to follow and, good as the leader of a dog-team may be, he cannot always pick the best trail. Moreover, dogs always go faster and better when they are following someone, rather than aimlessly picking their way over virgin snow.

Frank was about eighteen and rated a good runner. He had on a previous occasion run all the way from Wrigley to McMurray, almost nine hundred miles, as forerunner for another party. Off he started in the morning ahead of us at a steady run—with or without snowshoes—and, keen as the dogs were to catch him up, they never did so until he decided it was time to stop for a rest. We would then boil the kettle, have a breather and a quick cup of tea, and off again until dinner time or evening camp.

Frank kept this up day after day and ran almost every foot of the way to McMurray—900 miles in twenty-five travelling days. Later, when driving my own team behind him, I got accustomed to his stocky figure, shoulders usually covered with rime from perspiration, bobbing ahead, running and walking alternately mile after interminable mile.

He would start off in the morning fully clothed. After a bit I would see a black object beside his trail. It would be his parka, and I would pick it up and tie it on top of my load. Later, as he continued to warm up, he might cast aside his windbreaker, and occasionally even his sweater. Always cheerful, Frank did his full share making camp and was invariably up first in the morning lighting the fire.

When we got to McMurray we took him on the train to Edmonton to see the bright lights for the first time in his life, then sent him home by plane, where he became famous amongst his people as the man who had run the nine hundred miles to the steel in twenty-five days and returned by air in two.

We made Simpson in four long days, which was pretty good going for the one-hundred-and-fifty-mile stretch. One specially long day we got up at 2.30 a.m., were on the trail nearly five hours before daylight and did not camp until an hour after dark, covering fifty to sixty miles. I was too exhausted to eat much but no bed ever felt more comfortable.

We got a great welcome at Simpson and spent two very pleasant weeks there, including Christmas, a very festive occasion at that big fur post, where scores of Indians came in to trade and celebrate. Most people took in midnight mass at the Catholic Mission on Christmas Eve, and many attended the Christmas morning service in the little Anglican Church. We had Christmas dinner in the massive old H B C house, going afterwards to a lively party at the radio station.

We left Simpson for Providence on December 30. Here we said good-bye to Angus Hooker, and for the rest of the winter I drove our second team.

Everything went fine. At the Head of the Line, eighty miles above Simpson, we camped our second night out, on New Year's Eve, with Mrs. Hardisty, a famous old lady who lived in a large house with two granddaughters. She looked after us extremely well, was up and down in the night tending fires, and insisted on getting up herself at 4.30 to get our breakfast.

The next night we camped with Don Naylor, now the skipper of the S.S. *Distributor*, and his partner, Earl Cox, who in those days trapped in the winter and steamboated in the summer. Both being old friends of ours, we uncorked a bottle of "Best Procurable" we had brought for the occasion and toasted the New Year.

At Hay River, on Great Slave Lake, we decided to dispense with our tent, which meant we would not need our camp stove and pipes either, thus reducing our loads considerably and saving the long labour of pitching and striking it night and morning. We chose a cold night for our first to sleep out, as it was 50° below when we left Hay River for Resolution. However, we managed remarkably well. We selected a well sheltered spot in a thick grove of spruce, made an enormous fire, spread a thick carpet of spruce brush, and, although the fire went out in the night, we slept comfortably enough wrapped in our eiderdown robes, with most of our clothes on. After that experience nothing would persuade us to go through the drudgery involved in travelling with a tent again, although I must admit we hit cabins most nights from that time to our arrival at McMurray.

One day, between Hay River and Resolution, we were travelling on Great Slave Lake in a miniature blizzard. I was behind, and was following the trail of the others but could not see them or the land on account of the snow drifting along to a height of probably ten or fifteen feet. Suddenly I became conscious of a whirring noise. The dogs pricked up their ears and then, as the noise grew louder, without warning veered off in its direction and broke into a gallop. The hair started to rise up on the back of my neck. What in the world could it be? Open water? Then for a brief space I saw an aeroplane pass directly overhead, about two hundred feet up, before it was lost to view in the fog. It was the first commercial winter flight into the Mackenzie area, forerunner of what was to become a regular and routine service. We suddenly felt very much out of date!

I got lost the same day. We had arranged, in case I lost the trail, that we would all travel along the lake shore *inside* all the islands. So when I lost their trail I did not worry but figured I would pick it up off one of the points of land close to which we passed from time to time. But I saw no sign of it, and soon became convinced they were no longer ahead of me.

I had an axe and matches, and the dog feed for the entire party, but the others had all the grub. It was no use to go back and look for them. One could see only fifty yards or so. I would have had to face a bitter wind and there was no certainty of finding them. We might easily pass each other. It was too cold to wait around, so I pushed on along the shore.

After I had made about ten miles the sun went down and I knew there was a cold night close ahead of me. Travelling near the shore, I began to eye the woods, looking for a good thick place to make camp for the night. The dogs would eat anyway, but their frozen fish was much too tippy for me. Just as I was about to go ashore I rounded a point, and there in the mouth of a stream was a row of Indian houses with smoking chimneys.

I tried several of the houses before finding anyone who could speak English. It seemed all the men were away at the fort (Resolution), but my informant invited me to stay with her when I told her my plight. She gave me a good feed of moose-meat stew, and I had just turned in when the door burst open. Someone said "Here he is," and the rest of our party poured in.

They had gone outside an island and decided to boil the kettle on it. When I didn't turn up, they went back to look for me—quite a long way. Meantime, I had passed inside the island. They searched far and wide and had been quite alarmed, fearing I was lost out on the lake.

We made Resolution next day. Pierre Mercredi, with fifty years' service in the coming June, was in charge of the H B C post. At Resolution we were getting within a reasonable distance of civilization. The plane, which was still down river, had brought mail down for us, and we prepared a message to Winnipeg asking permission to abandon the dogs and fly when schedules permitted. The prospect was most exciting.

The day following our arrival we heard shouts of "Aeroplane! Aeroplane!" and soon the plane was overhead, back from Simpson. It circled a couple of times and landed on the ice half a mile out in the bay, bumped two or three times, stopped abruptly and seemed to collapse on its belly. People streamed out. The dejected pilot and mechanic were ruefully surveying a collapsed undercarriage and buckled propeller.

At the gate of the old fort on the hill, now demolished. The author is second from the left. In the middle is D. Forsyth.

The pilot was "Punch" Dickins, who was to become one of the most famous bush pilots of all time and is now vice-president and general manager of Canadian Pacific Air Lines, Limited. The mechanic was Lou Parmenter, who, in the ensuing years, became one of the best known of all northern mechanics.

After seeing this accident we thought perhaps the old dog team, if slower, was still the surest means of conveyance. However, it was not long before they had jacked up the ship, repaired the undercarriage, straightened the propeller, sawn off the broken tips, and were in the air again. We wanted to fly!

We left Resolution on February 4 and made Fort Smith in four days' travelling. Our first night out, just as we were turning in at our camp, along came the messenger Dickins had sent to Smith with word of his mishap. He was now on his way back and brought us a wire from the Fur Trade Commissioner saying he preferred us to finish our trip by dog team. What we thought about the Commissioner doesn't bear repetition . . . . Our feelings were not improved either by the plane passing over us repeatedly on the next and following days, sometimes twice, while we crawled a few miles on the surface. The aeroplane was here to stay, and had opened a new era in the North.

We slogged through to Smith and Fitzgerald in fair time. Our trip from Fitzgerald to Chipewyan was a hard grind, but we made the hundred miles in two long, wearing days. When hitching up to leave Fitzgerald, I missed one of my dogs—Gaston. He had broken loose and gone off. A hurried search revealed nothing, so we had to go without him. They promised to send him on by plane when he turned up, and sure enough the first sign of life we encountered at Chipewyan was Mr. Gaston smugly watching his mates drag themselves in. He had come swiftly, comfortably, by air in an hour—at a cost of $30—while we toiled along below.

The day we made Chipewyan was just about our longest of the winter—fifty-three miles between 7 a.m. and 10.30 p.m. The worst of it was we were travelling along a horse toboggan trail. This meant it was deeply pitted with their hoof marks, each horse stepping in the same hole. So both dogs and men had to avoid these holes, which made it something like running on railroad ties, extremely tiresome in the daylight and plain hell after dark. In fact, after dark we wore our snowshoes even though the trail was packed hard, simply to bridge the holes. But we made it.

We had a long twelve days at Chipewyan, which was another big post. R. Hooker, another long-service Company man, was manager, and he had three young clerks—a sort of apprentice school. The plane kept dropping in, north and south bound, and was doing a land-office business. All the travellers told us how vastly superior it was to a dog team. We could believe it.

On March 13 we left Chipewyan for the two-hundred-mile haul up the Athabasca River to McMurray. The weather was really mild now in the middle of the day, in fact it actually became wet underfoot. As we were making cabins every night, we could make long days. The first was forty-five miles. Next day was equally warm. I travelled in shirt sleeves, with sopping wet feet. Early in the afternoon we reached Poplar Point outpost, checked the small stock and pulled out again at 6 p.m., after sundown, when the trail was beginning to freeze up again and made easier pulling. We pushed on in the dark on a miserable trail and finally reached our destination, an Indian house, after midnight, all in. It was 1 a.m. before we had fed the dogs, had supper and turned in.

We started things moving again at 5.30 a.m., stiff and sore as we were. That night we dragged ourselves into Fort McKay over soft heavy trails which nearly killed the dogs, only thirty-five miles from journey's end.

We spent a few days at McKay, and finally reached the goal of our dog-team travel on Wednesday, March 20. Eight days later, after inspecting the post, we drove our dogs over to the station at Waterways, put the faithful brutes in the same crates in which they had arrived there nine months previously and, accompanied by them and our indefatigable Frank, entrained for Edmonton and the flesh-pots after a trip I would not have missed for worlds.

A warm spring day on the Athabaska. Frank Horrassie, the tireless forerunner, and General Inspector Hugh Conn with his team of fine huskies. Note the Eskimo style dog harness, and the Nome hitch, seldom used with a toboggan.

HERE and THERE

A Page of Contrasts

Left: Evidence that Trout Lake, Ontario, is well named. Gordon Pede.

Right: J. Milne, manager of B.C. District, feeds a pet moose calf.

The "Aklavik" in the ice. L. A. Learmonth.

Arctic flowers on Read Island, 69° N. W. Gibson.

Moving the dwelling at Green Lake post, Saskatchewan, with an old-time traction engine. E. W. Hampton.

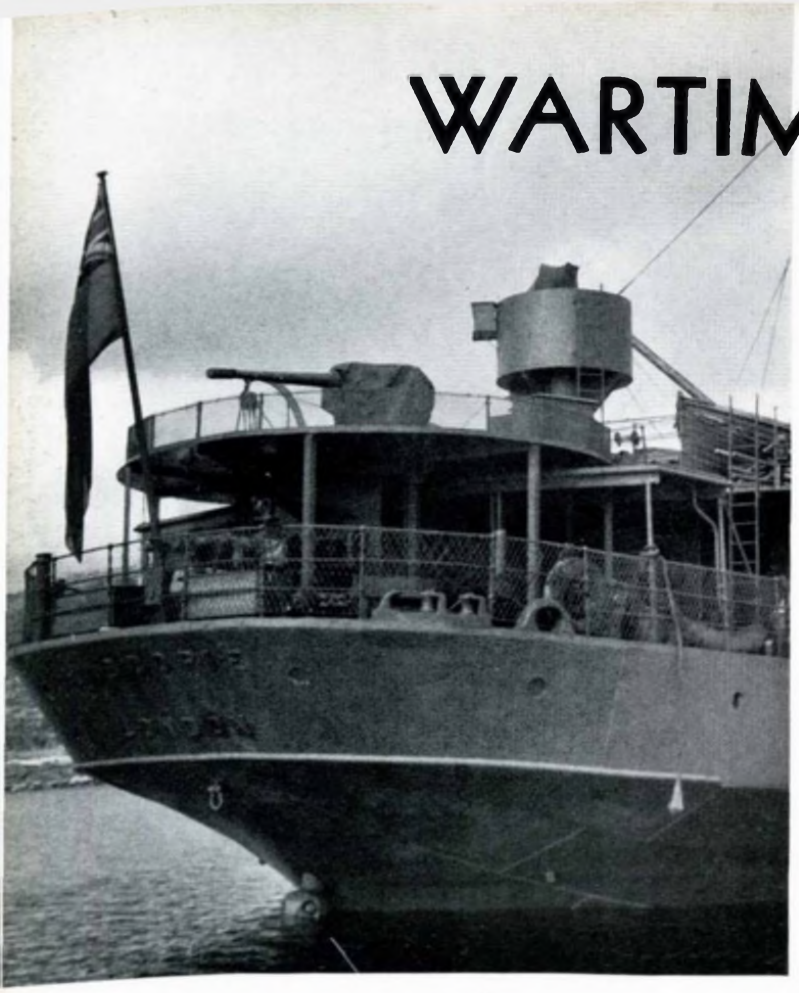
American army jeep outside Lower Post on the Alaska Highway. J. M. S. Macleod.

WARTIME VOYAGE

The 1942 Cruise of the HBC S.S. "Nascopie"

by J. W. Anderson

Pictures by the author
except where otherwise noted



THE two hundred and seventy-third annual voyage, "Trading Into Hudson's Bay," will go down in history as the longest on record—a total of no less than one hundred and thirty-five days. A combination of circumstances lengthened the voyage, including a very heavy program of work, much bad weather, convoys, and interruptions of the regular schedule due to the circumstances of the times in which we live. Storms there were aplenty, but one in particular will remain in the memories of passengers and crew for many years. On this occasion we experienced a very heavy gale while travelling empty. The wind squalls reached, at times, a velocity of one hundred miles per hour and the vessel, being light, was tossed around like a cork on the ocean, rolling "rails under." Everything moveable was blown overboard, and it was with difficulty that the cargo scows were saved.

Major D. L. McKeand, who this summer was accompanied by Mrs. McKeand, was again in charge of the Government party. The Bishop of the Arctic, the Right Reverend A. L. Fleming, accompanied by Mrs. Fleming, made his ninth episcopal visitation and his nineteenth voyage into the Arctic. Bishop Turquetil, accompanied by Father Pelletier, travelled with us from Montreal to Churchill, thence per *Fort Ross* to Chesterfield and farther north in another unsuccessful attempt to reach Igloolik. Inspector R. Bettaney, R.C.M.P., joined the ship at Chesterfield and inspected various Eastern Arctic detachments. Dr. K. F. Rogers was medical officer from Montreal to Chesterfield, where Dr. McKee, accompanied by Mrs. McKee and daughters Jean and Marion, joined us for Pangnirtung. From thence to the conclusion of the voyage we had as ship's physician Dr. J. L. Bildfell, who was accompanied by Mrs. Bildfell and her three babies, Michael, Gail and Peter. Dr. M. L. Craig of Toronto, now on active service, was dental officer for the voyage.

Mrs. Laura Boulton, accompanied by G. McLean, took a number of movies on the voyage for the National Film Board and stopped off at Southampton Island, where they spent a few weeks with Post Manager Chesley Russell. Thence they travelled by motorboat to Chesterfield, on to Baker Lake, then south to railhead at Churchill.

Ice conditions, except in Prince Regent Inlet, were relatively normal. We encountered scattered field ice in the eastern part of Hudson Strait and quite heavy ice in the western end, but very little in Hudson Bay. In Prince Regent Inlet, however, on the way to Fort Ross, we had both the old and the new ice to contend

One of the Cape Dorset stalwarts shows what he can carry—even without a tumpline.

Eskimo women carry flour to the warehouse at Cape Dorset. "Nascopie" in distance.

Above: White foxes in their summer pelage at Southampton Island, on their way to a zoo.

Right: The sea near Arctic Bay begins to freeze.

with. Never before have we seen ice of such solidity, for every time the good ship hit it in trying to force the passage, it was just as if she had hit a floating rock. In spite of very persistent and strenuous efforts, and when only about one hundred and fifty miles distant, Captain Smellie was reluctantly obliged to give up any idea of visiting Fort Ross in the 1942 season. Even at that the ship showed visible evidence of buffeting from heavy ice. Admiralty Inlet too presented a very bleak and wintry appearance, while at Pond Inlet, Post Manager Swaffield informed us that a week after our departure he would be travelling by komatik over the site of our anchorage. The season being well advanced, conditions at all of the northern posts were very wintry and cargo had to be handled under much difficulty.

At Lake Harbour we had a baptismal service in the church, where Bishop Fleming officiated and Captain T. F. Smellie and Mrs. D. L. McKeand were sponsors for Walter Roy Quartermain, the infant son of Reverend and Mrs. Quartermain.

We had three weddings during the voyage. In the little church at Lake Harbour, with Reverend Mr. Quartermain officiating, Constable W. Hastie and Miss Eleanor Storey were married, the reception being held in the home of Mrs. R. H. Kilgour. The second wedding took place on the high seas, when Miss Frances Caldwell, lately of Hudson's Bay House, became the bride of Norman Ross. The saloon was prettily decorated for the occasion and, with the ship's company present, the wedding was solemnized by the Bishop of the Arctic. The third wedding took place at Pangnirtung, where Miss Gwen Carey, of St. Luke's Hospital, became the bride of Mr. A. C. Ross, the Bishop of the Arctic officiating, assisted by Reverend H. A. Turner. The bride was given in marriage by Captain T. F. Smellie and a reception was held in St. Luke's Hospital, presided over by Miss Hockin, the matron.

As a result of our inability to reach Fort Ross, several staff changes had to occur. Post Manager James Bell and his staff, originally destined for Fort Ross, went ashore at Arctic Bay, while Norman Ross, who was to remain at Arctic Bay, was transferred with his bride to Pangnirtung. Thus there will be two brides at this post, Mesdames Ross and Hastie.

The non-arrival of the supply ship was naturally a great disappointment to the staff at Fort Ross, and particularly to Mrs. Heslop. True, they have sufficient coal, staple foods and staple supplies to see them through the winter without undue hardship, but the supply ship is an annual and very important event to all Arctic residents and there are so many pleasant things to look forward to in the way of fresh food supplies and items of personal requisites. The residents of Fort Ross were particularly unfortunate in regard to mail, inasmuch as the winter mail sent in for them in February, 1942, was lost in the tragic aeroplane accident which claimed the life of "Paddy" Gibson. All Fort Ross mail and supplies were landed at Arctic Bay, so that, with returning daylight in the far Arctic, Post Manager Heslop will send for them by komatik.

An interesting feature of the 1942 voyage was a call at the Greenland settlement of Julianehaab, a quaint and distinctly Scandinavian village, not far distant from the original settlement founded by Eric The Red in A.D. 986. Here the vessel took on bunker coal, the bunkering being done by the native men and women, who were strong and hardy and apparently in every way as capable as the men. Numerous sheep are raised at this village and we were fortunate in being able to receive a number of carcasses fresh from the local abattoir to replenish Chief Steward Reed's larder.

Julianehaab contains the residence of the governor of South Greenland and is the southernmost administrative point. There is a resident medical officer, a pastor of the Lutheran Church, and law and order is maintained by the governor and his staff.

At dinner on Sunday, October 11, Major McKeand gave a toast to Captain T. F. Smellie on the occasion of the twenty-fifth anniversary of his taking command of the good old ship. In reply, Captain Smellie recounted the outstanding events since October 11, 1917, and how, with the aid of Chief Steward A. Reed, he had built up an Eastern Arctic freight and passenger service for the comfort and convenience of Arctic travellers. Captain Smellie has had in many ways a remarkable seafaring career, and it was a pleasure for the ship's company to do him honour on this occasion.

Kyaks among the ice floes in Hudson Strait.

Above: All dressed up in his best koolitak and wrist watch, an Eskimo poses with his family inside his tent.

Above, right: Stacking lumber for a new building at Arctic Bay.

Right: The Alan Ross wedding group at Pangnirtung, October 5. L. to R.: Rev. H. A. Turner, Rt. Rev. A. L. Fleming; the bride and groom; Miss Reeves, bridesmaid; James Thom, best man. On the left is Sandra Thom. The dark object is the head of an Eskimo child.

Below: Mrs. Norman Ross collects her goods and chattels, including a Christmas tree, before disembarking at Pangnirtung.

Below, right: Newlyweds and others at Pangnirtung. L. to R.: Cst. Hastie, Insp. Bettaney, Mrs. Hastie, Norman and Mrs. Ross, J. W. Anderson, Capt. Smellie, Mrs. and Major McKeand, Mrs. Fleming, Bishop Fleming.

The three lower photos from Norman Ross.

Nascopie Pictures

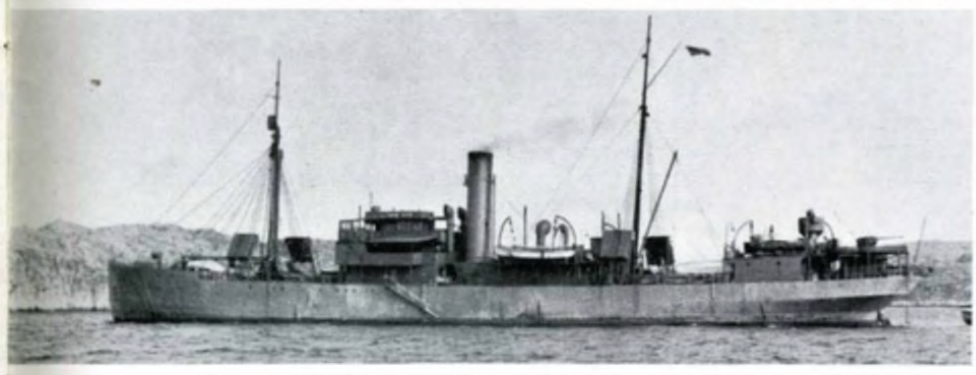
Above: Mount Ekaluit, a blizzard raging on one side of its peak, towers above the "Nascopie."

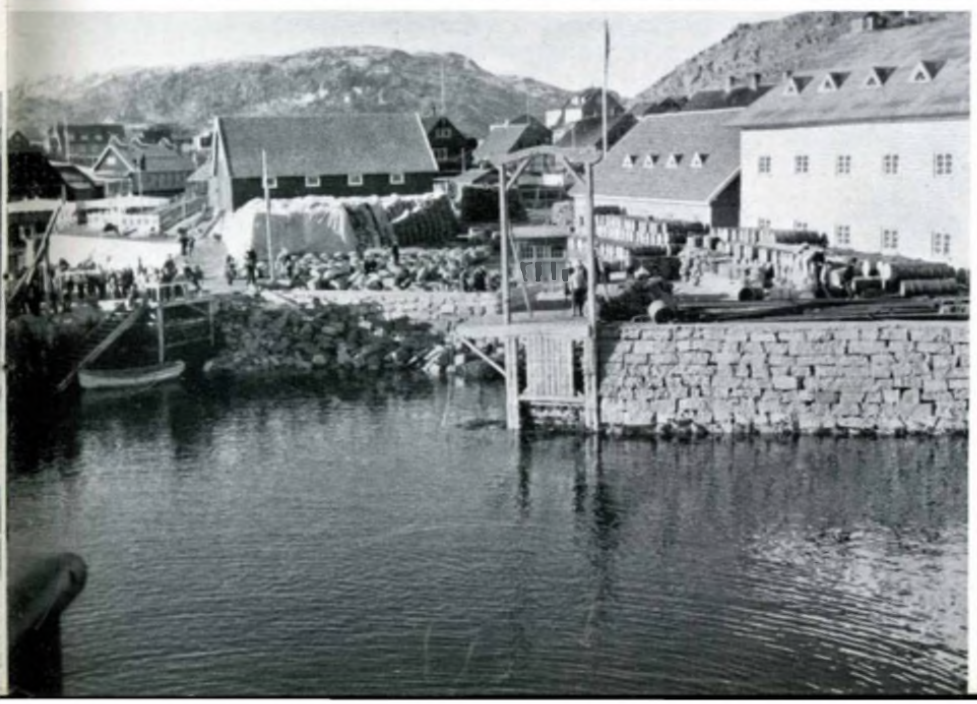
Upper left: A party leaves Ivigtut to picnic on the glacier. L. to R.: The host, Dr. Tickle; Bishop and Mrs. Fleming, the Alan Rosses.

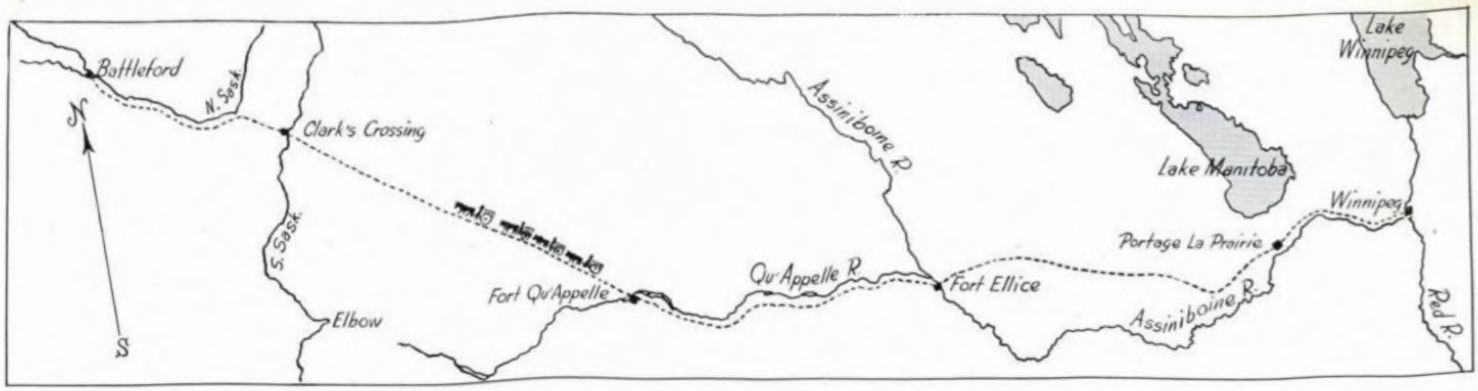
Middle left: The "Nascopie" in her war paint. Note the life rafts ready to slide into the sea, and on the stern, the machine-gun platform and the 3.6-inch gun.

Lower left: Julianehaab, a typical Scandinavian village, stands not far from the site of Eric the Red's original colony of A.D. 986.

Below: The midnight sun shines across a sea of ice.







THE TRAIL OF '81

by William Bleasdell Cameron

ON a bright warm afternoon in late July, 1881, Verey and I turned west from Main Street, Winnipeg, and, with the ungreased axle of our high-wheeled Red River cart screeching like a lost soul in purgatory, plodded beside Verey's red-and-white ox out along the Portage road, wilderness bent.

The Portage road, which was the highway to Portage la Prairie, is now Portage Avenue, and you may reach one side from the other, either of it or of Main Street, without risking your footwear. But those were the days when the future Manitoban metropolis was a raw border town, famed chiefly for the glutinous quality of its mud, and the crossing of one of its thoroughfares after a rain without losing at least your rubbers was an achievement, and possibly front page news for the *Free Press*.

The Marquis of Lorne, governor-general of Canada and Queen Victoria's son-in-law, had passed through Winnipeg, westbound like Verey and me, a week ahead of us, and everybody knew of it; but our arrival occasioned no perceptible ripple of excitement. A day or two later I met Sandy Macdonald and Ad McPherson. Sandy, who, although he has passed on, still lives in the name above the portals of numerous wholesale grocery establishments in the West, was then a small jobber in foodstuffs on Main Street; McPherson was loading goods for Battleford and Fort Edmonton, at both of which points the Winnipeg man had an interest in trading posts. I became then and there the hireling of the future sugar-and-spice millionaire, assigned to the former post, and Macdonald arranged with the guileful McPherson that Verey and I should journey westward under his experienced wing. This was supposed to ensure us freedom from alarms, but as a matter of fact the chief source of such alarms as assailed us during the two or three weeks I travelled with him was Ad himself. "Charlie" Ross, in reality James Ross who died only recently in Edmonton, was one of half a dozen men who handled McPherson's train of a hundred loaded carts, and it is of interest to note that Hon. Frank Oliver and his bride of a week left Winnipeg for Edmonton with an outfit hauled by cattle just a few days before us.

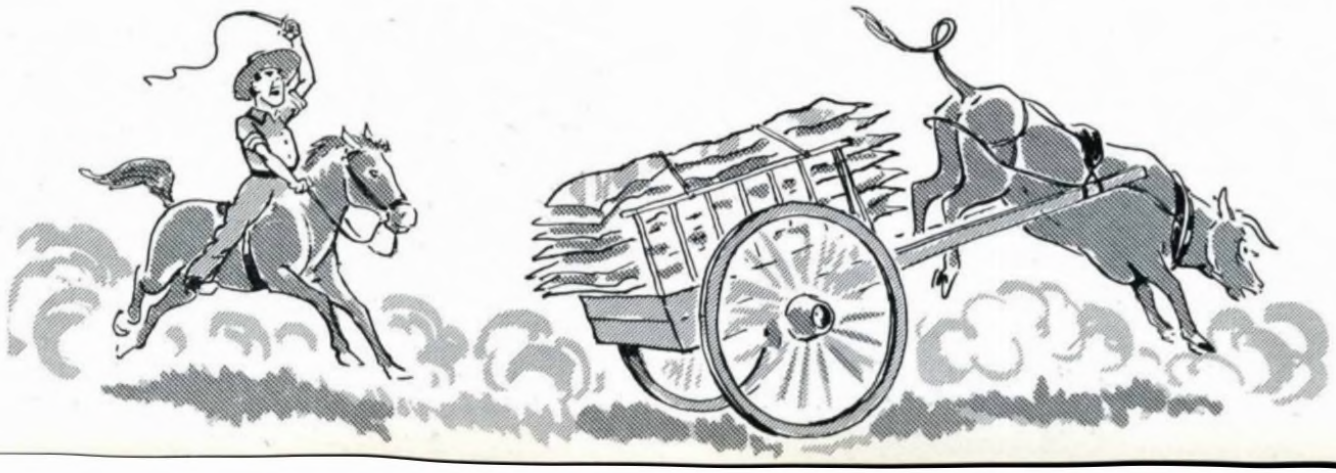
McPherson was in camp on Colony Creek, out along the Portage road, and we pitched our tent near his on what was then open prairie but is now a thickly populated section of the city. We had two weeks to wait. Ad was busy. A grizzled halfbreed, expert at the job, was adding required carts to his string as fast as he could make them, while McPherson himself was occupied in familiarizing a couple of dozen steers fresh off the range with the rule of the road.

A steer was roped, brought up and secured—objections summarily overruled—between the shafts of a cart packed to the brim with sheet tin. Unhanded, the steer, under the delusion that he was once more free, and smarting from the indignities heaped upon him, with an outraged bawl started off. The cart, lunging after, brought him to a startled halt. With a bewildered look over his shoulder, he lurched suddenly to the left. His tow followed. Panic then seized him. To be spanked soundly by a ton of tin is no joke, even for a deep-chested upstanding steer, and away he streaked with the cart, shedding bundled tin at every spring, bounding and rattling behind him, and with McPherson, mounted, whip in hand and yelling like an Apache, hot on his heels.

But such a frenzied pace could not last, and at a distance of a few hundred yards, spent and blown, the pupil came to a staggering stop. After that it was no great task for Ad to herd him back to camp. Two or three such lessons were enough to temper the spirits of the wildest steer. Thereafter he was readily broken to the labour of the trail.

McPherson at last had all the carts he needed, with ponies and oxen educated to pull them; another day or two for final preparations and we should be headed into the sunset, with Battleford, six hundred miles away, our first objective, and Fort Edmonton, three hundred miles farther on, at the end of the trail.

The day had been suffocatingly hot—one of those sticky, oppressive days when only to stir is a burden—



and we all sprawled in the shade of the carts, listless and uncomfortable. The air was pulseless. Suppertime came. A wind blew up out of the east, a wind soft, gratefully refreshing. Abruptly the sky in the west went black. The sun was blotted out. Clouds, sullen, leaden, gathered quickly, mounting and spreading; the wind veered, blowing suddenly from the clouds, and as suddenly it was cold. There was the rumble of approaching thunder, and a few raindrops, big as marbles, struck like bullets on the hard, parched earth.

McPherson had bounced out of his tent. "Draw the cart-covers taut! Lash that buckboard to the carts—tie everything down tight! She's goin' to blow!" he shouted, dashing about the camp, yanking on a rope-end here, swinging an axe on a tent peg there, goading his men to a furious activity.

And blow she did! Everything above the grass bowed and staggered. Canvas thrashed, carts creaked, ropes writhed and whined in the roaring wind. The ground shook under the resounding blows of the thunder and in the incessant glare of the lightning the silent camp stood out as clear as day. Rain fell in tons out of the sodden sky and the flat plain beneath swam in the flood inches deep. The stock stood, backs to the storm, with heads lowered, patiently awaiting its passing.

For four hours the bombardment kept up, and through it all Verey lay quietly in our tent with his head pillowed on a case of surgical instruments. Verey was English and a sailorman. He had a brother at Fort Edmonton, Dr. Verey, perhaps the future capital's first medical man—an odd old-timer may recall him. The sailor was taking a holiday from the sea to pay his brother a visit and was bringing along the instruments as a gift.

While the storm raged, Verey occupied the tent alone with the instruments. I was willing he should. It was wet outside but, I considered, safer. And I had hardly recovered from the shock I'd got when knocked down a few months before by lightning in the East.

"Why don't you get out? With all that steel beside you in the tent, you're liable to get hurt," I said to him.

Verey grunted. "If you're going to be killed you'll be killed, steel or no steel, and that's all there is to it. You can't do anything by moving around." A moment later he was asleep.

That storm on Colony Creek was, I believe, the most terrific I have ever witnessed. We learned next day that two men, holding up their tent at Brandon when it was at its peak, had been struck by lightning and killed.

At Portage la Prairie I picked up a team of horses belonging to Mr. Macdonald, and from that point on I drove the buckboard, leaving to Verey the sole and undisputed management of his ox. We did, however, continue in joint occupancy of the tent when in camp.

Ad McPherson usually rode with me at the head of the long crawling procession of the cart train, yarning of his own colourful earlier youth on both sides of the international border, while I listened, fascinated. He told stories of construction days on the Union Pacific Railway, which he helped to build, when the men worked with rifles beside them to stand off surprise attacks from hostile Indians; of his career as a foot-racer in Montana when the ordinary stake, which as a rule he won, was a fat poke of gold dust; of his first trip to the North Saskatchewan in '69 with Black Jack and Dancing Bill—other titles unknown. On that occasion Bull's Head, the towering chief of the Sarcees, with a dozen of his braves, halted them at a point which would now approximate Wetaskiwin, demanding payment before they would be allowed to cross "his land;" and, upon being liberally paid in tobacco, threateningly demanded more, emphasizing his terms by commencing to pull his gun out of its "coat." Whereupon Ad, then a youth of eighteen, to the consternation of his companions who were hurrying to comply with the fresh requisitions, whipped out a pistol and ordered the one-eyed potentate to leave the "coat" on. Bull's Head, grinning, did so and the party moved on to "Edmington"—always "Edmington" to Ad—without the payment of further tribute. Bull's Head professed to regard the matter as a joke. Subsequent events proved, however, that he had not forgotten—or forgiven—the boy who pulled a gun on him. But that is another story.

There never will be another Ad McPherson. The wild adventurous years that fashioned characters like him are gone forever. He was typically representative of that vanished time. A Virginian by birth and orphaned at an early age, while still a youngster he had slipped out of the custody of the uncle who had adopted him and struck for the West. He was about thirty when I first met him, of medium height, compact build, with a red face, fiery red hair, a bristling red moustache, snapping humorous blue eyes and a short nose to which nature had imparted a comically pugnacious tilt. He had little education and his utterances at times were simply lurid and appalling. Yet there was about him always a certain courtliness and customarily a subtle distinction of speech and manner that betokened a descent of which no one would have need to be ashamed. He rarely spoke of his connections,

Ad McPherson, from a photo taken by the author in 1926.

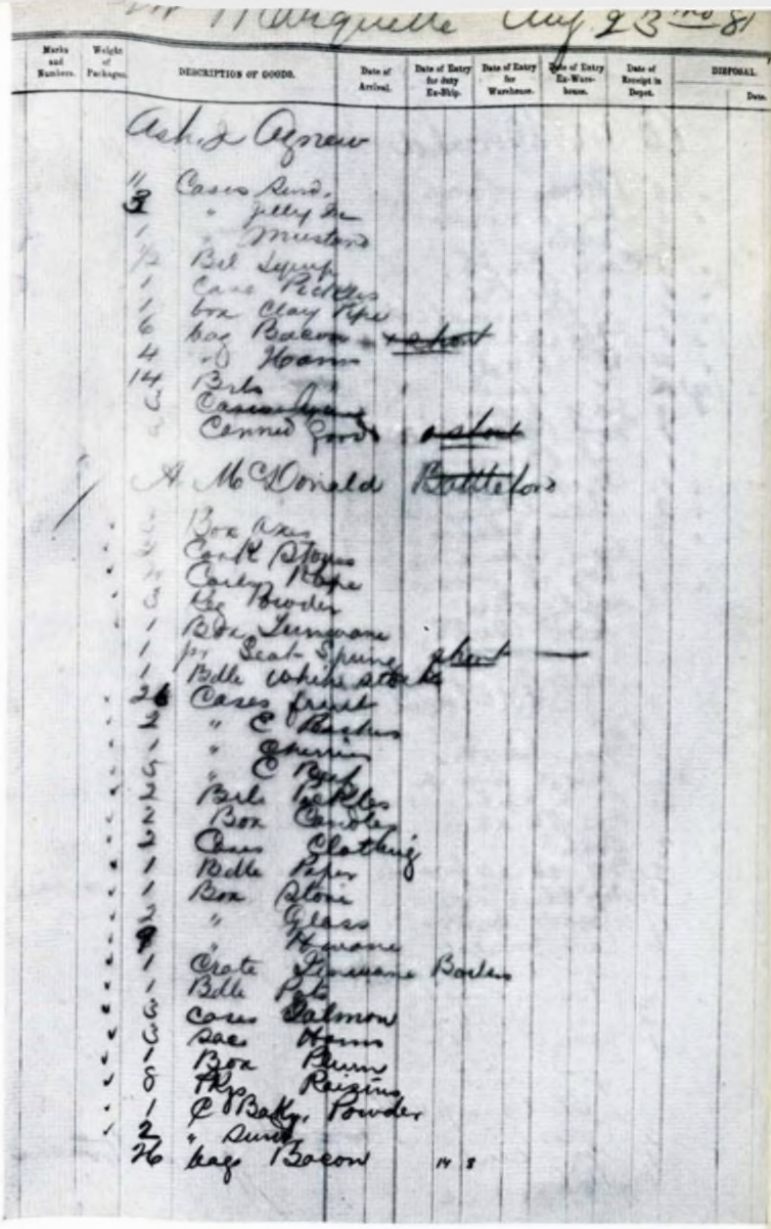
and then only vaguely. I doubt if he remembered much about them; for, more than anyone else perhaps, I had his confidence, and if he had had blood relationships he valued I should almost certainly have learned of it. But he was a thoroughbred, nevertheless; even his name—Addison—hinted of real personages among his forebears.

As he lay dying in the home of an acquaintance in Calgary a few years ago, he called his hostess to his bedside and placed in her hands a volume on the flyleaf of which I had sometime before penned a few words of affectionate regard. "This book was written by a very very dear friend of mine," he told her. "I wouldn't give it to everyone." I was touched to learn that one of the last thoughts in his tired old brain before it ceased forever to concern itself with the things of this world was of a youth whose friendship he had cherished since both he and the West were young.

He left two hundred acres of land adjoining the oil town of Turner Valley. Since he left no will and no discoverable heirs, the land probably reverted to the government or the University of Alberta. I have heard it rated as worth $80,000. Once he had a lawsuit over some oil property which he carried to the Privy Council. It cost him, he told me, $60,000, and he lost. This explained his confirmed distrust of all lawyers, which is probably why he made no will. He was afraid that if he engaged a lawyer to draw it, his property would never reach those to whom he wished to leave it.

At Fort Ellice, by trail two hundred miles, and by water probably double that distance, from Winnipeg, I parted from McPherson and my seafaring mate, Verey, in anticipation of a stay of some weeks. It will probably surprise most modern Manitobans to learn that in that day the Assiniboine River was navigated from its mouth at Winnipeg as far up as Fort Ellice by flat-bottomed stern-wheelers. I had been instructed by Mr. Macdonald to await at Fort Ellice the arrival of a number of halfbreed freighters, who were to come down from the Saskatchewan River settlements to meet the boats bringing goods up to Ellice for my employer's Battleford post.

Fort Ellice, an old and important establishment of the Hudson's Bay Company, at that time was head-



Page from a book recording cargoes of steamers unloaded at Fort Ellice from Winnipeg. Part of the shipment of which Mr. Cameron had charge is shown here.

Fort Ellice, from an engraving in "Harper's New Monthly Magazine" for 1860.

quarters of the Swan River District and of Chief Factor Archibald McDonald, the district officer in charge. Mrs. McDonald was a sister of the late Hon. Colin Inkster, for fifty years sheriff at Winnipeg. Both the chief factor and his wife are dead, but at least two of his sons, both distinguished, survive: General Harold F. McDonald, of the Pensions Tribunal at Ottawa, and Dr. Ellice McDonald, a prominent physician of Philadelphia.

Fort Ellice, which has long since disappeared, perched on the level prairie high above and overlooking the broad valley of the Assiniboine, from wall to wall of which the strongly flowing river wound a sinuous course. Quite early one morning we heard the distant blast of a steamboat, and the whole population flocked to the bank before the fort—to see above the tree-tops down the valley a thin plume of smoke. But the boat herself did not show up at her mooring berth soon by any means. From nine o'clock until after noon we watched that feathery streamer weaving back and forth across the valley. In a direct line the vessel, when we first sighted her, could not have been more than five miles away, but she must have steamed fifteen to reach the landing. A second boat followed.

The cargoes were duly delivered on the mud bank, and thence stored in the large warehouse of the Hudson's Bay Company in the valley, pending the appearance of the freighters. I secured lodgings at the home of Henry Bastien, the Company's warehouseman, and having nothing to do until the carts arrived, put in the time tramping the hills and valleys of the Assiniboine and its affluent, the Qu'Appelle, with my gun. I seldom returned to my quarters without a good bag of ducks or prairie chickens, or both. At Fort Ellice, too, I saw for the last time those beautiful game birds that as a small boy I had hunted in the East, where they were then to be found in flocks of thousands, but which, so far as is known, have for thirty years or so been extinct—passenger pigeons. To discover a pair of them, one morning shortly after my arrival, in the scrub oaks not far below the fort certainly gave me a surprise.

There were other things of interest at Fort Ellice. Here, for example, I had my first view of the noble red man of the plains before contact with the effete pale-face had robbed him of his picturesqueness. A band of Sioux, with many horses, were in camp along a coulee not far from the fort. Often, gorgeous in paint, feathers and many-hued blankets, they strutted about, silent spectators of that strange creature, the white man, and his amazing activities. When they watered their horses they usually rode into the valley naked except for their breechclouts, with buffalo robes thrown over their shoulders.

At length Solomon Venne, with his big brigade of carts, and a number of other halfbreeds, turned up at Ellice, and after loading them I was ready to take the trail for Battleford. I was now joined by two other Macdonalds, Ronald and Robert, who also had a team and buckboard. There had already been a quite heavy fall of snow before we left Fort Ellice on October 13, and the fine warm weather which had earlier made a joy of travelling was now lacking. Apart from the novelty of viewing for the first time a vast new land and day by day drawing farther and farther away from civilization and deeper into the wilderness, the second lap of my journey to Battleford did not promise much of entertainment.

Until we had made a hundred miles west we saw no settlement, but beside the blue lakes in the smiling Qu'Appelle valley a few halfbreed buffalo hunters were cultivating patches of the prodigal soil about their log shacks, and we overtook one or two Ontario families, with all their worldly goods loaded on oxen, westward bound in quest of homes in this rich virgin territory. We passed the Hudson's Bay Company and North-West Mounted Police posts at Fort Qu'Appelle thirty miles farther on, and after another fifty miles broke our journey to rest our tired horses and pass a pleasant day under the hospitable roof of W. Muirhead, manager of Heubach's trading post in the Touchwood Hills. The weather had continued wintry, with around zero temperatures, and snow still covered the ground.

We made the South Saskatchewan at Clark's Crossing a few days later at ten o'clock at night, with a prairie fire reflected from a clouded sky upon the surrounding landscape showing the way and enabling us to travel long after ordinarily we should have been snug in our blankets. With milder temperatures the snow had vanished.

After ferrying over the river, our trails parted. The main line of the Canadian Pacific across the prairies had not yet been located so far west, but a trial survey had been run to The Elbow of the river, eighty miles south of Clark's, and it was believed the railway would span the big stream at that point. The Macdonalds were hurrying to The Elbow to "squat" on land in anticipation of its being required for townsite purposes and becoming valuable. Ultimately the line passed fifty miles south of The Elbow—and no one ever made a fortune out of Elbow city lots.

My course lay west thirty miles to another Elbow, that of the North Saskatchewan, and thence, following the river, sixty more miles to Battleford.

The day the Macdonalds left me I, too, had my troubles. Shortly before sundown, when crossing a slough, the ice suddenly parted under me and, like McGinty in the song, down I went to the bottom, with the result that, again like McGinty, I was "very wet." I need only add that eventually I got out, but not until after I had plunged my arms to the shoulders under the freezing surface to loosen the harness and free the horses, which by this time had acquired a "what's-the-use" complex and refused to make further effort to save themselves, leaving it up to me to drag them almost bodily to dry land. Following which I stumbled through the broken ice with all my effects to shore and then by mighty effort pulled the empty buckboard out myself.

It was now dark, a cold wind blew from the west across the flat open plain and, to put warmth and life into my stiffened and benumbed steeds, with my garments rattling like boards on my shrinking frame, I drove on along the old government telegraph line for an hour. Then, of a sudden, to my intense relief there flashed before my straining eyes the gleam of a camp fire. In no time I pulled up beside it. Two men, line repairers from Battleford, were warming themselves there. They bustled about, threw me a change of clothing, filled me to the Plimsoll mark with bacon and eggs and made me a comfortable shakedown for the night. I went on next morning, and after four more endless days, on an exclusive diet of cold flapjacks (I've never been able to face a flapjack since without a shudder), arrived in Battleford, sixteen days from Fort Ellice, on October 29.

Thirty years later I stepped aboard a sleeper in the magnificent Canadian National station at Winnipeg and in little over twenty-four hours, covering practically the same route, stepped off again in the new town of North Battleford. In 1881 the trip had required more than that many days.

THE LONG TRAIL

by Mrs. J. S. C. Watt

The wife of a Company post manager tells of the 800-mile winter journey she and her husband made, mostly on foot, from Hudson Strait to the St. Lawrence.

The author in Eskimo costume helps push the loaded komatik on one of the big lakes.

THIS is the tale of a journey we made in the "spring" of 1918 from Fort Chimo near Ungava Bay to Seven Islands on the St. Lawrence. It was written three years ago from the notes which I kept on the trip. I was not the first white woman to travel through the interior of that part of Canada, for Mrs. Leonidas Hubbard had journeyed in the summer of 1905 from North West River to the mouth of George's River, via Lake Michikamau. (Her account of this adventure, *A Woman's Way Through Unknown Labrador*, was published in 1908.) But I *was* the first to see this wild country in the heart of Quebec province.

My husband and I had arrived at Fort Chimo in 1915, and the following year had travelled overland to a point about one hundred miles south as the crow flies, where he established Fort McKenzie. That trip makes a story in itself. This time we were to push far beyond Fort McKenzie, cross over into the Atlantic watershed (the present Labrador), and then into the St. Lawrence watershed. The distance in an air line is roughly six hundred miles, and the route we had to follow, through a chain of lakes and rivers, would make our journey about eight hundred miles.

With the exception of Fort McKenzie, there was no post or depot of any kind where we could procure additional supplies, should we happen to run short. Many years ago there was a post almost in the heart of the country, old Fort Nascopie, built by Erland Erlandson in 1838. Owing to transportation difficulties, this post had been abandoned in 1880. Fort Nascopie and several other posts in the interior were established under the direction of John McLean, then in charge of Fort Chimo. McLean, who did a lot of pioneering in his day, discovered the Grand Falls on the Hamilton River—falls higher than Niagara. He also made a trip from Fort Chimo to North West River and back again. On this trip he suffered great hardships. In fact McLean and his men almost starved; and this in the days when caribou were plentiful. McLean left a record of his experiences in a book published in 1849, entitled *Notes of a Twenty-five Years' Service in the Hudson's Bay Territory*.

The records of trips in this forbidding country were anything but cheerful reading, but we were not particularly discouraged. Our greatest difficulty lay in the fact we would have to make our trip both on ice and water. By the time we hoped to reach the headwaters of the Moisie river, the river would be open and we would require a canoe. This being the case, besides hauling supplies necessary for the journey we would have to haul a canoe for hundreds of miles.

Then there was the food supply. To depend on killing caribou would be madness. Fish were scarce in the spring we already knew, and fishing through the ice is hard work. We realized from the first we would both have to walk, but we wanted a few dogs to haul our supplies, and, owing to a dog sickness of the previous winter, dogs were almost impossible to obtain. The Eskimos had only one or two dogs each and would not part with them for love or money. I had reared four nice pups, but already two of them were dead. Our team, if you could call it a team, eventually comprized the two pups and one big dog we managed to obtain.

Then there was the still more important question of guides. Few or none of the local Indians had been further inland than the height of land. The Crees were not acquainted with the St. Lawrence watershed at all, and none of the Montagnais who visited Fort McKenzie were willing to accept the responsibility. They were afraid we would starve on the way. After a lot of trouble the manager of Fort McKenzie made

arrangements with two Seven Islands Indians to act as guides—Ostinetso with his wife and family, and Alexandre, a nephew of Bastien. They were going to Seven Islands anyhow, since they spent the summer there. The arrangements were for the men to meet us about the middle of April at Fort McKenzie. While the Indians undertook to act as guides, they could not undertake to haul supplies. They had their own personal belongings to haul. It was not a very satisfactory arrangement, but the best we could make.

The difficulties of taking adequate supplies with us were so great that several times my husband talked of calling the trip off—on my account, of course—but I would not hear of such a thing. After my experience travelling to and from and living at Fort McKenzie during the previous spring, I felt I was as good as any man, so we went ahead with our arrangements, and arrangements weren't so easy. We knew, if we were to make the trip successfully, we would have to travel light—very light. We knew our clothes would be in rags before we arrived at our destination, so my husband packed his best suit, shirt, tie and boots, and I a good dress and other things that went with it. Hats were big in those days, and I couldn't possibly take a hat. Then we got a very small tent made, just big enough for the two of us, and a very tiny and light camp stove. We also got a small sleigh or komatik made, with a very light grub box to fit on the rear. The grub box had detachable handles, something like plough handles, fitted to it, so one of us could both steer the sleigh and push at the same time. We found this very convenient on many of the narrow trails we had to follow.

Sleeping bags were another difficulty. Separate bags were too heavy, so finally we decided to use only one, made a little larger than usual and as light as possible. For cooking utensils, we took only two tin kettles (one to fit inside the other), a small frying pan, mugs, plates, spoons, knives and forks, some dishcloths, and I think that was all.

I have forgotten the exact details of the provision list, but with the exception of tea it was small. We took thirty pounds of very strong tea. We expected to meet Indians occasionally, and we knew they would be all short of tea. I remember we had some round dried peas and, what my husband called the backbone of the expedition, peasemeal. Peasemeal is practically unknown on this side of the water, but in Scotland, according to my husband, it is very much used. Personally, I am not very fond of it, but I do think it makes one of the best and, what is more important, lightest emergency rations known. It is already cooked, and about four tablespoonsful swells into a fairly large bowlful, sufficient for a meal.

Another important item—our canoe—was already built and stored at Fort McKenzie. This canoe was built of canvas, as lightly as possible, by the best Indian canoe builder, old Scoutiwapoumeaggin (Whisky Jug), assisted by his two clever sons, Tetchipateau and Katstentimoukou. The old man and his sons made a good job of this canoe. It stood a lot of rough usage and near the end of the trip was used as an icebreaker.

Finally we made a start on a very cold day—April 9, 1918. Although we were up very early, it was late before we got away from the post. There were so many people to shake hands with—most of them sorry to see us go. They certainly gave us the impression they did not expect to see us again.

Tradition still lingered of John McLean's starvation trips. Old Camaquist came with us as far as Fort McKenzie. His grandfather had accompanied McLean on his North West River trip, and on our second day, the old man, with a very solemn face, pointed out a round hill and told me a tale related by his grandfather: how, on the return trip from North West River, McLean had reached such a state of starvation and exhaustion he felt he could travel no further. When he reached the round hill referred to, Camaquist's grandfather had pointed it out and asked McLean if he recognized it. McLean remembered the hill and realized he was close to the post, made a final effort and reached Fort Chimo more dead than alive. Not a cheerful tale at such an early stage of our trip.

The trip to Fort McKenzie was very similar to the one I had made the previous spring. We arrived at the post at noon on April 15. Bastien had a good dinner of stewed rabbit awaiting us. Rabbits are very scarce in the Ungava country, so are considered a delicacy.

Our promised guides, Ostinetcho and Alexandre, were waiting for us and busy getting ready moccasins and snowshoes. I don't think they really expected us, and only now realized we were actually going. Ostinetcho was married and had a wife and two children, the eldest a boy about ten. Alexandre, or Alexandre Nist to give him his full name (Alexandre the third, his father and grandfather also having borne the same name), was unmarried, a smart pleasant looking young fellow, and, as we afterwards found out, just as smart and pleasant as he looked.

We had a look at our canoe, and realized our two pups and one dog could not haul this canoe and our supplies also. We had to get another man somehow, and, as it happened, we had no trouble getting one. Petabino volunteered at once, and we couldn't have found a better man. He was as strong as a horse and a most cheerful individual, always in good humour. Bastien had provided a very well made sleigh specially made for carrying a canoe—what the Indians call a *tatilabinask*. Bastien also presented me with a beautifully made pair of snowshoes. I wore them day after day, and they were still good when we reached open water.

During our stay at Fort McKenzie, it snowed nearly all the time. We were advised to wait for better travelling, but we were anxious to go; so we said good-bye and shook hands with our kind Fort McKenzie friends. Poor old Camaquist looked very solemn when he shook hands with me. He had never been across the

Indians who accompanied the Watts on their long journey.

One of the many camps en route. Mrs. Watt in the foreground, the ice-breaking canoe in the background.

height of land and he dreaded the unknown country beyond. On my part, I was sorry to say good-bye to the old man who had always been so kind to me.

We crossed the lake, and almost opposite the post entered a very rough and narrow path—just sufficient space to get through the tangled bush. Just before we entered the bush, I had my last look at the little post where I had spent so many happy days during the previous spring. The Company flag was flying—a tiny red flag it seemed against the wooded background—a flag that stood for all the comforts procurable in those Northern wilds. And now we had left the kindly shelter of the flag, and we had a long way to go before we would see it again.

Alexandre, who had the smallest load, beat the trail; then came Ostinetcho with a heavy load on a toboggan; his wife following, also with a heavy load which included her youngest child. Then came Petabino hauling the canoe; and we followed with our small dog-team. We took turns about helping the dogs—pushing on the handles, which we now found very convenient. Ostinetcho's little boy Pierre scampered about, sometimes ahead and sometimes behind us. Ostinetcho's wife was a cheerful woman, but she was painfully thin and looked as if she had been starved all winter. It was wonderful to see her eat; a large bannock just vanished like magic. I enjoyed seeing the Indians in our party eat, but thought it was unwise, considering the long trip ahead of us, to eat so much. We had a sack of flour for our own use, and each of the guides had been supplied with a sack, but Alexandre told us they intended to eat the flour at once, or at least as quickly as possible; it was too heavy to haul. When the flour was gone they would live on the country, as they were accustomed to do. He assured us they would not ask us for any of our food, and we found this was the case. After the Indians had eaten their flour and other supplies, country food was scarce, very scarce sometimes. At times they had actually nothing to eat, but they did not seem to mind and always refused to take any of our food. In fact the only worry they appeared to have was the thought of *our* starving on the way.

Although we boiled the kettle every few hours, we were never short of tea. Sometimes tea alone must have kept our Indians going, for often, later on, they had very little else. In the meanwhile it worried us a little to see how fast the provisions disappeared, and I think it made us save our own supplies all the more.

We camped early that night, still in the same green valley—quite a pleasant spot, perhaps more so by contrast with the bleak barren hills. I went hunting ptarmigan while the men made camp. Petabino cooked for the dogs—we had cornmeal for them. No ptarmigan that night, and no meat for supper. We missed the meat, and I thought we were not far behind our Indian friends in the way we made our bannock disappear. Walking all day and helping the dogs along always seemed to give us such enormous appetites.

The author cuts her husband's hair.

I was very careful with our meat and tried to make it last as long as possible. I had heard so much of people starving in this country. Our Indians, however, "took no thought for the morrow," but filled themselves up with all they could hold. Later, on the trip, I used to think the Indian method was best, at least in this country. Had they been careful with their food as we were, they never really would have had a full meal—would have been more or less hungry all the time. By their own method they often had all they could stuff into them, and I suppose, for the time being they felt happy and comfortable. As a result of this, and possibly with hopes of other hearty meals, they were able to carry on for a long time with little or nothing in the way of food.

The sunshine began to be strong in the late morning, and by midday the snow got so soft as to make travelling impossible. So we commenced to make very early starts, usually at three or four o'clock. Generally we had a cup of tea before starting, and something by way of breakfast a few hours later. After we commenced making an early start we camped when the snow got too soft to travel on—sometimes at noon—but on several cold dull days we were able to carry on until six o'clock. After the first day or two we were seldom tired, but terribly sleepy towards evening, and we often turned in while it was still daylight.

Petabino was the most tireless member of the party. He hauled the canoe all day—very often with some of the Ostinetcho family belongings in it, and he often wanted to haul me also. But I soon found I could step it out with any of our party and help to pull and push our load on the hills. Luckily, although it was a hilly country we encountered very few hills, but followed a waterway in the valleys. It was wonderful how the Indians knew the way, not only the trail but every lake and stream we passed through; and they could relate incidents that took place possibly years ago at the various lakes, rivers, and camping places.

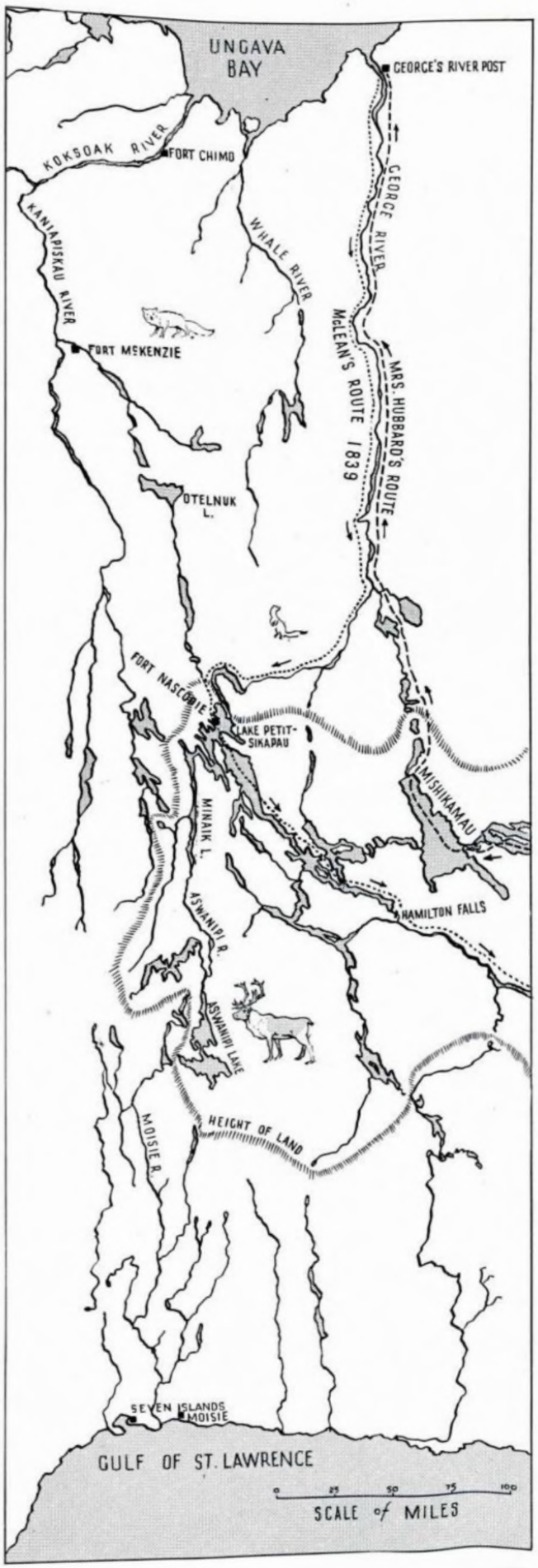
Talk about the pathless forest! To us it did seem pathless, but to the Indians every hill and dale seemed to be as familiar as notable buildings are to city dwellers. Not once during the whole journey did we have to pause and consider which route we should take.

The further we got into the interior, the more thrilling I found it. Some of those lakes and mountains may have been viewed by white men, such as McLean, but I was the first white woman ever to view those scenes of rugged grandeur.

We reached Oosquash Lake on the 29th, and for the first time had fish for supper. It was *Kukimish* (lake trout), and did we enjoy it! We had killed no ptarmigan for several days—had lived on bannock and peasemeal, and being afraid to use too much were always more or less hungry. Perhaps we should have saved some of this fish, but we just followed the Indians' example and had a real tuck-in for a change.

All the lakes we saw on this journey appealed to me in a very special manner. I felt as if I had discovered them—felt the same proprietary interest in them Columbus must have felt in the new world he had discovered. So far as we were concerned, they were a new world, a sufficiently spacious world, but a world which might long continue in its grand isolation, unless opened by aerial transport in the future.

On May third, we had a little excitement for a change. Alexandre and I were walking at least a mile ahead of the others, and on rounding a rocky point



almost ran into a herd of caribou. There must have been at least sixty. The caribou sighted us just as soon as we sighted them and immediately galloped off. In no time they were lost in the distance and pursuit was hopeless. It was too bad to see all this meat running away, but it cheered us up wonderfully. We felt there were still caribou in this part of the country and we would kill some eventually.

We followed a small river that day. The travelling was very bad. There was a thin crust on the snow, too thin to support the toboggans and sleigh, which broke through and made heavy hauling. We camped at 2 p.m., having made approximately eighteen miles.

The next two days it froze hard at night, and to take advantage of the good going we started at 2 a.m. The country was now fairly level—just rolling hills with a range of high hills to the west of us. The Indians told us the same range of hills continued right to the headwaters of the Moisie River. Nothing but young timber all the way, with here and there a big tree, and no tracks of either rabbits or ptarmigan. It was hard to imagine there was so little game in such a huge isolated country; but, if we except the great herds of caribou, which usually kept together and were only found in certain places, and not always the same places, and the occasional years when ptarmigan were plentiful, it must have always been so.

The Indians now had little to eat, but they continued to be cheerful. Petabino was as happy as a king, and after the camp was up was always on the go, looking for something to kill—caribou, rabbits or ptarmigan. Very often I accompanied him, but usually we returned empty handed and with sharpened appetites. We hoped to reach the headwaters of the Moisie River in three weeks. Day by day we were walking into spring, and the weather was getting warmer.

We reached Pitisikipau—the great lake right in the heart of the country—on May 9, and boiled the kettle and had our breakfast at the ruins of old Fort Nascopie. I was surprised to see so much of the buildings still standing; the roofs were gone, but the logs in what remained of the walls were still sound, except at the corners, and there was the remains of an old Carron stove from Scotland.

I pictured the old post as it was in the heyday of its existence—canoes arriving at the now deserted shores, and picturesque old-fashioned Indians, dressed in their painted deerskin coats, carrying up bales of fur and dried meat, while other Indians, equally picturesque, would sit on the bank watching them, smoking their stone pipes—pipes with long beaded stems. A pageant of old-time post life passed in front of me—

Boiling the kettle. Mr. Watt in the background (with dark glasses).

Mrs. J. S. C. Watt. Lorene Squire.

council meetings, weddings, dances. Now all was gone; all that remained on the shores of that great lake were the fast decaying remains of the old log buildings.

The site of Fort Nascopie is, like most of the H B posts, particularly well chosen. It is the hub of the Ungava interior—the meeting place of the trails—for Seven Islands, North West River, Fort Chimo, George's River and Nitchequan. The Grand Falls on the Hamilton River were said to be only a few days' walk from here. How I wished we could have gone to see them, but we were only half way, and our stock of provisions would not permit such an excursion.

This was a great marten country at one time—all around here, between Michigama and the headwaters of the George's River. But for some unknown reason they had become scarce. They could not have been hunted out; the country is too large and the Indians are few. The more I saw of the country the stranger it seemed that such a huge country could scarcely support the few Indians who roved in it. Of course forest fires must have caused tremendous damage at different periods. We had passed a great deal of burned country, and from the hill-tops we could see much more. This Ungava country was quite a problem; there was no commercial lumber we could see, or at least very little—growing in favoured spots—nothing to warrant the heavy expense of a fire patrol.

My husband and I had often talked of Fort Nascopie and dreamed of visiting it, and now our dreams had come true. Here our Indians left letters for other Indians hunting near the headwaters of the George's River. We had now crossed the height of land between the rivers flowing to Hudson Strait and those descending to the Atlantic Ocean, for Lake Pititsikapau is one of the headwaters of the Hamilton River. But we were only about halfway on our journey, and we had another height of land to cross before we could reach the waters flowing into the Gulf of St. Lawrence.

Part II of Mrs. Watt's story will appear in the June issue of The Beaver.

Const. Hastie, R.C.M.P., with Mrs. O. M. Demment at Cape Dorset. W. Buhr.

The Monty Demments in their Eskimo costumes of caribou skin. W. Buhr.

The "Koksoak" ties up between Fort Chimo and Payne Bay on account of ice. J. W. Anderson.

Voyaging on a fine summer's day along the picturesque coast of Baffin Land. R. H. Kilgour.

American sailors at Fort Chimo. P. J. Soper.

Snapshots from Hudson Strait

CAMP TRADE

Pictures by

W. P. Johnston and G. Skakum

THE chief method of fur trading in Canada is the one by which the trappers bring their furs to the post and exchange them for goods selected from the glittering and colourful array on the shelves of the trading store. But there is another method which, though of secondary importance, has been practiced since the 17th Century, when the French merchants along the St. Lawrence used to send out their *coureurs de bois* in canoes to trade for beaver skins in the Indian villages.

Under this system, known as the camp trade, the trader takes an assortment of goods to the trapper's camp and collects the furs right in the bush. And the Indian, instead of having to make the long journey to the post and back, is thereby enabled to stay out longer on his trap lines.

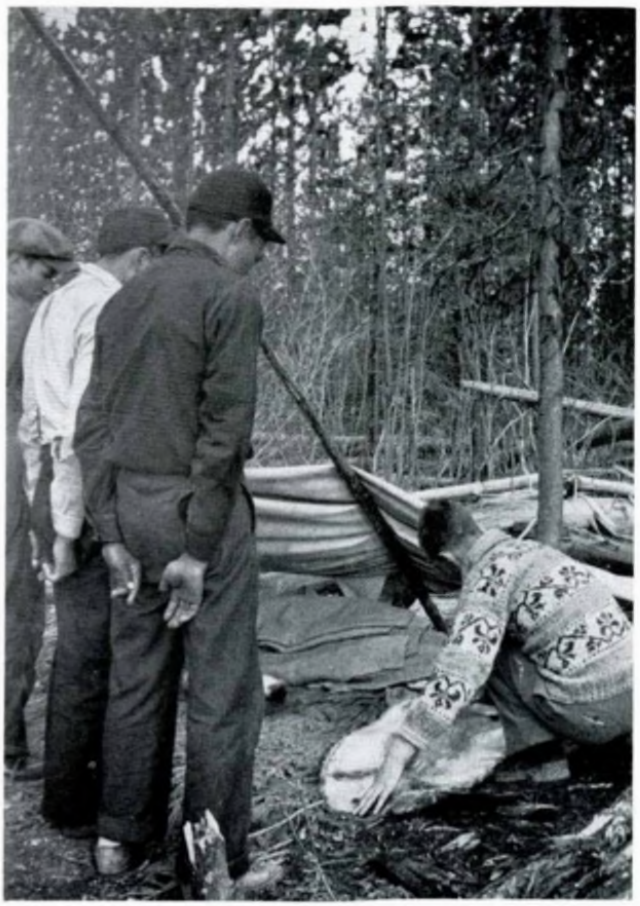
From Fort St. James, oldest fur trading post in B.C., the camp trade to the north is carried on today by means of a modern motor truck. These pictures show how it is done.

A trapper pulls a drowned beaver out of the water.

Post Manager W. P. Johnston, at the wheel of the Company truck from Fort St. James, stops to arrange a rendezvous with two trappers, each of whom has a beaver slung on his back.

Before each trapper leaves for his lines, the post manager advises him of the date he expects to make his visit. Here a trapper has put up a white flag on a stick to tell the driver that his camp is near by. The driver then stops and sounds his horn, and the trapper comes out of the bush.

At another rendezvous the trappers bring their skins out to the truck. Here the post manager examines some muskrat pelts.



Mr. Johnston visits an Indian camp en route and examines some beaver skins preparatory to making a trade.

Trading by the roadside. The beaver skins are exchanged for the goods on the ground. On the right is G. Skakum, clerk at Fort St. James.

With axe, traps, and gun, and with the other results of his trade in his packsack, this trapper is ready to go back to his lines.

SPRING PACKET

Captive Red Men

An afterword to W. B. Cameron's story of the Frog Lake Massacre, which appeared in the last *Beaver* under the title "Red Man's Captive," has been sent to us by S. Alfred Jones of Victoria.

"I was an officer," he writes, "in the 17th Fusiliers of London, Ontario, which served in the rebellion. Our regiment was stationed at Clark's Crossing on the South Saskatchewan, and in June half the regiment, including the company to which I was attached, was ordered to Telegraph Coulée on the North Saskatchewan, about sixty miles from Battleford. Two troopers of that admirable body, French's Scouts, were stationed there with us.

"One sunny afternoon, a white flag appeared at the top of a neighbouring hillock, followed by a band of about sixty Indians with their women and children. They came into our camp asking for food. The scouts did the interpreting, and they recognized among these Indians the Frog Lake murderers. They gave the Indians a letter to the C.O. at Battleford and told them that, if they took the letter to the commandant there, they would be given food. But the letter also carried the word that among these men were some who had perpetrated the massacre. Particulars were given, with a request to arrest and hold them.

"Not knowing the full contents of the letter, the Indians carried it to Battleford and delivered it to the C.O. The culprits were at once arrested, and subsequently tried and executed."

Between Trains

We were very glad the transcontinental train schedule was disorganized one day in January, because it gave us a chance to talk with two interesting visitors to Hudson's Bay House. The first was Sergeant Henry Larsen, skipper of the R.C.M.P. *St. Roch*. In the course of conversation, we asked if we could see the Polar Medal that had been awarded to him and to each member of his crew, but he replied that he hadn't even seen it himself. Apparently they have to come from England. So we brought out one of the medals from our historical collection for him to examine.

According to our information, the Polar Medal was originally awarded by the British Government to those who had distinguished themselves in Arctic exploration—including members of the various Franklin relief expeditions. Among the H B C officers to whom it was awarded were Dr. John Rae and Chief Factor Roderick MacFarlane. The medal is a silver, octagonal one, bearing the head of the young Queen on one side, and on the other a picture of a square rigged ship in the ice, with a party of men hauling a sled. The inscription is: "For Arctic Discoveries. 1818-1855."

The other visitor was Dr. Alfred Twomey, of the Carnegie Museum, Pittsburg, who has contributed several articles on natural history to this magazine, and is the author of *Needle to the North*, reviewed in the September issue. Dr. Twomey had been spending several months in and around Aklavik, studying the local fauna, and we are looking forward to receiving some more of his articles and pictures for future issues. We showed him our small northern library, where he was delighted to discover a rare three-volume set of Wilson's *American Ornithology* from the old library at York Factory. Sergeant Larsen was also interested in the library, but his specialty, as might well be imagined, was Arctic exploration.

Old-Timer

On February 15, death came to the oldest Hudson's Bay Company pensioner. N. M. W. J. McKenzie, who joined the Service in 1876, and saw forty years' service with the fur trade, died in Winnipeg in his eighty-seventh year. An Orkneyman, like so many of his fellow fur traders down the centuries, he was born near Stromness. At the age of twenty, he came out to Fort Garry via Montreal and Chicago, and starting as a carpenter in the Swan River district, worked up through the positions of post master, clerk, trader, and district manager to that of general inspector for the eastern districts.

In his forty years of service between Athabaska and Labrador, Mr. McKenzie had many adventures, notably during the Northwest Rebellion, when he succeeded in persuading his Indians to remain at peace. After the rebellion, the Dominion Government rewarded him for his valuable services.

While he was inspector of the eastern districts, J. S. C. Watt of Fort Chimo (see page 46) built Fort McKenzie in Ungava, naming it in his honour. In 1920, on the occasion of the Company's 250th anniversary, Mr. McKenzie published his autobiography, *Men of the Hudson's Bay Company*.

One of his daughters is now assistant personnel superintendent at the Company's Winnipeg store.

Hudson Bay Mining

The recent formation of Gulf Lead Mines for the purpose of developing galena deposits on the east mainland of Hudson Bay calls attention to the long history of mining on that part of the coast.

As early as 1682, the H B C consulted miners in England as to the tools required for investigating deposits in Rupert's Land. Four years later, Governor Bridgar was instructed to "fill up all our vacant Tonnage with that Stone digged as Deppe as can be, out of a mine nere Cape Jones"—which is seventy-five miles southwest of Great Whale River.

In 1701, the Company sent out a Saxon miner called Lichteneger to inspect the mineral deposits on the east main. The journal of the East Main Sloop for 1744 refers to the discovery of lead ore in the neighbourhood of Whale River, and five years later, other miners came out to investigate it. They appear to have obtained four tons of the ore at Little Whale River, which were sent to England on the Company's ship *Mary*. For five years they worked the deposits, then returned home.

By 1807, the mine had evidently been abandoned for some time, as George Gladman at Eastmain post was asked for information about the prospects of trade in lead ore at Little Whale River; but it was not until eleven years later that he reported his discovery of the old lead mine there. Samples from that region sent to England in 1856 were stated to be laminated sulphuret of molybdind—the old name for lead sulphide, or galena.

While we are on the subject of minerals, it is interesting to note at this time that in the parliamentary enquiry of 1857 into the affairs of the Company, one J. Tennant mentioned the mine of cryolite—"the substance from which the new metal, aluminium, has lately been obtained"—in Greenland. At that time it was being worked by an English company.

Combatants

Heaven forbid that this department should go in for retailing the cute sayings of children; but here is one that has a definite flavour of the North about it. It was told us by Fred Woodrow, radio operator at Port Harrison on the east coast of Hudson Bay. Billy is his son, who came up on the *Nascopie* last year.

"Young Billy," says Mr. Woodrow, "brought up with him some toy soldiers, tanks, anti-aircraft guns, etc., and in keeping with the times, stages mighty battles on the kitchen floor with some of the young Husky kids—Adam's son, Old Willya's kids, and various others. The other night they were practising intricate manoeuvres and Bill asked each of the Huskies whom they represented. Adam's Johnnie said 'Americanie,' Willya said 'Japaneesie,' and Davidie said 'Shermanie.' It came Coonie-Loosies turn; he scratched his head for a while, then burst out with 'The Company!'"

Relaxation

Writing in *Nature Magazine*, Richard Westwood has the following sane remarks to make about the value of relaxation:

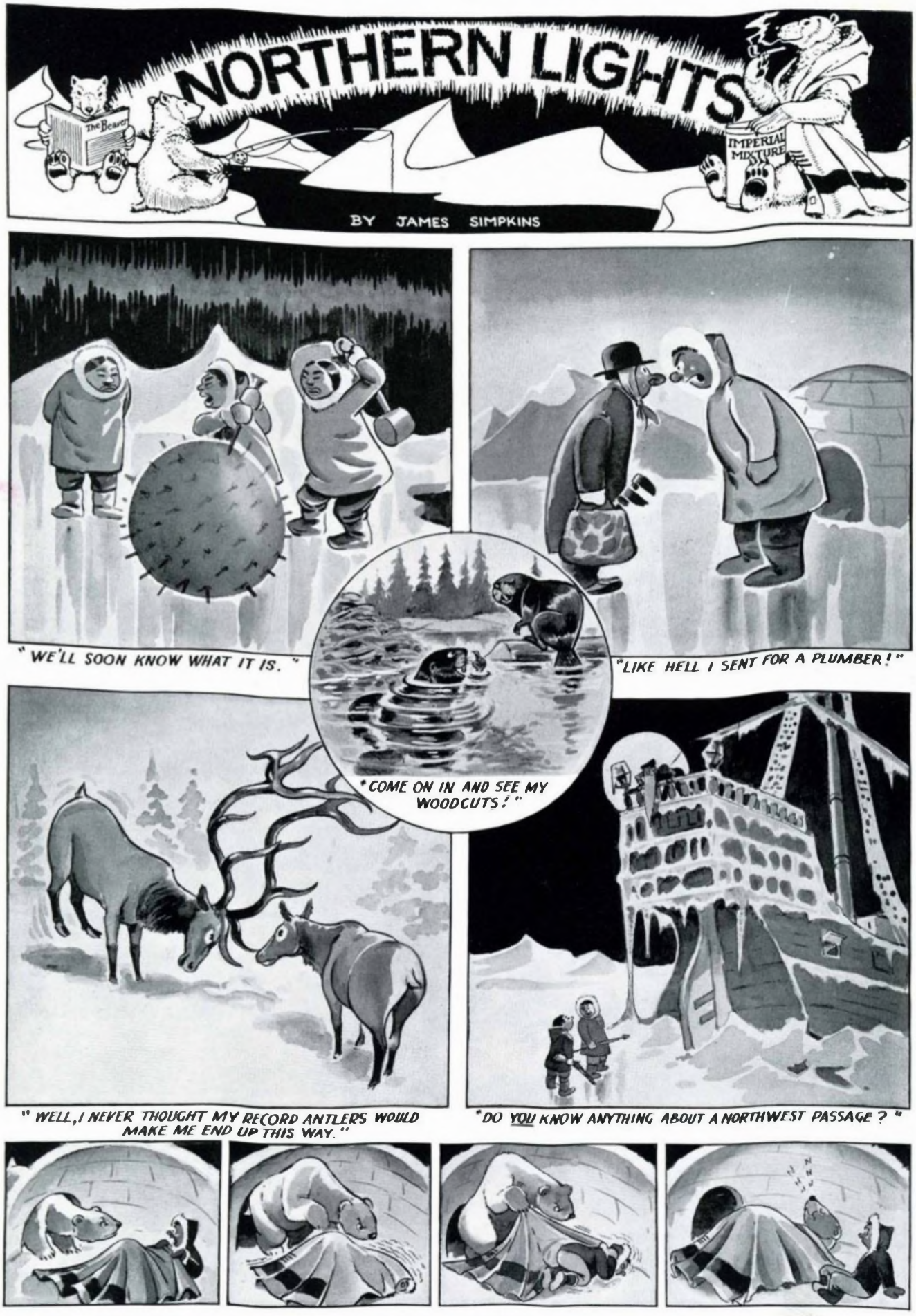
"A people at war must retain as much normalcy as possible. The human nervous system cannot long survive, day after day, twenty-four hours a day, war talk, war thought, and war effort. There must be relaxation. Americans are not noted, even in normal times, for this ability. Yet it is a habit that we must cultivate under stress. Park, forest, and wilderness, with their atmosphere of tranquillity, provide this release better than anything else."

To this we might add that, if you can't actually reach the forest and the wilderness, the next best thing is to enjoy them vicariously in books and outdoor magazines—like *The Beaver* for instance. . . .

We found the quotation from Mr. Westwood's article in a choice little illustrated magazine with a pleasant "woodsy" flavour about it, published monthly by the enterprising Minnesota Department of Conservation. It is called the *Conservation Volunteer*, and it sets an example which the corresponding departments of other states and provinces would do well to follow.

Contributors

R. H. G. Bonnycastle is secretary of the Company's Canadian Committee. He joined the Fur Trade in 1925 and was later manager of the Western Arctic District. . . . W. B. Cameron, an ex-H B C fur trader who knew the West when it was young and obstreporous, will be remembered as the author of "Red Man's Captive" in the December *Beaver*. He has just been appointed curator of the R.C.M.P. museum at Regina. . . . . Sir Cecil Denny was an Englishman who had joined the N.W.M.P. in 1874 and took part in the famous march of that year across the prairies. Next year he was in charge of the building of Fort Calgary, now Calgary, Alberta. The story of his career is told in his posthumous book, *The Law Marches West*, which was edited and arranged by W. B. Cameron (above). He died in 1928. . . . Trader John Gregg joined the service of the Company in 1914. He is now in charge at Fort Selkirk. . . . W. P. Johnston is post manager at Fort St. James, another old British Columbia post. He joined the service nearly fifteen years ago. . . . Dr. H. D. Kruse, one of the leading nutrition experts in the States, is assistant director of the Milbank Memorial Fund, New York City, an organization founded in 1905 "to improve the physical, mental, and moral condition of humanity, and generally to advance charitable and benevolent objects." . . . Leonard Mason is an anthropologist now studying for his Ph.D. at Yale. His M.A. thesis, written at the University of Minnesota, was an acculturation study of the Swampy Cree based on field work with the Oxford House Indians. . . . Dr. Percy Moore is acting superintendent of the Medical Services of the Indian Affairs Branch at Ottawa, which is doing such excellent work in the field of nutrition among the Indians of Canada. . . . Maud Watt is wife of J. S. C. Watt, post manager at Rupert's House, which this year will celebrate its 275th anniversary.


NORTHERN LIGHTS
BY JAMES SIMPKINS
The Beaver
IMPERIAL MIXTURE
"WE'LL SOON KNOW WHAT IT IS."
"COME ON IN AND SEE MY WOODCUTS!"
"LIKE HELL I SENT FOR A PLUMBER!"
"WELL, I NEVER THOUGHT MY RECORD ANTLERS WOULD MAKE ME END UP THIS WAY."
"DO YOU KNOW ANYTHING ABOUT A NORTHWEST PASSAGE?"

BOOK REVIEWS

B.C. & U.S.

BRITISH COLUMBIA AND THE UNITED STATES: THE NORTH PACIFIC SLOPE FROM FUR TRADE TO AVIATION, by F. W. Howay, W. N. Sage and H. F. Angus. Edited by H. F. Angus. The Ryerson Press, Toronto, 1942. 408 pages.

THE series to which this interesting and illuminating volume belongs is devoted to the study of Canadian-American relations, past and present, and in explanation of the "pattern" of the book the editor explains that "space was freely accorded to those parts of the story which seemed to throw most light on this topic, while other parts were sharply abridged." This means that relatively little attention is devoted to political developments; but on the other hand the economic history of British Columbia is dealt with more fully than in any other single work. Indeed, the book is essentially a study of the century-long predatory assault upon the virgin resources first of Old Oregon, and then, after the boundary settlement of 1846, of the area now comprising British Columbia and the Yukon Territory.

Both the economic development of the region and British-American relations within it began with the maritime fur trade. The British were the first on the scene, but the Americans soon gained the mastery and held it until 1825, by which time ruthless hunting had all but exterminated the trade's mainstay, the sea otter. This introductory episode is described briefly by Judge Howay, who also contributes the four longer chapters on the overland fur trade. The story begins with Alexander Mackenzie's overland journey to the Pacific in 1793, and the founding of the first trading posts west of the Rockies by the North West Company in 1805-07. The Americans were represented briefly by Astor's Pacific Fur Company, but the sale of Astoria in 1813 gave the British traders a grip on the region which the Nor'Westers and their successors, the Hudson's Bay Company, held for a generation. Neither individual American traders nor the relatively transient partnerships which they formed could compete with the resources and enterprise of the great monopoly, and on land the British kept their American rivals in check as effectively as they themselves had been held by the Americans in the maritime trade. Judge Howay's chapters are filled with colour and incident, and are notable because he devotes as careful attention to the activities and aspirations of the Americans as to the British.

From fur the book passes on to other natural resources of the region. First comes the story of gold, which commences with the rush to the Fraser River in 1858, and continues on to the Klondike rush forty years later. Upon each occasion American citizens swarmed into British territory, and presently swarmed out again when the surface placers, which alone could be worked profitably by individual miners, ceased to promise rich returns. Judge Howay and Dr. Sage both contribute to this narrative. Base metal mining in the Kootenay and boundary country, in which Americans from Spokane played a leading part, is described by Dr. Sage, who also writes a most useful history of the railways in British Columbia. To round out the picture Professor Angus devotes a short chapter to the early development of the lumbering and fishing industries.

We have seen that economic exploitation began with the maritime fur trade. Conservation had its beginning in a kindred industry. By 1890 the fur seal was being as rapidly and ruthlessly exterminated as the sea otter had been a century before. It was obvious that proper control could convert this rapidly wasting asset into a perpetual source of wealth, and the arbitration proceedings of 1893 proved to be a first step towards that end. Thoroughgoing international control was finally achieved in 1912. The negotiations had a further importance, for they revealed how greatly the tone of relations between Canada and the United States had improved since the turn of the century.

The period dealt with by the book proper really ends on the eve of the Great War, about 1913. Professor Angus has added a concluding chapter on "The Age of the Good Neighbours" to bring the narrative down to date. It is a brilliant outline, and could with profit be expanded into a whole volume.

No index has been provided. As the book is the most useful work on the history of British Columbia that has appeared in many a day, and is certain to become a standard reference, it is to be hoped that this omission can be made good in later printings.—*W. Kaye Lamb.*

For Children

THE FALCON OF ERIC THE RED, by Catherine Cate Coblentz. Illustrated by Henry C. Pitz. Longmans Green, Toronto and New York, 1942. 211 pages.

ERIC the Red will be remembered as the discoverer of the world's largest island, which he named Greenland. In A.D. 986, he founded a colony at Brattahlid, just north of the present Julianehaab (which the *Nascopie* visited last year), and this is where the story of young Jon and Astrid and the white gyrfalcon begins.

Soon afterwards, Karlsefni the Trader arrives from Iceland, and the two children go off with him and some of the other settlers to Leif Eriesson's Vineland. Jon, to whom Eric has given the falcon, takes the bird along. A settlement is made in Vineland; but after various adventures with the Indians—whom the Greenlanders call *Skraellings*—terminating in a pitched battle, Karlsefni decides it will be impossible to maintain such a small colony there. The settlers then return to Greenland, but the white bird has found her mate, and Jon reluctantly gives the falcon her freedom in the new land.

The author has evidently studied the ancient sport of falconry in detail, and describes at some length the gyrfalcon's method of hunting. The pen and ink illustrations, some of them double-page, are most striking.

Early Catholic Missions

DOCUMENTS RELATING TO THE NORTH-WEST MISSIONS, 1815-1827, edited by Grace Lee Nute. The Minnesota Historical Society, 1942. 469 pages.

PUBLISHED for the Clarence Walworth Alvord Memorial Commission by the Society, this book gives evidence of how much, historically speaking, Canadians and Americans have in common. It affords another proof that *la petite histoire*, or local history, is being intelligently cultivated in the Western States of America, an example we could well follow here where too much is left to private initiative. These "Documents" tell of the first Catholic missionaries who came to the Red River Colony in 1818. After 1751, date of Father de la Morenie's departure from Fort la Reine, no Catholic missionary had appeared in Western Canada. Bishop Plessis, whose jurisdiction embraced all Canada, had given the problem some thought, but it was really Lord Selkirk who intervened and was instrumental in having Father Provencher (later Bishop Provencher) and Father Dumoulin come to the Red River in 1818.

The load thrust on Father Provencher was not an easy one. The Selkirk colonists, from all appearances, were a motley crowd, but at least they were gradually being moulded into something orderly. The elements with which Bishop Provencher had to work were of a very different metal. Here were the voyageurs, the boastful and proud nomads of the fur trade who had grown to cherish their roaming existence and who found civilized habits irksome and colourless; here were their children and grandchildren who knew nothing of civilized habits and customs; here were the Indians, spoliated of their native dignity and self-respect. Out of this material, crude, care-free or primitive, the saintly man was asked to build a solid, permanent and god-fearing community.

These letters throw no new light on the general history of the fur trade, but are of value as human and objective records of men and institutions of the time. The missionaries reported on what they saw, in all sincerity and truth. The main characters moving on this changing scene are described with accuracy and colour.

There are, here and there, a few minor errors and a certain number of mistranslations. Thus the Fleury d'Eschambault who wrote to Bishop Plessis (p. 18) is not Georges, the H B C official, but his father, Louis-Joseph, an intimate friend of Selkirk. The Papineau mentioned on page 106 is not the leader of 1837, but his father, Joseph Papineau. *Servant de Messe* (p. 108) means "altar-boy" or person serving at Holy Mass. *Avec notre petit train* (p. 113) is a Canadianism meaning "slow gate," or "slow pace." *Chapelle en forme* (p. 190) means a chapel of good size. *Bonne Physique* (p. 246) means the young man should have completed his philosophy, "Physique" being the last year of the classical course as it existed then. When Father Dumoulin wonders whether infidels are subject to church laws, it is not "because of their morals" but simply because they had not been baptised. *La Societe Saint-Michel* (p. 282) is not an "order" but simply an insurance fund for aged priests. *Monteur de courant* (p. 308) means "He who can paddle upstream." *Rogate Dominum Messis* (p. 398) is the Latin text of St. Matthew, "Pray the Lord of the harvest." Finally, in the glossary the word *componenda* is wrongly described. It means a fee collected when marriage dispensations are granted or again the fee for funerals, marriages etc. These errors do not of course vitiate this valuable work of the Minnesota Historical Society, to whom we owe so much in the field of local history.

Dr. Grace Lee Nute, in her own thorough and scholarly way, has written the introduction to the "Documents." Dr. Nute explains how the publication came about, and gives a clear picture of the field where Bishop Provencher was called to minister. Her description of the background is essential to a proper understanding of the book. To her especially we owe a great debt, not only for this new contribution but for her constant devotion to the things and people of the past and her gift of bringing them back to life.—*Antoine d'Eschambault.*

Conjurers

THE ROLE OF CONJURING IN SAULTEAUX SOCIETY, by A. Irving Hallowell. Philadelphia, University of Pennsylvania Press; London, Humphrey Milford, Oxford University Press; 1942. 96 pages.

IT is an almost perfect summer evening in late June. A hush of expectancy pervades the summer encampment on the shore of the lake, hard by the trading post. There is to be a conjuring drum seance! The various families of the tribe have been scattered far and wide on the ancestral trapping lands throughout the winter. Now the hardship, the struggle and, sometimes, the tragedy of the winter effort for a livelihood is over. Relatives, families and friends are reunited; the air is warm and the days are balmy; there will be marrying and giving in marriage; there will be feasting and dancing. And so, let the conjurer see to his drum!

The evening deepens into night, but it is not dark, and there is a hush of stillness in the air. At first the conjurer starts slowly and quietly on his drum, but gradually his tempo increases and, as the seance proceeds, his voice accompanies the drum. No movement can be detected in the deep twilight of the encampment, but there is a tenseness in the air and you know instinctively that not a soul is sleeping. All are awake, tense and still, listening perhaps to the voice of the Great Spirit. . . .

Most of us know about Indian conjuring. Some of us have been in actual contact with Indian tribes and have noted the powerful influence of such occult practices on their lives. But very few of us have studied the practice, and it is here that Professor Hallowell of the University of Pennsylvania has rendered a great service not only to science, but to the reading public who are interested in all that concerns the Indian. His monograph is a carefully prepared study, of interest to the general reader, but deeply instructive to the student of Indian ways and life.

Dr. Hallowell spent the summers of 1930 and 1940 in the Berens River district, on the east side of Lake Winnipeg, studying the subject with the aid of Chief William Berens, whom he regards as "a virtual collaborator" in his task. Two of his portraits of local Indians appeared in *The Beaver* for December 1935.—*J.W.A.*

The Beaver is printed for the Hudson's Bay Company by Saults & Pollard Limited, Winnipeg, Canada, and the engravings are made by Brigdens of Winnipeg Limited.

1892—

—1943

1892—1943

IMPERIAL MIXTURE

CANADA'S MOST FAMOUS TOBACCO . . . for over Half a Century . . . has always had virtues claimed now by many newer brands . . . perfect blending of select types of leaf, long matured in oak hogsheads, aided by Latakia and smooth velvety Perique, with Jamaica Rum to flavour as the last exquisite touch.

After 50 years, this magnificent blend of pipe tobacco retains the full, rich, aromatic deliciousness for which it is famed.

These same characteristics in a less full bodied mixture are now presented in—

IMPERIAL MIXTURE—MILD

Packed in the 27c Vacuum Tins, also in Half-pounds

Distinguished from the "Original" Strength
by the Blue Strip Label and the word "Mild"

Let go of..
MY BLANKET
One of his most prized possessions is that
HUDSON'S BAY
Point BLANKET
It's something he won't grow out of but grow up with. On those future camping expeditions and canoe trips, he'll find it the same perfect companion as now—warm and dependable—cosy and colourful.
BEFORE YOU BUY—LOOK FOR THIS LABEL. ON ALL GENUINE HUDSON'S BAY "POINT" BLANKETS.